EXHIBIT A
PUD-85-08-013D and P12-0763
CONDITIONS OF APPROVAL

SPECIAL CONDITIONS OF APPROVAL

Planning

1. No signage is approved as part of this application. All new signage shall be subject to separate City review and approval.

2. This approval is contingent on approval of PUD-Minor Modification application PUD-85-08-25M.

3. Prior to the issuance of a building permit for the new building a Lot Line Adjustment shall be approved by the City and recorded which merges the 5871, 5877, and 5885 Owens Drive properties into one property.

4. Issuance of a building permit from the Building and Safety Division for the scope approved by these entitlements shall nullify approval of entitlements PUD-85-08-02D-03M (5885 Owens Drive) and PUD-85-08-08D-01M (5871 Owens Drive).

5. With the exception of the display vehicles, vehicles parked on the second floor of the parking garage shall not be visible from the public-right-of-way on Owens Court or Owens Drive. The applicant or responsible party shall include section and/or line-of-sight drawings that demonstrate compliance with this requirement with plans submitted to the Building and Safety Division for plan check.

6. If additional hours of operation, number of employees, or activities beyond what is stated in the applicant's written narrative dated, "Received June 1, 2012 on file in the Planning Division, are desired, prior City review and approval is required. The Director of Community Development may approve the modification or refer the matter to the Planning Commission if judged to be substantial.

7. All exterior lighting including landscape lighting shall be directed downward and designed or shielded so as to not cause glare or shine onto neighboring properties. The project/building developer shall submit a final lighting plan with the plans submitted to the Building and Safety Division for permits, and include drawings and/or manufacturer's specification sheets showing the size, design, and types of light fixtures proposed for the exterior of the buildings and the site.

8. New backflow devices shall be installed per Hacienda Business Park Design Guidelines.

9. The existing shrubs and hedges along Owens Court shall remain to the extent feasible with the objective of assisting to screen the vehicles in the parking lot.

10. Plans submitted to the Building and Safety Division shall include a fencing plan, subject to the review and approval by the Director of Community Development.

11. 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.

12. Appliances meeting Energy Star standards shall be installed as part of the project. The proposed appliances shall be indicated on the plans submitted to the Building and Safety Division for the issuance of a building permit.

13. A final landscape plan and irrigation plan shall be submitted to and approved by Director of Community Development as part of the plan check 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. Plant species shall be of a drought tolerant nature with an irrigation system that maximizes water conservation throughout the development (e.g. drip system).

14. 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.

15. The trash enclosure shall be sized to accommodate both trash and recycling containers, and be on an accessible route.

16. Plans submitted to the Building and Safety Division for permits shall be accompanied by a sample of the proposed spandrel glazing. All exterior finishes and colors, including the spandrel glazing, shall be noted on plans submitted to the Building and Safety Division for permits and are subject to approval by the Director of Community Development.

17. The project applicant//developer shall implement the measures identified in the U.S. Green Building Council's (USGBC), "Leadership in Energy and Environmental Design (LEED)" rating system to achieve a "certified rating" in the design, construction, and operation of the proposed project. The green building measures shall be shown on plans submitted to the Building and Safety Division for issuance of a building permit. Each point 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 determined by the Planning Division. The State of California's Green Building Standards Code, "CALGreen", shall apply.

18. Prior to issuance of building permit, the applicant or responsible party shall pay fees as determined by the Director of Community Development related to removal of trees into the City Urban Forestry Fund.

19. Plans submitted to the Building and Safety Division for permits shall indicate and be supplemented with materials and specifications related to how the subject project meets the on-site renewable energy programs in the City's Climate Action Plan.

Traffic Engineering

20. The applicant or responsible party shall pay all applicable traffic impact fees for the subject use as determined by the City Traffic Engineer. This fee shall be paid prior to issuance of a building permit.

21. Parking lot design shall be designed to accommodate vehicle delivery trucks so that the loading and unloading of all vehicles will be done on the property and not impede on street traffic.

22. Landscape placement shall be designed to provide sufficient sight distance for vehicles entering and leaving the project driveways.

23. The applicant shall provide sufficient parking spaces for employees and customers within the subject site to eliminate the need for customers and employees to park on adjacent local streets. Should additional employee or customer parking spaces be needed, existing spaces designated for inventory vehicles shall be converted to employee and/or customer parking as determined by the Director of Community Development. No employee, inventory, or service parking on public streets is permitted.

Engineering

24. The top floor of the parking garage shall drain to the storm drain system after being treated in bioretention swales. All the other floors within the parking structure shall drain to the sanitary sewer. Unless otherwise approved by the Chief Building Official there shall be a structural control such as an oil/water separator or sand filter installed inline before these floor drain lines tie into the main sanitary on-site sewer system.

25. Wastewater from vehicle and equipment washing operations shall not be discharged to the storm drain system. For car dealerships, if water only (without soap or other cleaning agent) is used for a minimal amount of rinsing

of vehicle exterior surfaces for appearance purposes, the runoff may be discharged to the storm drain system.

26. The car wash facility shall be designed and operated such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer [or a wastewater reclamation system shall be installed and the wastewater reused with no discharges to the storm drain].

27. All service operations involving fluid changes must occur indoors; all fluids shall be disposed of in an appropriate manner and shall not be placed in the storm drain. The service operations area shall be sloped to drain accidental spills into a containment area.

28. The service operations area shall be dry-swept routinely, and shall be inspected routinely for proper functioning and leak prevention. The facility shall have a spill clean-up plan approved by the Fire Department.

Building

29. Water conservation devices and mandatory low flow fixtures demonstrating a minimum 20% overall reduction in water use in compliance with the current California Green Building Standards shall be used in this project.

30. Energy efficient lighting in compliance with current California Energy Efficiency Standards shall be used.

Fire

31. The building covered by this approval shall be equipped with an automatic fire sprinkler system. Plans and specifications for the automatic fire sprinkler system shall be submitted to the Pleasanton Building and Safety Division 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. The fire alarm system shall be monitored in accordance with the Pleasanton Municipal Ordinance #1778. The fire alarm system shall transmit zone information to a UL listed Central Stat as specified in the Ordinance.

32. The Fire Prevention Bureau reviews building/civil drawings for conceptual on-site fire mains and fire hydrant locations only. This plan submittal did not provide a conceptual layout. Plans submitted to the Building and Safety Division for permits shall include a conceptual utility plan identifying the following:

- 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."
- Fire flow and duration shall be provided in accordance with 2010 CFC Appendix B.
- Installation drawings can be identified as deferred submittal for these plans. The underground pipeline contractor shall submit a minimum of three (3) sets of installation drawings to the Building Department, to be reviewed by the 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.
- All underground fire protection work shall require a California contractor's license type as follows: C-16, C-34, and C-36 or A.
- All field-testing and inspection of piping joints shall be conducted prior to covering of any pipeline.
- 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.

33. Valve tamper and water flow shall be monitored by an approved supervising station in accordance with NFPA 72 and the California Fire Code. Fire alarm control panel and remote annunciation panel(s) shall be at location(s) approved by the Fire Prevention Bureau. All systems shall be point identified by individual device, monitored, and annunciated by device type and point.

34. Emergency vehicle access roads:
    - Unless otherwise approved by the Fire Marshal, 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. 2010 California Fire Code Appendix D105. Submission of an Application for Alternate Methods shall be provided to the Fire Marshal for use of Exceptions found in 2010 California Fire Code Appendix D104 and D105. Fire rated stairwell construction, standpipes and automatic sprinkler system for Service/Parking structure can be proposed to meet the equivalent to two separate access drives.

- Buildings or facilities exceeding 62,000 square feet of gross building area or exceeding 3 stories 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 (reference 2010 California Fire Code Appendix D104). Submission of an Application for Alternate Methods shall be provided to the Fire Marshal for use of Exceptions found in 2010 California Fire Code Appendix D104 and D105. Fire rated stairwell construction, standpipes and automatic sprinkler system can be proposed to meet the equivalent to two separate access drives.
- A clear height free of obstructions (power, cable, telephone lines, tree limbs, etc.) shall be provided over fire access lanes. This clearance shall be a minimum of 13 feet-6 inches. An inside turning radius of 45 feet and outside turning radius of 55 feet shall be provided.
- All exterior portions of buildings must be within 200 feet of an access road. Landscaping and parking areas may be able to be located farther than 200 feet from access roads, depending on the specific use. Submission of an Application for Alternate Methods shall be provided to the Fire Marshal for use of Exceptions found in 2010 California Fire Code Appendix D104 and D105. Fire rated stairwell construction, standpipes and automatic sprinkler system can be proposed to meet the equivalent to two separate access drives.
- 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.

STANDARD CONDITIONS OF APPROVAL

Community Development Department

35. The applicant or responsible party shall obtain all required City permits for the project scope prior to construction.

36. 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.

37. 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, unless otherwise approved by the department.

38. 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

39. The proposed development shall conform substantially to the project plans and colors/materials board, Exhibit B, dated "Received, April 24, 2012," on file with the Planning Division, except as modified by the following conditions. Minor changes to the plans may be allowed subject to the approval of the Zoning Administrator if found to be in substantial conformance to the approved exhibits.

40. 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.

41. The approved building materials and colors shall be stated on the project plans submitted for issuance of building permits.

42. Prior to issuance of a building permit, the developer shall pay the required commercial development school impact fee as prescribed by state law and as adopted by the Pleasanton Unified School District.

43. This conditional use permit and design review approval will lapse within one (1) year from the date of approval unless a building permit is issued and

construction has commenced and is diligently pursued toward completion or the City has approved an extension.

44. 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.

45. All demolition and construction activities, inspections, plan checking, material delivery, staff assignment or coordination, etc., shall be limited to the hours of 7:00 a.m. to 6:00 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, interior construction, etc), if it can be demonstrated to the satisfaction of the Director of Community Development that the construction noise and construction traffic noise will not affect nearby residents or businesses. All construction equipment must meet Department of Motor Vehicles (DMV) noise standards and shall be equipped with muffling devices. Prior to construction, the applicant shall post on the site the allowable hours of construction activity.

46. 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.

47. If the operation of this use results in conflicts pertaining to parking, noise, traffic/circulation, or other factors, at the discretion of the Director of Community Development, this conditional use permit may be submitted to the Planning Commission for their subsequent review at a public hearing.

48. 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.

49. The project developer shall post cash, letter of credit, or other security satisfactory to the Director of Community Development in the amount of $5,000 for each tree required to be preserved, up to a maximum of $25,000. This cash bond or security shall be retained for one year following completion of construction and shall be forfeited if the trees are destroyed or substantially damaged. No trees shall be removed other than those specifically designated for removal on the approved plans or tree report.

50. A construction trailer shall be allowed to be placed on the project site for daily administration/coordination purposes during the construction period.

Landscaping

51. The project developer shall enter into an agreement with the City, approved by the City Attorney, which guarantees that all landscaping 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.

52. Six-inch vertical concrete curbs shall be installed between all paved and landscaped areas.

53. 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.

54. The following statements shall be printed on to the site, grading, and landscape plans where applicable to the satisfaction of the Director of Community Development prior to issuance of a building permit:

    a) No existing tree to be saved may be trimmed or pruned without prior approval by the Community Development Director.

    b) No equipment may be stored within or beneath the driplines of the existing trees to be saved.

    c) No oil, gasoline, chemicals, or other harmful materials shall be deposited or disposed within the dripline of the trees to be saved or in drainage channels, swales, or areas that may lead to the dripline.

    d) No stockpiling/storage of fill, etc., shall take place underneath or within five feet of the dripline of the existing trees to be saved.

55. Prior to issuance of a grading or building permit, the project developer shall install a temporary six foot tall chain-link fence (or other fence type acceptable to the Director of Community Development) outside of the existing tree drip lines, as shown on the plans. The fencing shall remain in place until final landscape inspection of the Community Development Department. Removal of such fencing prior to that time may result in a “stop work order.”

Building

56. Prior to or at the time of 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. The proposed plan must be approved by the Building Division prior to any building permit inspections. 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.

57. 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.

Engineering

58. 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.

59. 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.

60. There shall be no direct roof leaders connected to the street gutter or storm drain system, unless otherwise approved by the City Engineer.

61. 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.

62. 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 a permanent landscaping is in place.

63. 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.

64. Any existing City utility lateral stubbed to the property and not being utilized shall be abandoned in accordance with City Standards

65. There shall be a sampling manhole installed on the sanitary sewer service lateral (on-site) in accordance with City Standard details

Fire

66. The applicant or responsible party shall provide a Hazardous Materials Declaration for this tenant and/or use. The form shall be signed by owner/manager of company occupying the suite/space/building. No building permit will be issued until the Hazardous Materials Declaration is provided. The form is available through the permit center or from the LPFD Fire Prevention Bureau.

67. Should any operation or business activity involve the use, storage or handling of hazardous materials, the firm shall be responsible for contacting the LPFD prior to commencing operations. Please contact the hazardous materials staff at 925/454-2332.

CODE REQUIREMENTS

Building

(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.)

68. The building(s) covered by this approval shall be designed and constructed to the Title 24 Building Standards, including Building, Electrical, Mechanical, Plumbing, Energy, Fire, Green Building and both State and Federal accessibility requirements in effect and as amended by the City of Pleasanton at the time of Building Permit submittal.

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

70. All Building and Fire permit plans, including demolition, on-site, building shell and tenant improvements shall be submitted to the Building and Safety Division for review and approval.

Fire

71. All construction shall conform to the requirements of the California Fire Code currently in effect, City of Pleasanton Building and Safety Division and City of Pleasanton Ordinance 2015. All required permits shall be obtained.

72. Fire alarm system shall be provided and installed in accordance with the CFC currently in effect, the City of Pleasanton Ordinance 2015 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 the CFC currently in effect.

73. City of Pleasanton Ordinance 2015 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.

URBAN STORMWATER CONDITIONS OF APPROVAL

74. The project shall comply with the "Municipal Regional Stormwater NPDES Permit #CASCAS612008 dated October 14, 2009 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/water_issues/programs/stormwater/Municipal/index.shtml

75. The project shall also comply with the "NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities" by the California Regional Water Quality Control Board, San Francisco Bay Region. http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml

76. 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.

77. 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) (on the site) 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.
        i. Structures shall be designed to prohibit the occurrence and entry of pests into buildings, thus minimizing the need for pesticides.
        ii. 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.)
        iii. 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.

iv. 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 Division.

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.

78. The Construction General Permit's construction requirements include, but are not limited to, the following:

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

a. The project developer shall submit a Stormwater Pollution Prevention Plan (SWPP) 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.

b. 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.

c. 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.

   i. 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.

   ii. 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 place.

   iii. 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.

   iv. 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.

   v. 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.

vi. 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.

vii. Never clean machinery, equipment, tools, brushes, or rinse containers into a street, gutter, or storm drain.

viii. Ensure that concrete/gunite supply trucks or concrete/plaster operations do not discharge wash water into street, gutters, or storm drains.

ix. 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.

x. 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.

xi. 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.

79. 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.

80. 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.

h. Wastewater containing any soap, cleaning agent or degreaser shall not be discharged into the storm drain.

i. Vegetated swales with grasses shall be mowed and clippings removed on a regular basis.

EXHIBIT C

HACIENDA
Owners Association

June 8, 2012

Ms. Janice Stern
Planning Manager
City of Pleasanton
200 Bernal Avenue
Pleasanton, CA 94566

Re: Preliminary Design Review Approval
Mercedes Benz of Pleasanton
Site 51G

Dear Janice:

This letter is being provided in accordance with the Declaration of Covenants, Conditions and Restrictions for Hacienda, Article III, Section 3.2, Paragraph 3.2.3, Preliminary Plans. The Design Review Committee for the Hacienda Owners Association has reviewed the Preliminary Plans dated April 23, 2012 and June 7, 2012, prepared by Ware Malcomb, on behalf of USW Limited Partnership, Site 51G. Landscaping, Building Elevations, Site Grading and Utility Plans have been designed in substantial compliance with the guidelines set forth in the Design Guidelines and Covenants, Conditions and Restrictions.

Prior to the time of Final Design Review the Hacienda Owners Association will want to see the following issues addressed:

Architecture

1. Provide details on the construction of the building scoring lines to demonstrate that they will be bold and visible at a distance.
2. Show all utility screening.
3. Consider the reservation of some portion of the parking area for preferential parking for carpools and vanpools.
4. Provide a comprehensive sign program for all site signage including the demolition of any existing signs.
5. Provide a site lighting plan with details on fixtures, locations and conformance with minimum illumination requirements.

Landscape Architecture

1. Provide details on screening and impact of plantings provided in building setback areas to demonstrate compliance with design intent for these locations.
2. Provide details on ADA compliance for walks, ramps and paths of travel through the project.
3. Consider the addition of five to six trees to shade a portion of the guest parking area.
4. Increase the size of all trees to a 24" box minimum and increase crape myrtle trees from 15 gallon to 36" box minimum to help mitigate landscape reductions on other portions of the site.
5. Provide landscape reclaimed water requirements per Hacienda's Design Guidelines.
6. Consider an upgrade to the pedestrian paving material at main entry and glass wall.

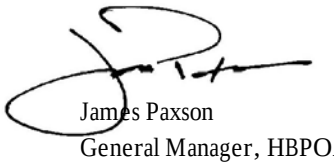
Civil Engineering

1. Relocate all utilities and utility connections to locations at the back of the landscaped berms within the Public Service Easements.
2. Provide a lot line adjustment for review and approval prior to recording showing the reconfigured lot with a new designation of 'Site 51G' and size in acres to three significant figures.

Five exceptions to the criteria outlined in the Design Guidelines have been approved for this application. The first exception is being granted to allow the elimination of the landscaping within some of the parking areas as required by the Design Guidelines. This is being done in order to remove problematic conditions between landscaping and cars parked either for storage or for customers in these areas, and as the appropriate design standard has been utilized on portions of the site and the minimum landscape ratio has been met overall. A second exception is being granted to allow a reduction in the amount of landscaping from fifteen feet to five feet adjacent to the building front yards and from nine feet to two feet adjacent to the building side yard as required by the Design Guidelines. This is being done in order to accommodate site constraints imposed by the building program and on-site water retention requirements, and as the site is currently enhanced with ample mature landscaping to compliment the new structure and the minimum landscape ratio has been met overall. A third exception is being granted to allow a reduction in the landscaping required within the Owens Drive and Owens Court Public Service Easements. This is being done in order to maintain consistency with previous approvals which granted this exception so that a view corridor at this corner could be created for the project, and as the applicant is installing new landscaping along Owens Court to reduce the amount of area that would require an exception and the minimum landscape ratio has been met overall. A fourth exception is being granted to allow a reduction in the drive aisle width along the south side of the building to twenty feet from twenty-six feet as required by the Design Guidelines. This is being done in order to assist the project with meeting the requirement for building setback landscaping given the aforementioned site constraints, and as no parking is located adjacent to the drive aisle and all turning radii will accommodate access into the building from the drive aisle along the constrained area. A fifth exception is being granted to allow a portion of the site to be slightly higher than the adjacent street grade as would otherwise be required by the Design Guidelines. This is being done in order to easily allow for three independent sites with existing projects to be redeveloped and combined into a single site and simultaneously meet on-site water retention requirements, and as the site has been well designed with other visual enhancements to mitigate this slight increase in grade at the rear corner of the project where the grade is higher than the Design Guidelines allow.

This application is hereby approved by the Hacienda Owners Association and may be processed for necessary approvals by the City of Pleasanton. Please feel free to contact me at the Association's office if I can be of any assistance in this matter.

Sincerely,



James Paxson
General Manager, HBPOA

cc: Uwe Waizenneger
Chris Waizenneger
Gary Drew

fc: 51G_pre001_approval.let
dc: DEV/DES/APP/MOD

INITIAL STUDY AND NEGATIVE DECLARATION FOR

MERCEDES-BENZ OF PLEASANTON

MAY 24, 2012

PREPARED BY:

City of Pleasanton
Planning Division
200 Old Bernal Avenue
P.O. Box 520
Pleasanton, California 94566-0802

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TABLE OF CONTENTS

LIST OF FIGURES

I. BACKGROUND

1. Project Title:	Mercedes-Benz of Pleasanton *PUD-85-08-13D (PUD Design Review)* *P12-0763 (Conditional Use Permit)*
2. Lead Agency:	City of Pleasanton Planning Division Community Development Department 200 Old Bernal Avenue Pleasanton, California 94566
3. Contact Person:	Shweta Bonn Phone: (925) 931-5611 Fax: (925) 931-5483 Email: sbonn@cityofpleasantonca.gov
4. Project Location:	5871, 5877, and 5885 Owens Drive
5. Project Sponsor Names(s) and Addresses:	Ware Malcomb on behalf of Mercedes Benz of Pleasanton 2400 Camino Ramon Suite 390 San Ramon, California 94583
6. General Plan Designation:	Business Park (Industrial, Commercial, and Office) and Mixed Use
7. Zoning:	Planned Unit Development – Industrial/Commercial-Office District
8. Description of Project:	See the "Project Description" section of the Initial Study.
9. Surrounding Land Uses and Settings:	See the "Project Description" section of the Initial Study.
10. Other public agencies whose approval is required:	No approvals are needed from other public agencies.

2. PROJECT DESCRIPTION

2.1 INTRODUCTION

This Initial Study (IS) provides the California Environmental Quality Act (CEQA) environmental analysis for land use entitlements PUD-85-08-13D (PUD Design Review) and P12-0763 (Conditional Use Permit) for the demolition of the three existing buildings and construction and operation of an approximately 112,345 square foot automobile showroom and service facility for Mercedes-Benz of Pleasanton at 5871, 5877, and 5885 Owens Drive.

2.2 ENVIRONMENTAL ANALYSIS

In accordance with CEQA Section 15070, this initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. The mitigation measures are put into effect by the revised project plans and/or by the enforcement of permit conditions, mitigation fees, or other instruments.

2.3 PROJECT LOCATION

The subject sites are located in Hacienda Business Park at 5871, 5877, and 5885 Owens Drive (see Figure 1). The site at 5871 Owens Drive is developed with a Mercedes-Benz showroom for pre-owned vehicles, approximately 12,168 square feet in size and the remainder of the site is used for inventory, customer, and employee parking. The approximately 1.93 acre site at 5877 Owens Drive is currently occupied with Chevys Fresh Mex restaurant, approximately 8,537 square feet in size, with the remainder of the site used as parking. A two-story, approximately 28,940 square foot building that consists of a Mercedes-Benz showroom and service facility is currently located on the approximately 3.17 acre (138,086 square feet) parcel located at 5885 Owens Drive. The remainder of this site is used as parking areas for customer, employee, and inventory vehicles.

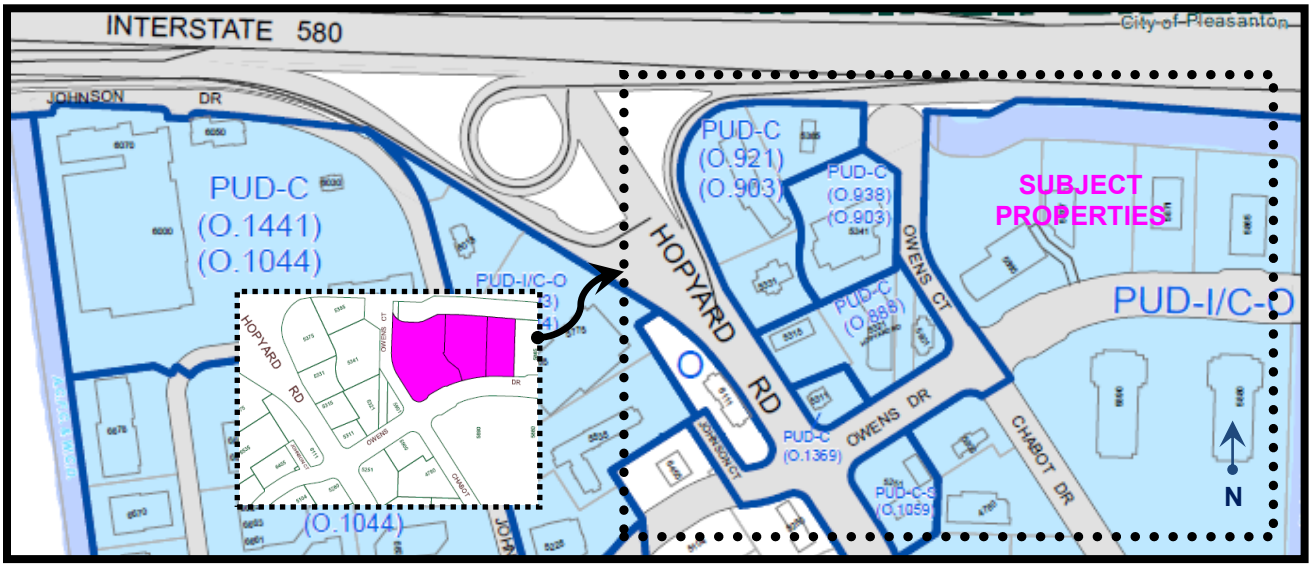

FIGURE 1: Vicinity Map

FIGURE 2: Aerial photograph and photographs of existing buildings

2.3.1 Surrounding Land Uses, Area, and Setting

Surrounding land uses consist mainly of commercial and offices uses. Figure 2 provides an aerial overview of the subject properties and surrounding land uses (the orange arrows in the aerial photograph correspond to the photographs shown below the aerial picture). The sites are bounded by Interstate 580 and a drainage canal to the north, Dahlin Group offices directly to the east, office and commercial uses across Owens Drive to the south, and commercial uses across Owens Court to the west.

2.3.2 Subject Properties

The three properties in aggregate are approximately 6.33 acres (3.17, 1.93, and 1.23 acres between 5885, 5877, and 5871 Owens Drive, respectively) and are generally flat, with elevations ranging from approximately 326 feet near Owens Drive to approximately 328 feet near the northern portions of the sites. A landscaping berm surrounds the western perimeter of the property at 5885 Owens Drive and along the southern perimeter of the property along Owens Drive. Additional landscaping is provided in a landscaping strip along the southern boundaries of the subject properties, along Owens Drive.

Access to the 5885 Owens Drive is currently provided from a driveway off of Owens Drive and a separate driveway from Owens Court. The driveway from Owens Court facilitates access to a parking area directly to the north of the showroom facility and the driveway from Owens Drive facilitates vehicular access to the parking area in front of the showroom facility and a drive aisle along the east side of the building that accesses the rear parking lot. Access to 5877 and 5871 Owens Drive is provided from two driveways, one of which is located along the western side of the property at 5877 Owens Drive and another driveway along the eastern side of 5871 Owens Drive. The driveway along the eastern side of 5871 Owens Drive also provides access to the property to the east, 5865 Owens Drive, which is currently occupied by Dahlin Group.

2.4 PLEASANTON GENERAL PLAN

The General Plan land use designation for the subject properties is Business Park (Industrial, Commercial, and Office) and Mixed Use.

2.5 ZONING

The subject properties are zoned Planned Unit Development – Industrial/Commercial-Office. The Hacienda Business Park land use designation is Retail/Commercial and Financial Planning District (CPD).

2.6 PROJECT DESCRIPTION

The project proposal consists of the demolition of the three buildings located at 5871, 5877, and 5885 Owens Drive and construction of an approximately 112,345 square foot showroom and service facility. In order to facilitate continuous operation of the showroom and service facilities, portions of the existing Mercedes-Benz buildings will be retained during the construction process. Upon completion of construction, the existing showroom

and service facilities will be completely demolished. The two driveways on Owens Drive will be replaced with a single driveway that provides access to the facility. The eastern driveway on Owens Drive will remain.

The first floor of the new building will consist of a showroom, service department, customer waiting area, parts storage, sales department, and general offices. Customers delivering their vehicles for servicing will pull into the service drive lanes located at the northern side of the facility where a service advisor will review the customer's request and a dealership employee will drive the vehicle into the service area. A total of 48 service bays are proposed. A drive-through car-wash is proposed along the eastern side of the building. The second floor of the building will consist of general offices and employee facilities. The parts storage area has a vaulted ceiling and will be three-stories tall, for a height of 43-feet-2-inches. The site plan in Figure 3 provides details regarding the location of the proposed showroom and service facility. The tan colored building footprints are the existing two dealership buildings to be demolished.

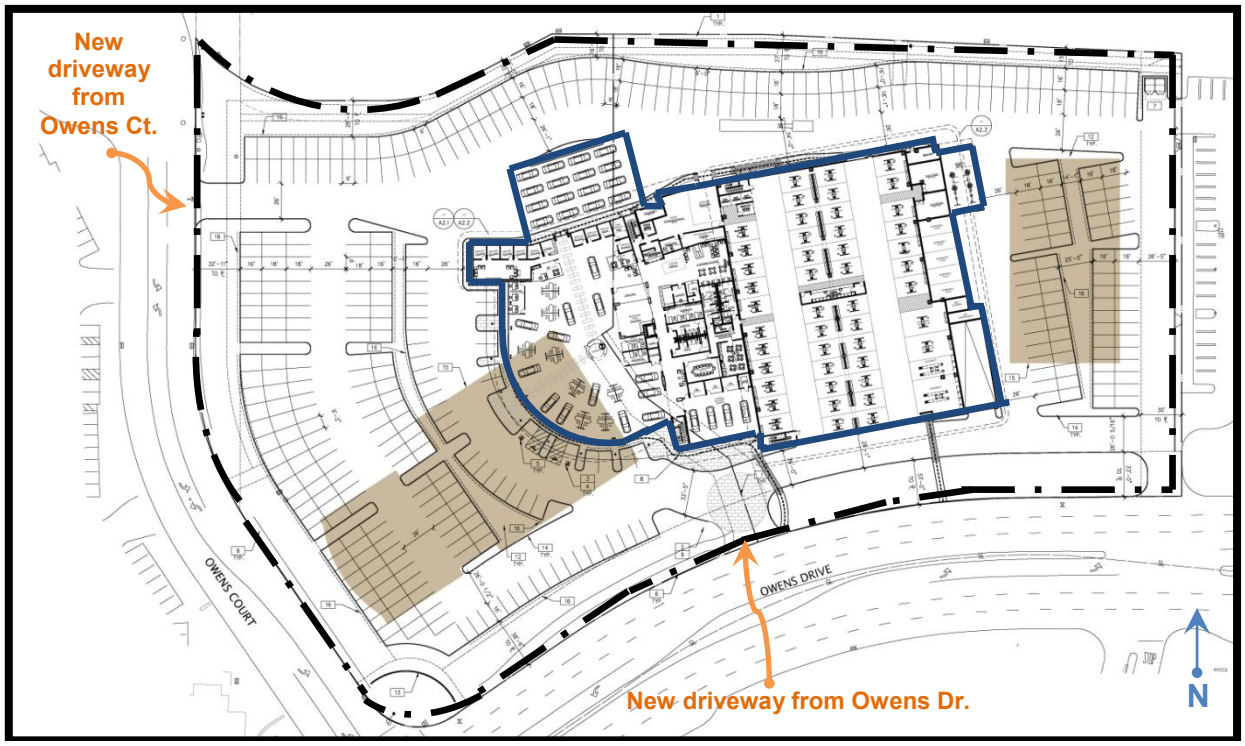

FIGURE 3: Proposed Site Plan

The design and architecture of the proposed showroom and service facility incorporates current Mercedes-Benz corporate standards. Figures 4 and 5 provide three-dimensional simulations of the proposed facility. The facades are detailed with various finishes and architectural accents such as framed doorways and canopies. The building walls are also articulated to avoid "flat" wall planes. The exterior will consist of a combination of blue, silver and white colors. Portions of the exterior wall material will consist of Alucobond (an

aluminum composite material that consists of a polyethylene core bonded between two aluminum sheets, therefore yielding a metal panel exterior finish). The colors of Alucobond proposed for the exterior of the building consist of "Deep Blue Cool" for the accent walls shown on the southern and northwestern facades, "Cadet Grey Cool" for the metal canopy, "Silver Metallic Cool" for the exposed metal canopy above glazing areas, and "Alabaster Cool," a matte off-white color for the building exterior.

FIGURE 4: Rendering depicting northwest corner of facility

FIGURE 5: Rendering depicting western façade (showroom entrance) of facility

3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project and could result in at least one impact that is a "Potentially Significant Impact" unless mitigated as described in the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

4. DETERMINATION

On the basis of this initial evaluation:

[X] I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

[ ] I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

[ ] I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

[ ] I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

[ ] I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Shweta Bonn — Shweta Bonn

05/23/12 — Date

5. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the Proposed Project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project specific mitigations, which have been incorporated into the project design as a part of the Proposed Project.

For this project, the following designations are used:

- **Potentially Significant Impact:** An impact that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.
- **Less Than Significant With Mitigation Incorporated:** An impact that requires mitigation to reduce the impact to a less-than-significant level.
- **Less Than Significant:** Any impact that would not be considered significant under CEQA relative to existing standards.
- **No Impact:** Any impact that does not apply to the project.

5.1. AESTHETICS

ENVIRONMENTAL SETTING

The existing sites are currently developed with the Mercedes-Benz dealership, Chevy's Fresh Mex Restaurant and the pre-owned Mercedes-Benz dealership at 5885, 5877, and 5871, respectively. Current views of the property are partially screened with landscaping located in planting areas along the periphery of the site.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Substantially alter or degrade the existing visual character or quality of the project site;
- Have a substantial effect on a scenic resource; or,
- Substantially increase light or glare in the project site or vicinity, which would adversely affect day or nighttime views.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Aesthetics				
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	X	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	X	☐

DISCUSSION

a, b. The proposed project is not located on a scenic vista or within a state scenic highway. Therefore, these would be *no-impact*.

c. The proposed project is attractively designed with high quality materials. The buildings walls and roofline are articulated to provide architectural interest and reduce perceived massing. Landscaping and trees to be removed will be replaced or enhanced in other locations on the subject properties. Therefore, this would be a *less-than-significant impact*.

d. Conditions for the project will require that all lighting be directed downwards and/or contain shields to minimize light pollution and glare. Therefore, this would be a *less-than-significant impact*.

5.2. AGRICULTURAL AND FORESTRY RESOURCES

ENVIRONMENTAL SETTING

The sites are located in an urbanized area and are currently developed. The sites are not currently being used for farmland or agricultural production. The California State Department of Conservation designates the subject properties as “Urban and Built-Up” land, which is defined as land that is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Examples of types of uses included in this designation include residential, industrial, commercial,

institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures[1].

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses;
- Conflict with or result in the cancellation of a Williamson Act contract;
- Adversely affect agricultural production.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Agricultural and Forest Resources *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

DISCUSSION

a-e. The subject property is in an urbanized area and is currently developed with parking areas and commercial buildings. The proposed project will not result in the conversion of any farmland and the subject property is not zoned for agricultural use and does not have a Williamson contract in place. No loss or conversion of forest land will occur as a result of the proposed project. Therefore, these would be *no-impact*.

