APPENDIX A

RESPONSES TO NOTICE OF PREPARATION (NOP)

Responses to Notice of Preparation

California Department of Transportation (Caltrans)
Christensen, Jeff
City of Fresno Department of Public Utilities – Water Division
County of Fresno Department of Public Health
Eliason, Carol J.
Fresno Irrigation District
Fresno Irrigation District (2)
Fresno Metropolitan Flood Control District
Fresno Metropolitan Flood Control District (Revised)
Fresno Unified School District
Fries, Frank and Carolyn
Geisler, Lori
Geisler, Lori (2)
Kissler, Waymon
Kissler, Waymon C. (2)
Nordstrom, Richard
Parkinson Gomes et al
Rau, Mary Katherine (Katy)
Stone, Terry B.
Welk-Kissler, Valerie
Welk-Kissler, Valerie (2)

DEPARTMENT OF TRANSPORTATION
1352 WEST OLIVE AVENUE
P. O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 445-5868
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

July 29, 2011

2131-IGR/CEQA
6-FRE-41-28.5+/-
FIG GARDEN FINANCIAL CENTER
SCH # 2011061087

Mr. Mike Sanchez
City of Fresno
2600 Fresno Street, 3rd Floor
Fresno, CA. 93721

Dear Mr. Sanchez:

We have completed our review of the Notice of Preparation (NOP) for the draft Environmental Impact Report (EIR) for the Fig Garden Financial Center Expansion located on the north east corner of North Palm and West Shaw Avenues. Caltrans has the following comments:

Our previous comments dated August 25, 2009 and June 23, 2011 (copies enclosed) still stand. Thus we project that a portion of the trips generated by the project would impact the State Route (SR) 41 interchanges at Shaw Avenue, Ashlan Avenue, and Bullard Avenue. Therefore it is recommended that the traffic portion of the study should identify and analyze the development's impact to these SR 41 interchanges. The study should also include the number of trips generated by the development that would likely impact the SR 99 interchange at Shaw Avenue. We are requesting project trip traces and proportional share percentages for the 4 listed interchanges (SR 41/Shaw, SR 41/Ashlan, and SR 41/Bullard and SR 99/Shaw).

It should be noted that this was also reiterated in our traffic scoping meeting conducted 7/28/11 subsequent to our previous comments.

If you have any questions, please call me at (559) 445-5868.

Sincerely,

MICHAEL NAVARRO
Office of Transportation Planning
District 06

Enclosures

DEPARTMENT OF TRANSPORTATION
1352 WEST OLIVE AVENUE
P. O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7307
FAX (559) 488-4088
TTY (559) 488-4066

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June 23, 2011

2131-IGR/CEQA
6-FRE-41-28.5+/-
FIG GARDEN FINANCIAL CENTER
TIS SCOPE

Mr. Wally Hutcheson
TPG Consulting Inc.
222 N. Garden Street, Suite 100
Visalia, CA. 93291

Dear Mr. Hutcheson:

We have reviewed the application proposing the Scope of Work for the Traffic Impact Study for the Fig Garden Financial Center Expansion located on the north east corner of North Palm and West Shaw Avenues. Caltrans has the following comments:

Our previous comments dated August 25, 2009 (copy enclosed) still stand. We have no additional comments to add at this time.

If you have any questions, please call me at (559) 488-7307.

Sincerely,

JENNIFER BRYAN-SANCHEZ
Office of Transportation Planning
District 06

Enclosure

DEPARTMENT OF TRANSPORTATION
1352 WEST OLIVE AVENUE
P. O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-4347
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

August 25, 2009

2131-IGR/CEQA
6-FRE-41-28.5+/-
VILLAS AT FIG GARDEN
NOP

Mr. Mike Sanchez
City of Fresno Development Department
2600 Fresno Street
Fresno, CA 93721

Dear Mr. Sanchez:

We have reviewed the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the proposed "Villas at Fig Garden" development to be located on the southeast corner of North Palm and West Ramon Avenues. Caltrans has the following comments:

Considering the size and location of the development, we project that a portion of the trips generated by the project would impact the State Route (SR) 41 interchanges at Shaw Avenue, Ashlan Avenue, and Bullard Avenue. Therefore it is recommended that the traffic portion of the EIR should identify and analyze the development's impact to these SR 41 interchanges. The study should also include the number of trips generated by the development that would likely impact the SR 99 interchange at Shaw Avenue. These improvements include additional turn lanes on the off-ramps and widening of the eastbound Shaw Avenue overcrossing. We are requesting project trip traces and proportional share percentages for the 4 listed interchanges (SR 41/Shaw, SR 41/Ashlan, and SR 41/Bullard and SR 99/Shaw). No additional technical analysis (i.e. level of service) is being requested.

If you have any questions, please call me at (559) 488-4347.

Sincerely,

Joanne Striebich

JOANNE STRIEBICH
Office of Transportation Planning
District 06

C: Mr. Scott Mozier, City of Fresno Public Works Department
Mr. Bryan Jones, City of Fresno Public Works Department
Mr. Tony Boren, Council of Fresno County Governments

Mike Sanchez

From: Jeff Christensen [JACnet@comcast.net]
Sent: Wednesday, July 27, 2011 1:12 PM
To: Mike Sanchez; lhumble@ddaplanning.com; smommer@larsandersen.com
Subject: Gunner Andros Fig Garden Office Complex phase 4

Importance: High

Mike Sanchez City of Fresno Planning Dept
Scott Mommer c/o Lars Andersen Co.
Leianne Humble Denise Duffy & Assoc, Inc.

I am very please that the developer has abandoned the huge multi-story residential structure and is now contemplating an office building similar to what already exists in Fig Garden Financial Center. This new office building will still have a negative impact on the adjacent residential neighborhood.