5.3. AIR QUALITY

ENVIRONMENTAL SETTING

The Bay Area Air Quality Management District (BAAQMD) monitors air quality and administers permitting authority over most stationary emission sources within nine-county the San Francisco Bay Area. The standards for levels of ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter (PM10), particulate matter - fine (PM2.5), sulfates, lead, hydrogen sulfide, and vinyl chloride have been set by both the California State Environmental Protection Agency and the United States Environmental Protection Agency. As of the writing of this document, the BAAQMD reports that the Bay Area is in non-attainment in levels of ozone, particulate matter (PM10), particulate matter - fine (PM2.5), and are undetermined for hydrogen sulfide and visibility reducing particles with respect to California State standards. For federal standards, areas of non-attainment include ozone and particulate matter - fine (PM2.5) (during the 24-hour period) and are undetermined in areas of nitrogen dioxide (during a 1-hour period), particulate matter (PM10) (during a 24-hour period). [2]

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in pollution emission levels above those established by Bay Area Air Quality Management District in either short term (construction related) or long term (traffic);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact

Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	X	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	X	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	X
e) Create objectionable odors affecting a substantial number of people?	☐	☐	X	☐

DISCUSSION

a. An air quality plan is intended to bring a region's air quality into compliance with State and Federal requirements. The BAAQMD, in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG), has developed the 2010 Clean Air Plan (adopted in September of 2010) and the 2005 Ozone Strategy (adopted in January of 2006). The assumptions and growth projections used in these documents rely on the General Plan documents of communities. Therefore, projects that are found to be consistent with the General Plan (as is the subject project) are consistent with applicable air quality plans. Therefore, this would be *no-impact*.

b-c. The BAAQMD published CEQA Air Quality Guidelines[3] in May of 2011. These guidelines establish screening criteria with which to provide a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If the screening criteria are met by the proposed project, then no additional air quality analysis is necessary. The screening criteria are organized into operational-related impacts (criteria air pollutants and precursors and

greenhouse gases), community risk and hazard impacts, carbon monoxide impacts, odor impacts, and construction-related impacts.

Stationary sources of pollution which would trigger review by BAAQMD are not proposed on site. The traffic impact analysis prepared for this project indicates the total number of average daily trips expected from the proposed use is 3,746.[4] The peak hour vehicle trip rate of the subject project (2.41) is most consistent with that of a home superstore (2.37). The screening size for operational criteria pollutant screening for a home superstore is 142,000 square feet and the approximately 112,345 square foot showroom and service facility does not exceed this threshold.

The City of Pleasanton has adopted a Climate Action Plan (CAP). At the time the CAP was developed, approximately 9.2 million square feet of commercial space was existing and a total of 9.8 million square feet was assumed for development within the Hacienda Business Park. The resulting residual from these values includes additional square footage that may be constructed without exceeding the growth incorporated into the CAP. Further, the project is consistent with the CAP in that the subject project is an infill project – the project sites are currently developed with the surrounding areas also developed. The project will also incorporate bicycle racks and showers for employees who choose to utilize non-motorized methods of transportation. The project site is in close proximity (0.2 miles) to the Dublin-Pleasanton BART station and is located within the Hacienda Business Park, which incorporates several transit-related programs, including providing employees within the park with an ECO-pass that entitles the bearer to use the Wheels bus system at no cost.[5]

Community risk and hazard impacts are applicable to sensitive receptors. The proposed project is an auto dealership facility that is not considered a "sensitive receptor" by the BAAQMD.

Carbon monoxide impacts are measured by a project's consistency with a local congestion management plan and traffic volumes. The Circulation Element of the General Plan requires a level-of-service "D" or better at intersections with the exception of the Downtown Area and at gateway intersections (Hopyard Road at Owens Drive is considered a gateway intersection). The project is not expected to increase traffic volumes to the affected intersection to more than 44,000 vehicles per hour and is not located near tunnels, underpasses, canyons, or below-grade roadways.

The operation of the service facility does not include painting or coating of vehicles and thus does not exceed the odor screening distances. Demolition of the existing buildings and construction of the proposed project is expected to generate short-term impacts related to construction activities (e.g., clearing/grubbing, site grading, etc.). Construction activity on the site is required to implement dust control measures (e.g., periodic watering of the site, cover all trucks hauling soil, sand, and

other loose material, etc.) to control airborne particulate. All construction equipment is required to meet all current exhaust standards for emissions. These requirements will be made as conditions of the project approval.

Overall, the proposed project will result in small, incremental, and insignificant increases in emissions. Therefore, these would be *less-than-significant impacts*.

d. The proposed project is an auto dealership facility that is not considered a "sensitive receptor" by the BAAQMD. Therefore, this would be *no-impact.*

e. The project will not result in the creation of objectionable odors, particularly since the project does not entail painting or coating of vehicles. Construction vehicles will be required to meet all current exhaust standards for emissions. Therefore, this would be a *less-than-significant impact.*

5.4. BIOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

Wetlands are regulated under federal, state and local laws, regulations and policies. Primary wetland regulatory compliance is under the federal Clean Water Act, the California Department of Fish and Game (CDFG), United States Fish and Wildlife Service (USFWS) and California Environmental Quality Act (CEQA).

The Clean Water Act requires avoidance of wetlands whenever a practicable alternative exists. For unavoidable impacts, the regulatory agencies have policies calling for mitigation to provide "no net loss" of acreage or habitat value. Under Section 404 of the Clean Water Act, a permit must be obtained for the discharge of dredged or fill material into waters of the United States.

Under the CDFG code, Sections 1601-1607 regulate projects with divert, obstruct, or change the natural flow, bed, channel, or bank of a river, stream, or lake. Proponents of such projects must notify CDFG and enter into a streambed alteration agreement. CDFG normally exerts jurisdiction over natural streams and artificial channels that have habitat value for wildlife species. The jurisdiction extends to the bank top.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Adversely affect, either directly or through habitat modification, any endangered, threatened or rare species, as listed in Title 14 of the California Code of Regulations

(Sections 670.5) or in Title 50, Code of Regulations (Sections 17.11 or 17.12 or their habitats (including but not limited to plants, fish, insects, animals, and birds);

- Have a substantial adverse impact, either directly or through habitat modification, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations or by the CDFG or USFWS;
- Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS;
- Adversely affect federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites; or,
- Conflict with any local or regional policies or ordinances designed to protect or enhance biological resources, such as a tree preservation policy or ordinance.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Biological Resources *Would the project*:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or United States Fish and Wildlife Service?	☐	☐	☐	X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	X

d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a-d. There are no rare, endangered, or threatened species of flora or fauna known to inhabit the subject property. In addition, there is no existing stream, river, lake, drainage channel, or other water body/course on the subject property. The property is surrounded by urban development and a freeway, and is currently developed with commercial buildings. Therefore, this would be *no-impact*.

e. The project entails the removal of ornamental trees along the periphery of the site and within existing planters located in the center of the subject property. Removal of the trees near the center of the site is required to accommodate the location of the proposed building and trees proposed for removal around the perimeter of the site are intended to create view corridors for the proposed building (65 trees are proposed for removal and 35 trees are being planted). The Hacienda Business Park Design Guidelines stipulate the size, species, and location of new trees planted on the parcel and the project will be required to adhere to these specifications. Therefore, this would be a *less-than-significant impact*.

f. No Habitat Conservation Plan, Natural Community Conservation Plan, or other conservation plans apply to the project sites. All three properties are currently developed with commercial buildings and parking areas. Therefore, this would be *no-impact*.

5.5. CULTURAL RESOURCES

ENVIRONMENTAL SETTING

The subject site is not located in an area identified as having site-specific archeological, paleontological, or geologic features or resources.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Cause a substantial change in the significance of a historical or archeological resource as defined in the CEQA Guidelines Section 15064.5; or,
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Cultural Resources *Would the project*:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique Paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

DISCUSSION

a. The existing buildings on the site are not significant historical resources. Therefore, this would be *no impact*.

b-d. There are no known archaeological or unique Paleontological resources or human remains on the sites. A condition of the approval for the project will require work to stop within 20 meters (66 feet) of prehistoric, historic artifacts, or other cultural resources if found during construction. Subsequent to the find, the services of the appropriate qualified professional will be secured to determine the best course of action. Therefore these would be *less-than-significant impacts*.

5.6. GEOLOGY AND SOILS

ENVIRONMENTAL SETTING

The site is generally flat and does not contain any significant slopes or changes in grade.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in a project being built that will either introduce geologic, soils, or seismic hazard by allowing the construction of the project on such a site without protection against those hazards.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Geology and Soils *Would the project*:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	X	☐
ii) Strong seismic ground shaking?	☐	☐	X	☐
Iii) Seismic-related ground failure, including liquefaction?	☐	☐	X	☐
iv) Landslides?	☐	☐	☐	X
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	X	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	X	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	X	☐

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	X

DISCUSSION

a. There are no known geologic hazards on the site or in vicinity of the site. The subject properties are not located within an Alquist-Priolo Earthquake Fault Zone as identified by the California Geological Survey[6]. Also, the project will be required to meet the requirements of California Building Code and conditions of approval for the project will require that the project meet or exceed seismic requirements. The sites are generally flat and there are no known landslides on the property. Therefore, these would be either *less-than-significant impacts* or *no-impact*.

b-d. The sites are generally flat and the project is not expected to result in substantial soil erosion or loss of topsoil. Conditions of approval will require that the project comply with stormwater runoff requirements and applicable measures. Therefore, these would be *less-than-significant impacts*.

e. The project scope does not entail the use of septic tanks and will utilize or propose new infrastructure to connect to existing water and sewer lines. Therefore, this would be *no-impact*.

5.7. GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL SETTING

The BAAQMD encourages local jurisdictions to adopt a qualified GHG Reduction Strategy that is consistent with Assembly Bill (AB) 32 goals. AB 32 mandated local governments to adopt strategies to reduce greenhouse gas (GHG) emissions. Consistent with the objectives of AB 32, the City has adopted a Climate Action Plan to outline strategies to reduce GHG emissions to 1990 levels by the year 2020.[7]

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Be inconsistent with a qualified GHG Reduction Strategy.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Greenhouse Gas Emissions *Would the project*:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

DISCUSSION

a-b. Staff has completed an analysis of how the project is consistent with applicable measures outlined in the City of Pleasanton's Climate Action Plan. The project sites are currently urbanized, developed properties and the proposed facility serves to replace the existing buildings located on the existing sites. The project will incorporate bicycle racks and showers for employees that utilize alternative commutes. Additionally, the site is located in close proximity (approximately 0.2 miles) to the Dublin-Pleasanton BART station. The project sites are located within the Hacienda Business Park, which incorporates several transit-related programs, including providing employees within the park with an ECO-pass that entitles the bearer to use the Wheels bus system at no cost.[8] The project will be required to incorporate green building and energy efficiency measures. Therefore, these would be *less-than-significant impacts*.

5.8. HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL SETTING

The existing sites are currently developed with car dealerships and a restaurant. The properties are generally flat and the proposed project does not entail significant modifications to the existing grade. The proposed project is considered an infill project.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in exposing people to existing contaminated soil during construction activities;

- Result in exposing people to asbestos containing materials;
- Result in exposing people to contaminated groundwater if dewatering activities take place.

Issues (Cont.)	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Hazards And Hazardous Materials *Would the project*:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	X	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	X	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste with-in one-quarter mile of an existing or proposed school?	☐	☐	☐	X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	X

DISCUSSION

a-b. The project does not involve the transport, use or disposal of hazardous materials. A condition will require that the proposed car wash area(s) be covered and drain through an oil/water separator to the sanitary sewer, or be collected in a holding tank for removal by a disposal and recycling service. If the area is connected to the sanitary sewer, a sign shall be posted prohibiting the dumping of hazardous materials. Therefore, these would be *less-than-significant impacts*.

c-d. The project will not emit hazardous emissions or involve the handling of hazardous materials. The sites are not located within one-quarter mile of an existing or proposed school (the closest school is Thomas S. Hart Middle School, approximately 0.9-miles away). The project sites are not located on hazardous sites as defined by Government Code Section 65962.5. Therefore, these would be *no-impact*.

e-f. The subject project sites are approximately 5.4 miles from the Livermore Municipal Airport and are not located within the Livermore Municipal Airport Influence Area or within vicinity of a private airstrip. The project is within the maximum building height permitted by the zoning designation. Therefore, these would be *no-impact*.

g-h. The subject properties are located in currently urbanized areas and development of the properties will not impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan. The subject properties are not in vicinity of areas susceptible to wildland fires. Therefore these would be *no-impact*.

5.9. HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL SETTING

The subject properties are directly to the south of the Hewlett Canal, a drainage canal that connects to the Chabot Canal to the south. The sites are generally flat, and the civil drawings for the project indicate that drainage will be directed towards the bio-retention planters located in various areas of the site that will then drain into the City's storm drain system.

The National Pollutant Discharge Elimination System (NPDES) was established in the Clean Water Act to regulate municipal and industrial discharges to surface waters of the U.S. Non-point sources originate and diffuse over a wide area rather than from a definable point. Two types of non-point source discharges are controlled by the NPDES program; discharges caused by general construction activities, and the regulation of the quality of storm water in municipal storm water systems.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in substantially degrading water quality or violate any water quality objectives set by the State Water Resources Control Board due to increased sediments or other contaminants generated by consumption and/or operation activities;
- Result in exposing people or property to the risk of injury and damage in the event of a 100-year flood.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Hydrology and Water Quality *Would the project*:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☐	X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	X	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	X

g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	X
h)	Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	X
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	X
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X

DISCUSSION

a-f. The conditions for the project will require that the project adhere to applicable stormwater runoff requirements. The project design includes bio-retention areas in the northern, eastern, southern perimeters of the site and within the planter strips proposed in the middle of the site. No streams or rivers run through the site and therefore the project will not alter the course of any body of water. Portions of the proposed facility will be further away from the existing drainage canal (Hewlett Canal) to the north than the location of the existing Chevy's Fresh Mex Restaurant. Therefore, these would be *less-than-significant impacts* or *no-impact*.

g-j. The subject properties are not located within the 100-year flood zone[9] and the proposed project does not include any housing units. The project will not impede or redirect flood flows or expose people or structures to a significant risk of flooding. The project site is not in a location where the project would cause or be at risk for seiche, tsunami, or mudflow. Therefore, these would be *no-impact*.

5.10. LAND USE PLANNING

ENVIRONMENTAL SETTING

The sites are currently developed with automobile dealerships and a restaurant. The properties are zoned PUD-I/C-O (Planned Unit Development – Industrial/Commercial-Office) District, and the Hacienda Business Park land use designation is Retail/Commercial and Financial Planning District (CPD).

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Substantially alter an approved land use plan that would result in physical change to the environment.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Land Use Planning *Would the project*:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a., c. The proposed project will not physically divide the city or result in the division or another portion of the city. The proposal entails development on existing urbanized properties and also entails merging the existing three lots into one. There is no habitat conservation plan or natural community conservation plan for the subject properties. Therefore, these would be *no-impact*.

b. The subject properties are located within the Hacienda Business Park and are thus subject to the Hacienda Design Guidelines. The subject proposal meets these requirements in the areas of floor-area-ratio, parking, maximum permitted height and setbacks. A modification to the standards as they pertain to landscaping requirements is requested. To mitigate for the reduced landscaping around the building perimeter, trees in other areas of the site will be of a larger size upon planting. The Hacienda Design Guidelines allow for establishing view corridors to permit visibility of the structure as viewed from Interstate-580.[10] A previous modification permitted establishing a view corridor along Owens Drive and Owens Court. Therefore, this would be a *less-than-significant impact*.

5.11. MINERAL RESOURCES

ENVIRONMENTAL SETTING

The subject site has not been identified to have mineral resource deposits.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in the depletion of a mineral resource.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Mineral Resources *Would the project*:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	X

DISCUSSION

a-b. The subject properties are not known to have any mineral resources and thus the proposed project will not result in the loss of the availability of locally important mineral resource recovery. Therefore, these would be *no-impact*.

5.12. NOISE

ENVIRONMENTAL SETTING

The external noise factors affecting the ambient noise level on the subject properties are Interstate 580 to the north, Owens Drive to the south, Owens Court to the west, and adjacent land uses (which consist mainly of office and commercial uses).

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in exterior noise levels above the acceptable level of 70 dBA;
- Result in interior noise levels exceeding 45 dBA;
- Result in construction noise levels that do no meet the City of Pleasanton Noise Ordinance.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Noise *Would the project*:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	X	☐
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	X	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	X	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	X	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X

DISCUSSION

a., c. The subject site is located adjacent to and across the street from other commercial and office uses and is not in close vicinity to land uses particularly sensitive to noise such as residential uses. Existing conditions on and around the site contribute to the ambient noise level. These conditions include traffic on Owens Drive, Owens Court, Interstate 580, and loading and unloading of delivery trucks on the subject and adjacent properties. The operation of the use will be required to meet the City's noise ordinance, which stipulates that the business not be allowed to produce a noise level in excess of 70 dBA at any point outside of the property plane. Therefore, this would be a *less-than-significant impact*.

b. The proposed project consists of construction of a showroom and service facility on the three merged lots. The construction phase may entail activities that result in ground-borne vibrations. However, no residential uses are in close proximity to the project site and once constructed, all activities related to the service facility will take place in the enclosed building. Therefore, this would be a *less-than-significant impact*.

d. The site's location adjacent to a major freeway and a major arterial street result in an ambient noise level that is not expected to change with the proposed project. Therefore, this would be a *less-than-significant impact*.

e., f. The project site is not located within two miles of an airport (the Livermore Municipal Airport is located approximately 5.4-miles from the subject sites). Therefore these would be *no-impact*.

5.13. POPULATION AND HOUSING

ENVIRONMENTAL SETTING

The subject properties do not contain any housing units and the scope of the subject project does not include any housing units.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Induce substantial growth that is inconsistent with the approved land use plans in place;
- Displace affordable housing.

Population and Housing
Would the project:

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	X

b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X

DISCUSSION

a.-c. The project sites are located within city limits and are currently developed, urbanized sites. The project consists of the demolition of three existing buildings and the construction of one building. No housing units will be lost or created as part of the project scope and thus no replacement housing is necessary. Therefore, these would be *no-impact*.

5.14. PUBLIC SERVICES

ENVIRONMENTAL SETTING

The City of Pleasanton has public services and infrastructure planned to meet the build out of the General Plan.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Create an increase in demand for police protection services which could substantially interfere with the ability of the Police Department to provide adequate response time to the project site;
- Create an increased demand for fire protection services that would substantially interfere with the ability of the Fire Department to provide adequate response time to the project site;
- Crease an increased demand for schools that would exceed existing school capacity; or,
- Create an increased demand for parks and other public facilities that would exceed existing capacity.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Public Services *Would the project*:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

DISCUSSION

a. The project scope entails the demolition of three commercial buildings and construction of one building consisting of a vehicle showroom and service facility. The project will not result in the need for additional fire protection above what is currently required. No residential development is a part of the project scope and thus no additional public services related to schools or parks are required. Therefore, this would be *no-impact*.

5.15. RECREATION

ENVIRONMENTAL SETTING

The project sites currently do not consist of any neighborhood or regional parks or of other recreational facilities. The subject project does not entail establishment of any parks.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in the failure to meet City standards for the provision of parkland.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Recreation *Would the project*:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	X

DISCUSSION

a-b. No residential units are part of the project scope and thus the proposed project will not result in the increase use of existing neighborhood or regional parks. The project scope does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, these would be *no-impact*.

5.16. TRANSPORTATION AND TRAFFIC

ENVIRONMENTAL SETTING

Owens Drive (an arterial street) is located directly to the south of the subject properties and Owens Court is located directly to the west of the subject properties. Hopyard Road (an arterial street) is located further to the west of the subject properties and the off-ramp from Interstate-580 is located north of the intersection of Hopyard Road and Owens Drive.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in reducing the Level of Service from an acceptable level "A-D" to an unacceptable level "E" or "F."
- Add 10 or more trips to an intersection that operates at an unacceptable level of service.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Transportation and Traffic *Would the project*:				
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	X	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location those results in substantial safety risks?	☐	☐	☐	X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	X
e) Result in inadequate emergency access?	☐	☐	☐	X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	X

DISCUSSION

a. A traffic impact analysis dated May 4, 2012, was prepared by W-Trans, Whitlock & Weinberger Transportation, Inc. for the purpose of identifying the potential traffic impacts of the proposed project. The analysis indicates that the project is expected to generate an average of 229 trips during the a.m. peak hour and 223 trips during the p.m. peak hour. After factoring in the existing development on the sites, this

results in a net increase in trip generation of approximately 47 trips during the a.m. peak hour and 29 trips during the p.m. peak hour.

The significance criteria used to measure the impact of the proposed project were:

1. Reduction in the level-of-service (LOS) of a signalized intersection from an existing LOS D (or better) to LOS E or F; or
2. The project adds ten or more trips to an intersection projected to operate at LOS E or F prior to the addition of project traffic.

Project trip distribution was completed by City staff. The distribution indicated that four intersections should be included in the traffic analysis: Dougherty Road/I-580 WB Off-ramp, Hopyard Road/I-580 EB Off-ramp, Hopyard Road/Owens Drive, and Owens Drive/Chabot Drive-Owens Court. Six different conditions were evaluated in the study: existing, existing plus project, near-term (existing plus approved projects), near-term plus project (existing plus approved projects plus project), build-out (no project), build-out plus project.

The “existing” and “existing plus project” scenarios did not result in exceeding either of the two thresholds identified in the significance criteria above and the intersection would continue to operate at a LOS of D or better.

The analysis for “near-term” (existing plus approved projects) and the “near term plus project” scenario indicates that the intersection at Hopyard Road and Owens Drive is expected to operate at an unacceptable level LOS E in both situations. The project is expected to add more than ten trips during the p.m. peak hour, therefore exceeding one of the two thresholds identified by the significance criteria.

The analysis for the “build-out” (no project) and “build-out plus project” scenario indicates that the addition of project-generated trips would result in the Hopyard Road/I-580 East Bound Off-Ramp reduction in LOS from “D” to “E.”

The traffic analysis indicates that in order to improve upon the impacts caused by the potential project, two mitigation measures be implemented:

1. At the Hopyard Road/Owens Drive intersection: Widen the westbound approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane by adding a westbound through lane creating a revised lane configuration of: one left-turn lane, one through lane, one shared through-right lane, and one right-turn lane.
2. At the Hopyard Road/I-580 Eastbound Off-ramp: Modify the roadway striping on the off-ramp from two left-turn lanes and two right-turn lanes into one left-turn lane, one shared left-turn/right-turn lane, and two right-turn lanes.

Both of these mitigations have been identified as future projects in the Pleasanton Traffic Impact Fee (TIF) and the applicant will be required to pay the TIF. Therefore, these would be *less-than-significant-impacts*.

b. The Alameda County Congestion Management Agency's threshold is whether a project would add 100 or more new peak-hour trips. The project does not exceed this threshold and therefore, this would be *no-impact*.

c. The proposed project will not result in a change to air traffic patterns. The proposed height of the building is within the maximum height permitted by the zoning designation. Therefore, this would be *no-impact*.

d-f. The project will not increase hazards due to design features or incompatible uses. No changes to the existing access to the site are proposed. Emergency access to the site will not be compromised due to the proposal. The proposal will also not be in conflict with policies, plans, or programs related to public transit, bicycle or pedestrian facilities. Bicycle racks will be part of the project proposal, and existing public sidewalks along the perimeter of the sites provide access to the site. ADA-compliant pedestrian pathways will be required to be shown on construction plans prior to issuance of permits. Therefore, these would be *no-impact*.

5.17. UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL SETTING

The City of Pleasanton has public services and infrastructure planned to meet the build out of the General Plan, implemented by the Growth Management Plan.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in the construction of new water facilities or expansion of existing facilities;
- Result in exceeding the wastewater treatment requirements of the Regional Water Quality Control Board;
- Result in or require the construction or expansion of existing wastewater treatment facilities;
- Be served by a landfill that has inadequate permitted capacity.

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Utilities and Service Systems *Would the project*:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	X	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	X	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	X	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	X	☐
e) Result in a determination by the wastewater treatment provided which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	X	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	X	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	X	☐

DISCUSSION

a-g. The proposed project will not exceed projected wastewater treatment requirements. On-site storm water pretreatment will be implemented by constructing bioswales and biofiltration planters. The project will not require the construction of off-site stormwater drainage facilities. Operation of the showroom and service facility will not generate solid waste. Construction of the proposed project would generate construction waste; however, construction and demolition debris related to the project will be required to be recycled to the maximum extent feasible. The remaining construction waste will not result in a substantial reduction in the capacity of a landfill. Therefore, these would be *less-than-significant impacts*.

5.18. MANDATORY FINDINGS OF SIGNIFICANCE

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Mandatory Findings of Significance *Would the project*:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION

a. The subject site is located in an urbanized area that is currently developed with commercial buildings. The site is adjacent to a major aerial road within the City and adjacent to Interstate 580. The site does not have any fish, wildlife, rare, threatened or endangered plants or animals, and will not eliminate important examples of California history or prehistory. Thus, this would be *no-impact*.

b. The proposed project consists of commercial development in a developed, urbanized area of the city. The project will not result in cumulative impacts when viewed in connection with the effects of past projects, current projects, or probably future projects. Mitigation for traffic impacts will be required for the project and therefore this would be a *less-than-significant impact*.

c. The project will have conditions of approval which will require all applicable codes and requirements are met. The project design and conditions of approval reduces potential impacts to a *less-than-significant impact*.

6. ENDNOTES

[1] California Department of Conservation, Map titled, *Alameda County Important Farmland 2010;* and pages 7-26 through 7-28 of the City of Pleasanton General Plan 2005-2025

[2] Bay Area Air Quality Standards and Attainment Status, BAAQMD Website: http://www.baaqmd.gov/

[3] Bay Area Air Quality Management District, CEQA Air Quality Guidelines, Updated May 2011

[4] Mercedes-Benz of Pleasanton – Traffic Impact Analysis, by W-Trans (Whitlock & Weinberger Transportation, Inc.), dated May 4, 2012

[5] Hacienda Business Park Website: http://www.hacienda.org

[6] Figure 5-5 of the City of Pleasanton General Plan 2005-2025

[7] Climate Action Plan, City of Pleasanton, adopted by City Council February 13, 2012

[8] Hacienda Business Park Website: http://www.hacienda.org

[9] Figure 5-7 of the City of Pleasanton General Plan 2005-2025

[10] Hacienda Business Park Design Guidelines, Hacienda Owners Association, May 1994

EXHIBIT E

CLIMATE ACTION PLAN CHECKLIST

Project Name: Mercedes-Benz of Plesanton **Project Address:** 5871-5885 Owens Drive

Case No.: PUD-85-08-13D and P12-0763 **Residential Units:** None **Commercial S.F.: Approximately 72,151**

	Project Aspects that reduce Greenhouse Gas (GHG) Emissions	Yes	No	N/A	Comments
LU1: Support Infill and High Density Development					
LU1-2	Project is infill development within the existing urban fabric that helps complete, reinforce, and repair the surrounding area.	X			
LU1-3	Project is mixed-use development which incorporates higher density and affordable residential units consistent and with the Downtown Specific Plan with easy access to activity areas. (Applies to projects in the downtown area only).			X	
LU1-4	Project is transit-oriented development near BART station, along transportation corridors, in business parks, and/or in the downtown area.			X	
LU1-5	Project is high density development near and/or around transportation hubs and employment centers.			X	
LU1-6	Project is TOD (transit oriented development): located within 1/4 mile of commuter rail, BART, and other transportation hubs.			X	
LU1-7	Project incorporates affordable housing on a vacant infill site.			X	
LU2: Support Mixed-use Infill and New Development near Local-serving Commercial Areas					
LU2-1	Project is located within convenient walking distance to work, residences, and services.	X			
LU2-2	Project provides new housing and/or new employment located within ½-mile walking/biking proximity of complementary land uses, including retail, employment, institutional, or recreational.	X			
LU2-4	Project reconnects streets and adds streets; minimizes parking to below code requirements; and includes attractive and functional urban plazas. (Applies to development near Pleasanton BART station in Hacienda and development near West Pleasanton BART)			X	
LU2-9	Project includes live-work units.			X	
LU2-10	Project incorporates elements of LEED for Neighborhood Development (LEED ND)			X	
LU3: Improve Transportation Efficiency through Design Improvements					
LU3-1	Project provides key services within a ½-mile walking distance of residential clusters or areas. (Applies to non-residential projects)			X	
LU3-2	Project provides building, landscape, and streetscape development design features that encourage transit, bicycle, and pedestrian access.	X			
LU3-3	Project encourages transit use and provides pedestrian and bicycle facilities.	X			
LU3-4	Project provides infrastructure to facilitate 'NextBus' technologies for tracking buses and predicting arrival times. (Applies to projects that include two or more bus shelters.)			X	
LU3-5	Project provides street improvements that meet the municipal street standards and AB 1358 Complete Streets and increase the safety, convenience, and efficiency of pedestrians, bicyclists, motorists, and transit riders.			X	
LU3-6	Project includes pedestrian and bicycle access through cul-de-sacs in new projects, except where prohibited by topography.			X	
LU3-7	Project includes neighborhood traffic calming to slow traffic speeds, reduce cut-through traffic and traffic-related noise, improve the aesthetics of the street, and increase safety for pedestrians, bicyclists, and vehicles.			X	
TR1: Improve and Increase Transit Ridership with Incentives, Partnerships, and Related Investments					
TR1-6	The project offers discounted transit passes as part of HOA amenities, payable through the HOA dues. (Applies to residential development within 1/2 mile of transit.)			X	

	Project Aspects that reduce Greenhouse Gas (GHG) Emissions	Yes	No	N/A	Comments
TR1-9	The project includes a condition of approval to limit diesel vehicle idling. (Applies to projects with associated bus or truck traffic.)			X	

NM1: Enhance and Maintain a Safe, Convenient, and Effective System for Pedestrians and Bicyclists

NM1-1	Project provides a community trail, bike lane, staging area or other facility consistent with the Community Trails Master Plan or the Pedestrian and Bicycle Master Plan.			X	
NM1-4	Project provides bicycle-related improvements (i.e., work-place provision for showers, bicycle storage, bicycle lanes, etc.).	X			
NM1-5	Project provides bike parking. (Applies to non-residential and multi-family projects.)	X			
NM1-7	Project provides bicycle detection at signalized intersections.			X	
NM1-8	Project provides safe and convenient bike racks. (Applies to private schools, business and office projects.)			X	
NM1-9	Project completes a section of the Iron Horse Trail. (Applies to developments adjacent to the trail location.)			X	
NM1-10	Project contributes to the bicycle/pedestrian underpass at 580/680 interchange (Johnson Drive canal) for connection to Dublin. (Applies to new projects in the immediate vicinity.)			X	

TDM1: Use Parking Policy/Pricing to Discourage Single Occupancy Vehicle (SOV) Travel

TDM1-1	Project shares parking with adjacent use to reduce paved areas that contribute to urban heat islands and reduce stormwater infiltration.			X	
TDM1-2	Project separates fee-based parking from home rents/purchase prices or office leases. (Applies to projects within 1/2 mile of BART stations to increase housing and office affordability for those without a car or cars.)			X	
TDM1-3	Project tenants will participate in the City's TSM program to reduce auto trips. (Applies to non-residential projects.)			X	
TDM1-5	Project will participate in a parking demand management program.			X	
TDM1-6	Project provides one or more electric charging stations for plug-in vehicles.			X	
TDM1-7	Project provides motorcycle or scooter parking. (Applies to projects located in Downtown.)			X	

TDM2: Promote Alternatives to Work and School Commutes

TDM2-4	Project provides a neighborhood telecommuting center.			X	
TDM2-7	Project provides transit passes or other transit use incentives for an interim period to establish transit use patterns for employees. (Applies to new non-residential projects of more than 20,000 s.f. within 1/4 mile of transit)	X			
TDM2-10	Project provides dedicated parking spaces for carpool, vanpool, alternative-fuel, and car-share vehicles.	X			
TDM2-11	Project incorporates a car-sharing service.			X	

EC1: Use City Codes, Ordinances and Permitting to Enhance Green Building, Energy Efficiency, and Energy Conservation

EC1-1	Project meets LEED *Certified* rating level and achieves 25% above T-24, and incorporates new requirements for shade trees, cool roofs and landscape lighting. (Applies to civic projects and commercial projects over 20,000 s.f.)	X			
EC1-2	Project meets the City's residential green rating standard, including 25% above T-24, and incorporates new requirements for shade trees, cool roofs and landscape lighting. (Applies to residential projects.)			X	

Project Aspects that reduce Greenhouse Gas (GHG) Emissions		Yes	No	N/A	Comments
EC1-3	Project provides light-colored paving material for roads and parking areas, as well as parking lot shade trees.	X			

EC4: Develop Programs to Increase Energy Efficiency and Conservation

EC4-4	Project incorporates solar tubes, skylights, and other daylighting systems within the design .	X			

ER1: Implement Local Ordinances and Permitting Processes to Support Renewable Energy

ER1-1	Project provides residential renewable energy installations (e.g., wind turbines). (Applies to residential projects.)			X	

ER2: Develop Programs to Promote On-Site Renewable Energy in the Community

ER2-3	Project incorporates distributed generation, especially PV, solar thermal, solar hot water, and solar cooling, and/or providing bloom box or other fuel cell technologies.	X			A condition of approval (No. 18) has been added to reflect this requirement
ER2-5	Project includes a solar grid to power one or more EV charging stations.	X			A condition of approval (No. 18) has been added to reflect this requirement

SW2: Increase Recycling, Organics Diversion, and Waste Reduction Associated with the Entire Community

SW2-12	Project provides adequate space and logistics for handling of recyclable and compostable materials. (Applies to commercial and multifamily residential projects.)	X			

WA1: Conserve Community Water through Building and Landscape Design and Improvements

WA 1-7	Project incorporates a water-saving landscape plan that includes xeriscaping and drought-resistant planting in lieu of lawns.	X			
WA 1-8	Project limits lawn areas to designated play areas.			X	

WA3: Increase or Establish use of Reclaimed/Grey Water Systems

WA3-2	Project utilizes reclaimed wastewater.			X	This is not available at this time but is expected to available in Hacienda Business Park in 2014.
WA3-4	Project incorporates rain harvesting.	X			

EXHIBIT F

Whitlock & Weinberger
Transportation, Inc.

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Oakland, CA 94612

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May 4, 2012

Mr. Mike Tassano
Deputy Director of Community Development, Transportation
City of Pleasanton
200 Old Bernal Avenue
Pleasanton, CA 94566

Mercedes of Pleasanton – Traffic Impact Analysis

Dear Mr. Tassano;

As requested, Whitlock & Weinberger Transportation, Inc., (W-Trans) has prepared a traffic impact analysis for the proposed expansion of Mercedes of Pleasanton which is located at 5871, 5877, and 5885 Owens Drive. The traffic impact analysis is intended to assist the City of Pleasanton staff in their evaluation of the potential impacts associated with the proposed project.

Project/Study Area

The proposed Mercedes of Pleasanton project would consist of approximately 112,345 square feet of new showroom space and a service facility. The proposed project would replace two existing Mercedes-Benz buildings located at 5871 and 5885 Owens Drive and an existing Chevy's Restaurant located at 5877 Owens Drive. The three lots would be merged into a single lot. The study area includes the following intersections:

1. Dougherty Road/I-580 Westbound Off-Ramp
2. Hopyard Road/I-580 Eastbound Off-ramp
3. Hopyard Road/Owens Drive
4. Owens Drive/Chabot Drive-Owens Court

Trip Generation and Distribution

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation*, 8th Edition, 2008. The trip generation potential of the proposed project was developed using the rates for "New Car Sales" (ITE Land Use #841). Because the site is currently occupied by the Mercedes-Benz auto center and Chevy's Restaurant, the trip generation associated with the existing use was considered using the rates for "New Car Sales" and "High-Turnover (Sit-Down) Restaurant" (ITE Land Use #932) respectively.

The trip generation potential for the proposed project is indicated in Table 1, with deductions taken for trips made to and from the existing Mercedes-Benz auto center and Chevy's Restaurant. The proposed project is expected to generate an average of 229 trips during the a.m. peak hour and 223 during the p.m. peak hour. After deductions are taken into account, the project would be expected to result in a net increase in trip generation potential of 47 trips during the morning peak hour and 29 trips during the evening peak hour.