My understanding is that there will be no direct access to the building by car or pedestrian from San Jose Ave on the south side of the building. That's a good thing. But there will be an impact to street traffic from people leaving the site that desire to go in an easterly direction to Freeway 41 or East Shaw Ave. They will take the short cut; that is turning North on Palm Ave from San Jose and then East on San Ramon Ave, right on Colonial (past my house), left on San Jose to Maroa and South to Shaw Ave to go East.

Not only is San Jose Ave.,between Maroa and Colonial Ave, in the worst of condition, it will definitely need new paving after all the construction traffic. And continuing North on Colonial and West on San Jose to Palm Ave where the street has a concrete strip approx 6 feet wide in the middle of the street that's been there for so long that the paving is buckled up where it abuts to the concrete. When the large garbage trucks roll over these bumps I can actually feel my house shake. The street condition will only worsen with additional traffic generated by the new office building. This situation needs to be addressed. The above referenced streets around our neighborhood have gone untended while ALL the surrounding streets have been resurfaced.

Best regards,

Jeff Christensen
5295 N. Colonial Ave.
Fresno, Ca 93704
JEFFREY ALAN COMPANY
DRE Lic #00452824
www.JeffreyAlanCompany.com
Voice 559-431-1273
Cell 559-473-7977
Email: JACnet@comcast.net

City of
FRESNO

DEPARTMENT OF PUBLIC UTILITIES – WATER DIVISION

Providing Life's Essential Services

DATE: July 29, 2011

TO: MIKE SANCHEZ, Planning Manager
Development and Resource Management Department, Planning Division

FROM: MICHAEL CARBAJAL, Chief Engineering Technician
Department of Public Utilities, Water Division

SUBJECT: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR FIG GARDEN FINANCIAL CENTER PHASE IV

The Department of Public Utilities Water Division has reviewed the Notice of Preparation of an Environmental Impact Report (EIR) for the Fig Garden Financial Center Phase IV. The project proposes the construction of a mid-rise four story 104,593 square-foot office building with at grade parking and a subterranean parking structure beneath the office building; also proposed is the removal of the existing 44 dwelling units, all on-site structures, and demolition of the accompanying on-site parking lots.

Development of the project as proposed has the potential to impact the City of Fresno's ability to provide adequate water service for domestic use and fire suppression in a central area of the City that is mostly urbanized. The following items outline the impacts and concerns that affect the Public Utilities-Water Division and should be considered in the preparation of an EIR.

1. The project is located in former County Waterworks District 21. The present water supply in the area of the project consists of groundwater wells in the vicinity of the project installed between years 1953 and 1972. Water production from these wells is limited in capacity and was designed to support existing development. Surplus capacity is not available to serve the proposed project.

2. Existing wells in the vicinity of the project have been impacted by various groundwater contaminations resulting in decreased production due to well closures. Existing groundwater contamination along with the surrounding development limits the availability of suitable sites to construct new water wells.

3. The existing water distribution system that serves the project site was constructed during the 1950's. This system was constructed to standards that are inadequate to support the proposed development. Many of the pipelines that serve the project site are deficient in size and constructed using steel. Overtime, these pipelines have deteriorated resulting in diminished flow capabilities and sometimes failure. Of specific concern is the availability of water to meet current fire flow requirements. The most recent fire flow test was conducted on November 19, 2008. Results from that test indicate that substantial distribution upgrades will be required to meet current fire flow requirements for the project site.

4. The project site is also located within a fluoride district. The City of Fresno water system is not fluoridated but many former County Waterworks Districts, including District 21,

continue to be fluoridated. The fluoride district must be isolated from the surrounding non-fluoridated water system to maintain a fluoride residual in the water. Isolating the district compounds the distribution system deficiencies and complicates water system improvements required for new development.

5. Due to the flat topography of the City, water pressure in the vicinity of the project site is maintained at a range of 40-60 PSI. As a Water Division policy, a pressure of 35 PSI is guaranteed at the water meter. Water pressure may be inadequate to provide domestic and fire water service to a multiple story commercial structure.

6. The City has implemented water conservation programs and measures to reduce overall per capita water use within the City. The target per capita consumption rate adopted in 2008 is a citywide average of 243 gallons per person per day by year 2020 (which includes anticipated water conservation resulting from the on-going residential water metering program and additional water conservation by all customers: 5% by 2010, and an additional 5% by 2020.) The EIR shall consider water use efficiency for landscaping, the use of artificial turf and native plant materials, reducing turf areas, and discouraging the development of artificial lakes, fountains, and ponds unless only untreated surface water or recycled water supplies are used for these decorative and recreational water features, as appropriate and sanitary.

7. Based upon existing land use for the project site identified in the 2025 General Plan, a water allocation of up to 20.2 af/yr for the project site is identified in the City of Fresno's 2008 Urban Water Management Plan (UWMP). Water demand greater than the adopted allocation resulting from the proposed development will be required to be offset or mitigated in a manner acceptable to the Department of Public Utilities.

The following alternatives and mitigation measures should be considered in the preparation of an EIR and may be required as a condition of development.

1. Construction of a water supply well site (including wellhead treatment) or the rehabilitation or modification of an existing well site to provide an appropriate supply of water.

2. Construction of transmission grid water mains to conduct new water to the project area (including required fluoridation facilities).

3. Replacement of existing 4-inch, 6-inch, and 8-inch diameter water mains with larger water mains sized to deliver required flows for domestic and fire uses. The number and locations will depend on the sources of supply that are developed.

4. Installation of booster pump facilities within the project for domestic and fire water uses within multiple story buildings.

5. Development of a water demand analysis of the anticipated annual water demand and daily peak water demand for proposed project meeting Department of Public Utilities criteria for such data.