Table 1
Trip Generation Summary – Project Conditions

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
M-B Auto Center[1]	-40.68 ksf[2]	33.34	-1357	2.03	-83	-62	-21	2.41	-98	-39	-59
Chevy's Restaurant[3]	-8.54 ksf	127.15	-1086	11.52	-99	-52	-47	11.15	-96	-57	-39
Proposed											
M-B Auto Center[1]	112.345 ksf	33.34	3746	2.03	229	170	59	1.98	223	87	136
Total			**1303**		**47**	**56**	**-9**		**29**	**-9**	**38**

Notes: [1] New Car Sales (Land Use #841), M-B = Mercedes-Benz
[2] ksf = 1,000 square feet; 40.68 ksf = 27.77 ksf (577 Owens Dr) + 12.91 ksf (580 Owens Dr)
[3] High Turn-Over (Sit Down) Restaurant (Land Use #932); to be consistent with the City of Pleasanton Travel Forecast Model, trips were considered for the Chevy's Restaurant during the a.m. peak hour

The trip distribution pattern used to allocate new project trips to the street network and study intersections was based on the existing traffic patterns around the study area. The applied trip distribution for the proposed project is indicated in Table 2.

Table 2
Trip Distribution Assumptions

Route	Percent
I-580 East	20%
I-580 West	50%
Hopyard Road North	20%
Hopyard Road South	6%
Owens Road West	1%
Owens Road East	2%
Chabot Drive South	1%
Total	**100%**

Collision History

The collision histories for Owens Drive in the vicinity of the site driveways were reviewed to determine any trends or patterns that may indicate a potential safety issue with turning movements at the project site driveway. The collision rate was calculated based on the collision data available from the City of Pleasanton. A three-year period between April 1, 2009, and April 1, 2012, was used in the analysis. The calculated collision rate for the study segment was compared to the statewide average rates for urban facilities, as indicated in *2007 Accident Data on California State Highways*, California Department of Transportation (Caltrans).

For the three-year study period, eight collisions were reported along the study segment (includes intersection related collisions). Of these, two appear to be related to turning into or out of the existing driveways along Owens Drive at the project site. The study segment had an injury rate lower than the statewide average and no fatalities were reported during the three-year study period. The calculated collision rate is presented in Table 3 and a copy of the spreadsheet indicating the details is enclosed.

Table 3
Collision Rates along the Study Segment

Study Segment	Number of Collisions (2009-2012)	Calculated Collision Rate (c/mvm)	Statewide Average Collision Rate (c/mvm)
Owens Dr (Chabot Dr to 600' West of Willow Rd)	8	2.01	2.40

Note: c/mvm = collisions per million vehicle miles of travel

Capacity Analysis

Intersection Level of Service Methodologies

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2000. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The City of Pleasanton has adopted an LOS standard of D or better for intersection operations per the General Plan (adopted July 2009). However, in the Downtown Area and at gateway intersections an LOS lower than the standard LOS D is acceptable if no reasonable mitigations exist or if the necessary mitigation is contrary to other goals and policies of the City.

Significance Criteria

As per City of Pleasanton, traffic impacts at signalized intersections would be considered significant if the Project would result in any of the following:

- Deterioration of a signalized intersection from LOS D (or better) to LOS E or LOS F
- The project adds ten or more trips to an intersection projected to operate at LOS E or F prior to the addition of project traffic

Intersection Level of Service

The intersection LOS was evaluated at the study intersections under the following six conditions:

- Existing
- Existing plus Project
- Near-term (Existing plus Approved Projects)
- Near-term plus Project (Existing plus Approved Projects plus Project)
- Buildout (No Project)
- Buildout plus Project

The City of Pleasanton provided the Synchro traffic analysis model for Existing, Near-term (No Project) and Buildout (No Project) Conditions. The project-generated trips were added to existing traffic volumes to evaluate Existing plus Project Conditions. Under Near-term plus Project Conditions and Buildout plus Project conditions, project trips were added using the a.m. and p.m. peak hour traffic volume difference plots provided by the City's travel forecast model.

Existing and Existing plus Project Conditions

Under Existing Conditions all of the study intersections are operating at an acceptable LOS D or better during both the a.m. and p.m. peak hours. With the addition of project-generated traffic, the study intersections would continue to operate at an acceptable LOS, with no changes to the LOS due to project-added traffic. Therefore, the project is not anticipated to result in any significant potential impacts at the study intersections during both the a.m. and p.m. peak hours. The levels of service for the study intersections under Existing and Existing plus Project Conditions are summarized in Table 4 and calculations are enclosed.

Table 4
Summary of Existing and Existing plus Project
Peak Hour Intersection Level of Service Calculations

Study Intersection	Existing Conditions				Existing plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Dougherty Rd/I-580 WB Off-Ramp	11.4	B	10.3	B	11.5	B	10.2	B
2. Hopyard Rd/I-580 EB Off-Ramp	36.7	D	24.2	C	40.5	D	23.9	C
3. Hopyard Rd/Owens Dr	31.0	C	45.3	D	31.1	C	47.3	D
4. Owens Dr/Chabot Dr-Owens Ct	8.0	A	10.9	B	8.5	A	10.9	B

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

Near-term (No Project) and Near-term plus Project Conditions

Under Near-Term (No Project) Conditions, the intersection at Hopyard Road/Owens Dr is expected to operate at an acceptable LOS E during p.m. peak hour. With the addition of project-generated trips, it would continue to operate at an unacceptable LOS E. However, the project is anticipated to add more than ten trips during the p.m. peak hour at this intersection, resulting in a potentially significant project impact. All of the remaining study intersections are projected to operate at an acceptable LOS during both the a.m. and p.m. peak hours without and with the addition of project-generated trips. The levels of service for the study intersections under Near-Term (No Project) and Near-Term plus Project Conditions are summarized in Table 5 and calculations are enclosed.

Table 5
Summary of Near-Term (No Project) and Near-Term plus Project
Peak Hour Intersection Level of Service Calculations

Study Intersection *Approach*	Near-Term (No Project)				Near-Term plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Dougherty Rd/I-580 WB Off-Ramp	13.7	B	10.5	B	13.8	B	10.6	B
2. Hopyard Rd/I-580 EB Off-Ramp	29.9	C	30.9	C	30.3	C	34.3	C
3. Hopyard Rd/Owens Dr	33.5	C	**61.3**	**E**	33.2	C	**63.2**	**E**
4. Owens Dr/Chabot Dr-Owens Ct	8.0	A	11.8	B	8.2	A	12.0	B

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service
Bold text = deficient operation

Buildout (No Project) and Buildout plus Project Conditions

Under the Buildout (No Project) Conditions, all of the study intersections are expected to operate at an acceptable LOS D or better overall during both the a.m. and p.m. peak hour. With the addition of project-generated trips, the intersection at Hopyard Rd/I-580 Eastbound Off-Ramp would degrade to an LOS E during a.m. peak hour, resulting in a potentially significant project impact. All of the remaining intersections would continue to operate at an acceptable LOS with the addition of project-generated trips during both a.m. and p.m. peak hour. The levels of service for the study intersections under Buildout (No-Project) and Buildout plus Project Conditions are summarized in Table 6 and calculations are enclosed.

Table 6
Summary of Buildout (No Project) and Buildout plus Project
Peak Hour Intersection Level of Service Calculations

Study Intersection	Buildout (No Project)				Buildout plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Dougherty Rd/I-580 WB Off-Ramp	13.8	B	13.9	B	13.8	B	14.5	B
2. Hopyard Rd/I-580 EB Off-Ramp	54.5	D	26.4	C	**55.6**	**E**	28.4	C
3. Hopyard Rd/Owens Dr	25.2	C	28.0	C	24.8	C	28.1	C
4. Owens Dr/Chabot Dr-Owens Ct	8.0	A	14.4	B	8.3	A	14.5	B

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service
Bold text = deficient operation

Improvements

Summary of Project Impacts

The project is anticipated to have a potentially significant impact at the following intersections:

- Hopyard Road/Owens Drive (p.m. peak hour) – Near-term plus Project Conditions
- Hopyard Road/I-580 Eastbound Off-Ramp (a.m. peak hour) – Buildout plus Project Conditions

Improved Intersection Level of Service

Mitigation measures were identified to address significant impacts of the proposed project under Near-term and Buildout Conditions.

Near-term plus Project plus Improvements

The intersection of Hopyard Road/Owens Drive would operate at an unacceptable LOS E during the p.m. peak hour without and with the addition of project-generated trips under Near-term Conditions. However, the project is anticipated to add more than ten trips at this intersections during the p.m. peak hour, resulting in a potentially significant impact. The recommended improvement measure at this intersection consists of widening the westbound approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane into one left-turn lane, one through lane, one shared through/right-turn lane and one right-turn lane. With the implementation of this improvement, the intersection would operate at an acceptable LOS D and the project's impact would be reduced to less-than-significant. The levels of service under Near-term Conditions without and with the recommended improvements are summarized in Table 7 and detailed LOS calculations are enclosed.

Table 7
Summary of Near-term plus Project Plus Improvements
PM Peak Hour Intersection Level of Service Calculations

Study Intersection Approach	Near-term (No Project) Delay/LOS	Near-term plus Project Delay/LOS	Near-term plus Project plus Improvements Delay/LOS
3. Hopyard Rd/Owens Dr	**61.3/E**	**63.2/E**	46.6/D

Notes: Results are displayed as Delay/LOS; Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation

Buildout plus Project plus Improvements

The intersection of Hopyard Road/I-580 Eastbound Off-Ramp would operate at an acceptable LOS D during the a.m. peak hour under Buildout Conditions. The addition of project-generated trips would deteriorate the intersection to LOS E. The recommended improvement measure at this intersection consists of restriping the I-580 Eastbound Off-Ramp approach from two left-turn lanes and two right-turn lanes into one left-turn lane, one shared left-turn/right-turn lane, and two right-turn lanes. With the implementation of this improvement the intersection would operate at an acceptable LOS B. The project's impact would be reduced to less-than-significant with the implementation of this improvement measure. The level of service under Buildout Conditions without and with the recommended improvements are summarized in Table 8 and detailed LOS calculation are enclosed.

Table 8
Summary of Buildout Plus Project Plus Improvements
AM Peak Hour Intersection Level of Service Calculations

Study Intersection Approach	Buildout (No Project) Delay/LOS	Buildout plus Project Delay/LOS	Buildout plus Project plus Improvements Delay/LOS
2. Hopyard Rd/I-580 EB Off-Ramp	54.5/D	**55.6/E**	14.9/B

Notes: Results are displayed as Delay/LOS; Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation

Queuing

Excessive intersection queuing occurs when the vehicle queue extends beyond the available storage capacity of an approach lane or turn lane. For turn lanes, this would be the length of the turn pocket and for through lanes this would be the distance to the adjacent intersection. Queuing can also create operational issues if the vehicle queue blocks nearby driveways. Queuing conditions were reviewed at the Owens Drive/Chabot Drive-Owens Court intersection under plus Project Conditions to determine if excessive queuing would exist with the addition of project-generated trips. The 95th percentile queue distance was determined using a Synchro analysis. Queuing conditions for turn lanes were only considered on approaches where the project would be expected to contribute traffic.

During both the a.m. and p.m. peak hour, adequate storage capacity would be available for all of the anticipated queuing under plus Project Conditions. A summary of projected queuing conditions is provided in Table 9 and queuing calculations are enclosed.

Table 9
Summary of Queuing and Storage Length

Intersection *Movement*	Available Storage (feet)	95th Percentile Queue (feet)					
		Existing plus Project		Near-Term plus Project		Buildout plus Project	
		AM	PM	AM	PM	AM	PM
Owens Dr/Chabot Dr-Owens Ct							
Eastbound Left	*175*	*114*	*105*	*90*	*126*	*104*	*124*
Southbound Left	*75*	*14*	*18*	*14*	*31*	*15*	*41*

Notes: Queue reported as feet per lane

Based on the field observations during a typical weekday p.m. peak period, it was noted that occasionally the westbound right-turn queues along Owens Drive between Hopyard Road and Chabot Drive-Owens Court exceeded the existing storage capacity, and queues spilled back and past the existing access driveways at the project site.

Site Access and Parking

Access to and within the site was analyzed based on the proposed site plan provided by City staff. Currently, the site is accessible by two right-in/right-out driveways on Owens Drive, as well as one full access driveway on Owens Court. With the proposed project, the two access points along Owens Drive would be consolidated into one right-in/right-out access and the access along Owens Court would be moved to the north from its current location. The proposed access along Owens Drive would connect to the parking areas and lead to the internal circulation system. The access along Owens Court would also connect to the parking areas and provide a direct access to the servicing area.

Sight-Distance

Sight distance along Owens Drive and Owens Court at the proposed project driveway was evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance for minor street approaches that are either a private road or a driveway are based on stopping sight distance. The approach travel speed is used as a basis for determining the recommended sight distance. For Owens Drive, a road with a posted speed limit of 40 mph, the minimum stopping distance needed is 300 feet. The speed limit on Owens Court is not posted. However, based on an assumed speed limit of 30 mph, the minimum recommended stopping sight distance for Owens Court is 200 feet.

Sight distances at the proposed driveway locations were evaluated based on existing conditions and the proposed driveway locations. Given the straight, flat alignment of Owens Drive in the vicinity of the project site, sight lines are considerably greater than the 300 feet recommended. Similarly, sight lines along Owens Court from the proposed access would exceed 200 feet to the south.

Parking

The City of Pleasanton Municipal Code section 18.88.030 (B2 C-R District) was reviewed to determine the adequacy of parking as proposed at the project site. The code does not specify a parking requirement for the proposed land use, but stipulates that parking shall be established on a case by case basis. Based on the information shown on the site plan (Sheet A1.1, February 28, 2012), approximately 853 parking stalls are required for the proposed project. As proposed, approximately 583 stalls would be provided at the project site. Generally, if an auto dealership does not have adequate parking on-site, then there would be less inventory stored on-site. Additional analysis including review of existing Mercedes facilities of a similar size as the proposed project may be required to determine adequacy of the parking as proposed at the project site.

Findings

- The proposed project would result in a net increase in trip generation potential of 47 trips during the morning peak hour and 29 trips during the evening peak hour.
- For a three-year period, two collisions were reported involving turning movements at the project site driveways on Owens Drive.
- All of the study intersections except Hopyard Road/Owens Drive and Hopyard Road/I-580 Eastbound Off-Ramp are expected to continue operating acceptably under all scenarios evaluated.

- The intersection at Hopyard Road/Owens Drive is expected to operate at an unacceptable LOS E during p.m. peak hour under Near-term (No project) Conditions without and with the addition of project-generated trips. However, the project is anticipated to add more than ten p.m. peak hour trips, resulting in a potentially significant Near-term impact.

- The intersection at Hopyard Rd/I-580 Eastbound Off-Ramp would operate at an acceptable LOS D or better under Buildout Conditions. With the addition of project-generated trips, this intersection would degrade to an unacceptable LOS E during a.m. peak hour, resulting in a potentially significant Buildout impact.

- The left-turn lane storage capacity at the Owens Drive/Chabot Drive-Owens Court intersection is expected to be adequate under project conditions.

- The proposed parking supply for the project site may not be adequate. Additional analysis may be required to determine the parking supply needed for the project site.

- Sight lines at the proposed project driveways along Owens Drive and Owens Court are adequate.

Recommendations

The recommended mitigation measures to reduce project impacts to less-than-significant levels at the study intersections are as follows:

- Hopyard Road/Owens Drive (p.m. peak hour, Near-term plus Project plus Improvements); Widen the westbound approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane into one left-turn lane, one through lane, one shared through/right-turn lane and one right-turn lane.

- Hopyard Road/I-580 Eastbound Off-Ramp (a.m. peak hour, Buildout plus Project plus Improvements): Change the roadway striping on the I-580 Eastbound Off-Ramp approach to Hopyard Road from two left-turn lanes and two right-turn lanes into one left-turn lane, one shared left-turn/right-turn lane, and two right-turn lanes.

Thank you for asking us to provide these services. Please call me if you have any questions or wish to discuss additional services to address potential impacts identified above.

Sincerely,

Jaspreet Anand

Jaspreet K. Anand, EIT
Transportation Engineer

Mark E. Spencer

Mark Spencer, PE
Principal

MS/jka/PLE002-3.L1

Enclosures: Collision calculations
Level of Service calculations
Queuing calculations

SEGMENT COLLISION RATE CALCULATIONS

Mercedes of Pleasanton Traffic Impact Analysis

Location: Owens Dr From Chabot Dr to 600' West of Willow Rd

Date of Count: Monday, December 1, 2002
ADT: 19,100

Number of Collisions: 8
Number of Injuries: 3
Number of Fatalities: 0
Start Date: April 1, 2009
End Date: April 1, 2012
Number of Years: 3

Highway Type: Divided 5 lanes or more
Area: Urban
Design Speed: <=45

Segment Length: 0.2 miles
Direction: East/West

$$\frac{\text{NUMBER OF COLLISIONS} \times 1\ \text{MILLION}}{\text{ADT} \times 365\ \text{DAYS PER YEAR} \times \text{SEGMENT LENGTH} \times \text{NUMBER OF YEARS}}$$

$$\frac{8 \times 1{,}000{,}000}{19{,}100 \times 365 \times 0.19 \times 3}$$

	Collision Rate		Fatality Rate	Injury Rate
Study Segment	2.01	c/mvm	0.0%	37.5%
Statewide Average*	2.40	c/mvm	0.7%	56.8%

ADT = average daily traffic volume
c/mvm = collisions per million vehicle miles
* *2007 Collision Data on California State Highways*, Caltrans

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	398	468	1009	0	0	1185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	423	498	1073	0	0	1261
RTOR Reduction (vph)	0	89	0	0	0	0
Lane Group Flow (vph)	423	409	1073	0	0	1261
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	16.4	16.4	31.6			31.6
Effective Green, g (s)	19.4	19.4	34.6			34.6
Actuated g/C Ratio	0.32	0.32	0.58			0.58
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1147	931	3030			2109
v/s Ratio Prot	0.12	c0.14	0.20			c0.34
v/s Ratio Perm						
v/c Ratio	0.37	0.44	0.35			0.60
Uniform Delay, d1	15.6	16.0	6.8			8.2
Progression Factor	1.00	1.00	1.35			1.00
Incremental Delay, d2	0.4	0.7	0.3			1.3
Delay (s)	16.0	16.7	9.4			9.5
Level of Service	B	B	A			A
Approach Delay (s)	16.4		9.4			9.5
Approach LOS	B		A			A

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	596	1382	0	764	1168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	641	1486	0	822	1256	0
RTOR Reduction (vph)	0	24	0	0	0	0
Lane Group Flow (vph)	641	1462	0	822	1256	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.18	c0.51		0.16	c0.24	
v/s Ratio Perm						
v/c Ratio	0.40	1.13		0.35	0.53	
Uniform Delay, d1	11.1	16.5		10.8	11.9	
Progression Factor	1.00	1.00		1.02	0.76	
Incremental Delay, d2	0.1	67.9		0.4	0.8	
Delay (s)	11.1	84.4		11.4	9.9	
Level of Service	B	F		B	A	
Approach Delay (s)	62.4			11.4	9.9	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	36.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	216	66	82	134	96	169	103	626	134	662	1306	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.95		1.00	0.95	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3223		1829	1743	1554	1829	5255	1605	3547	4994	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3223		1829	1743	1554	1829	5255	1605	3547	4994	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	232	71	88	144	103	182	111	673	144	712	1404	554
RTOR Reduction (vph)	0	54	0	0	14	82	0	0	0	0	47	0
Lane Group Flow (vph)	132	205	0	144	136	53	111	673	144	712	1911	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	16.6	16.6		13.2	13.2	40.7	11.0	40.7	120.0	27.5	57.2	
Effective Green, g (s)	19.6	19.6		16.2	16.2	46.7	12.0	43.7	120.0	28.5	60.2	
Actuated g/C Ratio	0.16	0.16		0.13	0.13	0.39	0.10	0.36	1.00	0.24	0.50	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	272	526		247	235	605	183	1914	1605	842	2505	
v/s Ratio Prot	c0.08	0.06		c0.08	0.08	0.03	0.06	0.13		c0.20	c0.38	
v/s Ratio Perm									0.09			
v/c Ratio	0.49	0.39		0.58	0.58	0.09	0.61	0.35	0.09	0.85	0.76	
Uniform Delay, d1	45.6	44.9		48.7	48.7	23.2	51.7	27.8	0.0	43.7	24.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.29	0.53	1.00	0.97	1.01	
Incremental Delay, d2	0.5	0.2		2.3	2.1	0.0	3.8	0.5	0.1	3.9	1.1	
Delay (s)	46.1	45.0		51.0	50.9	23.2	70.5	15.3	0.1	46.3	25.5	
Level of Service	D	D		D	D	C	E	B	A	D	C	
Approach Delay (s)		45.4			42.2			19.5			31.1	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	515	87	25	309	23	36	6	19	13	10	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5120		1829	5200		1800	1925	1636	1829	1706	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5120		1829	5200		1393	1925	1636	1450	1706	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	111	599	102	29	364	27	42	7	22	15	12	22
RTOR Reduction (vph)	0	14	0	0	6	0	0	0	18	0	18	0
Lane Group Flow (vph)	111	687	0	29	385	0	42	7	4	15	16	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	6.9	18.4		2.1	13.6		5.6	5.6	5.6	5.6	5.6	
Effective Green, g (s)	7.9	21.4		3.1	16.6		7.6	7.6	7.6	7.6	7.6	
Actuated g/C Ratio	0.19	0.52		0.08	0.40		0.18	0.18	0.18	0.18	0.18	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	352	2666		138	2100		258	356	303	268	315	
v/s Ratio Prot	c0.06	c0.13		0.02	0.07			0.00			0.01	
v/s Ratio Perm							c0.03		0.00	0.01		
v/c Ratio	0.32	0.26		0.21	0.18		0.16	0.02	0.01	0.06	0.05	
Uniform Delay, d1	14.3	5.5		17.8	7.9		14.1	13.7	13.7	13.8	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.1		0.8	0.0		0.3	0.0	0.0	0.1	0.1	
Delay (s)	14.8	5.5		18.6	7.9		14.4	13.7	13.7	13.9	13.9	
Level of Service	B	A		B	A		B	B	B	B	B	
Approach Delay (s)		6.8			8.7			14.1			13.9	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	6.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	280	527	2072	0	0	999
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	286	538	2114	0	0	1019
RTOR Reduction (vph)	0	6	0	0	0	0
Lane Group Flow (vph)	286	532	2114	0	0	1019
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.0	17.0	31.0			31.0
Effective Green, g (s)	20.0	20.0	34.0			34.0
Actuated g/C Ratio	0.33	0.33	0.57			0.57
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1182	960	2978			2072
v/s Ratio Prot	0.08	c0.18	c0.40			0.28
v/s Ratio Perm						
v/c Ratio	0.24	0.55	0.71			0.49
Uniform Delay, d1	14.5	16.4	9.4			7.8
Progression Factor	1.00	1.00	0.83			1.00
Incremental Delay, d2	0.2	1.2	0.8			0.8
Delay (s)	14.7	17.5	8.6			8.6
Level of Service	B	B	A			A
Approach Delay (s)	16.6		8.6			8.6
Approach LOS	B		A			A

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1223	1162	0	1979	1148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1274	1210	0	2061	1196	0
RTOR Reduction (vph)	0	46	0	0	0	0
Lane Group Flow (vph)	1274	1164	0	2061	1196	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	21.0	21.0		27.0	27.0	
Effective Green, g (s)	24.0	24.0		30.0	30.0	
Actuated g/C Ratio	0.40	0.40		0.50	0.50	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1419	1152		2628	2628	
v/s Ratio Prot	0.36	c0.40		c0.39	0.23	
v/s Ratio Perm						
v/c Ratio	0.90	1.01		0.78	0.46	
Uniform Delay, d1	16.9	18.0		12.3	9.7	
Progression Factor	1.00	1.00		1.11	1.60	
Incremental Delay, d2	7.7	29.1		1.6	0.5	
Delay (s)	24.5	47.1		15.3	16.0	
Level of Service	C	D		B	B	
Approach Delay (s)	35.5			15.3	16.0	
Approach LOS	D			B	B	

Intersection Summary			
HCM Average Control Delay	24.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	120.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
29: Owens Drive & Hopyard

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	525	176	124	177	122	605	138	1033	156	585	936	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.90	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3283		1829	1645	1554	1829	5255	1605	3547	5000	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3283		1829	1645	1554	1829	5255	1605	3547	5000	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	191	135	192	133	658	150	1123	170	636	1017	389
RTOR Reduction (vph)	0	22	0	0	61	16	0	0	0	0	53	0
Lane Group Flow (vph)	303	572	0	192	342	372	150	1123	170	636	1353	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	24.6	24.6		19.0	19.0	45.0	13.5	32.4	120.0	22.0	40.9	
Effective Green, g (s)	27.6	27.6		22.0	22.0	47.0	14.5	35.4	120.0	23.0	43.9	
Actuated g/C Ratio	0.23	0.23		0.18	0.18	0.39	0.12	0.30	1.00	0.19	0.37	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	383	755		335	302	609	221	1550	1605	680	1829	
v/s Ratio Prot	c0.18	0.17		0.10	c0.21	0.24	0.08	c0.21		c0.18	0.27	
v/s Ratio Perm									0.11			
v/c Ratio	0.79	0.76		0.57	1.13	0.61	0.68	0.72	0.11	0.94	0.74	
Uniform Delay, d1	43.5	43.1		44.7	49.0	29.2	50.5	37.9	0.0	47.8	33.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.16	0.63	1.00	0.93	0.89	
Incremental Delay, d2	10.0	3.9		1.5	92.2	1.3	6.2	2.9	0.1	14.7	1.8	
Delay (s)	53.5	47.0		46.2	141.2	30.5	64.8	26.7	0.1	59.1	31.2	
Level of Service	D	D		D	F	C	E	C	A	E	C	
Approach Delay (s)		49.2			78.9			27.5			39.9	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM Average Control Delay	45.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	139	870	52	49	767	35	121	9	42	16	11	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5201		1829	5220		1794	1925	1636	1829	1661	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5201		1829	5220		1371	1925	1636	1447	1661	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	143	897	54	51	791	36	125	9	43	16	11	37
RTOR Reduction (vph)	0	6	0	0	4	0	0	0	33	0	28	0
Lane Group Flow (vph)	143	945	0	51	823	0	125	9	10	16	20	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	7.9	21.6		4.1	17.8		9.6	9.6	9.6	9.6	9.6	
Effective Green, g (s)	8.9	24.6		5.1	20.8		11.6	11.6	11.6	11.6	11.6	
Actuated g/C Ratio	0.18	0.49		0.10	0.41		0.23	0.23	0.23	0.23	0.23	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	324	2544		185	2159		316	444	377	334	383	
v/s Ratio Prot	c0.08	c0.18		0.03	0.16			0.00			0.01	
v/s Ratio Perm							c0.09		0.01	0.01		
v/c Ratio	0.44	0.37		0.28	0.38		0.40	0.02	0.03	0.05	0.05	
Uniform Delay, d1	18.5	8.0		20.9	10.3		16.4	15.0	15.0	15.1	15.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	0.1		0.8	0.1		0.8	0.0	0.0	0.1	0.1	
Delay (s)	19.4	8.1		21.7	10.4		17.2	15.0	15.0	15.1	15.1	
Level of Service	B	A		C	B		B	B	B	B	B	
Approach Delay (s)		9.6			11.0			16.6			15.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	50.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	409	468	1007	0	0	1196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	435	498	1071	0	0	1272
RTOR Reduction (vph)	0	89	0	0	0	0
Lane Group Flow (vph)	435	409	1071	0	0	1272
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	16.5	16.5	31.5			31.5
Effective Green, g (s)	19.5	19.5	34.5			34.5
Actuated g/C Ratio	0.32	0.32	0.57			0.57
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1153	936	3022			2103
v/s Ratio Prot	0.12	c0.14	0.20			c0.35
v/s Ratio Perm						
v/c Ratio	0.38	0.44	0.35			0.60
Uniform Delay, d1	15.6	15.9	6.8			8.3
Progression Factor	1.00	1.00	1.34			1.00
Incremental Delay, d2	0.4	0.7	0.3			1.3
Delay (s)	16.0	16.6	9.4			9.6
Level of Service	B	B	A			A
Approach Delay (s)	16.3		9.4			9.6
Approach LOS	B		A			A

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	596	1410	0	758	1190	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	641	1516	0	815	1280	0
RTOR Reduction (vph)	0	22	0	0	0	0
Lane Group Flow (vph)	641	1494	0	815	1280	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.18	c0.52		0.16	c0.24	
v/s Ratio Perm						
v/c Ratio	0.40	1.15		0.34	0.54	
Uniform Delay, d1	11.1	16.5		10.7	12.0	
Progression Factor	1.00	1.00		1.00	0.77	
Incremental Delay, d2	0.1	78.0		0.4	0.8	
Delay (s)	11.1	94.5		11.1	10.0	
Level of Service	B	F		B	B	
Approach Delay (s)	69.7			11.1	10.0	
Approach LOS	E			B	B	

Intersection Summary			
HCM Average Control Delay	40.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
29: Owens Drive & Hopyard

4/24/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	216	67	82	133	96	161	103	626	137	712	1306	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.95		1.00	0.96	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3224		1829	1748	1554	1829	5255	1605	3547	4994	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3224		1829	1748	1554	1829	5255	1605	3547	4994	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	232	72	88	143	103	173	111	673	147	766	1404	554
RTOR Reduction (vph)	0	53	0	0	13	78	0	0	0	0	47	0
Lane Group Flow (vph)	132	207	0	143	133	52	111	673	147	766	1911	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	16.6	16.6		13.1	13.1	42.0	11.0	39.4	120.0	28.9	57.3	
Effective Green, g (s)	19.6	19.6		16.1	16.1	48.0	12.0	42.4	120.0	29.9	60.3	
Actuated g/C Ratio	0.16	0.16		0.13	0.13	0.40	0.10	0.35	1.00	0.25	0.50	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	272	527		245	235	622	183	1857	1605	884	2509	
v/s Ratio Prot	c0.08	0.06		c0.08	0.08	0.03	0.06	0.13		c0.22	c0.38	
v/s Ratio Perm									0.09			
v/c Ratio	0.49	0.39		0.58	0.57	0.08	0.61	0.36	0.09	0.87	0.76	
Uniform Delay, d1	45.6	44.9		48.8	48.7	22.3	51.7	28.8	0.0	43.1	24.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.29	0.53	1.00	0.98	1.01	
Incremental Delay, d2	0.5	0.2		2.3	1.9	0.0	3.8	0.5	0.1	4.3	1.1	
Delay (s)	46.1	45.1		51.1	50.5	22.4	70.4	15.9	0.1	46.4	25.3	
Level of Service	D	D		D	D	C	E	B	A	D	C	
Approach Delay (s)		45.4			42.0			19.9			31.3	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	148	515	87	25	309	23	36	7	19	13	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5120		1829	5200		1798	1925	1636	1829	1755	
Flt Permitted	0.95	1.00		0.95	1.00		0.74	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5120		1829	5200		1404	1925	1636	1448	1755	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	174	599	102	29	364	27	42	8	22	15	12	12
RTOR Reduction (vph)	0	14	0	0	6	0	0	0	18	0	10	0
Lane Group Flow (vph)	174	687	0	29	385	0	42	8	4	15	14	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	8.4	20.0		2.1	13.7		5.6	5.6	5.6	5.6	5.6	
Effective Green, g (s)	9.4	23.0		3.1	16.7		7.6	7.6	7.6	7.6	7.6	
Actuated g/C Ratio	0.22	0.54		0.07	0.39		0.18	0.18	0.18	0.18	0.18	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	403	2758		133	2034		250	343	291	258	312	
v/s Ratio Prot	c0.10	c0.13		0.02	0.07			0.00			0.01	
v/s Ratio Perm							c0.03		0.00	0.01		
v/c Ratio	0.43	0.25		0.22	0.19		0.17	0.02	0.01	0.06	0.05	
Uniform Delay, d1	14.3	5.2		18.7	8.5		14.9	14.5	14.5	14.6	14.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.0		0.8	0.0		0.3	0.0	0.0	0.1	0.1	
Delay (s)	15.1	5.3		19.5	8.6		15.2	14.5	14.5	14.7	14.6	
Level of Service	B	A		B	A		B	B	B	B	B	
Approach Delay (s)		7.2			9.3			14.9			14.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	42.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	278	527	2079	0	0	997
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	284	538	2121	0	0	1017
RTOR Reduction (vph)	0	6	0	0	0	0
Lane Group Flow (vph)	284	532	2121	0	0	1017
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.0	17.0	31.0			31.0
Effective Green, g (s)	20.0	20.0	34.0			34.0
Actuated g/C Ratio	0.33	0.33	0.57			0.57
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1182	960	2978			2072
v/s Ratio Prot	0.08	c0.18	c0.40			0.28
v/s Ratio Perm						
v/c Ratio	0.24	0.55	0.71			0.49
Uniform Delay, d1	14.5	16.4	9.4			7.8
Progression Factor	1.00	1.00	0.82			1.00
Incremental Delay, d2	0.2	1.2	0.8			0.8
Delay (s)	14.7	17.5	8.6			8.6
Level of Service	B	B	A			A
Approach Delay (s)	16.6		8.6			8.6
Approach LOS	B		A			A

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1223	1158	0	2005	1144	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1274	1206	0	2089	1192	0
RTOR Reduction (vph)	0	47	0	0	0	0
Lane Group Flow (vph)	1274	1159	0	2089	1192	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	21.0	21.0		27.0	27.0	
Effective Green, g (s)	24.0	24.0		30.0	30.0	
Actuated g/C Ratio	0.40	0.40		0.50	0.50	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1419	1152		2628	2628	
v/s Ratio Prot	0.36	c0.40		c0.40	0.23	
v/s Ratio Perm						
v/c Ratio	0.90	1.01		0.79	0.45	
Uniform Delay, d1	16.9	18.0		12.4	9.7	
Progression Factor	1.00	1.00		1.10	1.60	
Incremental Delay, d2	7.7	28.0		1.7	0.5	
Delay (s)	24.5	46.0		15.3	16.0	
Level of Service	C	D		B	B	
Approach Delay (s)	35.0			15.3	16.0	
Approach LOS	C			B	B	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	121.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	525	176	124	179	123	638	138	1033	155	577	936	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.90	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3283		1829	1641	1554	1829	5255	1605	3547	5000	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3283		1829	1641	1554	1829	5255	1605	3547	5000	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	191	135	195	134	693	150	1123	168	627	1017	389
RTOR Reduction (vph)	0	22	0	0	65	16	0	0	0	0	53	0
Lane Group Flow (vph)	303	572	0	195	360	386	150	1123	168	627	1353	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	24.6	24.6		19.0	19.0	45.0	13.5	32.4	120.0	22.0	40.9	
Effective Green, g (s)	27.6	27.6		22.0	22.0	47.0	14.5	35.4	120.0	23.0	43.9	
Actuated g/C Ratio	0.23	0.23		0.18	0.18	0.39	0.12	0.30	1.00	0.19	0.37	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	383	755		335	301	609	221	1550	1605	680	1829	
v/s Ratio Prot	c0.18	0.17		0.11	c0.22	0.25	0.08	c0.21		c0.18	0.27	
v/s Ratio Perm									0.10			
v/c Ratio	0.79	0.76		0.58	1.19	0.63	0.68	0.72	0.10	0.92	0.74	
Uniform Delay, d1	43.5	43.1		44.8	49.0	29.5	50.5	37.9	0.0	47.6	33.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.16	0.63	1.00	0.93	0.89	
Incremental Delay, d2	10.0	3.9		1.7	115.5	1.6	6.2	2.9	0.1	13.0	1.8	
Delay (s)	53.5	47.0		46.5	164.5	31.1	64.8	26.7	0.1	57.3	31.3	
Level of Service	D	D		D	F	C	E	C	A	E	C	
Approach Delay (s)		49.2			89.5			27.6			39.3	
Approach LOS		D			F			C			D	

Intersection Summary				
HCM Average Control Delay	47.3	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	87.5%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/24/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	130	870	52	49	767	35	121	9	42	17	12	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5201		1829	5220		1796	1925	1636	1829	1631	
Flt Permitted	0.95	1.00		0.95	1.00		0.70	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5201		1829	5220		1326	1925	1636	1447	1631	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	134	897	54	51	791	36	125	9	43	18	12	74
RTOR Reduction (vph)	0	6	0	0	4	0	0	0	33	0	57	0
Lane Group Flow (vph)	134	945	0	51	823	0	125	9	10	18	29	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	7.6	21.2		4.1	17.7		9.6	9.6	9.6	9.6	9.6	
Effective Green, g (s)	8.6	24.2		5.1	20.7		11.6	11.6	11.6	11.6	11.6	
Actuated g/C Ratio	0.17	0.48		0.10	0.41		0.23	0.23	0.23	0.23	0.23	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	315	2522		187	2165		308	447	380	336	379	
v/s Ratio Prot	c0.07	c0.18		0.03	0.16			0.00			0.02	
v/s Ratio Perm							c0.09		0.01	0.01		
v/c Ratio	0.43	0.37		0.27	0.38		0.41	0.02	0.03	0.05	0.08	
Uniform Delay, d1	18.4	8.1		20.7	10.1		16.2	14.8	14.8	14.9	15.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.1		0.8	0.1		0.9	0.0	0.0	0.1	0.1	
Delay (s)	19.4	8.2		21.5	10.3		17.1	14.8	14.8	15.0	15.1	
Level of Service	B	A		C	B		B	B	B	B	B	
Approach Delay (s)		9.6			10.9			16.4			15.0	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	49.9	Sum of lost time (s)	6.0
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	415	439	1545	0	0	1595
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	441	467	1644	0	0	1697
RTOR Reduction (vph)	0	19	0	0	0	0
Lane Group Flow (vph)	441	448	1644	0	0	1697
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.1	17.1	30.9			30.9
Effective Green, g (s)	20.1	20.1	33.9			33.9
Actuated g/C Ratio	0.34	0.34	0.56			0.56
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1188	965	2969			2066
v/s Ratio Prot	0.12	c0.16	0.31			c0.46
v/s Ratio Perm						
v/c Ratio	0.37	0.46	0.55			0.82
Uniform Delay, d1	15.2	15.7	8.3			10.6
Progression Factor	1.00	1.00	1.34			1.00
Incremental Delay, d2	0.4	0.7	0.6			3.8
Delay (s)	15.6	16.4	11.7			14.4
Level of Service	B	B	B			B
Approach Delay (s)	16.0		11.7			14.4
Approach LOS	B		B			B

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	763	1343	0	1177	1448	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	820	1444	0	1266	1557	0
RTOR Reduction (vph)	0	9	0	0	0	0
Lane Group Flow (vph)	820	1435	0	1266	1557	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.23	c0.50		0.24	c0.30	
v/s Ratio Perm						
v/c Ratio	0.51	1.11		0.54	0.66	
Uniform Delay, d1	11.8	16.5		12.0	12.9	
Progression Factor	1.00	1.00		1.03	0.69	
Incremental Delay, d2	0.1	59.9		0.8	1.0	
Delay (s)	11.9	76.4		13.1	9.9	
Level of Service	B	E		B	A	
Approach Delay (s)	53.0			13.1	9.9	
Approach LOS	D			B	A	

Intersection Summary			
HCM Average Control Delay	29.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
29: Owens Drive & Hopyard

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	258	57	68	161	116	292	100	873	136	748	1410	559
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.93	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3249		1829	1704	1554	1829	5255	1605	3547	4993	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3249		1829	1704	1554	1829	5255	1605	3547	4993	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	277	61	73	173	125	314	108	939	146	804	1516	601
RTOR Reduction (vph)	0	31	0	0	25	67	0	0	0	0	49	0
Lane Group Flow (vph)	138	242	0	173	204	143	108	939	146	804	2068	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	16.9	16.9		15.6	15.6	45.1	10.8	36.0	120.0	29.5	54.7	
Effective Green, g (s)	19.9	19.9		18.6	18.6	51.1	11.8	39.0	120.0	30.5	57.7	
Actuated g/C Ratio	0.17	0.17		0.16	0.16	0.43	0.10	0.32	1.00	0.25	0.48	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	276	539		283	264	662	180	1708	1605	902	2401	
v/s Ratio Prot	c0.08	0.07		0.09	c0.12	0.09	0.06	0.18		c0.23	c0.41	
v/s Ratio Perm									0.09			
v/c Ratio	0.50	0.45		0.61	0.77	0.22	0.60	0.55	0.09	0.89	0.86	
Uniform Delay, d1	45.5	45.1		47.3	48.7	21.8	51.8	33.3	0.0	43.2	27.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.30	0.48	1.00	0.96	1.03	
Incremental Delay, d2	0.5	0.2		2.7	12.0	0.1	3.7	1.2	0.1	5.4	2.1	
Delay (s)	46.0	45.3		50.1	60.6	21.8	71.2	17.2	0.1	47.0	30.4	
Level of Service	D	D		D	E	C	E	B	A	D	C	
Approach Delay (s)		45.6			44.3			20.0			35.0	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	33.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	89	603	78	29	477	29	37	5	19	13	8	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5147		1829	5210		1799	1925	1636	1829	1685	
Flt Permitted	0.95	1.00		0.95	1.00		0.74	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5147		1829	5210		1395	1925	1636	1451	1685	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	105	701	92	34	561	34	44	6	22	15	9	22
RTOR Reduction (vph)	0	10	0	0	5	0	0	0	18	0	18	0
Lane Group Flow (vph)	105	783	0	34	590	0	44	6	4	15	13	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	6.9	19.8		2.2	15.1		5.7	5.7	5.7	5.7	5.7	
Effective Green, g (s)	7.9	22.8		3.2	18.1		7.7	7.7	7.7	7.7	7.7	
Actuated g/C Ratio	0.19	0.53		0.07	0.42		0.18	0.18	0.18	0.18	0.18	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	338	2748		137	2208		252	347	295	262	304	
v/s Ratio Prot	c0.06	c0.15		0.02	0.11			0.00			0.01	
v/s Ratio Perm							c0.03		0.00	0.01		
v/c Ratio	0.31	0.29		0.25	0.27		0.17	0.02	0.01	0.06	0.04	
Uniform Delay, d1	15.0	5.5		18.6	8.0		14.8	14.4	14.4	14.5	14.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.1		1.0	0.1		0.3	0.0	0.0	0.1	0.1	
Delay (s)	15.6	5.5		19.6	8.1		15.1	14.4	14.4	14.6	14.5	
Level of Service	B	A		B	A		B	B	B	B	B	
Approach Delay (s)		6.7			8.7			14.9			14.5	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	42.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	291	521	2230	0	0	1028
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	297	532	2276	0	0	1049
RTOR Reduction (vph)	0	4	0	0	0	0
Lane Group Flow (vph)	297	528	2276	0	0	1049
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.0	17.0	31.0			31.0
Effective Green, g (s)	20.0	20.0	34.0			34.0
Actuated g/C Ratio	0.33	0.33	0.57			0.57
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1182	960	2978			2072
v/s Ratio Prot	0.08	c0.18	c0.43			0.29
v/s Ratio Perm						
v/c Ratio	0.25	0.55	0.76			0.51
Uniform Delay, d1	14.6	16.3	9.9			7.9
Progression Factor	1.00	1.00	0.83			1.00
Incremental Delay, d2	0.2	1.2	0.8			0.9
Delay (s)	14.8	17.5	9.1			8.8
Level of Service	B	B	A			A
Approach Delay (s)	16.5		9.1			8.8
Approach LOS	B		A			A

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1295	1235	0	2146	1187	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1349	1286	0	2235	1236	0
RTOR Reduction (vph)	0	41	0	0	0	0
Lane Group Flow (vph)	1349	1245	0	2235	1236	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	21.0	21.0		27.0	27.0	
Effective Green, g (s)	24.0	24.0		30.0	30.0	
Actuated g/C Ratio	0.40	0.40		0.50	0.50	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1419	1152		2628	2628	
v/s Ratio Prot	0.38	c0.43		c0.43	0.24	
v/s Ratio Perm						
v/c Ratio	0.95	1.08		0.85	0.47	
Uniform Delay, d1	17.4	18.0		13.0	9.8	
Progression Factor	1.00	1.00		1.16	1.59	
Incremental Delay, d2	13.7	51.1		1.9	0.6	
Delay (s)	31.2	69.1		17.0	16.2	
Level of Service	C	E		B	B	
Approach Delay (s)	49.7			17.0	16.2	
Approach LOS	D			B	B	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	127.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
29: Owens Drive & Hopyard

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	561	209	120	187	134	707	142	1132	190	705	918	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.90	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3300		1829	1640	1554	1829	5255	1605	3547	4992	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3300		1829	1640	1554	1829	5255	1605	3547	4992	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	610	227	130	203	146	768	154	1230	207	766	998	397
RTOR Reduction (vph)	0	18	0	0	66	13	0	0	0	0	56	0
Lane Group Flow (vph)	323	626	0	203	403	432	154	1230	207	766	1339	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	25.3	25.3		19.0	19.0	45.0	13.6	31.7	120.0	22.0	40.1	
Effective Green, g (s)	28.3	28.3		22.0	22.0	47.0	14.6	34.7	120.0	23.0	43.1	
Actuated g/C Ratio	0.24	0.24		0.18	0.18	0.39	0.12	0.29	1.00	0.19	0.36	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	392	778		335	301	609	223	1520	1605	680	1793	
v/s Ratio Prot	c0.19	0.19		0.11	c0.25	0.28	0.08	c0.23		c0.22	0.27	
v/s Ratio Perm									0.13			
v/c Ratio	0.82	0.81		0.61	1.34	0.71	0.69	0.81	0.13	1.13	0.75	
Uniform Delay, d1	43.5	43.2		45.0	49.0	30.7	50.5	39.6	0.0	48.5	33.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.14	0.66	1.00	0.93	0.89	
Incremental Delay, d2	12.5	5.7		2.1	173.1	3.1	7.0	4.6	0.2	68.7	1.8	
Delay (s)	56.0	49.0		47.1	222.1	33.8	64.7	30.9	0.2	113.9	31.7	
Level of Service	E	D		D	F	C	E	C	A	F	C	
Approach Delay (s)		51.3			115.3			30.2			60.8	
Approach LOS		D			F			C			E	

Intersection Summary			
HCM Average Control Delay	61.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	1061	52	49	890	35	118	7	43	17	9	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5210		1829	5225		1791	1925	1636	1829	1647	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5210		1829	5225		1371	1925	1636	1450	1647	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	146	1094	54	51	918	36	122	7	44	18	9	37
RTOR Reduction (vph)	0	5	0	0	4	0	0	0	33	0	28	0
Lane Group Flow (vph)	146	1143	0	51	950	0	122	7	11	18	18	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	8.1	23.7		4.0	19.6		11.8	11.8	11.8	11.8	11.8	
Effective Green, g (s)	9.1	26.7		5.0	22.6		13.8	13.8	13.8	13.8	13.8	
Actuated g/C Ratio	0.17	0.49		0.09	0.41		0.25	0.25	0.25	0.25	0.25	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	305	2552		168	2167		347	487	414	367	417	
v/s Ratio Prot	c0.08	c0.22		0.03	0.18			0.00			0.01	
v/s Ratio Perm							c0.09		0.01	0.01		
v/c Ratio	0.48	0.45		0.30	0.44		0.35	0.01	0.03	0.05	0.04	
Uniform Delay, d1	20.6	9.1		23.1	11.4		16.7	15.3	15.3	15.4	15.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	0.1		1.0	0.1		0.6	0.0	0.0	0.1	0.0	
Delay (s)	21.7	9.2		24.1	11.6		17.3	15.3	15.3	15.4	15.4	
Level of Service	C	A		C	B		B	B	B	B	B	
Approach Delay (s)		10.6			12.2			16.7			15.4	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM Average Control Delay	11.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	54.5	Sum of lost time (s)	6.0	
Intersection Capacity Utilization	53.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	417	439	1548	0	0	1603
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	444	467	1647	0	0	1705
RTOR Reduction (vph)	0	19	0	0	0	0
Lane Group Flow (vph)	444	448	1647	0	0	1705
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.1	17.1	30.9			30.9
Effective Green, g (s)	20.1	20.1	33.9			33.9
Actuated g/C Ratio	0.34	0.34	0.56			0.56
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1188	965	2969			2066
v/s Ratio Prot	0.13	c0.16	0.31			c0.47
v/s Ratio Perm						
v/c Ratio	0.37	0.46	0.55			0.83
Uniform Delay, d1	15.2	15.7	8.3			10.6
Progression Factor	1.00	1.00	1.35			1.00
Incremental Delay, d2	0.4	0.7	0.7			3.9
Delay (s)	15.6	16.5	11.8			14.6
Level of Service	B	B	B			B
Approach Delay (s)	16.0		11.8			14.6
Approach LOS	B		B			B

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	763	1348	0	1180	1453	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	820	1449	0	1269	1562	0
RTOR Reduction (vph)	0	9	0	0	0	0
Lane Group Flow (vph)	820	1440	0	1269	1562	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.23	c0.50		0.24	c0.30	
v/s Ratio Perm						
v/c Ratio	0.51	1.11		0.54	0.66	
Uniform Delay, d1	11.8	16.5		12.0	12.9	
Progression Factor	1.00	1.00		1.03	0.69	
Incremental Delay, d2	0.1	61.4		0.8	1.0	
Delay (s)	11.9	77.9		13.1	9.9	
Level of Service	B	E		B	A	
Approach Delay (s)	54.0			13.1	9.9	
Approach LOS	D			B	A	

Intersection Summary			
HCM Average Control Delay	30.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
29: Owens Drive & Hopyard

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	258	57	68	158	116	280	100	873	156	758	1410	559
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.93	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3249		1829	1709	1554	1829	5255	1605	3547	4993	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3249		1829	1709	1554	1829	5255	1605	3547	4993	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	277	61	73	170	125	301	108	939	168	815	1516	601
RTOR Reduction (vph)	0	31	0	0	24	67	0	0	0	0	49	0
Lane Group Flow (vph)	138	242	0	170	197	138	108	939	168	815	2068	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	16.9	16.9		15.4	15.4	45.2	10.8	35.9	120.0	29.8	54.9	
Effective Green, g (s)	19.9	19.9		18.4	18.4	51.2	11.8	38.9	120.0	30.8	57.9	
Actuated g/C Ratio	0.17	0.17		0.15	0.15	0.43	0.10	0.32	1.00	0.26	0.48	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	276	539		280	262	663	180	1703	1605	910	2409	
v/s Ratio Prot	c0.08	0.07		0.09	c0.12	0.09	0.06	0.18		c0.23	c0.41	
v/s Ratio Perm									0.10			
v/c Ratio	0.50	0.45		0.61	0.75	0.21	0.60	0.55	0.10	0.90	0.86	
Uniform Delay, d1	45.5	45.1		47.4	48.6	21.6	51.8	33.4	0.0	43.0	27.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.29	0.49	1.00	0.96	1.03	
Incremental Delay, d2	0.5	0.2		2.5	10.3	0.1	3.7	1.3	0.1	5.5	2.0	
Delay (s)	46.0	45.3		50.0	59.0	21.7	70.7	17.6	0.1	47.1	30.2	
Level of Service	D	D		D	E	C	E	B	A	D	C	
Approach Delay (s)		45.6			43.6			19.9			34.9	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM Average Control Delay	33.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	603	78	29	477	31	37	5	19	13	8	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5147		1829	5207		1798	1925	1636	1829	1718	
Flt Permitted	0.95	1.00		0.95	1.00		0.74	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5147		1829	5207		1405	1925	1636	1451	1718	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	129	701	92	34	561	36	44	6	22	15	9	14
RTOR Reduction (vph)	0	10	0	0	5	0	0	0	18	0	12	0
Lane Group Flow (vph)	129	783	0	34	592	0	44	6	4	15	11	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	7.5	20.6		2.2	15.3		5.7	5.7	5.7	5.7	5.7	
Effective Green, g (s)	8.5	23.6		3.2	18.3		7.7	7.7	7.7	7.7	7.7	
Actuated g/C Ratio	0.20	0.54		0.07	0.42		0.18	0.18	0.18	0.18	0.18	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	357	2792		135	2191		249	341	290	257	304	
v/s Ratio Prot	c0.07	c0.15		0.02	0.11			0.00			0.01	
v/s Ratio Perm							c0.03		0.00	0.01		
v/c Ratio	0.36	0.28		0.25	0.27		0.18	0.02	0.01	0.06	0.04	
Uniform Delay, d1	15.2	5.4		19.0	8.2		15.2	14.8	14.8	14.9	14.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.1		1.0	0.1		0.3	0.0	0.0	0.1	0.1	
Delay (s)	15.8	5.4		20.0	8.3		15.5	14.8	14.8	15.0	14.9	
Level of Service	B	A		C	A		B	B	B	B	B	
Approach Delay (s)		6.9			8.9			15.3			14.9	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	43.5	Sum of lost time (s)	6.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	291	516	2280	0	0	1029
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	297	527	2327	0	0	1050
RTOR Reduction (vph)	0	3	0	0	0	0
Lane Group Flow (vph)	297	524	2327	0	0	1050
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.0	17.0	31.0			31.0
Effective Green, g (s)	20.0	20.0	34.0			34.0
Actuated g/C Ratio	0.33	0.33	0.57			0.57
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1182	960	2978			2072
v/s Ratio Prot	0.08	c0.18	c0.44			0.29
v/s Ratio Perm						
v/c Ratio	0.25	0.55	0.78			0.51
Uniform Delay, d1	14.6	16.3	10.1			7.9
Progression Factor	1.00	1.00	0.83			1.00
Incremental Delay, d2	0.2	1.1	1.0			0.9
Delay (s)	14.8	17.4	9.4			8.8
Level of Service	B	B	A			A
Approach Delay (s)	16.5		9.4			8.8
Approach LOS	B		A			A

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1295	1278	0	2140	1188	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1349	1331	0	2229	1238	0
RTOR Reduction (vph)	0	41	0	0	0	0
Lane Group Flow (vph)	1349	1290	0	2229	1238	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	21.0	21.0		27.0	27.0	
Effective Green, g (s)	24.0	24.0		30.0	30.0	
Actuated g/C Ratio	0.40	0.40		0.50	0.50	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1419	1152		2628	2628	
v/s Ratio Prot	0.38	c0.45		c0.42	0.24	
v/s Ratio Perm						
v/c Ratio	0.95	1.12		0.85	0.47	
Uniform Delay, d1	17.4	18.0		13.0	9.8	
Progression Factor	1.00	1.00		1.14	1.59	
Incremental Delay, d2	13.7	65.9		1.9	0.6	
Delay (s)	31.2	83.9		16.7	16.2	
Level of Service	C	F		B	B	
Approach Delay (s)	57.4			16.7	16.2	
Approach LOS	E			B	B	

Intersection Summary			
HCM Average Control Delay	34.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	128.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
29: Owens Drive & Hopyard

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	561	213	120	197	135	733	142	1132	185	706	918	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.95	0.95	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.90	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3301		1829	1638	1554	1829	5255	1605	3547	4992	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3301		1829	1638	1554	1829	5255	1605	3547	4992	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	610	232	130	214	147	797	154	1230	201	767	998	397
RTOR Reduction (vph)	0	18	0	0	69	13	0	0	0	0	56	0
Lane Group Flow (vph)	323	631	0	214	413	449	154	1230	201	767	1339	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	25.3	25.3		19.0	19.0	45.0	13.6	31.7	120.0	22.0	40.1	
Effective Green, g (s)	28.3	28.3		22.0	22.0	47.0	14.6	34.7	120.0	23.0	43.1	
Actuated g/C Ratio	0.24	0.24		0.18	0.18	0.39	0.12	0.29	1.00	0.19	0.36	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	392	778		335	300	609	223	1520	1605	680	1793	
v/s Ratio Prot	c0.19	0.19		0.12	c0.25	0.29	0.08	c0.23		c0.22	0.27	
v/s Ratio Perm									0.13			
v/c Ratio	0.82	0.81		0.64	1.38	0.74	0.69	0.81	0.13	1.13	0.75	
Uniform Delay, d1	43.5	43.3		45.3	49.0	31.2	50.5	39.6	0.0	48.5	33.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.14	0.66	1.00	0.93	0.89	
Incremental Delay, d2	12.5	6.1		2.9	189.7	4.0	7.0	4.6	0.2	68.6	1.6	
Delay (s)	56.0	49.4		48.3	238.7	35.2	64.8	30.9	0.2	114.0	31.6	
Level of Service	E	D		D	F	D	E	C	A	F	C	
Approach Delay (s)		51.6			122.3			30.3			60.8	
Approach LOS		D			F			C			E	

Intersection Summary			
HCM Average Control Delay	63.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	151	1061	52	49	890	32	118	5	43	34	9	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5210		1829	5227		1793	1925	1636	1829	1617	
Flt Permitted	0.95	1.00		0.95	1.00		0.70	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5210		1829	5227		1325	1925	1636	1452	1617	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	156	1094	54	51	918	33	122	5	44	35	9	76
RTOR Reduction (vph)	0	5	0	0	3	0	0	0	33	0	57	0
Lane Group Flow (vph)	156	1143	0	51	948	0	122	5	11	35	28	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	8.4	24.1		4.0	19.7		11.8	11.8	11.8	11.8	11.8	
Effective Green, g (s)	9.4	27.1		5.0	22.7		13.8	13.8	13.8	13.8	13.8	
Actuated g/C Ratio	0.17	0.49		0.09	0.41		0.25	0.25	0.25	0.25	0.25	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	313	2572		167	2161		333	484	411	365	406	
v/s Ratio Prot	c0.09	c0.22		0.03	0.18			0.00			0.02	
v/s Ratio Perm							c0.09		0.01	0.02		
v/c Ratio	0.50	0.44		0.31	0.44		0.37	0.01	0.03	0.10	0.07	
Uniform Delay, d1	20.6	9.0		23.3	11.5		16.9	15.4	15.5	15.8	15.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.3	0.1		1.0	0.1		0.7	0.0	0.0	0.1	0.1	
Delay (s)	21.9	9.1		24.4	11.7		17.6	15.4	15.5	15.9	15.7	
Level of Service	C	A		C	B		B	B	B	B	B	
Approach Delay (s)		10.7			12.3			17.0			15.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	54.9	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	393	572	1461	0	0	1426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	418	609	1554	0	0	1517
RTOR Reduction (vph)	0	24	0	0	0	0
Lane Group Flow (vph)	418	585	1554	0	0	1517
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.8	17.8	30.2			30.2
Effective Green, g (s)	20.8	20.8	33.2			33.2
Actuated g/C Ratio	0.35	0.35	0.55			0.55
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1230	998	2908			2024
v/s Ratio Prot	0.12	c0.20	0.30			c0.41
v/s Ratio Perm						
v/c Ratio	0.34	0.59	0.53			0.75
Uniform Delay, d1	14.5	16.1	8.5			10.2
Progression Factor	1.00	1.00	1.46			1.00
Incremental Delay, d2	0.3	1.4	0.6			2.6
Delay (s)	14.9	17.4	13.0			12.8
Level of Service	B	B	B			B
Approach Delay (s)	16.4		13.0			12.8
Approach LOS	B		B			B

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	574	1545	0	1287	1465	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	617	1661	0	1384	1575	0
RTOR Reduction (vph)	0	8	0	0	0	0
Lane Group Flow (vph)	617	1653	0	1384	1575	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.17	c0.57		0.26	c0.30	
v/s Ratio Perm						
v/c Ratio	0.39	1.28		0.59	0.67	
Uniform Delay, d1	11.0	16.5		12.3	13.0	
Progression Factor	1.00	1.00		1.06	0.69	
Incremental Delay, d2	0.1	130.0		1.0	1.2	
Delay (s)	11.0	146.5		14.0	10.1	
Level of Service	B	F		B	B	
Approach Delay (s)	109.8			14.0	10.1	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	54.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	55	73	179	109	278	113	991	160	766	1623	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.94	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1602
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1602
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	258	59	78	192	117	299	122	1066	172	824	1745	588
RTOR Reduction (vph)	0	0	66	0	0	0	0	0	0	0	0	74
Lane Group Flow (vph)	258	59	12	192	117	299	122	1066	172	824	1745	514
Confl. Peds. (#/hr)			16						24			12
Turn Type	Prot		Perm	Prot		Free	Prot		Free	Prot		pm+ov
Protected Phases	3	8		7	4		5	2		1	6	3
Permitted Phases			8			Free			Free			6
Actuated Green, G (s)	22.1	16.1	16.1	14.0	8.0	120.0	7.5	45.5	120.0	22.4	60.4	82.5
Effective Green, g (s)	25.1	19.1	19.1	17.0	11.0	120.0	8.5	48.5	120.0	23.4	63.4	88.5
Actuated g/C Ratio	0.21	0.16	0.16	0.14	0.09	1.00	0.07	0.40	1.00	0.19	0.53	0.74
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	1.8	1.8	1.8	1.8	1.8		1.8	5.0		1.8	5.0	1.8
Lane Grp Cap (vph)	742	582	251	502	335	1636	251	1478	1605	1006	2776	1181
v/s Ratio Prot	0.07	0.02		0.05	c0.03		0.03	c0.29		c0.16	0.33	c0.09
v/s Ratio Perm			0.01			0.18			0.11			0.23
v/c Ratio	0.35	0.10	0.05	0.38	0.35	0.18	0.49	0.72	0.11	0.82	0.63	0.44
Uniform Delay, d1	40.5	43.1	42.8	46.7	51.1	0.0	53.6	30.1	0.0	46.3	20.0	6.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.14	0.58	1.00	0.98	1.01	1.15
Incremental Delay, d2	0.1	0.0	0.0	0.2	0.2	0.2	0.5	3.0	0.1	1.4	0.3	0.0
Delay (s)	40.6	43.1	42.8	46.9	51.4	0.2	61.9	20.3	0.1	46.7	20.4	7.0
Level of Service	D	D	D	D	D	A	E	C	A	D	C	A
Approach Delay (s)		41.4			24.8			21.5			24.8	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	25.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	646	80	29	477	28	36	5	20	14	8	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5152		1829	5211		1798	1925	1636	1829	1685	
Flt Permitted	0.95	1.00		0.95	1.00		0.74	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5152		1829	5211		1395	1925	1636	1451	1685	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	107	751	94	34	561	33	42	6	24	16	9	22
RTOR Reduction (vph)	0	9	0	0	4	0	0	0	20	0	18	0
Lane Group Flow (vph)	107	836	0	34	590	0	42	6	4	16	13	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	7.0	20.1		2.2	15.3		5.7	5.7	5.7	5.7	5.7	
Effective Green, g (s)	8.0	23.1		3.2	18.3		7.7	7.7	7.7	7.7	7.7	
Actuated g/C Ratio	0.19	0.54		0.07	0.43		0.18	0.18	0.18	0.18	0.18	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	340	2768		136	2218		250	345	293	260	302	
v/s Ratio Prot	c0.06	c0.16		0.02	0.11			0.00			0.01	
v/s Ratio Perm							c0.03		0.00	0.01		
v/c Ratio	0.31	0.30		0.25	0.27		0.17	0.02	0.01	0.06	0.04	
Uniform Delay, d1	15.1	5.5		18.8	8.0		14.9	14.5	14.5	14.7	14.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.1		1.0	0.1		0.3	0.0	0.0	0.1	0.1	
Delay (s)	15.7	5.6		19.7	8.1		15.3	14.6	14.5	14.8	14.7	
Level of Service	B	A		B	A		B	B	B	B	B	
Approach Delay (s)		6.7			8.7			15.0			14.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	43.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	240	408	2562	0	0	1079
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	434	2726	0	0	1148
RTOR Reduction (vph)	0	1	0	0	0	0
Lane Group Flow (vph)	255	433	2726	0	0	1148
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	16.3	16.3	31.7			31.7
Effective Green, g (s)	19.3	19.3	34.7			34.7
Actuated g/C Ratio	0.32	0.32	0.58			0.58
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1141	926	3039			2115
v/s Ratio Prot	0.07	c0.15	c0.52			0.31
v/s Ratio Perm						
v/c Ratio	0.22	0.47	0.90			0.54
Uniform Delay, d1	14.9	16.3	11.1			7.8
Progression Factor	1.00	1.00	1.16			1.00
Incremental Delay, d2	0.2	0.8	2.6			1.0
Delay (s)	15.1	17.0	15.4			8.8
Level of Service	B	B	B			A
Approach Delay (s)	16.3		15.4			8.8
Approach LOS	B		B			A

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1244	1284	0	1815	1171	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1338	1381	0	1952	1259	0
RTOR Reduction (vph)	0	24	0	0	0	0
Lane Group Flow (vph)	1338	1357	0	1952	1259	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.38	c0.47		c0.37	0.24	
v/s Ratio Perm						
v/c Ratio	0.84	1.05		0.83	0.53	
Uniform Delay, d1	14.6	16.5		14.4	11.9	
Progression Factor	1.00	1.00		1.40	0.70	
Incremental Delay, d2	3.9	38.4		2.6	0.8	
Delay (s)	18.4	54.9		22.8	9.1	
Level of Service	B	D		C	A	
Approach Delay (s)	36.9			22.8	9.1	
Approach LOS	D			C	A	

Intersection Summary			
HCM Average Control Delay	26.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	122.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	512	193	136	189	113	573	154	1181	200	647	1038	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.94	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1603
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1603
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	551	208	146	203	122	616	166	1270	215	696	1116	371
RTOR Reduction (vph)	0	0	123	0	0	0	0	0	0	0	0	68
Lane Group Flow (vph)	551	208	23	203	122	616	166	1270	215	696	1116	303
Confl. Peds. (#/hr)			16						24			12
Turn Type	Prot		Perm	Prot		Free	Prot		Free	Prot		pm+ov
Protected Phases	3	8		7	4		5	2		1	6	3
Permitted Phases			8			Free			Free			6
Actuated Green, G (s)	23.7	15.7	15.7	16.2	8.2	120.0	8.2	45.9	120.0	20.2	57.9	81.6
Effective Green, g (s)	26.7	18.7	18.7	19.2	11.2	120.0	9.2	48.9	120.0	21.2	60.9	87.6
Actuated g/C Ratio	0.22	0.16	0.16	0.16	0.09	1.00	0.08	0.41	1.00	0.18	0.51	0.73
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	1.8	1.8	1.8	1.8	1.8		1.8	5.0		1.8	5.0	1.8
Lane Grp Cap (vph)	789	570	246	568	341	1636	272	1490	1605	911	2667	1170
v/s Ratio Prot	c0.16	0.06		0.06	0.03		0.05	c0.35		c0.13	0.21	0.06
v/s Ratio Perm			0.01			c0.38			0.13			0.13
v/c Ratio	0.70	0.36	0.09	0.36	0.36	0.38	0.61	0.85	0.13	0.76	0.42	0.26
Uniform Delay, d1	42.9	45.3	43.4	44.9	51.0	0.0	53.7	32.3	0.0	47.0	18.5	5.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.14	0.65	1.00	0.97	1.02	1.68
Incremental Delay, d2	2.2	0.1	0.1	0.1	0.2	0.7	2.7	6.0	0.2	2.0	0.3	0.0
Delay (s)	45.1	45.5	43.4	45.0	51.3	0.7	64.0	27.0	0.2	47.4	19.2	9.1
Level of Service	D	D	D	D	D	A	E	C	A	D	B	A
Approach Delay (s)		44.9			16.8			27.3			26.5	
Approach LOS		D			B			C			C	

Intersection Summary			
HCM Average Control Delay	28.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	1007	51	52	747	37	112	9	50	20	12	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5208		1829	5217		1787	1925	1636	1829	1664	
Flt Permitted	0.95	1.00		0.95	1.00		0.72	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5208		1829	5217		1356	1925	1636	1444	1664	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	162	1171	60	61	879	44	132	11	59	24	14	41
RTOR Reduction (vph)	0	4	0	0	4	0	0	0	42	0	29	0
Lane Group Flow (vph)	162	1227	0	61	919	0	132	11	17	24	26	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	11.9	26.1		4.8	19.0		15.5	15.5	15.5	15.5	15.5	
Effective Green, g (s)	12.9	29.1		5.8	22.0		17.5	17.5	17.5	17.5	17.5	
Actuated g/C Ratio	0.21	0.47		0.09	0.36		0.29	0.29	0.29	0.29	0.29	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	384	2468		173	1869		386	549	466	412	474	
v/s Ratio Prot	c0.09	c0.24		0.03	0.18			0.01			0.02	
v/s Ratio Perm							c0.10		0.01	0.02		
v/c Ratio	0.42	0.50		0.35	0.49		0.34	0.02	0.04	0.06	0.05	
Uniform Delay, d1	21.0	11.1		26.0	15.3		17.4	15.8	15.9	16.0	15.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	0.2		1.2	0.2		0.5	0.0	0.0	0.1	0.0	
Delay (s)	21.8	11.3		27.3	15.6		17.9	15.8	15.9	16.0	16.0	
Level of Service	C	B		C	B		B	B	B	B	B	
Approach Delay (s)		12.5			16.3			17.2			16.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	399	572	1447	0	0	1424
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	424	609	1539	0	0	1515
RTOR Reduction (vph)	0	25	0	0	0	0
Lane Group Flow (vph)	424	584	1539	0	0	1515
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	17.8	17.8	30.2			30.2
Effective Green, g (s)	20.8	20.8	33.2			33.2
Actuated g/C Ratio	0.35	0.35	0.55			0.55
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1230	998	2908			2024
v/s Ratio Prot	0.12	c0.20	0.29			c0.41
v/s Ratio Perm						
v/c Ratio	0.34	0.59	0.53			0.75
Uniform Delay, d1	14.5	16.1	8.5			10.2
Progression Factor	1.00	1.00	1.46			1.00
Incremental Delay, d2	0.4	1.4	0.6			2.6
Delay (s)	14.9	17.4	13.0			12.8
Level of Service	B	B	B			B
Approach Delay (s)	16.4		13.0			12.8
Approach LOS	B		B			B