6. The retrofit or modification of public and/or private landscape and/or structures to provide a reduction in water use to mitigate any proposed increase in water demand in excess of the adopted water allocation for the land use adopted in the 2025 General Plan will be subject to Department of Public Utilities approval as an acceptable mitigation measure.

7. Any proposed groundwater wells or existing well upgrades or modifications will require review and approval from the State Department of Toxic Substances Control with regards to potential impacts to the Vendo TCE plume.

Should you have any questions regarding this response, please contact me by phone at 621-5319 or by email at michael.carbajal@fresno.gov

County of Fresno
Department of Public Health
Edward L. Moreno, M.D., M.P.H., Director-Health Officer

July 18, 2011

FA0004084
LU0016101
PE 2602

Mike Sanchez
City of Fresno
Development Department
2600 Fresno Street
Fresno, CA 93721

Dear Mr. Sanchez:

PROJECT: Fig Garden Financial Center Phase IV Project

The Fresno County Department of Public Health, Environmental Health Division has reviewed the Notice of Preparation of a Draft Environmental Impact Report. It is recommended that the following items be considered and/or incorporated in the preparation of the Draft EIR:

- Appropriate measures should be incorporated into the project to minimize potentially significant short-term localized noise impacts to noise sensitive receivers caused by the operation of construction equipment. Construction specifications for the project should require that all construction equipment be maintained according to the manufacturers' specifications, and that noise generating construction equipment be equipped with mufflers. In addition, consideration should be given to limiting noise-generating construction activities to daytime hours as specified in your City's municipal code.

The following comments pertain to demolition of the existing structures:

- Should any of the structures have an active rodent or insect infestation, the infestation should be abated prior to demolition of the structures in order to prevent the spread of vectors to adjacent properties.

- In the process of demolishing the existing structures, the contractor may encounter asbestos containing construction materials and materials coated with lead based paints.

- If asbestos containing materials are encountered, contact the San Joaquin Valley Air Pollution Control District at (559) 230-6000 for more information.

- If the structures were constructed prior to 1979 or if lead-based paint is suspected to have been used in these structures, then prior to demolition work the contractor should contact the following agencies for current regulations and requirements:

  - California Department of Public Health, Childhood Lead Poisoning Prevention Branch, at (510) 620-5600.

  - United States Environmental Protection Agency, Region 9, at (415) 947-8000

  - State of California, Industrial Relations Department, Division of Occupational Safety and Health, Consultation Service (CAL-OSHA) at (559) 454-5302.

- Any construction materials deemed hazardous as identified in the demolition process must be characterized and disposed of in accordance with current federal, state, and local requirements.

- Should any underground storage tank(s) be found on the premises, the applicant shall apply for and secure an Underground Storage Tank Removal Permit from the Fresno County Department of Public Health, Environmental Health Division. Contact the Certified Unified Program Agency at (559) 445-3271 for more information.

REVIEWED BY:

R.E.H.S., M.P.H.
Environmental Health Specialist III

---

(559) 445-3271

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jg

NOP DEIR Fig Garden Financial Center

Mike Sanchez

From: Carol J. Eliason [cjeliason@comcast.net]
Sent: Friday, July 29, 2011 3:59 PM
To: Mike Sanchez
Subject: NOP Response for Fig Garden Financial Center, phase IV

Mr. Mike Sanchez, Planning Manager
City of Fresno Development and Resources Management Department
2600 Fresno Street, Room 3043
Fresno, CA 93721

July 29, 2011

Dear Mr. Sanchez,

This letter is in response to the Notice of Preparation concerning the proposed Fig Garden Financial Center Phase IV.

I live at 1174 W. San Ramon Ave., Fresno, CA 93711. West of Palm Ave and East of Thorne Ave.

The following are some specific items which I think the Environmental Impact Report ought to address:

I. Current and anticipated increases in volume and speed of traffic on

1. San Ramon Ave at all points in which that street appears from Maroa Ave to Fruit Ave.

2. All streets immediately bordering the project

3. Lanes of traffic used in Fig Garden Village as drivers who might be going to and from the new center will inevitably use Fig Garden Village as a short cut to Shaw.

4. Lanes of traffic used within the Financial Center bordering San Jose Ave. as this will also be a short cut temptation. For example, if traffic is backed up on San Jose Ave, with people waiting to turn right or left onto Palm, people will be tempted to make a short cut through the parking lots of the banks in order to get onto Palm without waiting for the light. This will be tempting at the busy hours (morning rush hour, the daily rush hour for lunch in Fig Garden Village, the late afternoon rush hour) and during the holiday shopping season at all hours when Fig Garden stores are open.

5. The intersection of San Ramon and Palm, including the impact on the current frontage road located at that same intersection.

6. If traffic intensifies on Palm, there is likely at key times of the day to be traffic blocked on the left lane of Palm heading north, by people seeking to use the left hand turn lane/u-turn lane on Palm at San Ramon. This is likely to stall traffic back to the San Jose/Palm intersection especially during the holiday season.

7. All major intersections in the immediate area: Shaw/Palm, San Jose/Palm, San Ramon/Palm, Barstow/Palm, Browning/Palm, Bullard/Palm. Shaw/Fruit and Shaw/West. Fruit/San Ramon, Fruit/Barstow, Fruit/Browning, Fruit/Bullard. Thorne/Barstow, Thorne/San Jose, and Arthur/Shaw. (When traffic is heavy on Palm, Barstow, Fruit, and Shaw and its various intersections, drivers use Thorne, Arthur, and San Ramon as short cuts. The residents who live on these streets are already upset about the increasing volume and speed of traffic on these once quiet streets.) Barstow/West and Bullard/West.

8. It should be noted that a Walgreens Pharmacy is being built at the NW corner of Palm and Shaw. It is reasonable to assume that the traffic to and from this business is going to be greater than existed for the small businesses that existed there previously. The Subway franchise generated the most traffic, but the others generated only a small impact. When the traffic study is conducted for the proposed new phase IV, it would be ideal if it was done after the new Walgreens is

open for business. If this is not possible, the report should certainly address the anticipated volume of traffic that will be created in the area due to this popular business which will add to the total numbers of cars and trips in the area.

9. **Any traffic study should be done between Thanksgiving and Christmas.** This is the peak of the traffic volume throughout the year. As Fig Garden Village is located nearby and people often drive north to River Park via Palm and Fruit, we area residents are **greatly impacted by this annual increase in traffic.** While the traffic peak occurs from Thanksgiving through Christmas, local residents are impacted by the general rise in volume from Halloween through New Year's Day. The fact that this is a yearly occurrence should make it imperative that if there is only one traffic study conducted, it should be done during this peak time.

10. Any traffic study conducted should also be done while Fresno Unified School District is in session (not during summer school or during a vacation period.) The area residents are already greatly impacted by several elementary schools, several middle schools, and Bullard High School.

It should be noted that the residents who live on San Ramon Ave west of Palm Ave, already perceive themselves to have a traffic problem on our street due to people using our street for short cuts and frequently speeding while they do it. Recently, speed limit signs were placed on our street without significant effect. Our pre-existing problems remain. We are concerned about any size project which will exacerbate our problems.

II. Current and anticipated use of water resources and its impact on water pressure at key times of the day.

1. The EIR should address which area residents, if any, whose water pressure will be affected and by how much by the new building with its inevitable bathrooms and landscaping needs.

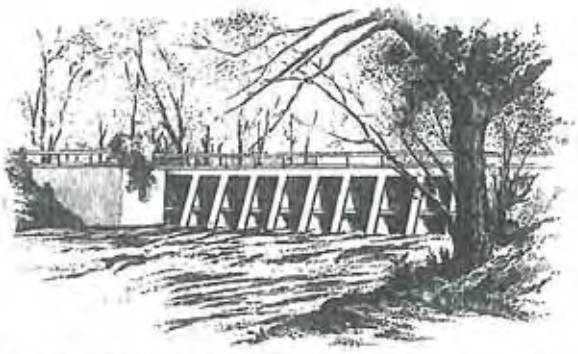
Due to time restrictions on watering landscaping, people are more likely now than ever to water their lawns and gardens at the same time as other nearby residents and businesses--impacting the overall water pressure in the area. When water pressure lowers, the sprinklers don't "reach as far" as they used to. This causes some plants and areas of landscaping to require hand watering–a great annoyance to the home owner-- as well as an aesthetic blight as dead plants and brown spots emerge. When there is insufficient water pressure, plants that people paid for and put in with their own time and energy die.

2. Similar to the traffic concern above, please incorporate the new Walgreens being built at Shaw and Palm avenues into the report's assumptions about the area's current water use and water pressure levels.

Sincerely,

Carol J. Eliason

E-FILE



YOUR MOST VALUABLE RESOURCE - WATER

OFFICE OF
FRESNO IRRIGATION DISTRICT

TELEPHONE (559) 233-7161
FAX (559) 233-8227
2907 S. MAPLE AVENUE
FRESNO, CALIFORNIA 93725-2218

July 6, 2011

Mr. Mike Sanchez
City of Fresno
Development & Resource Management
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

RE: Plan Amendment No A-11-006, Rezone No R-11-008, Vesting Tentative Parcel Map No. 2008-07, Conditional Use Permit No. C-11-088, N/W Shaw and Maroa avenues

Dear Mr. Sanchez:

The Fresno Irrigation District (FID) has reviewed the Plan Amendment No. A-11-006, Rezone No R-11-008, Vesting Tentative Parcel Map No. 2008-07, and Conditional Use Permit No. C-11-088 applications, being filed concurrently, pertaining to the northerly 3.96± acres of property located northwest of Shaw and Maroa avenues, APN: 417-240-37, 417-231-16 and 17.

FID understands the applicant is requesting:

- Authorization to amend the 2025 Fresno General Plan and the Bullard Community Plan from the medium-high and medium-low density residential planned land use designations to the commercial office land use designation.
- Authorization to reclassify the subject properties from the R-2 and R-1-AH zone districts to the C-P/cz zone district.
- Authorization to merge the three parcels through the Tentative Parcel Map process.
- Authorization to construct a mid-rise four-story 104,593 square-foot office building with at-grade parking and a subterranean parking structure beneath the office building.
- Authorization to remove the existing 44 dwelling units on site.

FID has the following comments:

1. FID does not own, operate or maintain any facilities located on the applicant's property as indicated on the attached FID exhibit map.

2. For informational purposes; FID's Enterprise-Holland Colony Canal No. 122 runs southwesterly and crosses Palm Avenue, approximately 1,200 feet west of the subject property, as shown on the attached FID exhibit map, in an exclusive 40-foot wide easement recorded on October 21, 1960, as Document No. 75283, Official Records of Fresno County. This pipeline was installed in 1965 as 48-inch diameter ASTM C-361 Rubber Gasket Reinforced Concrete Pipe which meets FID's minimum standards for developed (residential, industrial, commercial) parcels or urban areas. Should this project expand to include any street improvements along Palm Avenue and in the vicinity of the canal crossing, FID requires it review and approval of all plans.