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	574	1552	0	1275	1465	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	617	1669	0	1371	1575	0
RTOR Reduction (vph)	0	8	0	0	0	0
Lane Group Flow (vph)	617	1661	0	1371	1575	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.17	c0.58		0.26	c0.30	
v/s Ratio Perm						
v/c Ratio	0.39	1.28		0.58	0.67	
Uniform Delay, d1	11.0	16.5		12.3	13.0	
Progression Factor	1.00	1.00		1.06	0.69	
Incremental Delay, d2	0.1	132.7		0.9	1.2	
Delay (s)	11.0	149.2		13.9	10.1	
Level of Service	B	F		B	B	
Approach Delay (s)	111.9			13.9	10.1	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	55.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	57	73	173	109	275	113	991	158	773	1623	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.94	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1602
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1602
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	258	61	78	186	117	296	122	1066	170	831	1745	588
RTOR Reduction (vph)	0	0	65	0	0	0	0	0	0	0	0	74
Lane Group Flow (vph)	258	61	13	186	117	296	122	1066	170	831	1745	514
Confl. Peds. (#/hr)			16						24			12
Turn Type	Prot		Perm	Prot		Free	Prot		Free	Prot		pm+ov
Protected Phases	3	8		7	4		5	2		1	6	3
Permitted Phases			8			Free			Free			6
Actuated Green, G (s)	20.8	17.1	17.1	11.7	8.0	120.0	7.5	46.6	120.0	22.6	61.7	82.5
Effective Green, g (s)	23.8	20.1	20.1	14.7	11.0	120.0	8.5	49.6	120.0	23.6	64.7	88.5
Actuated g/C Ratio	0.20	0.17	0.17	0.12	0.09	1.00	0.07	0.41	1.00	0.20	0.54	0.74
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	1.8	1.8	1.8	1.8	1.8		1.8	5.0		1.8	5.0	1.8
Lane Grp Cap (vph)	703	613	265	435	335	1636	251	1512	1605	1014	2833	1181
v/s Ratio Prot	0.07	0.02		0.05	c0.03		0.03	c0.29		c0.16	0.33	c0.09
v/s Ratio Perm			0.01			0.18			0.11			0.23
v/c Ratio	0.37	0.10	0.05	0.43	0.35	0.18	0.49	0.71	0.11	0.82	0.62	0.44
Uniform Delay, d1	41.6	42.3	41.9	48.8	51.1	0.0	53.6	29.1	0.0	46.2	19.1	6.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.14	0.58	1.00	0.98	1.01	1.16
Incremental Delay, d2	0.1	0.0	0.0	0.2	0.2	0.2	0.5	2.7	0.1	1.4	0.3	0.0
Delay (s)	41.7	42.3	42.0	49.0	51.4	0.2	61.8	19.5	0.1	46.5	19.5	7.1
Level of Service	D	D	D	D	D	A	E	B	A	D	B	A
Approach Delay (s)		41.8			25.4			20.9			24.3	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	24.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	130	646	80	29	477	38	36	5	20	14	8	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5151		1829	5196		1797	1925	1636	1829	1712	
Flt Permitted	0.95	1.00		0.95	1.00		0.74	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1829	5151		1829	5196		1403	1925	1636	1451	1712	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	153	751	94	34	561	45	42	6	24	16	9	15
RTOR Reduction (vph)	0	9	0	0	6	0	0	0	20	0	12	0
Lane Group Flow (vph)	153	836	0	34	600	0	42	6	4	16	12	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	8.1	21.8		2.2	15.9		5.7	5.7	5.7	5.7	5.7	
Effective Green, g (s)	9.1	24.8		3.2	18.9		7.7	7.7	7.7	7.7	7.7	
Actuated g/C Ratio	0.20	0.55		0.07	0.42		0.17	0.17	0.17	0.17	0.17	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	372	2858		131	2197		242	332	282	250	295	
v/s Ratio Prot	c0.08	c0.16		0.02	0.12			0.00			0.01	
v/s Ratio Perm							c0.03		0.00	0.01		
v/c Ratio	0.41	0.29		0.26	0.27		0.17	0.02	0.01	0.06	0.04	
Uniform Delay, d1	15.5	5.3		19.6	8.4		15.8	15.4	15.4	15.5	15.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.1		1.1	0.1		0.3	0.0	0.0	0.1	0.1	
Delay (s)	16.2	5.3		20.7	8.5		16.1	15.4	15.4	15.6	15.5	
Level of Service	B	A		C	A		B	B	B	B	B	
Approach Delay (s)		7.0			9.1			15.8			15.5	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	44.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	258	408	2588	0	0	1086
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0			3.0
Lane Util. Factor	0.97	0.88	0.91			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3547	2880	5255			3657
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3547	2880	5255			3657
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	274	434	2753	0	0	1155
RTOR Reduction (vph)	0	1	0	0	0	0
Lane Group Flow (vph)	274	433	2753	0	0	1155
Turn Type		Prot				
Protected Phases	4	4	2			6
Permitted Phases	4					
Actuated Green, G (s)	16.5	16.5	31.5			31.5
Effective Green, g (s)	19.5	19.5	34.5			34.5
Actuated g/C Ratio	0.32	0.32	0.57			0.57
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	5.0	5.0	5.0			1.8
Lane Grp Cap (vph)	1153	936	3022			2103
v/s Ratio Prot	0.08	c0.15	c0.52			0.32
v/s Ratio Perm						
v/c Ratio	0.24	0.46	0.91			0.55
Uniform Delay, d1	14.8	16.1	11.4			7.9
Progression Factor	1.00	1.00	1.17			1.00
Incremental Delay, d2	0.2	0.8	3.1			1.0
Delay (s)	15.0	16.8	16.4			9.0
Level of Service	B	B	B			A
Approach Delay (s)	16.1		16.4			9.0
Approach LOS	B		B			A

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1244	1313	0	1805	1180	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.88		0.91	0.91	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	3547	2880		5255	5255	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	3547	2880		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1338	1412	0	1941	1269	0
RTOR Reduction (vph)	0	23	0	0	0	0
Lane Group Flow (vph)	1338	1389	0	1941	1269	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	24.0	24.0		24.0	24.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1596	1296		2365	2365	
v/s Ratio Prot	0.38	c0.48		c0.37	0.24	
v/s Ratio Perm						
v/c Ratio	0.84	1.07		0.82	0.54	
Uniform Delay, d1	14.6	16.5		14.4	12.0	
Progression Factor	1.00	1.00		1.39	0.71	
Incremental Delay, d2	3.9	46.6		2.5	0.8	
Delay (s)	18.4	63.1		22.5	9.3	
Level of Service	B	E		C	A	
Approach Delay (s)	41.4			22.5	9.3	
Approach LOS	D			C	A	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	123.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	512	193	136	201	117	577	154	1181	196	648	1038	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.94	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1603
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3547	3657	1580	3547	3657	1636	3547	3657	1605	5157	5255	1603
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	551	208	146	216	126	620	166	1270	211	697	1116	371
RTOR Reduction (vph)	0	0	123	0	0	0	0	0	0	0	0	65
Lane Group Flow (vph)	551	208	23	216	126	620	166	1270	211	697	1116	306
Confl. Peds. (#/hr)			16						24			12
Turn Type	Prot		Perm	Prot		Free	Prot		Free	Prot		pm+ov
Protected Phases	3	8		7	4		5	2		1	6	3
Permitted Phases			8			Free			Free			6
Actuated Green, G (s)	23.8	15.7	15.7	16.4	8.3	120.0	8.1	45.7	120.0	20.2	57.8	81.6
Effective Green, g (s)	26.8	18.7	18.7	19.4	11.3	120.0	9.1	48.7	120.0	21.2	60.8	87.6
Actuated g/C Ratio	0.22	0.16	0.16	0.16	0.09	1.00	0.08	0.41	1.00	0.18	0.51	0.73
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	1.8	1.8	1.8	1.8	1.8		1.8	5.0		1.8	5.0	1.8
Lane Grp Cap (vph)	792	570	246	573	344	1636	269	1484	1605	911	2663	1170
v/s Ratio Prot	c0.16	0.06		0.06	0.03		0.05	c0.35		c0.14	0.21	0.06
v/s Ratio Perm			0.01			c0.38			0.13			0.13
v/c Ratio	0.70	0.36	0.09	0.38	0.37	0.38	0.62	0.86	0.13	0.77	0.42	0.26
Uniform Delay, d1	42.9	45.3	43.4	44.9	51.0	0.0	53.8	32.5	0.0	47.0	18.5	5.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.14	0.65	1.00	0.96	1.02	1.63
Incremental Delay, d2	2.2	0.1	0.1	0.2	0.2	0.7	2.8	6.2	0.2	1.9	0.3	0.0
Delay (s)	45.0	45.5	43.4	45.1	51.2	0.7	64.3	27.2	0.2	47.1	19.2	8.8
Level of Service	D	D	D	D	D	A	E	C	A	D	B	A
Approach Delay (s)		44.9			17.3			27.5			26.4	
Approach LOS		D			B			C			C	

Intersection Summary			
HCM Average Control Delay	28.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
44: Owens Drive & Chabot Dr

4/23/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	1007	51	52	747	30	112	2	50	44	12	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.98	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1829	5208		1829	5225		1789	1925	1636	1829	1632	
Flt Permitted	0.95	1.00		0.95	1.00		0.70	1.00	1.00	0.76	1.00	
Satd. Flow (perm)	1829	5208		1829	5225		1320	1925	1636	1456	1632	
Peak-hour factor, PHF	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	165	1171	60	61	879	35	132	2	59	52	14	72
RTOR Reduction (vph)	0	4	0	0	3	0	0	0	42	0	51	0
Lane Group Flow (vph)	165	1227	0	61	911	0	132	2	17	52	35	0
Confl. Peds. (#/hr)			24				36					36
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			4			8	
Permitted Phases							4		4	8		
Actuated Green, G (s)	12.0	26.1		4.8	18.9		15.7	15.7	15.7	15.7	15.7	
Effective Green, g (s)	13.0	29.1		5.8	21.9		17.7	17.7	17.7	17.7	17.7	
Actuated g/C Ratio	0.21	0.47		0.09	0.36		0.29	0.29	0.29	0.29	0.29	
Clearance Time (s)	4.0	6.0		4.0	6.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	386	2460		172	1858		379	553	470	418	469	
v/s Ratio Prot	c0.09	c0.24		0.03	0.17			0.00			0.02	
v/s Ratio Perm							c0.10		0.01	0.04		
v/c Ratio	0.43	0.50		0.35	0.49		0.35	0.00	0.04	0.12	0.07	
Uniform Delay, d1	21.1	11.2		26.1	15.5		17.4	15.7	15.8	16.2	16.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	0.2		1.3	0.2		0.6	0.0	0.0	0.1	0.1	
Delay (s)	21.8	11.4		27.4	15.7		17.9	15.7	15.8	16.4	16.1	
Level of Service	C	B		C	B		B	B	B	B	B	
Approach Delay (s)		12.6			16.4			17.3			16.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	53.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
29: Owens Drive & Hopyard

5/4/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	561	213	120	197	135	733	142	1132	185	706	918	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.91	0.91		1.00	0.91	0.91	1.00	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.89	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3301		1829	3119	1489	1829	5255	1605	3547	4992	
Flt Permitted	0.95	0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1664	3301		1829	3119	1489	1829	5255	1605	3547	4992	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	610	232	130	214	147	797	154	1230	201	767	998	397
RTOR Reduction (vph)	0	18	0	0	263	14	0	0	0	0	55	0
Lane Group Flow (vph)	323	631	0	214	284	384	154	1230	201	767	1340	0
Confl. Peds. (#/hr)			16						24			12
Turn Type	Split			Split		pt+ov	Prot		Free	Prot		
Protected Phases	3	3		4	4	4 1	5	2		1	6	
Permitted Phases									Free			
Actuated Green, G (s)	25.3	25.3		17.0	17.0	43.0	13.6	33.7	120.0	22.0	42.1	
Effective Green, g (s)	28.3	28.3		20.0	20.0	45.0	14.6	36.7	120.0	23.0	45.1	
Actuated g/C Ratio	0.24	0.24		0.17	0.17	0.38	0.12	0.31	1.00	0.19	0.38	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.8	1.8		1.8	1.8		1.8	5.0		1.8	5.0	
Lane Grp Cap (vph)	392	778		305	520	558	223	1607	1605	680	1876	
v/s Ratio Prot	c0.19	0.19		0.12	0.09	c0.26	0.08	c0.23		c0.22	0.27	
v/s Ratio Perm									0.13			
v/c Ratio	0.82	0.81		0.70	0.55	0.69	0.69	0.77	0.13	1.13	0.71	
Uniform Delay, d1	43.5	43.3		47.2	45.8	31.6	50.5	37.7	0.0	48.5	32.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.14	0.65	1.00	0.93	0.89	
Incremental Delay, d2	12.5	6.1		5.9	0.6	2.8	7.0	3.4	0.2	68.6	1.3	
Delay (s)	56.0	49.4		53.0	46.5	34.4	64.6	28.0	0.2	114.0	29.7	
Level of Service	E	D		D	D	C	E	C	A	F	C	
Approach Delay (s)		51.6			43.5			28.0			59.6	
Approach LOS		D			D			C			E	

Intersection Summary			
HCM Average Control Delay	46.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	574	1552	0	1275	1465	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.97	0.86		0.91	0.91	
Frt	0.93	0.85		1.00	1.00	
Flt Protected	0.97	1.00		1.00	1.00	
Satd. Flow (prot)	3381	2814		5255	5255	
Flt Permitted	0.97	1.00		1.00	1.00	
Satd. Flow (perm)	3381	2814		5255	5255	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	617	1669	0	1371	1575	0
RTOR Reduction (vph)	5	8	0	0	0	0
Lane Group Flow (vph)	1163	1110	0	1371	1575	0
Turn Type		Prot				
Protected Phases	4	4		2	6	
Permitted Phases	4			2		
Actuated Green, G (s)	23.9	23.9		24.1	24.1	
Effective Green, g (s)	26.9	26.9		27.1	27.1	
Actuated g/C Ratio	0.45	0.45		0.45	0.45	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.8	1.8		5.0	5.0	
Lane Grp Cap (vph)	1516	1262		2374	2374	
v/s Ratio Prot	0.34	c0.39		0.26	c0.30	
v/s Ratio Perm						
v/c Ratio	0.77	0.88		0.58	0.66	
Uniform Delay, d1	13.9	15.1		12.2	12.9	
Progression Factor	1.00	1.00		1.06	0.69	
Incremental Delay, d2	2.1	7.0		0.9	1.1	
Delay (s)	16.1	22.1		13.8	10.0	
Level of Service	B	C		B	B	
Approach Delay (s)	19.0			13.8	10.0	
Approach LOS	B			B	B	

Intersection Summary			
HCM Average Control Delay	14.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Queues
44: Owens Drive & Chabot Dr

4/24/2012

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	174	701	29	391	42	8	22	15	24
v/c Ratio	0.27	0.20	0.06	0.17	0.09	0.01	0.04	0.03	0.04
Control Delay	17.3	7.8	22.1	13.1	14.3	13.7	6.9	14.0	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	7.8	22.1	13.1	14.3	13.7	6.9	14.0	10.4
Queue Length 50th (ft)	32	17	6	23	8	1	0	3	2
Queue Length 95th (ft)	114	105	32	71	28	9	12	14	16
Internal Link Dist (ft)		440		1306		1381			223
Turn Bay Length (ft)	175		160		150			75	
Base Capacity (vph)	1410	4484	1262	4199	1255	1773	1509	1333	1593
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.16	0.02	0.09	0.03	0.00	0.01	0.01	0.02

Intersection Summary

Queues
44: Owens Drive & Chabot Dr

4/24/2012

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	134	951	51	827	125	9	43	18	86
v/c Ratio	0.27	0.33	0.13	0.34	0.28	0.01	0.07	0.04	0.15
Control Delay	22.5	11.3	24.7	14.5	18.5	15.3	6.2	15.7	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	11.3	24.7	14.5	18.5	15.3	6.2	15.7	6.5
Queue Length 50th (ft)	32	69	13	64	28	2	0	4	3
Queue Length 95th (ft)	105	163	53	156	80	12	19	18	30
Internal Link Dist (ft)		440		1306		1381			223
Turn Bay Length (ft)	175		160		150			75	
Base Capacity (vph)	1122	4034	798	3128	953	1409	1209	1059	1193
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.24	0.06	0.26	0.13	0.01	0.04	0.02	0.07

Intersection Summary

Queues
44: Owens Drive & Chabot Dr

4/24/2012

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	129	793	34	597	44	6	22	15	23
v/c Ratio	0.22	0.23	0.08	0.24	0.09	0.01	0.04	0.03	0.04
Control Delay	18.5	8.2	21.9	12.4	14.5	13.8	7.0	14.1	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	8.2	21.9	12.4	14.5	13.8	7.0	14.1	9.8
Queue Length 50th (ft)	24	20	7	36	8	1	0	3	2
Queue Length 95th (ft)	90	122	36	102	29	8	11	14	14
Internal Link Dist (ft)		440		1306		1381			223
Turn Bay Length (ft)	175		160		150			75	
Base Capacity (vph)	1399	4474	1243	4171	1250	1766	1503	1331	1549
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.18	0.03	0.14	0.04	0.00	0.01	0.01	0.01

Intersection Summary

Queues
44: Owens Drive & Chabot Dr

4/24/2012

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	156	1148	51	951	122	5	44	35	85
v/c Ratio	0.32	0.39	0.14	0.39	0.26	0.01	0.07	0.07	0.14
Control Delay	26.0	13.0	28.9	16.8	19.0	16.2	6.3	16.7	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	13.0	28.9	16.8	19.0	16.2	6.3	16.7	6.3
Queue Length 50th (ft)	40	89	14	80	30	1	0	8	2
Queue Length 95th (ft)	126	201	56	185	86	9	20	31	32
Internal Link Dist (ft)		440		1306		1381			223
Turn Bay Length (ft)	175		160		150			75	
Base Capacity (vph)	1050	3754	756	2933	887	1310	1127	987	1107
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.31	0.07	0.32	0.14	0.00	0.04	0.04	0.08

Intersection Summary

Queues
44: Owens Drive & Chabot Dr

4/24/2012

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	153	845	34	606	42	6	24	16	24
v/c Ratio	0.26	0.24	0.08	0.24	0.09	0.01	0.04	0.03	0.04
Control Delay	18.5	8.1	22.6	12.7	15.2	14.6	7.2	14.9	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	8.1	22.6	12.7	15.2	14.6	7.2	14.9	10.1
Queue Length 50th (ft)	30	22	7	38	8	1	0	3	2
Queue Length 95th (ft)	104	131	37	106	29	8	12	15	15
Internal Link Dist (ft)		440		1306		1381			223
Turn Bay Length (ft)	175		160		150			75	
Base Capacity (vph)	1382	4414	1221	4109	1237	1748	1488	1317	1527
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.19	0.03	0.15	0.03	0.00	0.02	0.01	0.02

Intersection Summary

Queues
44: Owens Drive & Chabot Dr

4/24/2012

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	165	1231	61	914	132	2	59	52	86
v/c Ratio	0.42	0.49	0.22	0.53	0.35	0.00	0.11	0.12	0.16
Control Delay	27.5	14.4	29.9	19.3	20.8	17.0	6.0	17.6	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.5	14.4	29.9	19.3	20.8	17.0	6.0	17.6	7.2
Queue Length 50th (ft)	45	106	17	82	34	1	0	13	3
Queue Length 95th (ft)	124	210	60	169	89	5	22	41	31
Internal Link Dist (ft)		440		1306		1381			223
Turn Bay Length (ft)	175		160		150			75	
Base Capacity (vph)	1008	3704	813	3160	1024	1525	1308	1154	1281
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.33	0.08	0.29	0.13	0.00	0.05	0.05	0.07

Intersection Summary

EXHIBIT G

May 18, 2012

Mr. Mike Fulford
City of Pleasanton
200 Old Bernal Avenue
Pleasanton CA 94566

Subject: Trees to be removed
Mercedes Benz project

Dear Mr. Fulford:

Mercedes Benz is planning to redevelop its facility at 5885 Owens Drive. In addition to constructing new buildings, proposed plans call for a new parking areas, circulation pattern and landscape.

You requested that I assess trees to be removed as part of the project, and establish their value as required by the City of Pleasanton Tree Preservation Ordinance. You provided the Landscape Plan prepared by Ware Malcomb (dated April 16, 2012) which identified the location of the new structures and a number of trees to be removed. I visited the site earlier today. This letter summarizes my findings.

Survey Methods
The survey encompassed all trees over 4" in diameter and consisted of the following steps:

1. Identify the tree as to species.
2. Attach a numerically coded metal tag to the trunk of each tree.
3. Record the tree's location on a map.
4. Measure the trunk diameter at a point 54" above grade.
5. Evaluate the health and structural condition using a scale of 0 – 5 where 0 = dead, 1 = poor and 5 = excellent condition.
5. Comment on presence of defects in structure, insects or diseases and other aspects of development.
6. Assess the tree's suitability for preservation.

Results for individual trees are located in the ***Tree Assessment Form*** (see **Attachments**). Tree locations are noted by tree tag number in the ***Tree Assessment Map***.

Description of Trees
Sixty-five (65) trees were evaluated, representing 8 species (Table 1, following page). All trees had been planted as part of landscape development, primarily in parking areas and adjacent to buildings. None of the species present is native to California. No trees were indigenous to the site.

The City of Pleasanton defines a Heritage trees as having a trunk diameter of 18" or greater or a height of 35' or more. Using these criteria, I determined that Canary Island pines #34 and 35 were 35' tall and would be considered as Heritage.

Table 1. Species present and tree condition. Mercedes Benz project. Pleasanton CA.

Common name	Scientific name	Condition				No. of Trees	
		Poor	Fair	Good	Excel-lent	Heritage	Total
Deodar cedar	*Cedrus deodara*	--	--	1	1	--	2
Crape myrtle	*Lagerstroemia indica*	--	--	--	2	--	2
Sweetgum	*Liquidambar styraciflua*	--	1	5	1	--	7
Canary Island pine	*Pinus canariensis*	--	--	--	2	2	2
London plane	*Platanus* x *acerifolia*	1	10	13	1	--	25
Bradford pear	*Pyrus calleryana* 'Bradford'	--	5	--	--	--	5
Evergreen pear	*Pyrus kawakamii*	1	3	17	--	--	21
African sumac	*Rhus lancea*	--	--	1	--	--	1
Total, all trees surveyed		**2**	**19**	**37**	**7**	**2**	**65**

Twenty-five (25) London planes were present, located on the east side of the project area. Trees were semi-mature in development with trunk diameters ranging from 4" to 11". Tree condition was generally either fair or good. As is common in Pleasanton, all planes had been infected with the fungus anthracnose which results in defoliation and death of young twigs. Infection is most common in late winter and early spring. Trees normally recover once the rains stop and weather becomes dry.

The west side of the site was dominated by evergreen pear (21 trees). Trees were more mature in development than the London planes, although trunk diameters ranged from 5" to 11". Most evergreen pears were in good condition.

No other species was represented by more than 7 trees. Included in this group were:

- 7 semi-mature sweetgums. Trunk diameter ranged from 6" to 9". Tree condition was generally good.
- 5 Bradford pears were mature in development. Trunk diameters ranged from 12" to 17". Trees were in fair condition with dense canopies but poor structure.
- 2 small Deodar cedars were in good and excellent condition.
- 2 small crape myrtles were in excellent condition.
- 2 semi-mature Canary Island pines were located in a landscape bed along Owens Drive. Both were in excellent condition.
- African sumac #46 was 11" in diameter and in good condition.

Appraisal of Value

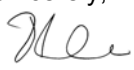
To establish the value of the surveyed trees, I employed the standard methods found in *Guide for Plant Appraisa*l, 9th edition (published in 2000 by the International Society of Arboriculture, Savoy IL). In addition, I referred to *Species Classification and Group Assignment (*2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter at 54" above grade. The species factor considers the adaptability and appropriateness of the plant in the East Bay. The ***Species Classification and Group Assignment*** lists recommended species ratings and evaluations and I used that rating. Condition reflects tree health and structural integrity. The location factor considers the site, placement and contribution of the tree in the surrounding landscape. In this case, trees were located at the site of a prominent business.

Using the methods described above, I established the value of the 65 trees as $66,500.

Please feel free to contact me with any questions, I look forward to hearing from you.

Sincerely,



James R. Clark, Ph.D.
Certified Arborist WE-0846
Registered Consulting Arborist #357

Tree Assessment

Mercedes Benz
5885 Owens Drive
Pleasanton CA
May 2012

HORT SCIENCE

Tree No.	Species	Trunk Diameter (in.)	Heritage Tree	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Appraised Value
1	Evergreen pear	9	No	4	Moderate	Mulitple attachments @ 8'; one-sided to S.	$1,350
2	Evergreen pear	9	No	3	Poor	Leaning & one-sided to S.	$950
3	Bradford pear	17	No	3	Poor	Mulitple attachments @ 12'; bowing apart.	$1,500
4	Bradford pear	17	No	3	Poor	Mulitple attachments @ 12'; leans S.	$1,850
5	Bradford pear	17	No	3	Poor	Mulitple attachments @ 8' with poor attachments; bowing apart with gap in canopy.	$1,500
6	Bradford pear	14	No	3	Poor	Mulitple attachments @ 8'; leans E.; bowing apart.	$1,250
7	Bradford pear	12	No	3	Poor	Mulitple attachments @ 7'; bowed S.	$950
8	Sweetgum	9	No	4	Moderate	Typical; laterals sweep upright; codominant high in crown; one-sided to W.	$1,250
9	Sweetgum	7	No	5	Good	Good tree; one-sided to W.	$1,000
10	Sweetgum	9	No	4	Moderate	One-sided to W.	$1,250
11	Deodar cedar	10	No	4	Good	Corrected lean to W.	$1,650
12	Deodar cedar	7	No	5	Good	Good young tree.	$1,100
13	Evergreen pear	9	No	4	Moderate	Mulitple attachments @ 7'; leans E.	$1,350
14	Evergreen pear	7	No	4	Moderate	Mulitple attachments @ 7'; leans E.; not as vigorous.	$800
15	Evergreen pear	8	No	4	Moderate	Mulitple attachments @ 7'; leans E.	$1,050
16	Evergreen pear	7	No	2	Poor	Suppressed; poor form & structure.	$350
17	Evergreen pear	7	No	4	Moderate	Mulitple attachments @ 7'; leans E.	$800
18	Evergreen pear	8	No	4	Moderate	Mulitple attachments @ 7'; leans E.	$1,050
19	Evergreen pear	8	No	4	Moderate	Mulitple attachments @ 6'; leans E.	$1,050
20	Evergreen pear	8	No	4	Moderate	Mulitple attachments @ 6'; leans E.	$1,050
21	Evergreen pear	10	No	4	Moderate	Mulitple attachments @ 7'; wide crown.	$1,650
22	Evergreen pear	11	No	3	Poor	Mulitple attachments @ 6'; strong lean S.	$1,400
23	Evergreen pear	11	No	4	Moderate	Mulitple attachments @ 6'.	$1,950

Tree Assessment

Mercedes Benz
5885 Owens Drive
Pleasanton CA
May 2012

HORT SCIENCE

Tree No.	Species	Trunk Diameter (in.)	Heritage Tree	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Appraised Value
24	Evergreen pear	6	No	4	Moderate	Mulitple attachments @ 7'; leans E.	$600
25	Evergreen pear	9	No	4	Moderate	Codominant trunks @ 8' & 9'; wide crown.	$1,350
26	Evergreen pear	8	No	4	Moderate	Heavy lateral to NW.	$1,050
27	Evergreen pear	11	No	4	Moderate	Mulitple attachments @ 7'; wide crown.	$1,950
28	Evergreen pear	8	No	4	Moderate	Codominant trunks @ 7'; leans E.	$1,050
29	Evergreen pear	9	No	4	Moderate	Mulitple attachments @ 7'; wide crown.	$1,350
30	Evergreen pear	9	No	4	Moderate	Mulitple attachments @ 8'.	$1,350
31	Evergreen pear	5	No	3	Poor	Strong lean E.; no vigor.	$300
32	Sweetgum	6	No	4	Moderate	Low laterals sweep upright.	$550
33	Sweetgum	7	No	3	Poor	Poor form & structure; lost central leader @ 8'.	$450
34	Canary Island pine	12	Yes	5	Good	Good tree; narrow crown; 35' tall.	$3,000
35	Canary Island pine	15	Yes	5	Good	Good tree; narrow crown; 35' tall.	$4,650
36	London plane	7	No	4	Moderate	Good form; thin crown; anthracnose.	$650
37	London plane	7	No	4	Moderate	Good form; anthracnose.	$650
38	London plane	6	No	3	Moderate	Codominant trunks @ 9'; anthracnose; very thin crown.	$350
39	London plane	11	No	4	Moderate	Rounded form due to lost central leader; anthracnose.	$1,550
40	London plane	5	No	3	Poor	Good form; extensive twig dieback; thin crown.	$250
41	London plane	7	No	4	Moderate	Okay form; anthracnose.	$650
42	London plane	5	No	3	Moderate	Rangy form; thin crown; anthracnose.	$250
43	London plane	6	No	3	Moderate	Strong bow E.; thin crown; anthracnose.	$350
44	London plane	4	No	3	Moderate	Rangy form; thin crown; anthracnose.	$200
45	London plane	6	No	4	Moderate	Mulitple attachments @ 10'; okay; thin crown.	$500
46	African sumac	11	No	4	Moderate	Mulitple attachments @ 5'; dense rangy crown.	$2,550

Tree Assessment

Mercedes Benz
5885 Owens Drive
Pleasanton CA
May 2012

HORT SCIENCE

Tree No.	Species	Trunk Diameter (in.)	Heritage Tree	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Appraised Value
47	London plane	6	No	3	Moderate	Leans E.; mulitple attachments @ 7'.	$350
48	London plane	6	No	4	Moderate	Okay form; narrow; base engulfed in ivy.	$500
49	London plane	7	No	4	Moderate	One-sided to W.	$650
50	London plane	9	No	4	Moderate	Irregular form; heavy lateral limb @ 7' to W; 2 sets of codominant stems high in crown.	$1,050
51	London plane	9	No	3	Moderate	Leans SE.; codominant @ 5'.	$750
52	London plane	5	No	3	Poor	Lost central leader; thin crown.	$200
53	London plane	4	No	3	Poor	Small crown; bowed E.	$200
54	London plane	4	No	2	Poor	Lost central leader removed; bowed E.; poor.	$100
55	London plane	6	No	3	Moderate	Rangy form; bowed E.; anthracnose.	$350
56	London plane	7	No	4	Moderate	2 sets of G28codominant stems; wide vase-shaped crown.	$650
57	London plane	7	No	5	Good	Good tree.	$850
58	London plane	9	No	4	Moderate	Good form; thin crown; anthracnose.	$1,050
59	London plane	6	No	4	Moderate	Mulitple attachments @ 10'; anthracnose.	$500
60	London plane	8	No	4	Moderate	Mulitple attachments @ 6'; antracnose.	$850
61	London plane	6	No	4	Moderate	Okay form; anthracnose.	$500
62	Crape myrtle	5	No	5	Good	Good tree.	$800
63	Sweetgum	8	No	4	Moderate	Low laterals sweep upright.	$1,000
64	Sweetgum	8	No	4	Moderate	Low laterals sweep upright.	$1,000
65	Crape myrtle	7	No	5	Good	Good tree.	$1,450

Tree Assessment Map

Mercedes Benz
Pleasanton, CA

Prepared for:
The City of Pleasanton

May 2012

▲

No Scale

Notes:

- TS = small tree not included in assessment
- Base map provided by:
  Ware Malcomb
  San Ramon, CA
- Numbered tree locations
  are approximate.

HORT SCIENCE
325 Ray Street
Pleasanton, California 94566
Phone 925.484.0211
Fax 925.484.0596

EXHIBIT H

City of Pleasanton

STAFF REPORT 9F

October 28, 1986

HONORABLE CITY COUNCIL
Pleasanton, California

PUD-85-8-2M, Callahan, Sweeney & O'Brien Major Modification

Members of the Council:

Background

Phase II of Hacienda Business Park (HBP) was approved in March, 1985. The approved Planned Unit Development development plan contained the master plan for Phase II, which, combined with the Phase I project originally approved in 1982, created a comprehensive plan for the 830-acre HBP. The master plan included a "development plan" setting forth the uses and intensity allowed for each parcel in the HBP, comprehensive design guidelines to guide development of each site, and City-applied conditions of approval. The applicants, Callahan, Sweeney and O'Brien, wish to modify the development plan by changing the land use regulations on two sites within Phase II and conditions of approval to allow construction this winter of an automobile dealership and post office/retail center. The final development plan approval for these uses is also before your City Council for review, PUD-85-8-2D, Item 9g on your agenda. These changes are described in detail in the attached Planning Commission staff report.

Analysis

See the attached Planning Commission staff report for a full discussion of the proposed changes.

Planning Commission Action

The Planning Commission at its October 22, 1986 meeting recommended approval of the proposed changes, eliminating staff's second recommendation. This recommendation would have had the effect of precluding subsequent approval of the design plans for Site 51B, the post office/retail complex, as that design plan was specifically designed for proposed uses which would generate

trips in excess of 3.6 trips/peak hour/1,000 sq. ft. The Planning Commission expressed considerable concern over the impact of that proposal on the Hopyard Rd. - Owens Dr. intersection (the concern which spawned staff's recommendation). However, they felt the Post Office needed to be prodded off dead-center to build a north Pleasanton annex, they felt the City's approving a site would assist in that, and they were comfortable with the estimated short-term life of the post office in the small annex and with the standard traffic condition's ability to keep Hopyard Rd. - Owens Dr. intersection at acceptable LOS (LOS D or better).

Conclusion

While staff agrees that the standard level of service conditions can ensure acceptable future LOS, it can do so only at the expense of vacant lots at build-out if the traffic projections are accurate. Staff agrees that if the Post Office use is short-term, this problem is likely to evaporate. Short-term effects should not be a problem if the NPID improvements are constructed on schedule. Because staff continues to believe almost any location in north Pleasanton is a better site for a post office, short-term or long-term, staff continues to recommend your Council adopt its second recommendation as shown in the Planning Commission staff report. (See staff report for PUD-85-8-2D for further discussion of the post office location).

Environmental Assessment

A Negative Declaration accompanies this report. Based on the initial environmental study done for this project, it is the staff's opinion that Case PUD-85-8-2M would not have significant adverse effects on the environment. If your Council concurs with this environmental assessment, you must make the finding that the Negative Declaration is appropriate for the project. The finding must be made prior to taking action on the project itself.

Staff Recommendation

Staff recommends your Council:

1. Adopt the Draft Negative Declaration

Item 6i
Staff Report
PLANNING COMMISSION
October 22, 1986

SUBJECT: **PUD-85-8-2M**

APPLICANT: **Callahan, Sweeney and O'Brien/Prudential Insurance Company of America**

PURPOSE: Application of Callahan, Sweeney, and O'Brien and Prudential Insurance for a major modification to an approved planned unit development zoning for a business park, including changes to zoning, uses, and development standards, to be located on an approximately 10.9 acre site located at the southeast corner of Owens Drive and Chabot Drive. Zoning for the property is PUD (Planned Unit Development) - Industrial, Commercial and Offices District.

ATTACHMENTS:
1. Vicinity Map
2. Land Use Plan - Hacienda Business Park
3. Phase II Design Guidelines - Table B-1, Summary of Site Development Criteria
4. Draft Negative Declaration
5. HBP Phase II Conditions of Approval - Ord. 1246 excerpt

BACKGROUND

Phase II of Hacienda Business Park (HBP) was approved in March,1985. The approved Planned Unit Development development plan contained the master plan for Phase II, which, combined with the Phase I project originally approved in 1982, created a comprehensive plan for the 830-acre HBP. The master plan included a "development plan" setting forth the uses and intensity allowed for each parcel in the HBP, comprehensive design guidelines to guide development of each site, and City-applied conditions of approval. The applicants, Callahan, Sweeney and O'Brien, wish to modify the development plan by

changing the land use regulations on two sites within Phase II and conditions of approval to allow construction this winter of an automobile dealership and post office/retail center. The final development plan approval for these uses is also before your Planning Commission for review, PUD-85-8-2D, Item 6j on your agenda.

PROPOSED CHANGES

The proposed changes affect the land use designation of Sites 51 and 52 and Condition 5 of Ordinance 1246, the ordinance adopting the Phase II development plan.

Lot 51 - O.P.D. to C.P.D.

Lot 51 is an 8.2 acre site currently designated "Office Planned Development" (O.P.D.), the "middle density" general office category in HBP. It presently would allow a four story general office building at a 50% F.A.R. The site is proposed to be changed to "Commercial Planned Development" (C.P.D.). This designation allows various retail/commercial/financial uses, generally in 1-2 story buildings with a 25% F.A.R. maximum.

Site 51 is directly across Owens Dr. from the National Car Rental/Schoeber's/Burger King/Buttercup/Motel 6 complex of commercial uses at I-580 and Hopyard Road. It abuts I-580 on the north. To the east, across the Chabot Canal, is the multi-faceted "transit hub" proposed to house a future BART station parking lot and numerous ancillary uses. Owens Dr., which forms the site's southerly boundary, is a six lane, major street connecting Hopyard Rd. to Hacienda Dr. in the center of HBP and then on to W. Las Positas Blvd. just westerly of Santa Rita Rd.

Lot 52 - O.G.P.D. to O.P.D.

Lot 52 is an 11 acre site partially used at present for the temporary heli-port and overflow AT&T parking lot. It is currently designated "Garden Office" (O.G.P.D.) which allows two- or three-story office buildings (with 40% and 45% FAR's, respectively). Maximum height is 55 feet. The proposed change would not affect the allowable uses, which would remain primarily office, but it would allow a four-story building with a 50% FAR and height of 70 feet.

Site 52 is across Chabot Dr. from the rear of the Sheraton Hotel complex and the vacant 2.3 acre Site 5C designated for commercial uses (CPD). To the east, across Chabot Canal, is Site 53, an undeveloped "mid-rise" office designated site, and to the south

is Site 5B in Phase I, a garden office site (OGPD). Site 51 is across Owens Dr. to the north.

Condition 5 - I-580 Specific Plan

Condition 5 of the development plan for Phase II mandates that no site-specific development plan be approved on Lot 51 until the I-580 specific plan has been adopted (or until March 31, 1987, whichever occurs first). The condition was intended to delay development on sites adjacent to the freeway until after the City has adopted a coordinated landscape plan for along this route and to develop particularized design goals for development adjacent to the freeway, with specific attention to setbacks, height, bulk, layout, and preservation of view corridors.

The specific plan work is in progress but will not be completed for several months. In order to gain approval for the proposed auto dealership and post office/retail center at this time, this condition must be waived as to Site 51.

ANALYSIS

No Comprehensive Revision

Virtually every business park in Pleasanton is currently "rethinking" its plan and its future options in light of the slowdown in the suburban office market. The developers of HBP are among those looking hard at their project and potential options. The proposed changes, however, do not constitute a comprehensive scheme of revisions. How the proposed changes may fit into a revised scheme is unknown at this time; the changes must be analyzed on their own merit in conjunction with the approved development plan.

Need for Additional Commercial Area - Site 51

The primary effect of the changes are to move away from office development and to cater to land uses for which there is a present demand. Retail Commercial demand in Pleasanton is not especially strong, and such sites will soon be abundant. HBP has provided 9.8 acres planned as a specialty complex (Pacific Rim) at Hopyard Rd. - Stoneridge Dr. and has a vacant 13-acre site south of Stoneridge Drive at Hopyard Rd. Trammell-Crow's shopping complex (Long's et al.) is under construction on Rosewood Dr. at Santa Rita Rd. Phase II has a smaller, 4 acre CPD site (Site 57B) and the 18.4 acre convention center site (Site 56A) for other commercial needs of the park. Site 37 in Phase I on Stoneridge Dr. at Gibraltar Dr. is a developed commercial site (banks, restaurants, gifts, and office supplies) and a smaller 5 acre vacant site exists across the street (Site

8B). The intent for Site 51 is to cater to the immediate, strong demand in Pleasanton for automobile sales sites, which prefer a freeway oriented site, and to create a small, more "service" oriented center housing a post office annex (in response to strong urging by the City for a north Pleasanton site) and probably deli/restaurant-type uses. A movie theatre has been considered for the balance of the site; several theatres are actively pursuing sites in Pleasanton at present.

Site 51, with its unique juxtaposition adjacent to I-580 and to the existing commercial complex at I-580 and Hopyard Rd., presents an attractive site for commercial uses such as automobile dealers which prefer freeway exposure. More than the one dealership proposed could be attracted to the site in today's market. Likewise, the site is attractive to movie theaters. The post office annex, on the other hand, would locate in almost any north Pleasanton site, if a willing developer could be found to lease it space in accordance with its specifications. Additional park-related service commercial uses, primarily restaurants, could be attracted, but these need not necessarily locate along the freeway and will be expanding into the planned Pacific Rim and Trammell Crow projects. (In addition, staff has interpreted the Phase I PUD to allow one deli/restaurant per site; such uses now occur in various office buildings in Phase I.)

There is clearly a demand for certain specialized commercial uses on Site 51. Staff's primary concern is the integration of these type uses into the overall HBP. These specialized uses are attracted to the site due to its freeway exposure and/or access. They normally would not desire to meet the kind of landscaping and design standards set forth for projects in HBP. However, if they could be so integrated, without significantly relaxing the quality standards of HBP, they could become valuable uses. The existing hotels and the planned convention center can profit by adjoining uses such as auto dealers and theatres. These uses can also profit by the proximity to the future transit hub. Designating Site 51 Commercial makes sense if the uses are compatible and/or are related to the hotel/convention center/transit hub uses. Staff feels this change is appropriate for HBP so long as care is taken to scrutinize actual development plans to ensure this compatibility.

Increased Density/Height - Site 52

Although the proposed change would increase this site's total allowable square footage, the total development of HBP is limited to a fixed amount. The square footage of Site 51 is also likely to decrease (due to the change to commercial development). In total, the maximum square footage would not be reached without changes or additional lots.

In June, 1985, a major modification to the Phase I PUD was approved which lowered allowable heights for all future buildings west of Chabot Canal to two stories. This was done to reduce the apparent height of buildings along Hopyard Rd.; taller buildings were concentrated in the center of the park.

The proposed change would allow a four-story building west of Chabot Canal. Although potentially tall, the site lies behind the tall two-story Sheraton Hotel complex and is well north of any residential development along Hopyard Rd. An interesting, well-designed four-story office building meeting the HBP standards would not appear out of place.

Traffic Impacts

The traffic impacts of the changes in land use proposed are summarized below:

	Before (51-GPD; 52 OGPD)	After (51-CPD; 52 OPD)
Average Daily Traffic	4,413 trips/day	6,681 trips/day
P.M. Peak Traffic	662 trips/hour	802 trips/hour
Distribution	530 outbound 132 inbound	522 outbound 280 inbound

Total trips and peak hour trips increase despite the reduction in total building square footage on these two sites because of the increased rate for typical commercial uses (the numbers above include normal "trip reduction" factors).

Of primary importance is the impact of these changes on the Hopyard-Owens intersection. This intersection is a critical intersection in the future, even with all proposed General Plan street improvements. The General Plan build-out scenario showed this intersection to have a poor LOS of D (V/C = .89), a level reached only by making permanent the "interim" four lane northbound-triple right turn westbound to northbound modifications to the intersection. (Without these modifications, it reaches 1.53, LOS F). Under future conditions, the changes proposed add about .05 "real" effect to this intersection; with "yellow time" modifications, this effect is still enough to bring the projected LOS to a low level LOS E (about .91). The LOS worsens due to both increased total peak hour traffic volumes and the additional turning movements (particularly left turns) at the intersection caused by the commercial use traffic.

The long-term effect on the Hopyard-Owens intersection is subject to more uncertainty than short-term traffic analyses, due primarily to the trip distribution assumed by the gravity model for trips on a very different street network. Nonetheless, it is clear that commercial uses along the Owens Dr. corridor near Hopyard Rd. have the potential for significantly worsening the LOS at that intersection due to generally higher trip generation rates and additional turning movements of all kinds at the intersection.

Commercial uses vary widely in their trip generation rates, peak hours, and distribution patterns. For instance, the auto dealership proposed has a lower daily trip rate than a typical mid-sized "shopping center" (48 trips/1,000 sq. ft. vs. 60 trips/1,000 sq. ft.) On the other hand, the proposed post office is likely to have a higher peak hour rate (about three times the office outbound peak period rate and twice the retail rate). Staff believes that if limited to commercial uses generating peak hour trips at the lower end of the commercial trip generation spectrum, the Hopyard-Owens intersection can continue to function at acceptable levels of service.

I-580 Specific Plan

Staff is fairly well along in the development of the I-580 Specific Plan. Both staff and POD, the City's design consultant, have reviewed the proposed development plans for the uses proposed on Site 51 to date. The plans could be made consistent with the policies and plans under consideration fairly easily. First, the buildings are essentially single-story and set back from the freeway, avoiding significant impacts on views across the site Second, the uses are not requiring unreasonable attention from the freeway. Staff had concerns regarding landscaping, screening roll-up doors and service areas, and the "blank" walls of the retail center facing the freeway. These can all be satisfactorily resolved through landscape modifications which the developer is willing to support. Accordingly, although staff would prefer adoption of development criteria for this corridor prior to approval of final plans, staff is satisfied that the policies and plans of the I-580 Specific Plan would not be compromised with the processing of commercial projects on Site 51.

ENVIRONMENTAL ASSESSMENT

A Negative Declaration accompanies this report. Based on the initial environmental study done for this project, it is the staff's opinion that Case PUD-85-8-2M would not have significant adverse effects on the environment. If your Commission concurs with this environmental assessment, you must make the finding

that the Negative Declaration is appropriate for the project. The finding must be made prior to taking action on the project itself.

STAFF RECOMMENDATION

Staff recommends your Commission approve the proposed modifications to the HBP Phase II project as follows:

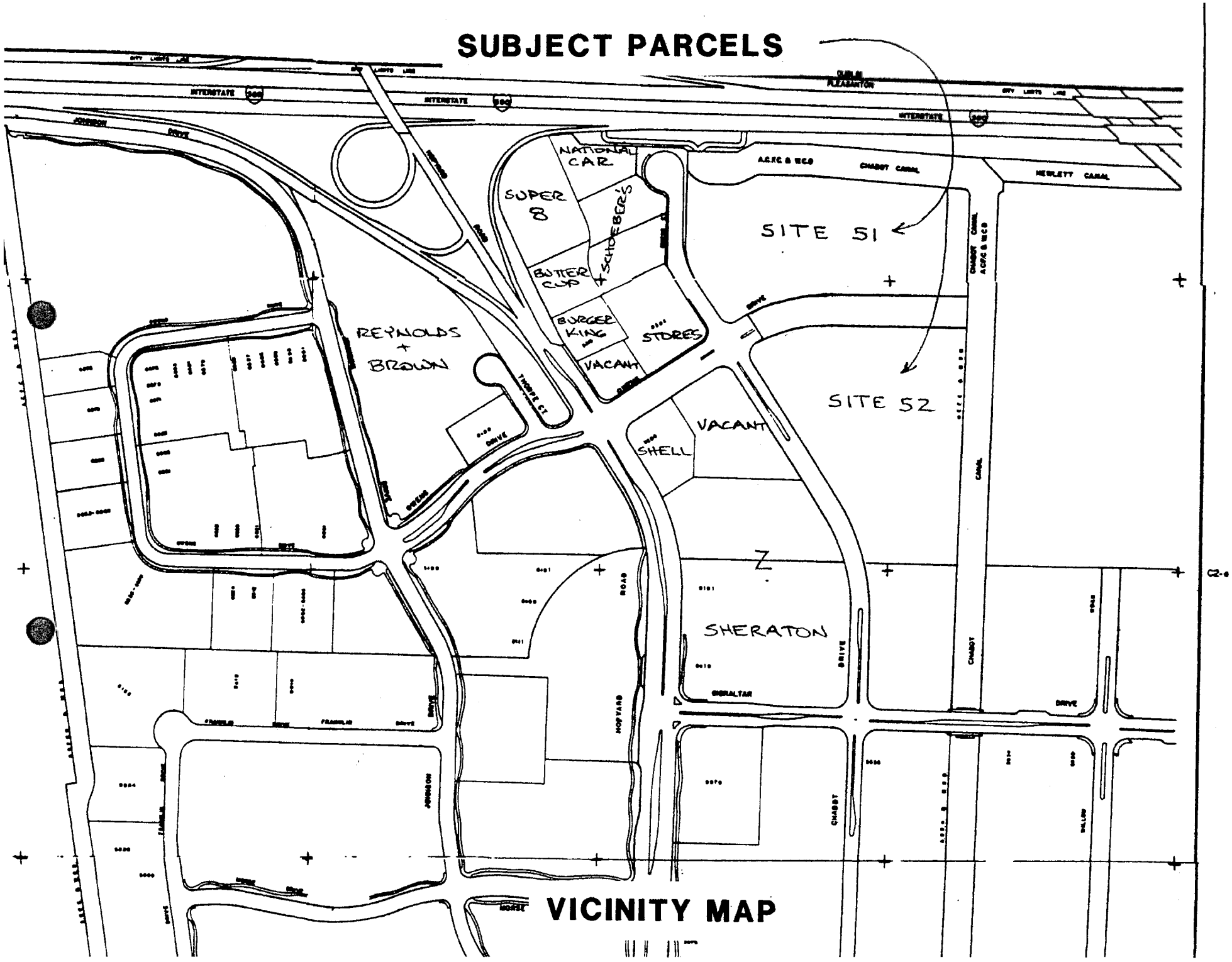
1. Modify the HBP Phase II Table B-1 "Summary of Site Development Criteria" of the Design Guidelines for Sites 51 and 52 to read as follows:

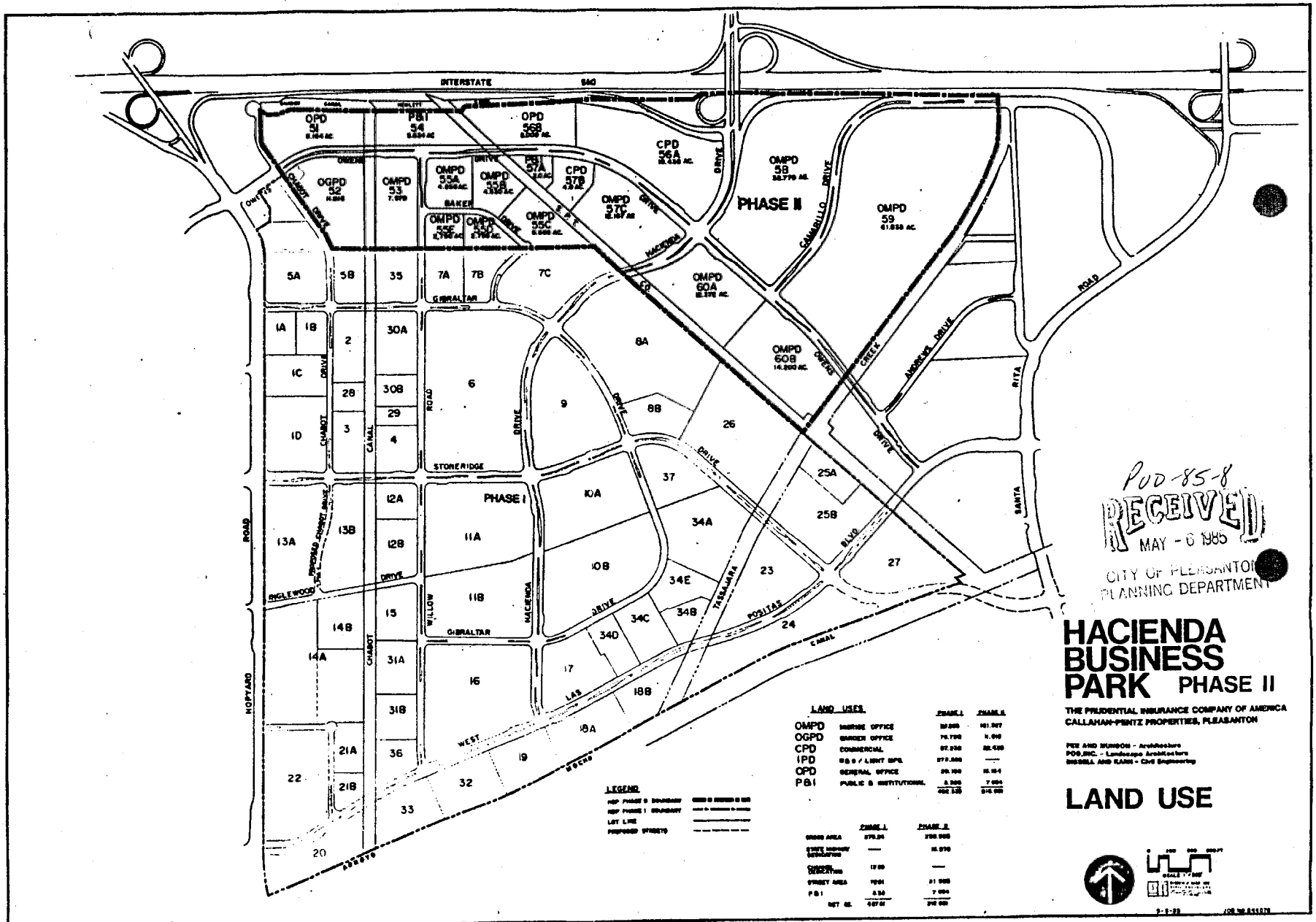
LOT PARCELS	USE(A)	MAX. FAR1	MAX. HT2	MIN. LANDSCAPE	MIN. PARKING
51	CPD(1-2 Story	40%	45'	25%	See Note 5
52	OPD (4 Story)	50%	70'	30%	1 per 250 SF

2. Direct that in approving final development plans for commercial uses on Site 51, proposed plans should accommodate uses which are those with generally low peak hour trip rates (below 3.6 trips/peak hour/1,000 sq. ft.) and which are compatible with its hotel/convention center/transit hub neighbors, especially evening entertainment type uses.

3. Modify Condition 5 of Ord. 1246 to delete Site 51 from the condition.

BS/ml(mpc8582M)


SUBJECT PARCELS
INTERSTATE 580
INTERSTATE 680
CITY LIMITS LINE
CITY OF PLEASANTON
JOHNSON DRIVE
NATIONAL CAR
SUPER 8
SCHOEBER'S
BUTTER CUP
BURGER KING
STORES
VACANT
REYNOLDS + BROWN
TIMOTHY CT.
SITE 51
SITE 52
A.E.C.C. & W.C.D.
CHABOT CANAL
HEWLETT CANAL
SHELL
VACANT
Z
SHERATON
HOPYARD ROAD
GIBRALTAR DRIVE
FRANKLIN DRIVE
VICINITY MAP



POD-85-8

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CITY OF PLEASANTON
PLANNING DEPARTMENT

HACIENDA BUSINESS PARK PHASE II

THE PRUDENTIAL INSURANCE COMPANY OF AMERICA
CALLAHAN-PENTZ PROPERTIES, PLEASANTON

PEE AND BUNSON - Architecture
POD, INC. - Landscape Architecture
BISSELL AND KARN - Civil Engineering

LAND USE

City of Pleasanton

STAFF REPORT 9G

October 28, 1986

HONORABLE CITY COUNCIL
Pleasanton, California

PUD-85-8-2D

Members of the Council:

BACKGROUND

Callahan, Sweeney, and O'Brien have applied for design review approval for an auto dealership and a retail commercial building to be located on Site 51 of Hacienda Business Park, at the northeast corner of Owens Court and Owens Drive.

A rezoning of Sites 51 and 52 in Hacienda Business Park is being sought in a concurrent application for a major modification (PUD-85-8-2M) before your Council at this meeting. The applicant proposes to rezone Site 51 from the OPD (four-story general office) District to the CPD (commercial) District. Therefore, approval of the current design review submittal must be contingent upon your approval of the modification to rezone the subject property.

The original design included an approximately 38,350 square foot movie theater complex located on the easternmost 3.4 acres of Site 51. The theater has been withdrawn from the current submittal and will not be included for review by your Council at this time.

Site 51 is currently occupied by several construction trailers and equipment related to the installation of Hacienda Phase II improvements. These will need to be relocated in order to develop the site.

PROJECT DESCRIPTION AND ANALYSIS

Please see the attached Planning Commission staff report for a detailed analysis of the project. After the writing of that report, the applicant submitted revised plans which incorporate many of the changes addressed in staff's recommendations. Not all of that report, then, is currently accurate. Following the Planning Commission's recommendations, staff and the applicant

have reached agreement on almost all of the site plan and landscape modifications. These changes are detailed in the "Planning Commission Action" portion of this report.

As indicated in the companion Case PUD-85-8-2M, staff continues to feel that an alternative use to the proposed post office/retail complex would be preferable on this site, based on traffic and design considerations. However, if your Council feels that use is appropriate, staff and the applicant have agreed to most aspects of the proposal.

PLANNING COMMISSION ACTION

As had staff (and, in their manner, the applicant), the Planning Commission attempted to recommend a plan which met the peculiar merchandising requirements of an auto dealership, which met the Post Office's requirements, and which still maintained the essential elements of Hacienda Business Park. The Planning Commission recommended approval of the revised plans modified as follows:

1. added the standard 5' full length Owens Court sidewalk - all agree
2. required maintenance of the rear 15' by the property owner - all agree
3. approved preliminary sign placements on the building to have "Mercedes Benz" and logo on the northerly showroom elevation and dealer name and logo on the westerly showroom elevation - all agree
4. added two clusters of Shamel ash street trees along Owens Drive - all agree
5. modified the Lot 51A-51B common driveway landscaping to match the Owens Court treatment - all agree
6. added "parking court trees" in the landscape median on the south side of the building between service doors - all agree
7. added shrubs and trees in the rear parking area landscape islands to screen the north elevation service doors - all agree
8. increased the width of the planter along the east and north sides of the building - all agree
9. added clusters of "canal trees" along the rear property line in the 15' landscape easement - the applicant does not agree
10. deleted the drop box "snorkel lane" in front of Site 51B - all agree.

The only site planning/landscape issue not agreed upon is the addition of some trees in clusters along the northern boundary of the site. The Planning Commission felt the rear parking lot was essentially unattractive as viewed from the freeway and would be largely obscured by the berm-shrub planting. The clustering of trees along this boundary integrated the site with the balance of

the landscape plan along I-580 within the park, softened the view of the service portion of the building, and did not interfere with the critical business exposure from the freeway (view across Owens Court cul-de-sac to the showroom and sign).

CONCLUSION

Staff is quite satisfied with the recommendation of the Planning Commission as it relates to Site 51A. As indicated earlier, staff has recommended denial of Site 51B, with the caveat that if this site is later selected by the Post Office for its north Pleasanton annex, that the plan (or a revised plan incorporating the final Post Office requirements) be brought to you for approval at that time. If, however, your Council wishes to approve the proposed use, staff recommends the additional Planning Commission conditions/modifications as shown in the draft conditions of approval.

ENVIRONMENTAL ASSESSMENT

A Negative Declaration has been prepared for Case PUD-85-8-2M, which is being reviewed in conjunction with this case. The environmental effects of this application have been included within the scope of that environmental assessment. If your council finds that a Negative Declaration for Case PUD-85-8-2M is appropriate, then no further environment review is necessary for this project (PUD-85-8-2D) at this time.

STAFF RECOMMENDATION

Staff recommends your Council:

1. Approve the design plan for Site 51A, subject to the attached 12 conditions of approval.
2. Deny the design plan for Site 51B.

However, if you approve the proposed use of Site 51B, approve both Site 51A and Site 51B as shown on the revised plans subject to the attached 12 conditions, plus the following additional conditions:

13. That the drop-off "snorkel lane" be deleted from the site plan, with direction to the applicant to seek a dual snorkel lane on Chabot Drive south of Owens Drive or elsewhere in the general vicinity of the site.

14. That a temporary driveway connecting the main entrance driveway on Site 51C (at the Owens Drive median break) to the Site 51B parking lot shall be included in the improvements for Site 51B.

15. That the owner of Site 51B shall enter into a lease with the U.S. Postal Service for a period of no more than 10 years; if the Postal Service wishes to be retained beyond that time frame, it or the owner shall make separate application and shall be approved only after a traffic study indicates that there will be no adverse traffic impact.

16. That in the event the Postal Service does not select Site 51B for its north Pleasanton "annex", this approval shall be null and void; no construction shall take place on Site 51B until a lease or other document found satisfactory by the City Attorney has been entered into between the owner and the Postal Service for its use of the site for a post office annex.

Respectfully submitted,

Brian W. Swift
Director of Planning and
Community Development

James R. Walker
City Manager

BWS/kh(kcc86468)

Attachments

1. Planning Commission Staff Report
2. Vicinity Map
3. Site Plan and Elevations
4. Traffic Study
5. Conditions of Approval for Site 51A
6. Standard Conditions of Development
7. Planning Commission Minutes of October 22, 1986 Meeting

PROPOSED CONDITIONS OF APPROVAL
PUD-85-8-2D

1. That the developer provide a 5 foot wide sidewalk (4-1/2 foot sidewalk adjacent to the 6 inch curb) along the entire Owens Court (west) boundary of the site north of the Owens Court entrance driveway.

2. That the property owner be responsible for maintaining the entire 15 foot width of landscape easement along the rear (north) boundary of the site, unless an alternative arrangement satisfactory to the Planning Director is reached between the owner and the Hacienda Business Park Owners' Association to suitably maintain said easement.

3. That wall-mounted signs for the auto dealership shall be limited to "Mercedes Benz" and logo on the northerly showroom parapet and dealer name and logo on the westerly showroom parapet; the remainder of the sign program is approved in concept, but the owner shall apply for design review approval for the comprehensive sign program (colors, letter height and type, etc.) in a separate application.

4. That the developer shall plant approved street trees for Owens Drive (Shamel ash only) in two clusters located in the 33 foot landscape easement adjacent to Owens Drive, generally in front of the two roll-up doors at the drive-through and service entrance along the south elevation of the building.

5. That the developer shall modify the common Site 51A-51B driveway landscaping to utilize a low wall, shrub, and flower treatment similar to that proposed for the Owens Court driveway entrance to Site 51A.

6. That the developer shall plant 4-5 additional parking court trees (flowering pears or other suitable species) in the landscape median between the south wall of the service area and the south parking lot/used car display, to the west of the service entry where none are currently proposed.

7. That the developer shall plant appropriate shrubs and trees in the landscape islands in the rear (north) of the service area in order to screen the rear service doors and soften views of the building from the freeway to the satisfaction of the Planning Director.

8. That the developer shall increase the width of landscape median directly adjacent to the north side of the service areas to 5 feet or greater both before and after the proposed expansion, and that these shall be planted with trees and shrubs to soften views of the building from the freeway to the satisfaction of the Planning Director.

9. That the developer shall plant 4-5 clusters of 4-5 canal trees (eucalyptus) each along the length of the rear (north) landscape easement adjacent to the canal outside the proposed security fence in order to soften views of the building and stock parking area from the freeway.

10. That the proposed mitigation measures, as identified in the previous traffic studies completed for the AT&T and Reynolds and Brown projects, for Hopyard Road/Owens Drive and Hopyard Road/EB I-580 offramp be interim and done at the time it is deemed necessary for the City Engineer. If said improvements are required to be constructed then the City shall spread, if feasible, the cost in proportion to the pro rata square footage share of all buildings whose approval was made possible by these mitigation measures.

11. That this development is subject to all of the "Standard Conditions of Development", except for Conditions No. 7, 12, 13, 14, 29, 46, and 49.

12. That this approval shall become effective upon the effective date of Case PUD-85-8-2M.

(k8582d)

Item 6j
Staff Report
PLANNING COMMISSION
October 22, 1986

SUBJECT: **PUD-85-8-2D**

APPLICANT: **Callahan, Sweeney, and O'Brien**

PURPOSE: Application for design review approval for an approximately 35,150 square foot auto dealership and an approximately 16,000 square foot retail commercial building, and related facilities, to be located on an approximately 4.8 acre site located generally at the northeast corner of the intersection of Owens Court and Owens Drive. Zoning for the property is PUD (Planned Unit Development)-Industrial, Commercial and Offices District.

ATTACHMENTS:
1. Vicinity Map
2. Site Plan and Elevations
3. Traffic Study
4. Conditions of Approval for Site 51A
5. Standard Conditions of Development

BACKGROUND

Callahan, Sweeney, and O'Brien have applied for design review approval for an auto dealership and a retail commercial building to be located on Site 51 of Hacienda Business Park, at the northeast corner of Owens Court and Owens Drive.

A rezoning of Sites 51 and 52 in Hacienda Business Park is being sought in a concurrent application for a major modification (PUD-85-8-2M) before your Commission at this meeting. The applicant proposes to rezone Site 51 from the OPD (four-story general office) District to the CPD (commercial) District. Therefore, approval of the current design review submittal must

be contingent upon your approval of the modification to rezone the subject property.

The original design included an approximately 38,350 square foot movie theater complex located on the easternmost 3.4 acres of Site 51. The theater has been withdrawn from the current submittal and will not be included for review by your Commission at this time.

Site 51 is currently occupied by several construction trailers and equipment related to the installation of Hacienda Phase II improvements. These will need to be relocated in order to develop the site.

PROJECT DESCRIPTION - SITE 51A

A Mercedes Benz auto dealership is being proposed for the westernmost 3.2 acres of Site 51, which has been designated "Site 51A" by the applicant. This site is bordered by Owens Drive to the south, Owens Court to the west, Chabot Canal and I-580 to the north, and Site 51B to the east.

The applicant proposes to construct the approximately 34,797 square foot building in two phases. Approximately 27,770 square feet will be constructed initially. This will include an approximately 6,000 square foot sales showroom area in the west portion of the building, an approximately 15,200 square foot service area in the east portion, and approximately 6,560 square feet of second floor office space. Approximately 7,030 square feet will be added to the service area in a later phase, approximately five years after the initial construction. The ratio of total floor area to site area will be .252 at buildout.

A representative of Mercedes Benz has noted that a dealership in Pleasanton would draw from a potential customer population of approximately one-quarter million in the Tri-Valley and parts of the East Bay. It may be assumed, therefore, that the majority of the clientele would reach the site from I-580 via the Hopyard Road Interchange.

Design

The proposed building is large in scale and modern in design. The overall height to the parapet is 28 feet. A series of massive rounded columns appear as supports to the structure along its length on the north and south elevations. These are linked at the top by an extensive metal grillwork along portions of both elevations.

The major frontage of the building faces west and consists of a curving showroom window 22 feet high and approximately 80 feet wide. The dominance of the showroom in the overall design is reinforced by its relative height, which is 3.5 feet greater than the finished floor elevation of the service area. All mechanical equipment on the building roof will be architecturally screened from view from both on and off the site.

The modern architecture is further emphasized by the colors and materials used in the design. The "hi-tech" appearance of the building is softened somewhat by the curvilinear forms of the columns, outdoor display platforms, and showroom window. The west, south, and north elevations of the sales/showroom area consist primarily of clear "vision glass." The walls of the remaining structure consist of tilt-up concrete panels with a smooth surface texture. The surfaces are given definition by score lines which run primarily in a horizontal direction. Roll up doors on the north elevation will match the color of adjacent walls and will include glazed panels for aesthetic appeal.

The primary color of the building is light gray. A contrasting medium gray band of color approximately 3 feet wide encircles the building at its base in all areas except those occupied by glass. The large vertical columns are white metal clad and are each capped by a metal top approximately 6 feet high and of a silver/aluminum color. The aforementioned matching metal grillwork ties the columns together horizontally at the top and matches the window mullions.

Parking and Circulation

New automobiles will be displayed on the floor of the glass showroom and on raised outdoor show platforms on the north and south sides. The platforms are reach from the ground level by way of a 10 foot wide ramp which doubles as a handicap access to the interior of the building. The curving lines of the patios and ramp further emphasize the importance of the sales/showroom area.

It is intended that customers enter the site at the Owens Court entrance. They will either park in the customer parking area near that entrance or will turn right and enter the drive-through where cars are dropped off for service. Service technicians will drive vehicles out the south end of the drive-through and around to the service entry on the south side of the building. If space within the service area of the building is limited, cars awaiting repair may be stored in the rear outdoor parking area, which is accessible through two roll-up doors on the rear (north) elevation. The customer parking area may be exited by way of Owens Court for customers who do not require service.

The Owens Drive entrance at the southeast corner of the site will be used primarily by service technicians taking vehicles out for test drives and for vehicle deliveries. The lack of a median break at this location will limit ingress and egress. The east entrance to the rear stock parking area will be used primarily for transfer of stock vehicles and some service vehicles. Employees will use the west entrance to the rear lot to gain access to employee parking spaces in the rear.

The customer parking area at the Owens Court entrance consists of 15 spaces, including one handicap space. A 23-space used car display area is located along the south frontage of site. The enclosed rear yard on the north side of the site comprises 186 spaces, to be reduced to approximately 149 spaces upon expansion of the service area of the building. Of the latter figure, the applicant has designated 119 spaces for stock parking and 30 spaces for storage of vehicles being serviced. A portion of these spaces will also be used for required employee parking.

Landscaping

Landscaping for the site bears a resemblance to other areas of Hacienda Business Park but with some variation based on the commercial nature of the subject use. The landscape plan incorporates an existing landscape intersection treatment on the corner of Owens Court and Owens Drive as found elsewhere throughout the business park.

The south, west, and north edges of the site feature bermed landscape setbacks of varying width and composition. The Owens Drive (south) and Owens Court (west) frontages utilize the 33 foot wide landscape and utility easement required for these streets in the design guildelines for Phase II of Hacienda Business Park. Included in this area is a sidewalk which is separated from the curb by landscaping along Owens Drive and adjacent to the curb along Owens Court. The bermed area consists primarily of lawn, low shrubs, and accent plantings near both site entrances.

A 15 foot wide bermed landscape easement enhances the north boundary of the site adjacent to Chabot Canal and I-580 beyond. This area will be planted with ground cover and medium shrubs (flowering oleanders). A cluster of holly oak trees (the street tree designated for Owens Court in the Hacienda Design Guidelines) will be located at the northwest corner of the site, and a line of eucalyptus will screen the northeast corner.

A 5 foot high decorative security fence surrounds the rear stock parking area on the north, west, and south sides of the parking lot. The fence is set at the apex of the 3 foot landscape berm.

The tubular steel "picket" fence is curved outward at the top to make climbing difficult. The design of the fence is clean and simple, and the vertical "pickets" become nearly invisible when viewed from a car passing at normal speed.

The east side of the stock parking lot is enclosed with an 8 foot block wall (part of the post office enclosure on Site 51B). The applicant originally proposed only shrubbery along this wall. At the advice of staff, the design has been altered so that the wall is off-set rather than straight, thus permitting ample space for planting trees along its length.

Landscaping in the interior of the site consists primarily of small beds to highlight the building and car display areas. A cluster of flowering pear trees adorns the southeast corner of the building. At staff's advice, the applicant has also agreed to provide several landscape islands with vertical-growing shrubs and trees along the north side of the service building in the stock parking area. These would be designed to screen the service doors from view from the freeway.

Utilities

A sewer line which bisects Sites 51A and 51B at an angle in the northwest corner of Site 51 is being relocated to the 15 foot easement along the north and west boundaries of the site. According to the applicant, lighting for the site will consist of metal halide pole lamps of the standard type used throughout Hacienda. The applicant further proposes to install higher intensity pole lights in the rear stock parking area for security purposes. A specific lighting plan was not included as part of the submittal.