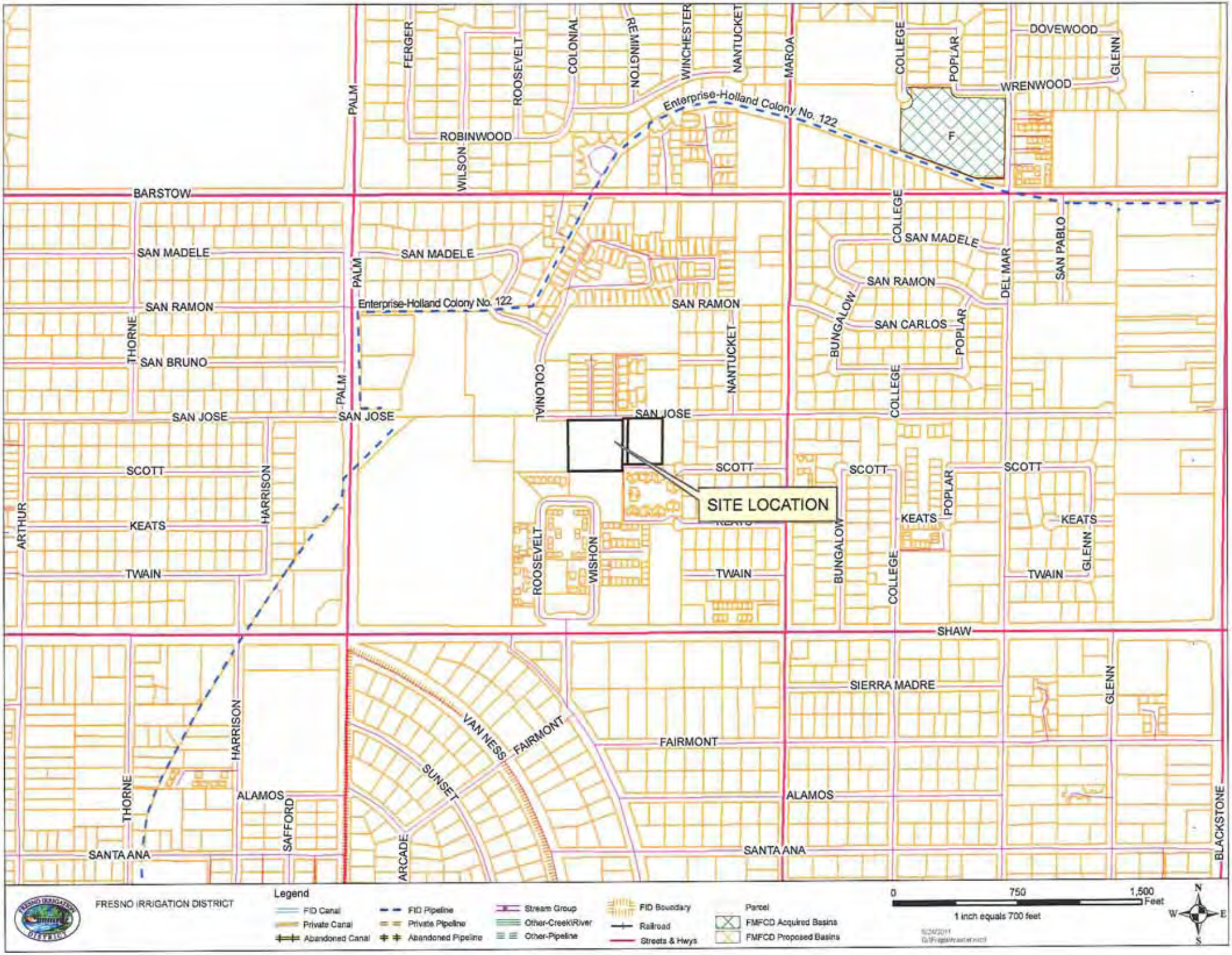
Thank you for submitting this for our review. We appreciate the opportunity to review and comment on the subject documents for the proposed project. If you have any questions please feel free to contact James Shields at 233-7161 extension 319 or jshields@fresnoirrigation.com.

Sincerely,

William R. Stretch

William R. Stretch, P.E.
Chief Engineer

Attachment


SITE LOCATION
Enterprise-Holland Colony No. 122
BARSTOW
SAN MADELE
SAN RAMON
SAN BRUNO
SAN JOSE
SCOTT
KEATS
TWAIN
ALAMOS
SANTA ANA
SHAW
FAIRMONT
SIERRA MADRE
PALM
FERGER
ROOSEVELT
COLONIAL
REMINGTON
WINCHESTER
NANTUCKET
MAROA
COLLEGE
POPLAR
DOVEWOOD
GLENN
WRENWOOD
ROBINWOOD
WILSON
THORNE
HARRISON
ARTHUR
WISHON
BUNGALOW
SAN CARLOS
DEL MAR
SAN PABLO
VAN NESS
SUNSET
ARCADE
SAFFORD
BLACKSTONE
F
FRESNO IRRIGATION DISTRICT
Legend
FID Canal
Private Canal
Abandoned Canal
FID Pipeline
Private Pipeline
Abandoned Pipeline
Stream Group
Other-Creek\River
Other-Pipeline
FID Boundary
Railroad
Streets & Hwys
Parcel
FMFCD Acquired Basins
FMFCD Proposed Basins
0
750
1,500
Feet
1 inch equals 700 feet
N
S
E
W

CITY OF FRESNO - DEVELOPMENT AND RESOURCE MANAGEMENT DEPARTMENT
REQUEST FOR COMMENTS, CONDITIONS, ENVIRONMENTAL ASSESSMENT, AND ENTITLEMENT APPLICATION REVIEW OF PLAN AMENDMENT APPLICATION NO. A-11-006, REZONE APPLICATION NO. R-11-008, VESTING TENTATIVE PARCEL MAP NO. 2008-07, AND CONDITIONAL USE PERMIT APPLICATION NO. C-11-088

RECEIVED
JUN 28 2011
BY: FID email

Return Completed Form to:
Mike Sanchez
Email: Routing@fresno.gov
Telephone: 559-621-8277
Development and Resource Management
2600 Fresno Street, Third Floor
Fresno CA 93721-3604