Signage

The conceptual signage plan for the site consists of monument and wall-mounted signs. Two low profile monument signs will be installed, one at the Owens Court customer entrance and one on the Owens Drive frontage. In addition, the applicant has indicated that several smaller directional signs may be installed on the site. A wall-mounted sign indicating the dealer name ("Hacienda Euromotors Ltd.") is proposed for location at the parapet of the west facade above the curving glass showroom window, and the words "Mercedes Benz" would appear at the parapet of the north facade above the service area. The Mercedes Benz logo is proposed to be mounted in the center of the parapet area on both the north and south faces of the sales/showroom area. A detailed signage program was not included as part of the submittal, and thus will be subject to City approval at a later date.

PROJECT DESCRIPTION - SITE 51B

The applicant proposes to locate an approximately 16,000 square foot retail building on approximately 1.6 acres in the center of Site 51, designated as "Site 51B". This site is bordered by Site 51A on the west, Chabot Canal and I-580 on the north, Site 51C on the east, and Owens Drive on the south.

Approximately 4,500 square feet, located generally in the "elbow" of the L-shaped building, is planned for a U.S. Postal Service post office. The remainder (approximately 11,500 square feet) will house individual retail tenants, including at least one restaurant. The overall ratio of floor area to site area is 23 percent.

Design

The proposed building is of a modern Mediterranean style with cubic lines and a tile roof. A covered arcade encircles the building in all areas except the loading dock. It varies in width from 4 feet along the north and south sides and rear (west) to 10 feet along the east-facing major frontage.

The building is 24 feet in height, including an 8 foot deep mechanical screening. The gently sloping mansard roof consists of clay tiles which are a very muted reddish-brown in color. Walls of the building are stucco.

The interior arcade walls and exterior building walls are a very light beige, while the columns and exterior facade of the arcade itself are of a slightly darker contrasting peach tone. The interior arcade walls along the major south and east frontages consist primarily of clear vision glass with white mullions. As with the auto dealership, vertical and horizontal score lines provide detail to otherwise bare wall areas on the north and west building elevations.

Parking and Circulation

The major vehicular entrance to on-site parking areas will be at the common drive shared by Sites 51B and 51C, through a median break at Owens Drive. This entry is defined through the use of architectural concrete stamping. In addition, patrons may enter the site by way of the common driveway between Sites 51A and 51B.

Customers will either park in the small lot along the Owens Drive frontage, or will continue inward to parking areas adjacent to the major store fronts along the east frontage. The central parking area is limited to one-way (counter-clockwise) traffic

around a landscape island. This area of angled spaces is intended primarily for temporary post office parking.

Post office employees and delivery vehicles will enter the Site 51A/51B driveway to gain access to the enclosed rear service area, which includes a loading dock with a roll-up door and ramp. The rear yard may also be entered through a gate on the north side of the building.

Parking spaces have been provided at an overall ratio of one space per 200 square feet of gross floor area. Thirteen spaces are located within the enclosed post office yard for employees, including one handicap space. An additional seven spaces are located outside the west service area gate. The remaining (58) spaces are located generally adjacent to the south and east building frontages.

A mailbox drop-off drive-through area has been proposed between the two entry driveways. Westbound drivers would enter the drive-through on the right side of Owens Drive. Mail boxes will be installed on a median strip so that they may be reached from the left (driver's) side of the car.

Landscaping

The 33 foot front landscape easement along Owens Drive is continued on Site 51B, although a major portion is occupied by the mailbox drive-through. Clusters of flowering crabapple trees line each entry driveway, while the remainder of the landscape easement is planted with lawn, small shrubs, and bedding plants on a low berm.

Service areas of the site are planted with low shrubs, ground cover, and with informal masses of a small variety of eucalyptus tree. The rear of the site adjacent to Chabot Canal and I-580 will continue the theme of eucalyptus screen plantings within the 15 foot landscape easement as begun on Site 51A.

In addition to small-scale plantings of shrubs, ground cover, and container plantings, the interior of the site is planted with flowering oleanders in small tree form as focal elements. Ash trees are found in several areas of the main parking lot.

An 8 foot high block wall encloses the rear service area as required by U.S. Postal Service standards. This security area will be served by two locking gates. The material will be rough-textured split face concrete block in a natural tone intended to blend with the landscaping rather than the retail building.

Signage

The proposed signage for the post office/retail building consists of a single monument sign to identify the complex, and a series of individual wall-mounted tenant signs. The double-faced monument sign will be installed at the main driveway entry perpendicular to Owens Drive. It will be 5 feet high and 10 feet long, with a metal base and top. The copy area will consist of a plexiglas face with routed, back-lit letters.

Individual tenant signs will be mounted on the front wall of the arcade above each tenant location. No further detail has been provided with regard to the style, materials, and dimensions for individual tenant signs.

HACIENDA PHASE II DESIGN GUIDELINES

The second phase of development for Hacienda Business Park (PUD-85-8) was approved by the City Council on March 18, 1986. Condition No. 2 of Ordinance No. 1246 approving the development requires that all on-site development be guided by the Design Guidelines for Phase II on file with the City Planning Department.

The proposed development plan for Sites 51A and 51B includes some inconsistencies with regard to the Design Guidelines, some of which were acknowledged by the applicant at the time of the submittal. The latter have been approved as "variances" in a document of "Unanimous Consent" executed by the Hacienda Business Park Owners Association Board of Directors on September 17, 1986. A summary of inconsistencies with the Design Guidelines follows.

Site 51A (Mercedes Benz Dealership)

Numerous inconsistencies exist with regard to landscaping both on-site and in required easements. Both the Owens Court and Owens Drive frontages are considered as front yards in the Design Guidelines, and thus require a 33 foot landscape easement (with berm and sidewalk) adjacent to the street, and 15 feet (where parking is present) or 17 feet (in the absence of parking) of landscaping adjacent to the building. The applicant proposes less extensive landscaping and encroachments within the setback area due to the commercial nature of the use.

The Design Guidelines state that the rear (north) of Site 51 shall also be considered as a front yard for the purposes of establishing the required minimum landscaping depth against buildings and service areas (15 feet would be required along the rear of the building). Furthermore, a minimum 15 foot wide landscape strip is to be installed along I-580 and the Flood

Control right-of-way, to be maintained by the Hacienda Business Park Owners Association, which may conflict with the fence/wall plan. The submitted plans show a 15 foot landscape easement bisected by a 5 foot high security fence, making maintenance of the entire strip as a common area difficult.

Insufficient landscaping in the rear stock parking area (the Guidelines require "orchard-type" tree planting in open parking areas) is again justified on the basis of the commercial nature of the use and on the role of the frontage as a showcase, presumably as viewed from I-580.

The Design Guidelines require a minimum width of 30 feet for a common drive between two sites. The applicant proposes to reduce the two entry drives at Sites 51A/51B and 51B/51C from 30 feet to 26 feet in width after the first 100 feet from the street. The applicant feels that this meets the intent of providing sufficient space for wide turns onto and from Owens Drive, while still being sufficient for on-site circulation.

Signage proposed for the dealership also exceeds the amount and location allowed.

Site 51B (Post Office/Retail)

As with Site 51A, the front and rear yards of Site 51B are to be considered as front yards for the purpose of establishing required minimum landscaping and building setbacks. The 15 foot wide landscape easement which begins at the border with Site 51A in the rear is gradually reduced in width to approximately 8 feet at the northeast corner of the site. The required 15 foot landscaping adjacent to the rear of the building is lacking. Again, a portion of the easement is bisected by an 8 foot high block wall enclosing the post office service yard, reducing the effect of a wider planting strip and, as discussed earlier, making maintenance by the HBPOA infeasible. The overall justification for landscape changes is again the commercial nature of the use and the general lack of applicability of the Design Guidelines to Commercial Uses.

As proposed, the landscape plan for Site 51B provides approximately 16 percent landscape area (not including areas of concrete or "hardscape") as a percentage of the total site area. The HBP Design Guidelines require 25 percent of site areas in the CPD District to be landscaped. To date, all approved developments in CPD District within the park have met this requirement.

The proposed curb cuts for the two common driveways off of Owens Drive are shown approximately 80 feet apart at the points of

tangency rather than the 100 foot spacing required in the Design Guidelines. This situation is compounded by the presence of the mail drop-off between the two driveways. The westernmost driveway will permit only right turns to and from the site, and the applicant was allowed a "variance" based on this justification.

As with Site 51A, the common driveway between Sites 51B and 51C will be reduced in width from 30 feet to 26 feet after the first 100 feet of length.

ANALYSIS

Site 51A

As proposed by the applicant, the overall design for the Mercedes Benz dealership does not meet many of the requirements of the Design Guidelines. Staff recognizes, however, that the specific requirements of an auto dealership use were probably not taken into account when those guidelines were developed and established.

Nevertheless, staff feels that it should be possible to design a dealership that will more closely meet the intent of the Design Guidelines, and will thus achieve a more successful assimilation with the more prevalent uses within the business park.

Therefore, staff feels that the proposed use and design are generally appropriate for the subject site if the site design is modified to bring it more closely within the Design Guidelines. Staff is generally satisfied with the design of the building with a few minor exceptions. The proposed modifications relate primarily to the need for greater landscaping. These are listed individually as conditions in the section on staff recommendations which follows.

Site 51B

Staff has major concerns over the proposed uses of this site. As indicated in the companion staff report, staff cannot support uses which generate traffic at the projected rate for this site. If your Commission favored staff's recommendation concerning potential uses on Site 51, you should turn down this proposal.

Post Office Location - The Post Office committee evaluated several sites in attempting to find a suitable location for a north Pleasanton post office. This site was not recommended. However, it appears that the Committee was restricting its review to developed sites with vacancies. Staff believes a preferable location would be more accessible to the northern portion of

Pleasanton (residential as well as industrial/commercial), such as along Stoneridge Drive. The Committee's recommendations favored such sites. The post office will be a major attractor of P.M. peak hour trips, and funneling such traffic through the Hopyard/Owens intersection should be avoided.

Post office personnel have indicated that they have made no decision concerning a new location. They will be soliciting bids again shortly. Staff is fully supportive of a north Pleasanton post office site, and, if this site is selected by the post office, staff feels a plan should be submitted for approval after the selection. In the meantime, staff suggests that the staff work with the Committee members and north Pleasanton developers to attempt to generate more interest in the post office annex.

Site Plan and Elevations - The proposed project was designed to meet the post office's requirements and still allow a reasonable project on that site, all while leaving an economic remnant to the east (Site 51C). Numerous modifications to the design guidelines are necessary for approval of the project. Foremost among these are the following:

- there is not sufficient accessible parking for the 40 customer spaces demanded by the post office and the balance of the uses at the required 1 space/200 sq. ft. rate; numerous spaces are located within the enclosed area, are not necessary for the post office, and are unusable for on-site businesses (staff acknowledges the difficulty the developer has had in trying to meet the Postal Service's requirements; it appears their requirements are changing, as staff has been told different information than was told to the developer).

- the 8 ft. wall along the rear negates the planned landscape effect of the 15 ft. planter proposed initially to run all along the I-580 frontage.

- the wall and rear elevations (west and north) of the building are essentially plain walls; although well-done for a typical commercial center, they do not reach the standard desired when viewed from I-580.

- the retail building layout is not optimal for business success as there is limited exposure to Owens Drive.

- the driveway location, and future Site 51C driveway, place three driveways in closer proximity than established in the guidelines, which should be avoided along this major street.

- the drop off box, as initially designed and as revised, greatly reduces the effective landscaping along Owens Drive; it also creates potential traffic hazards at driveways and as autos stack onto Owens Drive at peak periods of use. (Ideally, a drop off box should be incorporated on-site to minimize traffic interferences.)

All of the above are essentially a function of trying to accommodate the post office requirements on a small site. In staff's opinion, the modifications constitute too large a departure from the quality standards established for HBP. Modifications to meet staff's concerns with the site plan would require a larger site for the size of building and uses proposed. Because the developer wishes to retain Site 51C in its current size for future development, staff is unable to suggest modifications which could be attached as conditions. Accordingly, staff recommends you deny the proposed development plan for Site 51B.

Traffic Analysis

A short-term traffic impact study for the proposed development on Sites 51A and 51B was carried out by a consultant to the developer. In summary, the results of the traffic analysis show that the impact that Sites 51A and 51B would have on the 23 intersections studied in Pleasanton is such that all of the intersections would remain at acceptable levels of service.

Environmental Assessment

A Negative Declaration has been prepared for Case PUD-85-8-2M, which is being reviewed in conjunction with this case. The environmental effects of this application have been included within the scope of that environmental assessment. If your Commission finds that a Negative Declaration for Case PUD-85-8-2M is appropriate, then no further environmental review is necessary for this project (PUD-85-8-2D) at this time.

STAFF RECOMMENDATION

As stated earlier, the design of the proposed auto dealership may be effectively assimilated into Hacienda Business Park with some modifications to the landscape and site plan. Therefore, staff recommends approval of the development for Site 51A subject to the attached list of conditions.

Because of aforementioned inconsistencies with the Design Guidelines, traffic generation, and general limitations with regard to the proposed development plan, staff recommends denial of the development plan for Site 51B. However, if your

Commission feels that the post office/retail building site plan is appropriate for Site 51B as proposed, staff recommends approval of the development plan for Site 51B subject to these additional conditions:

1. That the developer shall redesign the Owens Drive postal box turnout as follows, unless otherwise approved by the City Engineer:

   A. Delete the common driveway opening between Lot 51B and Lot 51C.

   B. Extend the on-site parking lot driveway from the common driveway opening between Lot 51A and Lot 51B to the driveway opening in Lot 51C opposite Chabot Drive. Provide suitable truck turning radii.

   C. Design a twelve foot (12') $\pm$ wide turnout lane and a six foot (6'), or wider, frontage island to fit between the Lot 51A/51B driveway opening and the Lot 51C driveway opening opposite Chabot Drive. The frontage island would be approximately 110' long and capable of accommodating a minimum of 5 to 6 vehicles.

2. That the owner shall enter into a lease with the U.S. Postal Service for a period of no more than 10 years; if the Postal Service wishes to be retained beyond that time frame, it shall make separate application and shall be approved only after a traffic study indicates that there will be no adverse traffic impact.

SE/ml/kh(kpc8582D)

PUD-85-8-2M, Application of Callahan, Sweeney, and O'Brien and Prudential Insurance Company for a major modification to an approved planned unit development zoning for a business park, including changes to zoning, uses, and development standards to be located on an approximately 10.9 acre site located at the southeast corner of Owens Drive and Chabot Drive. Zoning for the property is PUD (Planned Unit Development)-Industrial, Commercial and Offices District

Consider Adoption of Negative Declaration

PUD-85-8-2D, Application of Callahan, Sweeney, and O'Brien and Prudential Insurance Company of America for design review approval for an approximately 35,150 sq. ft. auto dealership, an approximately 16,000 sq. ft. retail commercial building, and an approximately 38,350 sq. ft. theater complex, and related facilities, to be located on an approximately 8.2 acre site located generally at the northeast corner of the intersection of Owens Court and Owens Drive. Zoning for the property is PUD (Planned Unit Development)-Industrial/ Commercial and Offices District

Mr. Swift presented his reports (SR 86:466 and SR 86:468) dated October 28, 1986, regarding these items.

Mayor Brandes declared the public hearing open.

Mr. Joe Callahan, representing Callahan, Sweeney, and O'Brien and Prudential Insurance Company, stated he has reviewed the reports and have no objections to any of the conditions. He advisd that with regard to Site 51B, if the Post Office does not use their proposed site, he will resubmit plans to eliminate the conditions that are attached to the Post Office parcel.

No one in the audience spoke in opposition to these items.

There being no further testimony, Mayor Brandes declared the public hearing closed.

It was moved by Councilmember Wood, and seconded by Councilmember Mohr, that Resolution No. 86-505, determining on the basis of a review of initial environmental study done for this project, that no significant environmental impact would occur as outlined in the City's guidelines and that a negative declaration is appropriate in connection with PUD-85-8-2M, application of Callahan, Sweeney, and O'Brien and Prudential Insurance for a major modification to an approved planned unit development zoning for a business park, including changes to zoning, uses, and development standards to be located on an approximately 10.9 acre site located at the southeast corner of Owens Drive and Chabot Drive, be adopted.

The roll call vote was as follows:

AYES: Councilmembers Mercer, Mohr, Wood, and Mayor Brandes
NOES: None
ABSENT: Councilmember Butler

It was moved by Councilmember Wood, and seconded by Councilmember Mercer, that Ordinance No. 1281, to be read by title only and waiving further reading thereof, approving PUD-85-8-2M, application of Callahan, Sweeney, and O'Brien and Prudential Insurance for a major modification to an approved planned unit development zoning for a business park, including changes to zoning, uses, and development standards to be located on an approximately 10.9 acre site located at the southeast corner of Owens Drive and Chabot Drive, subject to conditions as recommended by Planning Commission, be introduced.

The roll call vote was as follows:

AYES: Councilmembers Mercer, Mohr, Wood, and Mayor Brandes
NOES: None
ABSENT: Councilmember Butler

Council discussion ensued regarding the raised platforms for cars, high intensity lights, gas storage tank, and possible location of the Post Office Substation on this parcel. Mr. Callahan stated the lights will have a head and louvers that focus on a distinct area rather than a large area. He stated the felt the Post Office Substation site is as good a location as any for such a facility; he felt the present Post Office is inadequate even with a substation. He stated the theater has been removed from the request because he could not get plans squared away.

It was moved by Councilmember Wood, and seconded by Councilmember Mercer, that Resolution No. 86-506, approving PUD-85-8-2D, application of Callahan, Sweeney, and O'Brien and Prudential Insurance Company of America for design review approval for an approximately 35,150 sq. ft. auto dealership, and an approximately 16,000 sq. ft. retail commercial building, and related facilities, to be located on an approximately 8.2 acre site located generally at the northeast corner of the intersection of Owens Court and Owens Drive, subject to conditions set forth by the Planning Commission, be adopted.

The roll call vote was as follows:

AYES: Councilmembers Mercer, Mohr, Wood, and Mayor Brandes
NOES: None.
ABSENT: None

CITY COUNCIL OF THE CITY OF PLEASANTON

ALAMEDA COUNTY, CALIFORNIA

RESOLUTION NO. 86-506

RESOLUTION APPROVING APPLICATION OF CALLAHAN, SWEENEY, AND O'BRIEN AND PRUDENTIAL INSURANCE COMPANY OF AMERICA FOR DESIGN REVIEW APPROVAL FOR A CAR DEALERSHIP AND RETAIL COMMERCIAL BUILDING ON APPROXIMATELY 8.2 ACRES LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF OWENS COURT AND OWENS DRIVE (PUD-85-8-2D)

WHEREAS, Callahan, Sweeney, and O'Brien and Prudential Insurance Company of America have applied for design approval for an approximately 35,150 sq. ft. auto dealership and an approximately 16,000 sq. ft. retail commercial building and related facilities, to be located on an approximately 8.2 acre site located generally at the northeast corner of the intersection of Owens Court and Owens Drive; and

WHEREAS, a Negative Declaration was prepared for the development of the subject site (PUD-85-8-2M) including the typical architectural and site designs for individual lots, and there are no changed circumstances or new information requiring additional environmental review; therefore, this application does not constitute a new project under CEQA and no new environmental documents accompany this application; and

WHEREAS, a public hearing was held on October 28, 1986 and testimony taken concerning the proposed project including its design, cumulative impact, consistency with PUD-85-8-2M and the General Plan; and

WHEREAS, the City Council has found that the project is consistent with PUD-85-8-2M as well as the City's General Plan;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF PLEASANTON RESOLVES AS FOLLOWS:

Section 1: Approves the application of Callahan, Sweeney and O'Brien and Prudential Insurance Company of America for design approval for an approximately 35,150 sq. ft. auto dealership and an approximately 16,000 sq. ft. retail commercial building and related facilities, to be located on an approximately 8.2 acre site located generally at the northeast corner of the intersection of Owens Court and Owens Drive, subject to the conditions listed in Exhibit "A", attached hereto and incorporated herein by this reference.

Section 2: This resolution shall become effective immediately upon its passage and adoption.

THIS RESOLUTION ADOPTED OCTOBER 28, 1986 BY THE FOLLOWING VOTE:

AYES: Councilmembers - Mercer, Mohr, Wood and Mayor Brandes
NOES: None
ABSENT: Councilmember Butler
ABSTAIN: None

ATTEST:

FRANK C. BRANDES, JR., MAYOR

James R. Walker, City Clerk
By Doris George, Deputy City Clerk

APPROVED AS TO FORM:

Peter D. MacDonald, City Attorney

EXHIBIT "A"

CONDITIONS OF APPROVAL
PUD-85-8-2D

1. That the developer provide a five foot wide sidewalk (4-1/2 foot sidewalk adjacent to the 6 inch curb) along the entire Owens Court (west) boundary of the site north of the Owens Court entrance driveway.

2. That the property owner be responsible for maintaining the entire 15 foot width of landscape easement along the rear (north) boundary of the site, unless an alternative arrangement satisfactory to the Planning Director is reached between the owner and the Hacienda Business Park Owners' Association to suitably maintain said easement.

3. That wall-mounted signs for the auto dealership shall be limited to "Mercedes Benz" and logo on the northerly showroom parapet and dealer name and logo on the westerly showroom parapet; the remainder of the sign program is approved in concept, but the owner shall apply for design review approval for the comprehensive sign program (colors, letter height and type, etc.) in a separate application.

4. That the developer shall plan approved street trees for Owens Drive (Shamel ash only) in two clusters located in the 33 foot landscape easement adjacent to Owens Drive, generally in front of the two roll-up doors at the drive-through and service entrance along the south elevation of the building.

5. That the developer shall modify the common Site 51A-51B driveway landscaping to utilize a low wall, shrub, and flower treatment similar to that proposed for the Owens Court driveway entrance to Site 51A.

6. That the developer shall plant 4-5 additional parking court trees (flowering pears or other suitable species) in the landscape median between the south wall of the service area and the south parking lot/used car display, to the west of the service entry where none are currently proposed.

7. That the developer shall plan appropriate shrubs and trees in the landscape islands in the rear (north) of the service area in order to screen the rear service doors and soften views of the building from the freeway to the satisfaction of the Planning Director.

8. That the developer shall increase the width of landscape median directly adjacent to the north side of the service area to five feet or greater both before and after the proposed expansion, and that these shall be planted with trees and shrubs to soften views of the building from the freeway to the satisfaction of the Planning Director.

9. That the developer shall plant 4-5 clusters of 4-5 canal trees (eucalyptus) each along the length of the rear (north) landscape easement adjacent to the canal outside the proposed security fence in order to soften views of the building and stock parking area from the freeway.

10. That the proposed mitigation measures, as identified in the previous traffic studies completed for the AT&T and Reynolds and Brown projects, for Hopyard Road/Owens Drive and Hopyard Road/EB I-580 offramp be interim and done at the time it is deemed necessary for the City Engineer. If said improvements are required to be constructed then the City shall spread, if feasible, the cost in proportion to the pro rata square footage share of all buildings whose approval was made possible by these mitigation measures.

11. That the drop-off "snorkel lane" be deleted from the site plan, with direction to the applicant to seek a dual snorkel lane on Chabot Drive south of Owens Drive or elsewhere in the general vicinity of the site.

12. That a temporary driveway connecting the main entrance driveway on Site 51C (at the Owens Drive median break) to the Site 51B parking lot shall be included in the improvements for Site 51B.

13. That the owner of Site 51B shall enter into a lease with the U. S. Postal Service for a period of no more than 10 years; if the Postal Service wishes to be retained beyond that time frame, it or the owner shall make separate application and shall be approved only after a traffic study indicates that there will be no adverse traffic impact.

14. That in the event the Postal Service does not select Site 51B for its north Pleasanton"annex", the approval for Site 51B shall be null and void; no construction shall take place on Site 51B until a lease or other document found satisfactory by the City Attorney has been entered into between the owner and the Postal Service for its use of the site for a post office annex.

15. That this development is subject to all of the "Standard Conditions of Development", except for Conditions No. 7, 12, 13, 14, 29, 46, and 49.

16. That this approval shall become effective upon the effective date of Case PUD-85-8-2M.

///

STANDARD CONDITIONS OF DEVELOPMENT

1. That the street number(s) of the building(s) be posted so as to be easily seen from the street at all times, day and night. Street numbers shall be clearly displayed on all rear doors when a building has more than one tenant.

2. That all ducts, meters, air conditioning equipment, and any other mechanical equipment, whether on the structure, on the ground, or elsewhere, be effectively screened from view with materials architecturally compatible with the main structure.

3. That all mechanical equipment be constructed in such a manner that noise emanating from it will not be perceptible at or beyond the property plane of the subject property in a normal environment for that zoning district.

4. That all lighting be constructed in such a manner that glare is directed away from surrounding properties and rights-of-way.

5. That all trash and refuse be contained completely within enclosures architecturally compatible with the main structure.

6. That all trees used in landscaping be a minimum of 15 gallons in size and all shrubs a minimum of 5 gallons.

7. That if signing for the development is desired, a comprehensive signing program shall be submitted to the City for consideration under separate application.

8. That 6" vertical concrete curbs be installed between all paved and landscaped areas.

9. That all parking spaces be striped and provided with wheel stops unless they are fronted by concrete curbs, in which case sufficient areas shall be provided beyond the ends of all parking spaces to accommodate the overhang of automobiles.

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Rev. 10/84

Rev. 5/86

10. That all utilities required to serve the development shall be installed underground.

11. That the applicant enter into an agreement with the City, approved by the City Attorney, which guarantees that all landscaping included in this project will be maintained at all times in a healthful, attractive and weedfree manner. Said agreement shall run with the land for the duration of the existence of the structures located on the subject property.

12. That all dwelling units in the development be constructed to meet the latest P.G.&E. Energy Conservation Home Standards.

13. That the following water conserving plumbing fixtures be installed: a) low flush water closets; b) shower flow control heads; c) aerators in interior faucets; and d) insulation of hot water lines.

14. That the applicant be aware that design review approval lapses within one year unless a building permit is issued and construction has commenced and is diligently pursued toward completion or an extension has been requested from the City.

15. That the developer acknowledges that the City of Pleasanton does not guarantee the availability of sufficient sewer capacity to serve this development by the approval of this case, and that the developer agrees and acknowledges that building permit approval may be withheld if sewer capacity is found by the City not to be available.

16. That the location of any pad mounted transformers shall be subject to approval by the Planning Division prior to issuance of a building permit. Generally speaking such transformers shall not be located between any street and the front of a building.

17. That all buildings and/or structures must comply with all codes and ordinances in effect at the time required permits are issued by the Building Division.

18. That the development shall meet all requirements of the Pleasanton Fire Code.

27. That the paving sections for the on-site parking and drive areas be designed on the basis of an R-Value test and a traffic index to carry the anticipated traffic loads. This design shall be subject to the approval of the City Engineer. The minimum paving section shall be 2" A.C. on 6" of A.B. The minimum A.C. pavement slope shall be 1%. For pavement slopes of less than 1% the surface runoff shall be carried in a concrete gutter to an acceptable point of discharge. The minimum slope for concrete gutter shall be 0.5%.

28. That the developer install street frontage improvements per ordinance and to the satisfaction of the City Engineer. These improvements may include, but are not necessarily limited to, grading, curb and gutter, sidewalk, paving, storm drain, sanitary sewer, water facilities, street lighting, underground utilities, traffic control devices, landscaping, and automatic irrigation systems.

29. That the property owner enter into an agreement with the City whereby he agrees to construct or finance the construction of street improvements adjacent to the site to the extent required by the Subdivision Ordinance at such time in the future as this is deemed necessary by the City Engineer. Said improvements may include, but are not necessarily limited to grading, curb and gutter, sidewalk, paving, street lighting, street trees, street monuments, underground utilities, storm drain facilities, sanitary sewer facilities, tree removal, traffic control devices, landscaping and automatic irrigation systems. This agreement shall be executed and approved by the City Council prior to the issuance of a building permit. The property owner/developer shall deposit a bond with the City to ensure future completion of the required 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 accept or may require a cash payment in-lieu of bonding where circumstances warrant.

30. That the developer submit a refundable cash bond for hazard and erosion control prior to issuance of a building permit. The amount of this bond will be determined by the City Engineer.

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19. That the site be dept free of fire hazards from the start of construction to final inspection and that the Fire Department emergency number be provided adjacent to all telephones on the site.

20. That the project shall meet all requirements of the Pleasanton Security Code and the developer shall provide plans as specified by the Crime Prevention Bureau of the Pleasanton Police Department.

21. That if required by the Police Department, the building(s) shall be equipped with an alarm system, the type to be approved by the Police Department and that this system shall be installed prior to final building inspection.

22. That a final landscape plan be submitted to the Planning Division for approval prior to issuance of a building permit.

23. That the colors of the building(s) be submitted to the Planning Division for approval prior to issuance of a building permit.

24. That the developer pay any and all fees that the property may be subject to.

25. That only modular newspaper dispensers accommodating more than one newspaper shall be allowed outside of buildings within the development; the design of these dispensers shall be approved by the Planning Division.

26. That the developer submit a building permit survey and a site development plan in accordance with the provisions of Chapter 18.68 of the Municipal Code of the City of Pleasanton, and that these plans be approved by the City Engineer prior to the issuance of a building permit. That the site development plan include all required information to design and construct site, grading, paving, drainage and utilities. Specific items to be indicated on the site development plan necessary to construct the improvements are to be in accordance with the City of Pleasanton Private Development Design Guidelines and Standard Details adopted April 15, 1986.

31. That a sanitary sewer sampling manhole be provided on the sanitary sewer lateral from each building, unless otherwise waived by the City Engineer.

32. That prior to issuance of a building permit, the developer shall pay the applicable Zone 7 and City connection fees and water meter cost for any water meters (irrigation meters) not directly related to a building permit.

33. That the developer dedicate to the City for street right-of-way purposes those parcels of land intended to be public streets.

34. That the developer grant an easement to the City over those parcels shown as public service easements (P.S.E.) and which are approved by the City Engineer or other parcels which may be designated by the City Engineer.

35. That approval of the design for the line, grade, and structural sections for the streets serving this development be withheld pending final engineering design and review by the City Engineer.

36. That vertical P.C.C. curbs and gutters be constructed within this development unless otherwise approved by the City Engineer and that the curb and gutter be poured monolithically with the sidewalk when the sidewalk is adjacent.

37. That all existing wells, septic tanks or holding tanks on the site be properly sealed, filled and abandoned prior to the start of grading operations unless Zone 7 retains specific wells for observation wells, or special approval is obtained from the City Engineer for temporary use of an existing well for construction water. Any wells designated for abandonment or any wells encountered during construction, are to be destroyed in accordance with a permit obtained from Zone 7 by calling (415) 443-9300.

38. That the haul route for all materials to and from this development be approved by the City Engineer prior to the start of any construction.

39. That the developer submit an erosion and sedimentation control plan or procedure as part of the improvement plans prior to the final approval of the development.

40. That the developer submit a dust control plan or procedure as part of the improvement plans prior to the final approval of the development.

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Rev. 10/84

Rev. 5/86

41. That 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 be privately maintained by the property owners or through an association approved by the City.

42. That approval of the water supply and distribution system be withheld pending final design and until the developer has demonstrated to the satisfaction of the City Engineer that the proposed system meets both the immediate and long-range requirements for supplying water in this area.

43. That the developer comply with any and all applicable requirements of the cross-connections control and backflow prevention device programs required by the California Administrative Code, Title 17.

44. That approval for the number, type and location of fire hydrants be withheld pending final design, review by the Fire Marshal, and final review by the City Engineer.

45. That approval of the sanitary sewer system be withheld pending final design and until the developer has demonstrated to the satisfaction of the City Engineer that the proposed system is adequate, connects to an approved point of discharge, and meets both the immediate and long-range requirements of the sanitary system in this and all tributary areas.

46. That if a sanitary sewer lift station is installed for use by the development and if it is accepted by the City for maintenance and operation, an agreement shall be completed between the City and the developer prior to the approval of the development to the effect that the developer will provide a maintenance and operation fund for a minimum ten year period.

47. That approval of the storm drainage system be withheld pending final design and until the developer has demonstrated to the satisfaction of the City Engineer that the system is adequate, connects to an approved point of discharge, meets any and all applicable requirements of the Alameda County Flood Control District - Zone 7, meets any and all applicable requirements of the Federal Emergency Management Flood Hazard Program, and meets the immediate and long-range requirements of this development and all upstream areas intended to be drained through this development.

48. That electric power distribution, gas distribution, communication service, and any required alarm systems be installed underground in a joint utility trench unless otherwise specifically approved by the City Engineer.

49. That the developer be responsible for the installation of the street lighting system serving the development. The street lights shall be 70 watt, high pressure sodium vapor units mounted on galvanized steel poles with poured in place bases, on the LS-1C schedule per City requirements and P.G.&E. standard details unless otherwise specifically approved. Approval for the number, location, and type of electroliers shall be withheld pending final design and review by the City Engineer.

50. That this development provide a safe and effective circulation system for bicycles and pedestrians. These facilities shall be designed and installed to the satisfaction of the City Engineer and shall be separated from vehicular traffic whenever possible.

51. That the developer submit detailed landscape and irrigation plans as part of the improvement plans. These plans should include, where applicable, a street tree planting plan and landscape plans for medians, buffer strips, and any right-of-way landscape areas. The irrigation plan shall provide for automatic controls.

52. That any damage to street improvements now existing or done during construction on the subject property be repaired to the satisfaction of the City Engineer at full expense to the developer. This shall include slurry seal, overlay, or street reconstruction if deemed warranted by the City Engineer.

53. That the developer's contractor(s) obtain an encroachment permit from the City Engineer prior to the start of construction.

54. That the developer install street trees as required per ordinance.

55. That all access roads and driveways on the site are hereby declared fire lanes and must be maintained and accessible at all times. Curbs must be painted red and "No Parking" signs provided to the City Standards.

56. That the developer shall include within the project design a fully screened location for a future satellite dish antenna satisfactory to the Planning Director and/or provide underground cable facilities to serve all users of the site.

CITY COUNCIL OF THE CITY OF PLEASANTON

ALAMEDA COUNTY, CALIFORNIA

ORDINANCE NO. 1281

AN ORDINANCE APPROVING A MAJOR MODIFICATION TO PUD-85-8 ALLOWING A CHANGE IN LAND USE ON TWO SITES IN HACIENDA BUSINESS PARK PHASE II

WHEREAS, at its meeting of March 18, 1986, Council adopted Ordinance No. 1246 approving Phase II of Hacienda Business Park; and

WHEREAS, Callahan, Sweeney & O'Brien are now requesting a modification to the development plan to allow a change in the land use regulations on two sites within Phase II and conditions of approval to allow construction of an automobile dealership and post office/retail center; and

WHEREAS, the Planning Commission has recommended approval of the modification;

THE CITY COUNCIL OF THE CITY OF PLEASANTON DOES HEREBY ORDAIN AS FOLLOWS:

Section 1: Approves the application of Callahan, Sweeney & O'Brien for a major modification to an approved planned unit development for a business park, as follows:

a. Modify the Hacienda Business Park Phase II Table B-1 "Summary of Site Development Criteria" of the Design Guidelines for Sites 51 and 52 to read as follows:

LOT PARCELS	USE(A)	MAX. FAR1	MAX. HT2	MIN. LANDSCAPE	MIN. PARKING
51	CPD(1-2 Story)	40%	45'	25%	See Note 5
52	OPD (4 Story)	50%	70'	30%	1 per 250 SF

b. Modify Condition 5 of Ord. 1246 to delete Site 51 from the condition.

Section 2: This ordinance shall be published once within fifteen (15) days after its adoption in "The Valley Times," a newspaper of general circulation published in the City of Pleasanton.

Section 3: This ordinance shall be effective thirty (30) days after the date of its final passage and adoption.

INTRODUCED at a regular meeting of the City Council of the City of Pleasanton on October 28, 1986.

ADOPTED at a regular meeting of the City Council of the City of Pleasanton on November 18, 1986 by the following vote:

AYES: Councilmembers - Brandes, Butler, Mohr and Mayor Mercer
NOES: None
ABSENT: None
ABSTAIN: None

ATTEST:

KENNETH R. MERCER, MAYOR

James R. Walker, City Clerk
By Doris George, Deputy City Clerk

APPROVED AS TO FORM:

Peter D. MacDonald, City Attorney

THE CITY OF PLEASANTON

Planning Commission Staff Report

February 11, 2004
Item 6.a.

SUBJECT: PCUP-106/PDR-349

APPLICANT: Uwe Waizenegger/Hacienda Motors

PROPERTY OWNER: USW Limited Partnership

PROPOSAL: Application for conditional use permit and design review approvals to operate a pre-owned automobile sales business that includes a showroom, a quick service department, and outdoor vehicle display.

GENERAL PLAN: Retail/Highway/Service Commercial, Business and Profession Offices

ZONING: Planned Unit Development (PUD) – Industrial/ Commercial/ Office

LOCATION: 5871 Owens Drive

ATTACHMENTS:

1. Exhibit A: Site Plan, Floor Plans, Building Elevations, and Signage, dated "Received February 5, 2004";
2. Exhibit B: Proposed Conditions of Approval
3. Approval Letter from Hacienda Owners Association
4. Location Map

BACKGROUND

Uwe Waizenegger, owner of Mercedes-Benz of Pleasanton, has applied for conditional use permit and design review approvals to operate a pre-owned Mercedes-Benz sales and service business at 5871 Owens Drive. This building was formerly occupied by S&G Discount Carpet.

The subject building is located in Hacienda, where the Hacienda PUD ordinance allows

automobile dealership at the subject site. The City's zoning regulations require a conditional use permit for automobile sales and service in the Commercial Freeway (C-F) district, the zoning district applicable to the subject site. Thus, a conditional use permit is required for the proposed pre-owned Mercedes-Benz sales and service business.

The existing Mercedes-Benz dealership has been in business since 1987. The proposed pre-owned car lot is a part of the current Mercedes-Benz of Pleasanton dealership at 5885 Owens Drive.

SITE DESCRIPTION

Constructed in 1998, the existing one-story commercial building with a small mezzanine area is located on a 1.23-acre site on the north side of Owens Drive. It is bounded on the north by the Alameda County Flood Control channel and Interstate 580, on the east by the State Farm Insurance building and BART station/parking lot, on the west by Chevy's Restaurant and the existing Mercedes-Benz dealership, and on the south by Owens Drive and office buildings.

The existing building is approximately 12,400 square feet in size. It is surrounded by parking spaces along the south, north and west sides of the building, and a driveway along the east side of the building. A total of 62 parking spaces, including three handicap spaces, is currently provided.

Main access to and from the subject site is via Owens Drive. The subject lot is also accessible from adjacent lots via access easements that are in place on the lots occupied by the existing Mercedes-Benz dealership at 5885 Owens Drive, Chevy's Restaurant at 5877 Owens Drive, the proposed project at 5871 Owens Drive, and State Farm insurance building at 5865 Owens Drive.

The existing building is a tilt-up building that has two corner towers and a mansard roof. A trellis with shrubs is placed up against each tower, facing south and west, respectively. An arcade, functioning as a covered walkway, is in the front of the building. The arcade wraps around the southwest corner and extends along a portion of the west side of the building.

Existing landscaping, a combination of groundcover, hedge, and trees, is located along Owens Drive. Trees and shrubs are also planted next to the building, as well as in the parking lot.

PROJECT DESCRIPTION

The proposed use includes automobile retail sales, display, and services. The front portion of the existing building would be used as a vehicle showroom, and the rest of the building would be used as a vehicle service area, providing "quick service", i.e. routinely scheduled vehicle maintenance checks and oil changes. Any other services would be performed at the existing dealership at 5885 Owens Drive.

The proposed business hours are as follows:

Service Department:	Mon. – Fri.:	7:30 a.m. – 5:30 p.m.
Pre-Owned Sales Department:	Mon. – Fri.:	8:00 a.m. – 8:00 p.m.
	Sat.:	9:30 a.m. – 6:00 p.m.
	Sun.:	11:00 a.m. – 6:00 p.m.

The existing building has a front entrance, a rear roll-up door, and three windows on the west elevation. Existing offices, restrooms, a break room, and a mechanical room are located in the rear of the building. A mezzanine area is located directly above, and it consists of two offices and two storage rooms. No changes are proposed to this portion of the facility.

The showroom could display eight to ten vehicles, and the outdoor area could accommodate 30 vehicles. A total of 12 work stalls would be installed in the service area.

Seven new sales offices would be constructed inside the showroom. In addition to the new offices, the existing double entry doors would be widened so that vehicles can be moved in and out of the showroom. To meet the Building Code requirements, a single door would be added within the storefront of the west elevation just outside the sales office. To make the showroom area visible to the public, new fixed window panels would be added on the front elevation, one of which would replace the lower portion of the existing trellis. New windows would also be added on the west elevation to echo the building exterior of the existing dealership just two lots to the west.

New signage is proposed for the pre-owned vehicle sales business. Specifically, a new double-faced monument sign would be installed in the streetscape zone (frontage landscaping area) on Owens Drive. New building mounted signs are also proposed on the south and west elevations. They include the business name and the Mercedes-Benz three-point star logo.

In addition to the proposed signage, the exterior colors of the building would be modified to match the existing dealership building. Specifically, the building would be painted in “Silver Quill”, a light gray color, and the existing greenish building trim and the arcade roof would be changed to “Evening Shadow”, a medium gray color. The existing and new glass panels for the doors and windows would be gray vision glass. All exterior changes, including the signage, would match those of the existing dealership.

The existing 62 on-site parking spaces would be used for vehicle display and for customer parking. Employees would continue to park at the existing dealership.

No fence or gate is proposed. No modification to the existing parking lot lighting is proposed except that re-lamping may be necessary to utilize more energy efficient light bulbs.

ANALYSIS

Conditional uses are uses that, by their nature, require individual review to ensure that impacts associated with their use will be minimal. Conditional use permits may be subject to appropriate conditions to ensure that any potential adverse impacts associated with the use will be mitigated.

Land Use

The subject site is in Hacienda, zoned PUD-I/C-O (Planned Unit Development – Industrial/Commercial-Office), where the PUD development plan allows automobile sales and service on the subject site. The City's zoning regulations require a conditional use permit for automobile sales and service in the zoning district applicable to the subject site. Thus, a conditional use permit would be required for the proposed certified pre-owned Mercedes-Benz dealership.

The subject site is adjacent to Interstate 580. Automobile uses are considered appropriate for freeway-oriented sites. The existing Mercedes-Benz dealership has been in business at the subject location since 1987. Since the proposed use is a part of the existing automobile dealership, it would be a compatible land use for the area. In addition, the subject site has adequate on-site parking, sufficient parking lot lighting, and safe ingress and egress to the site. Thus, with the approval of this conditional use permit, the proposed use would be compatible with the uses in the surrounding area.

Access Easements

The pre-owned vehicle department performs quick service to all new and pre-owned vehicles that are brought to the dealership. Vehicles that need to be serviced would be brought back and forth between the two dealership buildings via the existing reciprocal access easement through Chevy' restaurant site.

Given that Chevy's restaurant generates a substantial amount of vehicular and pedestrian traffic during lunch and dinner hours, pedestrian safety is a concern. Staff recommends as a condition of approval that vehicles may not be brought to the proposed location for service via the on-site driveway access easements during restaurant's busy hours if complaints are reported to the City regarding safety concerns due to dealership employees driving at excessive speeds between the two sites. At that time, the applicant would be required to submit a safety plan for continued use of the access easement which may require the installation of speed bumps on the access driveway, or would be required to use Owens Drive, not the on-site driveway, to transport

vehicles between the two Mercedes sites.

Proposed Signage

Monument Sign: A double-faced monument sign is proposed in the streetscape zone on Owens Drive. The monument sign has a pylon design, mounted on posts. The sign itself would be 6'-5" in height and 5'-11"in width. The sign is comprised of a metallic silver steel column on the each side, and two bevel-edged metallic blue aluminum face panels. The three-point star logo is constructed of white solar guard polycarbonate plastic, internally illuminated. This sign would be a total of 7'-6" in height measured from the ground.

The Hacienda Design Guidelines allow a single tenant directory monument sign to be at a maximum of five feet in height, measured from the lowest exposed point of the sign base. In this case, the proposed freestanding sign, 7'-6" in height, would exceed the maximum allowable sign height. Additionally, the sign panel is restricted to a maximum of 30 square feet in area, and the proposed sign would exceed this at 39 square feet. In addition to the height and area issues, the design of the proposed sign does not match that of the monument sign at the existing dealership. Specifically, the proposed sign is supported by posts while the existing sign is supported by a solid base. To maintain consistency, staff recommends as a condition of approval that the applicant modify that pylon design so that the proposed sign would have a solid base to match that of the existing sign and to conform to the Hacienda Design Guidelines.

Staff would also prefer that the monument sign dimensions conform to the Design Guidelines. Although the proposed sign would match the height and area of the existing Mercedes dealership sign, staff believes that a monument sign of five feet in height and 30 square feet in sign area would be sufficiently visible from Owens Drive. Staff has added a recommended condition of approval to reduce the size of this sign accordingly.

The streetscape zone is planted with groundcover, hedges, and trees. Staff recommends as a condition of approval that the construction of the monument sign not jeopardize the health of the existing trees or result in removal of any existing landscaping including trees without prior City approval. Staff recommends as a condition of approval that the applicant submit sign construction details to ensure that the construction of the sign would not affect any trees in the vicinity.

Wall-Mounted Signs: Three types of wall-mounted signs are proposed: two fascia signs for the business name, a Mercedes-Benz three-point star logo, and an arcade sign informing customers that this facility is for the pre-owned vehicles.

The fascia sign for "Mercedes-Benz of Pleasanton" is a fully enclosed architectural grade panel sign, constructed of a silver metallic bevel-edged Alucobond face and a sheet of aluminum back panel. The routed text, 24" in height, would be blue in color and would be internally illuminated.

The sign panel would be approximately 36'-8" long and 2'-8" tall. It would be mounted on the south and west elevations of the building between the blue building trims. This sign would match the building sign used on the existing dealership building.

The "Certified Pre-Owned" sign is an LED channel letter sign. This is a separate sign, and it would be mounted on the building arcade, facing south. Normally, staff would require such signs, which are not the business name, to be located in a window, not on a wall. However, the presence of the building arcade would limit visibility of a window sign, thus, staff supports this sign mounted on the arcade.

In addition to the fascia signs, one Mercedes-Benz three-point star logo is proposed. It would be mounted on building's northwest tower, facing west. The design of the three-point star logo is the same as the logo on the monument sign. Staff finds that this logo sign is acceptable.

Staff recommends as a condition of approval that the applicant provide sign construction details to the Planning Department prior to installation.

As previously mentioned, the subject building was previously occupied by S&G Discount Carpet. S&G Discount Carpet had a sign panel on the existing freeway pylon sign shared with Chevy's. This sign panel was removed since USW Limited Partnership's purchase of the property in 2003. Visits to the subject site showed that florescent light tubes on this freeway sign were exposed and the sign area has not been suitably capped. Staff recommends as a condition of approval that, prior to issuance of a building permit, the sign area allocated to the previous business be capped so that no exposed florescent light tubes would be visible from public streets.

Architectural Modifications and Tenant Space Improvement

New windows are proposed on both the south and west elevations of the building to give more visibility to the showroom. The building exteriors would be repainted to match the color of the existing dealership at 5885 Owens Drive. Staff believes that these minor design modifications would visually enhance the appearance of the existing building and would make the subject building better relate to the existing Mercedes-Benz building, thus, maintaining a corporate image.

The service department would perform vehicle scheduled maintenance and oil changes. Wall-mounted hoses would be used to directly transport waste oil and fluid into a container. To prevent any oil and fluid from contaminating the ground, the service area floor will be covered with opoxy paint designed for automobile use. The floor would be scribed daily, and all fluid would be vacuumed through the scriber machine and then into containers. According to the applicant, no oil or fluid would be washed down either the storm drain or the sewer system. To insure that neither the storm drain nor the sewer system would be polluted, the construction

drawings should show that all fluid would be collected into containers. A condition of approval is added to address this issue.

No additional HVAC equipment is proposed at this time. As stated by the applicant, if additional roof-mounted HVAC equipment is needed in the future, they would be located behind and below the existing parapet roof; thus, they would not be visible from streets. Staff recommends as a condition of approval that roof-mounted equipment plan be submitted to the Planning Director for review and approval to verify visibility and screening issue.

The existing building is fully sprinkled; however, the existing sprinkler system may not be adequate for the proposed use. Staff recommends as a condition of approval that the applicant contact the Fire Department and meet their requirements. In addition, certain amounts of hazardous materials, such as motor oil, transmission fluid, etc., would be stored on the subject site. Although the amount to be stored on site would not trigger monitoring by the Fire Department as a hazmat site, the Fire Department requires that a hazmat business plan be prepared and submitted for review and approval prior to operation. A condition of approval has been added to address this issue.

Parking and Landscaping

No plans have been submitted at this time to modify the existing parking configuration. The applicant may be required to modify the parking stall dimensions in order to meet the ADA requirements. As result, two or three existing parking spaces on the subject site may need to be removed. In order to maintain the same amount of parking spaces at the subject site, staff recommends as a condition of approval that compact parking stalls be utilized at the time that parking spaces need to be modified.

Staff does not anticipate any parking shortage at the subject site, as the parking spaces at the subject site would for customer parking and for vehicle display, and as reciprocal parking rights are in place between the subject site and the Chevy's site. The proposed dealership will not create any additional parking demand compared to the previous carpet store, so staff believe that there will continue to be adequate parking.

No modification to the existing landscaping is proposed at this time. However, discussion with the applicant indicates that the existing landscaping along Owens Drive would be modified. Specifically, the existing groundcover and hedges may be removed and replanted, and some of the existing trees may also be removed. Staff recommends a condition of approval that any modification to the existing landscaping require prior approval by the Planning Director. Staff wants to ensure that the revised landscaping plan would not only meet the Hacienda Design Guidelines, but that it would also be attractive and compatible with the area. Staff is hesitant to allow removal of trees and would prefer saving/relocating trees or adding replacement trees as necessary. A condition of approval has been added to address this issue.

Vehicle Display and Security

The majority of the pre-owned vehicles would be displayed in the open parking lot. As previously mentioned, cross access easements are in place on the subject lot as well as on the adjacent lots which prohibit fences or gates from being installed to secure the vehicle display area.

Staff has discussed this issue with the applicant. The applicant has indicated that vehicles that are currently parked in the unfenced area on the existing lot at 5885 Owens Drive have attracted little crime. The applicant believes that having the pre-owned vehicles displayed on a separate lot would not attract unwanted traffic.

Staff has also brought this security issue to the Police Department. Comments received were that having vehicles displayed on an open lot should not increase the crime calls to the Police Department and should not increase the current workload onto the Police Department. If security does become a concern, the applicant should contract with a private security company to patrol the lot. At no time shall fencing or gates be installed to secure the lot and block reciprocal access. A condition of approval has been added to address this issue.

Hacienda

The Hacienda Owners Association reviewed the proposal, supported the proposed architectural changes, and granted exceptions to the signage.

Public Comment

Notices of the Planning Commission's public hearing on this item were sent to property owners, business tenants, and homeowners within 1,000' of the subject property. Staff has received calls inquiring about the proposal. No written comments or objections pertaining to the proposed project were received at the time this report was prepared.

FINDINGS

The Planning Commission must make the following findings prior to granting of a use permit:

A. That the proposed location of the conditional use is in accordance with the objectives of the zoning ordinance and the purpose of the district in which the site is located.

Objectives of the zoning ordinance include: fostering a harmonious, convenient, workable relationship among land uses; protecting existing land use from inharmonious

influences and harmful intrusions; and insuring that public and private lands ultimately are used for the purposes which are most appropriate and beneficial to the City as a whole. The proposed pre-owned automobiles sales business is a division of the existing dealership that has been in business over a decade. During the past years, the dealership has been managed professionally, and staff has not received any complaints regarding the business. Staff feels that if managed in a same manner as it currently is, the proposed pre-owned vehicle sales and service business would be consistent with the above-cited objectives. Furthermore, the business is located in a commercial area with good freeway access and would be compatible with the surrounding uses. The expansion of the automobile dealership would also promote the economic vitality of the area and the community. Therefore, staff feels this finding can be made.

B. That the proposed location of the conditional use and the conditions under which it would be operated or maintained will not be detrimental to the public health, safety, or welfare, or materially injurious to the properties or improvements in the vicinity.

The proposed pre-owned vehicle sale and service business is part of the existing automobile dealership that has been in business for a number of years. If operated in the same manner, the proposed use should not be detrimental to the general public and other businesses in the vicinity. In addition, the floor of the vehicle service department would be covered with opoxy paint designated for automobile use to prevent any contamination to the ground. As conditioned, the applicant is required to submit plans to show that all vehicle oil and fluids would be properly collected into containers so that neither the storm drain or the sewer system would be polluted. As conditioned, the applicant is required to submit a hazmat business plan to the Fire Department for review and approval. In addition, the applicant would not alter the existing access easement, thus, ensuring continued access between adjacent sites. Additionally, any modification to the existing landscaping would require approval by the Planning Director to ensure that the revised landscaping would meet the City's requirements and be compatible with the surrounding area. With the proposed conditions, staff does not find that the proposed use would be detrimental to the public health, safety, or welfare, or materially injurious to the properties or improvements in the vicinity. Staff feels this finding can be made.

C. That the proposed conditional use will comply with each of the applicable provisions of the zoning ordinances.

The proposed use is located on the site that automobile dealership is allowed by the Hacienda Business Park and conditionally allowed by the subject zoning requirements. With the proposed conditions, the proposed use would be operated in a manner that would comply with zoning and Hacienda Business Park requirements. Granting a conditional use permit would be consistent with the City's ability to regulate related

zoning regulations. Therefore, staff believes that the third finding can be made.

ENVIRONMENTAL ASSESSMENT

Projects of this nature are categorically exempt from the requirements of the California Environment Quality Act (CEQA). Therefore, no environmental document accompanies this report.

CONCLUSION

The proposed project would adhere to the requirements of the Hacienda Design Guidelines and has been reviewed and approved by the Hacienda Owners Association. Staff believes that the proposed project would enhance the appearance of the existing building and that it would be attractive and compatible with the main dealership building two lots to the west. Staff believes that the automobile sales use would fit in well in this commercial area, which has good freeway access, and that the expansion of the dealership would promote the economic vitality of the area and the community.

STAFF RECOMMENDATION

Staff recommends the Planning Commission approve Case PCUP-106/PDR-349 subject to the proposed conditions of approval listed in Exhibit "B".

Staff Planner: Jenny Soo: 925.931.5615 or email: jsoo@ci.pleasanton.ca.us

PCUP-106/PDR-349, Hacienda Motors

Application for conditional use permit and design review approvals to operate a pre-owned automobile sales business that includes a showroom, a quick-service department, and outdoor vehicle display for property located at 5871 Owens Drive. Zoning for the property is PUD-I/C-O (Planned Unit Development – Industrial/Commercial-Office) District.

Mr. Iserson summarized the staff report and described the history and scope of the use. Staff believed that the subject site is in an appropriate location, adjacent to I-580, which is a good location for such uses. Staff believed that the on-site parking was adequate and that the site has sufficient parking lot lighting and safe ingress and egress to the site. Staff noted that because of its proximity to Chevy's Restaurant, it was important for the employees to operate vehicles at safe speeds. He noted that if complaints were received, the applicants could be required to use Owens Drive rather than the on-site driveway, or the applicant could be required to develop a safety plan that may include the installation of speed bumps. He noted that no complaints had been received about the existing dealership, and staff had every reason to believe that safety record would continue at the new site.

Mr. Iserson described the signage plan, and staff recommended that the applicant modify the pylon design so that the proposed sign would have a solid base to match the existing sign. He noted that staff's analysis that the monument sign was inconsistent with the Hacienda Design Guidelines was incorrect; the Guidelines allow retail monument signs of up to eight feet in height. Therefore, this sign conforms to that provision, and the condition of approval requiring the sign to be smaller could be deleted. From a design point of view, staff believed that the free-standing sign could be mounted on a concrete base to match the other dealerships.

The signage was acceptable to staff, and a condition of approval was recommended that the applicant provide sign construction details to the Planning Department prior to installation.

Staff was satisfied with the on-site parking, and up to 30 vehicles may be stored outside. The applicant indicated that some landscaping changes may be forthcoming, and staff added a condition that the Planning Director would review those changes; they would also be subject to Hacienda review and approval. The quality of landscaping would stay high, and any tree design would be consistent with the existing design. Removal of trees would be discouraged by staff, and relocation or substitution of trees would be encouraged.

Staff believed the changes to the building design would be positive and that the use would promote the economic vitality of the City. Staff recommended that the Commission make the use permit findings and approve the design review application, subject to the conditions of the staff report, including the modification of Condition No. 6 with respect to the height of the signage as previously mentioned.

In response to an inquiry by Commissioner Fox, Mr. Iserson noted that staff looked at the safety of families and children when considering the vehicle transfers near Chevy's. Staff did not believe there would be an excessive amount of traffic in the easement and noted that the applicant's previous track record had been acceptable. He noted that the applicant was aware that staff would examine that use carefully and that any complaints would bring further conditions. Staff preferred that the traffic not go on the public street during those operations; however, if that were necessary to increase the safety of customers at Chevy's, staff would impose that condition. He noted that Chevy's did not make any comments.

In response to an inquiry by Chairperson Roberts, Mr. Iserson confirmed that the easement for the applicant was in the front of the building.

In response to an inquiry by Chairperson Roberts, Mr. Iserson confirmed that the Commercial Freeway District was fairly rare in Pleasanton and noted that there were similar sites on Stanley Boulevard and on Sunol Boulevard and Mission Drive.

THE PUBLIC HEARING WAS OPENED.

Gary Drew, project architect, 5000 Executive Parkway, Suite 298, San Ramon, advised that he would be available to answer any questions.

In response to an inquiry by Commissioner Sullivan, Mr. Drew advised that between 20 and 30 vehicles were generally moved by 9:30 a.m.

THE PUBLIC HEARING WAS CLOSED.

Commissioner Maas moved to make the use permit findings and approve PCUP-106/PDR-349 as conditioned in the staff report and subject to the conditions listed in Exhibit B, including the modification of Condition 6 on the staff memorandum.
Commissioner Kameny seconded the motion.

In response to an inquiry by Commissioner Sullivan, Mr. Iserson confirmed that if there were any safety or congestion problems with the transfer of cars, the complaint would be referred to the Planning Commission.

ROLL CALL VOTE

AYES:	Commissioners Kameny, Maas, Roberts, and Sullivan.
NOES:	Commissioner Fox.
ABSTAIN:	None.
ABSENT:	Commissioner Arkin.

Resolution No. PC-2004-12 was entered and adopted as motioned.

PLANNING COMMISSION CITY OF PLEASANTON

ALAMEDA COUNTY, CALIFORNIA

RESOLUTION NO. PC-2004-12

RESOLUTION APPROVING THE APPLICATION OF UWE WAIZENEGGER/HACIENDA MOTORS FOR CONDITIONAL USE PERMIT AND DESIGN REVIEW APPROVALS, AS FILED UNDER CASE PCUP-106/PDR-349

WHEREAS, Uwe Waizenegger/Hacienda Motors has applied for conditional use permit and design review approvals to operate a pre-owned automobile sales business that includes a showroom, a quick-serve department, and outdoor vehicle display for property located at 5871 Owens Drive; and

WHEREAS, zoning for the property is PUD-I/C-O (Planned Unit Development – Industrial/ Commercial-Office) District; and

WHEREAS, at its duly noticed public hearing of February 11, 2004, the Planning Commission considered all public testimony, relevant exhibits, and recommendations of the City staff concerning this application; and

WHEREAS, projects of this nature are categorically exempt from the requirements of the California Environmental Quality Act (CEQA); and

WHEREAS, the Planning Commission made the following findings:

1. The proposed location of the conditional use is in accordance with the objectives of the zoning ordinance and the purpose of the district in which the site is located.

Objectives of the zoning ordinance include fostering a harmonious, convenient, workable relationship among land uses; protecting existing land use from inharmonious influences and harmful intrusions; and insuring that public and private lands ultimately are used for the purposes which are most appropriate and beneficial to the City as a whole. The proposed pre-owned automobiles sales business is a division of the existing dealership that has been in business for over a decade. During the past years, the dealership has been managed professionally, and there have been no complaints regarding the business. If managed in the same manner as it currently is, the proposed pre-owned vehicle sales and service business would be consistent with the above-cited objectives. Furthermore, the business is located in a commercial area with good freeway access and would be compatible with the surrounding uses. The expansion of the automobile dealership would also promote the economic vitality of the area and the community. Therefore, this finding can be made.

2. The proposed location of the conditional use and the conditions under which it would be operated or maintained will not be detrimental to the public health, safety, or welfare, or materially injurious to the properties or improvements in the vicinity.

The proposed pre-owned vehicle sale and service business is part of the existing automobile dealership that has been in business for a number of years. If operated in the same manner, the proposed use should not be detrimental to the general public and other businesses in the vicinity. In addition, the floor of the vehicle service department would be covered with epoxy paint designated for automobile use to prevent any contamination to the ground. As conditioned, the applicant is required to submit plans to show that all vehicle oil and fluids would be properly collected into containers so that neither the storm drain nor the sewer system would be polluted. A further condition would require the applicant to submit a hazmat business plan to the Fire Department for review and approval. In addition, the applicant would not alter the existing access easement, thus ensuring continued access between adjacent sites. Additionally, any modification to the existing landscaping would require approval by the Planning Director to ensure that the revised landscaping would meet the City's requirements and be compatible with the surrounding area. With the proposed conditions, the proposed use would not be detrimental to the public health, safety, or welfare, or materially injurious to the properties or improvements in the vicinity. Therefore, this finding can be made.

3. The proposed conditional use will comply with each of the applicable provisions of the Zoning Ordinance.

The proposed use is located on a site where automobile dealership is allowed by the Hacienda Business Park and conditionally allowed by the subject zoning requirements. With the proposed conditions, the proposed use would be operated in a manner that would comply with zoning and Hacienda Business Park requirements. Granting a conditional use permit would be consistent with the City's ability to regulate related zoning regulations. Therefore, this finding can be made.

WHEREAS, the Planning Commission determined that the proposed conditional use would be compatible with the existing uses in the area.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF PLEASANTON RESOLVES THE FOLLOWING:

Section 1. Approves Case PCUP-106/PDR-349, the application of Uwe Waizenegger/ Hacienda Motors for conditional use permit and design review approvals to operate a pre-owned automobile sales business that includes a showroom, a quick-serve department, and outdoor vehicle display for property located at 5871 Owens Drive, subject to the conditions shown in Exhibit "B," attached hereto and made part of this case by reference.

Section 2. This resolution shall become effective 15 days after its passage and adoption unless appealed prior to that time.

THIS RESOLUTION ADOPTED BY THE PLANNING COMMISSION OF THE CITY OF PLEASANTON ON THE 11TH DAY OF FEBRUARY BY THE FOLLOWING VOTE:

AYES: Commissioners Kameny, Maas, Roberts, and Sullivan.
NOES: Commissioner Fox.
ABSENT: Commissioner Arkin.
ABSTAIN: None.

ATTEST:

Dawn G. Abrahamson
City Clerk

Mary Roberts
Chairperson

APPROVED AS TO FORM:

Lynn Tracy Nerland
Assistant City Attorney

Exhibit B
Conditions of Approval

PCUP-106/PDR-349, Hacienda Motors
5871 Owens Drive
February 11, 2004

1. Development shall be conform substantially to Exhibit "A", site plan, building elevations, floor plan, signage, color and material sample board, and applicant's statement, dated "Received February 5, 2004" on file with the Planning Department, except as modified by the following conditions. Minor changes to the plans may be allowed subject to the approval of the Planning Director if found to be in substantial conformance to the approved exhibits.

2. The project developer shall pay any and all fees to which the property may be subject prior to issuance of building permits. The type and amount of the fees shall be those in effect at the time the building permit is issued.

3. This conditional use permit and design review approval will lapse within one (1) year from the date of approval unless a building permit is issued and construction has commenced and is diligently pursued toward completion or an extension has been approved by the City.

4. **All conditions of approval for this case shall be written by the project developer on all building permit plan check sets submitted for review and approval.** These conditions of approval shall be on, at all times, all grading and construction plans kept on the project site. It is the responsibility of the building developer to ensure that the project contractor is aware of, and abides by, all conditions of approval. It is the responsibility of the building developer to ensure that the project landscape contractor is aware of, and adheres to, the approved landscape and irrigation plans. Prior approval from the Planning Department must be received before any changes are constituted in site design, grading, building design, building colors or materials, landscape material, etc.

5. The applicant may be required to discontinue use of the access easements between 5871, 5877 and 5885 Owens Drive if complaints concerning vehicular and pedestrian safety as a result of employees driving cars between the two Mercedes dealership buildings are reported to the City. At that time, the applicant shall submit a safety plan, which may include the installation of speed bumps on the access driveway, subject to the approval of the Planning Director. The Planning Director may require that employees transporting cars between the two dealership buildings use Owens Court and Owens Drive, and not the on-site access driveway.

6. The proposed pylon design of the freestanding design shall be modified to a solid base monument sign. This modification shall be shown on the sign construction plan prior to issuance of a building permit.

7. Prior to issuance of a building permit, the applicant shall provide construction plans for the proposed monument sign. This plan shall include construction methods to demonstrate that the existing trees in the vicinity would not be affected.

8. Prior to issuance of a building permit, the construction drawings shall include a plan showing that all oil and fluids from the vehicle service area would be properly drained and collected in containers so that there would be no contamination to the storm drain and sewer systems.

9. Prior to issuance of a building permit, the applicant shall prepare and submit a hazmat business plan to the Fire Department for review and approval.

10. Any modification to the existing landscaping area requires submittal of a landscaping plan, which is subject to the approval the Planning Director. Any proposed tree removal shall be mitigated by relocating those trees on the site or providing replacement trees in other locations suitable to the applicant and the Planning Director.

11. Roof-mounted equipment that shall not be visible from streets. Any new roof equipment requires approval by the Planning Director prior to installation.

12. No fencing or gates which would block any of the on-site access driveways or restrict access or parking, shall be installed on the subject lot at any time.

13. The existing access easements shall not be terminated or modified in any way without prior approval by the Planning Director.

14. The applicant shall contract with a private security company to patrol the lot if security becomes a concern of the Police Department.

15. If operations of this use permit results in conflicts pertaining to parking, security, public safety, property maintenance, or other factors, at the discretion of the Planning Director, this conditional use permit may be submitted to the Planning Commission for their subsequent review at a public hearing. If necessary, the Planning Commission may modify or add conditions of approval to mitigate such impacts, or may revoke the said conditional use permit approval.

{end}

PUD-85-08-13D/P12-076

City of Pleasanton

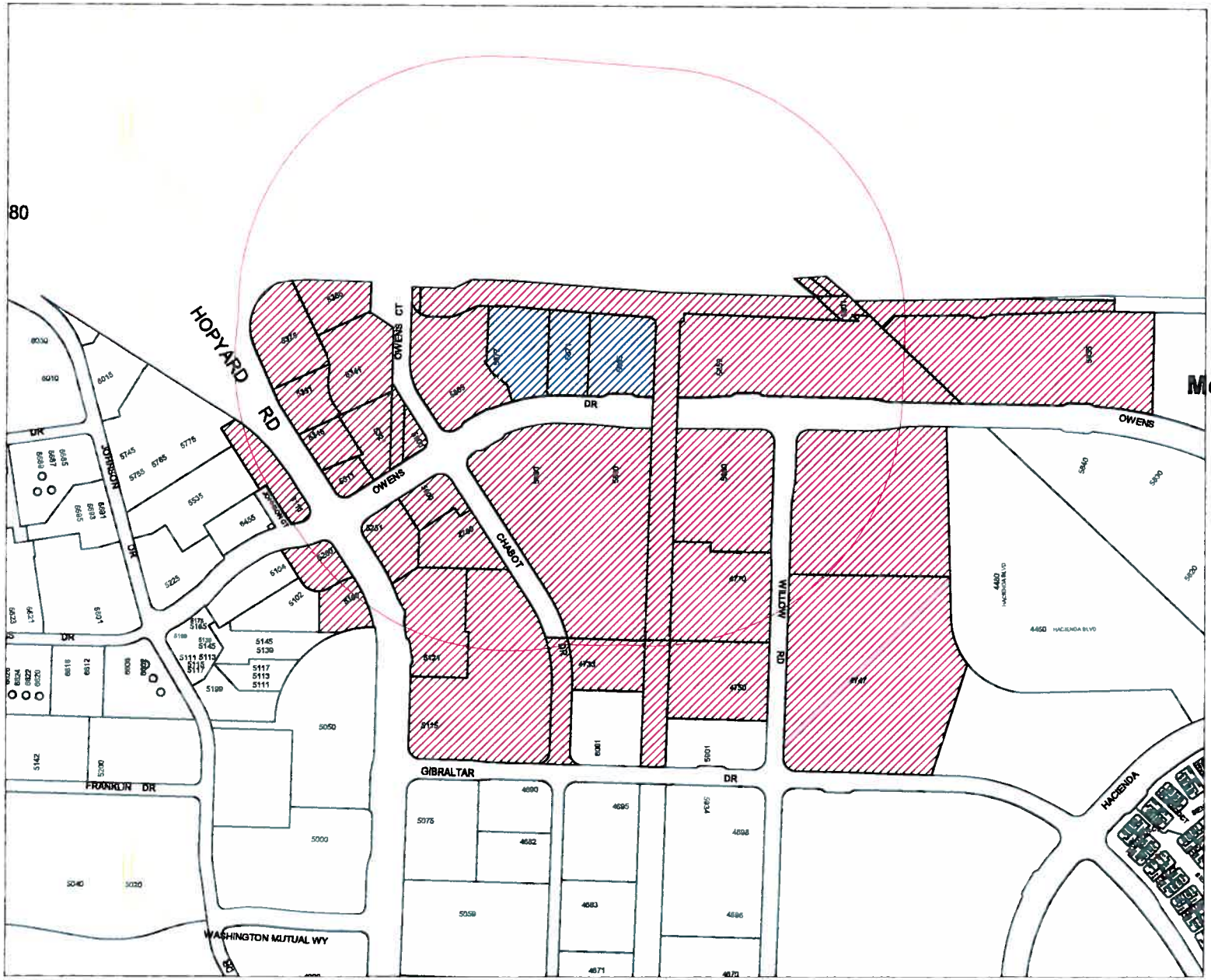
GIS

Department

Mercedes Benz of Pleasan

THE CITY OF PLEASANTON

EXHIBIT I



PUD-85-08-13D/P12-076

City of Pleasanton

GIS

Department

Mercedes Benz of Pleasan

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EXHIBIT J