PROJECT DESCRIPTION AND LOCATION:

Plan Amendment Application No. A-11-006, Rezone Application No. R-11-008, Vesting Tentative Parcel Map 2008-07, and Conditional Use Permit Application No. C-11-088 were filed by Scott Mommer, on behalf of Gunner Andros Investments, LLC, and pertain to 3.96± acres of property located on the south side of West San Jose Avenue between North Colonial and North Maroa Avenues. The Plan Amendment proposes to amend the 2025 Fresno General Plan and Bullard Community Plan from the medium-high and medium-low density residential planned land use designations to the commercial office land use designation. The Rezone Application proposes to reclassify the property from the R-2 *(Low Density Multiple Family Residential)* and R-1-AH *(Single Family Residential, horses permitted)* zone districts to the C-P/cz *(Administrative and Professional Office/conditions of zoning)* zone district. Vesting Tentative Parcel Map proposes merging the three parcels. The Conditional Use Permit Application proposes the construction of a mid-rise four story 104,593 square-foot office building with at grade parking and a subterranean parking structure beneath the office building; also proposed is the removal of the existing 44 dwelling units, all on-site structures, and demolition of the accompanying on-site parking lots.

APN: 417-240-37, 417-231-16 & 17 ZONING: R-2 & R-1-AHB to C-P/cz SITE ADDRESS: 5204 North Palm Avenue

DATE ROUTED: June 28, 2011 **COMMENT DEADLINE: July 18, 2011**

If no response is received by the comment deadline, it will be assumed you have no comments to submit.

WILL THIS PROJECT AFFECT YOUR AGENCY/JURISDICTION? (If yes, specify.)

SUGGESTION(S) TO REDUCE IMPACTS/ADDRESS CONCERNS:

No FID Fac
Ent-Hwy Col 122
1,000' w/o site

REQUIRED CONDITIONS OF APPROVAL:

IS ANY ADDITIONAL INFORMATION NEEDED FOR YOU TO COMPLETE YOUR REVIEW? (Be specific):

REVIEWED BY: _____
Name and Title Telephone Number Date

Council District 2; Bullard Community Plan

ENTITLEMENT APPLICATION PACKAGE

FOR

CONDITIONAL USE PERMIT
PLAN AMENDMENT
REZONE
VESTING TENTATIVE PARCEL MAP
ENVIRONMENTAL ASSESSMENT

FIG GARDEN FINANCIAL CENTER
PHASE IV
5204 N. PALM AVENUE
FRESNO, CA. 93704

GUNNER ANDROS INVESTMENTS, LLC
555 W SHAW AVENUE, SUITE B4
FRESNO, CA 93704

SUBMITTED BY:

SCOTT A. MOMMER CONSULTING
4694 W. JACQUELYN AVENUE
FRESNO, CA 93722

JUNE 2011

City of FRESNO

Planning & Development Department
Development Partnership Center (DPC)
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

Master Application Form

#: A-11-006, R-11-008, VTPM 2008-07 (Amended), C-11-088

Check all that apply:

☑	Plan Amendment	☐	Site Plan Review	☐	Amendment ☐ Major ☐ Minor
☑	Rezone	☐	Variance	☐	Revised Exhibit ☐ Major ☐ Minor
☑	Conditional Use Permit	☐	Minor Deviation	☐	Easement Encroachment
☐	Tentative Tract Map	☑	Tentative Parcel Map	☐	Lot Line Adjustment
☐	Voluntary Parcel Merger	☐	Fresno Green Project	☐	Public Art Project
☐	Annexation	☐	Other:		

Project Name: Fig Garden Financial Center Phase IV

Project Address: 5204 N. Palm Avenue Fresno, CA. 93704 (site address) A.P.N 417-240-37, 417-231-16, 17

Size of Site: (See Attached) Sq. Ft. 3.96 Ac. Historical Project? (Building on registry and/or over 50 yrs. old) No

Project Description (attach additional pages if necessary): (See Attached)

Proposed: C-P (Administrative + Professional Office) Proposed: Commercial office

Zoning Designation: (See Attached) R-1-AH + R-2 General Plan Designation: med-high + med-low residential

List all ~~previously approved and/or~~ pending entitlements, associated with this project/site (provide application number(s), if available): R-11-008, C-11-088, Vesting Tentative Parcel Map 2008-07-Amended

Please read carefully before signing or filing.
Submission of this application does not imply approval of this permit by the Planning and Development Department. Application approval will become null and void if it is determined that approval was based on omissions or inaccurate information submitted by the applicant.

PRIMARY CONTACT, check all that apply ☑ Applicant ☐ Owner ☐ Other

Name: Signature:

Company/Organization: Gunner Andros Investments, LLC

Address: 555 W. Shaw Avenue, Suite B-4 City: Fresno Zip: 93704

Email: gafresno@gunnerandandros.com Phone: (559) 227-1647

Check all that apply ☐ Applicant ☐ Owner ☑ Other Legal Councel

Name: Jeffrey M. Reid, Esq. Signature:

Company/Organization: McCormick, Barstow, Sheppard, Wayte & Carruth, LLP

Address: 5 River Park Place East City: Fresno Zip: 93720

Email: jeff.reid@mccormickbarstow.com Phone: (559) 433-2310

Check all that apply ☐ Applicant ☐ Owner ☑ Other Site Development Coordinator

Name: Scott A. Mommer Signature:

Company/Organization: Scott A. Mommer Consulting

Address: 4694 W. Jacquelyn Avenue City: Fresno Zip: 93722

Email: smommer@larsandersen.com Phone: (559) 276-2790 x 12

Note: This application will not be accepted for processing without the mandatory attachments. Please see the corresponding **Application Submittal Requirements** for the checklist(s) of required documents.

FOR INTERNAL USE ONLY

DEVELOPMENT PARTNERSHIP CENTER			
Received By:		Date:	
Verification By:		Date:	
Application Fee:		EA Fee:	
PZ No:	11-2-006	Zone District:	

SUPPORTING INFORMATION
FOR
MASTER APPLICATION FORM

PLAN AMENDMENT

✓ PROJECT DESCRIPTION

The owners of the Fig Garden Financial Center propose to expand the existing Fig Garden Financial Center (see Figure I-1 Existing Site Plan) and to incorporate into its environs a new mid-rise office building. This new structure will be developed on lands that lie immediately east of the existing Financial Center Development within the center (the "Site Addition"). The Site Addition comprising APNs 417-231-16, 417-231-17 and 417-240-37, (see FIGURE I-5 Existing Zoning Map) is planned medium high residential and medium low residential.

The proposed project will comprise a total of net useable area 104,593 square feet on four floors. Also, proposed is a parking structure under the office building. The proposed office building will be located on lands presently zoned R1-AH and R-2, for which a Plan Amendment and Rezone will be required.

EXISTING STRUCTURES		
APN	EXISTING COMMERCIAL SQ. FT.	RESIDENTIAL UNITS
417-240-37	---	1(1)
417-231-16	---	44
417-231-17	---	N/A

(1) Note the single family dwelling unit at 525 W. San Jose (417-240-37) was previously removed

The proposed project involves the removal of the approximately existing 44 dwelling units and all on-site structures including the accompanying parking lots, and the construction of a mid-rise four-story office building on 3.96 acres of the project site (Figure II-1 – Proposed Overall Site Plan). At grade parking and a subterranean parking structure is proposed beneath the office building, which would provide a total on-site parking supply of 417 spaces in compliance with the requirements of the City of Fresno Municipal Code. The proposed structure will be 60 feet in height.

The proposed structure would be designed to be consistent with the predominant character and scale of the architecture of the adjacent Financial Center. The proposed project would also incorporate landscaping and other site aesthetics. Figure II-2 (Elevations) illustrates the proposed architectural style.

Currently, there are existing trees on the project site that are part of the existing apartment complex and surrounding single family lot. As currently proposed, all of the trees will be removed or where feasible relocated on the proposed project site. There are no oak or other indigenous species found on the project site. The proposed project would include a Landscape Plan which would provide for trees, shrubs and other ornamental plants.

In order to construct the underground parking structure and proposed site, the grading for the proposed project would require approximately 35,000 cubic yards (cy) of dirt to be excavated and removed from the site. The project will comply with City of Fresno grading and drainage requirements and detailed Grading and Drainage Plans will be provided for final permits.

THE OPERATIONAL STATEMENT
FOR
PLAN AMENDMENT

- ✓ **PROJECT SITE ADDRESSES** (SEE TABLE SPR-I)
- ✓ **ASSESSOR'S PARCEL NUMBERS (APN)** (SEE TABLE SPR -I)
- ✓ **EXISTING GENERAL PLAN LAND USE DESIGNATION** (SEE FIGURE I-2)
- ✓ **EXISTING ZONING** (SEE FIGURE I-5)

TABLE PA -I

PROJECT SITE ADDRESS	APN	EXISTING GENERAL PLAN LAND USE DESIGNATION	EXISTING ZONING
525 W. San Jose Avenue	417-240-37	Residential Medium Low Density	R1-AH
569 W. San Jose Avenue	417-231-16	Residential Medium High Density	R-2
NO ADDRESS	417-231-17	Residential Medium Low Density	R1-AH

✓ **IDENTIFY THE COMMUNITY PLAN**

The project site is located in the Bullard Community Plan (see Figure I-4), and consists of three parcels of land, which two have West San Jose Avenue addresses and one piece is a vacant strip of land and does not have an address. Their current and proposed zoning and use designations are indicated on the above Table SPR-1. The Bullard Community Plan will also be required to be amended for the project scope.

✓ **IDENTIFY THE SPECIFIC PLAN**

The project is not located in a City of Fresno Specific Plan.

✓ **IDENTIFY THE REDEVELOPMENT PLAN (IF APPLICABLE)**

The project is not located in a City of Fresno Redevelopment Plan.

✓ **DESCRIPTION OF EFFORTS THAT HAVE BEEN MADE TO DISCUSS THE PROPOSAL WITH NEIGHBORS**

Gunner Andros Investments, LLC has been proactive in its outreach to the neighborhood. Development proposals for the site were the focus of a meeting hosted by Gunner Andros for neighborhood residents. A further meeting to discuss development proposals with neighborhood representatives was also held in coordination with elected representatives. Neighbors have also received several items of written correspondence regarding project plan updates to keep them informed. Gunner Andros has strived to maintain an open door policy and encouraged neighbors and those interested in the project to contact them via phone, email or personal meeting(s).

✓ **DESCRIPTION OF HOW THE PROPOSAL IS COMPLEMENTARY TO THE SURROUNDING NEIGHBORHOOD**

The site will be developed (through site access and project orientation) in a fashion that will principally associate this site with immediately adjacent Fig Garden Financial Center. The construction materials and architectural style will be substantially consistent with the existing three office buildings at this location. It will thereby be complementary to its surrounding neighborhood.

Utilities required for the proposed project (e.g., electricity, natural gas, sewer and water) already exist on-site. The project will comply with City of Fresno utility requirements and Utility Plans will be provided for final permits.

The project is proposed to be constructed and completed in one phase.

Primary access to the site would be off of North Palm Avenue through the Fig Garden Financial Center's driveway, Shaw Avenue via private driveways (Figure II-3 Access Plan). Both accesses would accommodate ingress and egress into the proposed development, surface parking and garage parking accommodating 445 parking spaces. No public access will be provided from West San Jose Avenue.

- ✓ **PROJECT ADDRESSES** (SEE TABLE MA-I)
- ✓ **ASSESSOR'S PARCEL NUMBERS** (SEE TABLE MA-I AND FIGURES I-7A, I-7B &I-7C)
- ✓ **SIZE OF SITE SQUARE FOOTAGE** (SEE TABLE MA-I)
- ✓ **SIZE OF SITE ACREAGE** (SEE TABLE MA-I)
- ✓ **ZONING DESIGNATION** (SEE TABLE MA-I & FIGURE I-5)
- ✓ **GENERAL PLAN DESIGNATION** (SEE TABLE MA-I & FIGURE I-2)

TABLE MA-I

ADDRESS	APN	SIZE OF SITE SQ. FT.	SIZE OF SITE ACREAGE	ZONING DESIGNATION (EXISTING)	GENERAL PLAN DESIGNATION (EXISTING)
525 W. San Jose Avenue	417-240-37	61,855	1.42	R1-AH	Residential Medium Low Density
569 W. San Jose Avenue	417-231-16	102,366	2.35	R-2	Residential Medium High Density
NO ADDRESS	417-231-17	8,276	0.19	R1-AH	Residential Medium Low Density

FIGURES

- FIGURE I-1: EXISTING SITE PLAN
- FIGURE I-2: EXISTING GENERAL PLAN
- FIGURE I-3: PROPOSED GENERAL PLAN
- FIGURE I-4: COMMUNITY BOUNDARY MAP
- FIGURE I-5: EXISTING ZONE MAP
- FIGURE I-6: PROPOSED ZONING MAP
- FIGURE I-7A: APN MAP
- FIGURE I-7B: APN MAP
- FIGURE II-1: SITE PLAN EXHIBIT
- FIGURE II-2: ELEVATIONS EXHIBIT
- FIGURE II-3: ACCESS PLAN

In addition, through prior consultations with neighbors in the adjacent residential neighborhoods, we learned of their concerns about noise and other impacts associated with certain approaches to intensified residential uses in these environs. We also learned about their concerns for appropriate set backs for any multi-storied development. The proposed office structure will not include a residential component and will be constructed to the same height and with comparable setbacks as the immediately adjacent office development.

✓ **DESCRIPTION OF HOW THE PROPOSAL HELPS IMPLEMENT THE 2025 FRESNO GENERAL PLAN.**

The project will replace an aged former apartment two-story apartment complex structure with a Class A four story office structure. The office structure will be developed in a style consistent with the three existing adjacent office facilities which comprise the Fig Garden Financial Center. This in-fill development is consistent with some key goals of the 2025 General Plan.

The proposed multi-storied office complex will be developed with a style and massing consistent with adjacent commercial buildings. This style of development will also assist in the General Plan's goal of developing urban design strategies to improve Fresno's visual image and enhance its form and function (2025 General Plan, General Plan Goals, item 12, page 3). The project's design and strategic location also facilitate the General Plan's goal of providing activity centers within plan areas. (2025 General Plan, General Plan goals, item 9, page 3).

More specifically, the General Plan's Urban Form Element includes a statement of strategies for Commercial Land Use (item 7 at page 23). That statement confirms that a quality of life in the city requires commercial developments for employment opportunities. Those commercial uses should be strategically located to ensure accessibility and convenience to the population they service, while minimizing travel requirements, infrastructure demands and adverse impacts, particularly adverse effects on nearby residential areas. (See generally the Objectives and Policies of the City of Fresno 2025 General Plan at C-12). The proposed project is a continuation of the development that comprises the existing Fig Garden Financial Center. That strong market support for the existing Financial Center development is a reflection of its qualities of appropriate access and convenience. The character and amenities of the Fig Garden Financial Center have also proven its capacity to avoid adverse effects on nearby residential neighborhoods. Development of this character in these environs has proven itself to serve as an effective transition between more intensive commercial uses and sensitive residential areas (See General Plan Policy C-12-c, at page 41).

The Urban Form Element of the General Plan also discusses land use activity centers, which have been conceptually located within the environs of this center. Such centers are intended to provide commercial uses and employment centers. The General Plan has a stated intent to support the development of those centers, and to reinforce the goals though mixed-use and intensification (General Plan, Urban Form Element, item 3, page 22). The Activity Center objective and policies are further detailed at page 35 (Objective C-4). Several policies detailed for that objective include the goal of pursuing intensive concentrations of urban uses in strategically located areas to include commercial, employment and higher density residential with pedestrian activities and linkages that provide multi-story facilities with underground parking.

This project provides the infill and intensified employment center development that is one of the prongs of the Activity Center goal. It provides a multi-storied facility with underground parking that intensifies existing urban uses. Its strategic location for these development goals is demonstrated by the fact that the site has obtained conceptual designation as a favored Activity Center location. (See materials prepared for the "Activity Center Presentation to Joint Planning Commission on January 28, 2009" and Fresno Activity Center and Corridor Intensification Study Workshop Materials conducted December 9, 2008, available at http://www.fresno.gov/Government/DepartmentDirectory/PlanningandDevelopment/Planning/Ongoing+Planning+Studies.htm)

Beyond the Activity Center Lands, the General Plan has a broader purpose of facilitating In-Fill Development. Objective C-16 (General Plan page 25) details the goal of establishing more efficient, economical and livable urban forms though the concentration of developments within older, built-up core communities including activity centers. The location of this project, within an older, built-up core community is an effective in-fill and private redevelopment of lands.

✓ **DESCRIBE IN DETAIL, THE PROPOSED USE(S)**

The proposed multi-story office development will be utilized for a variety of commercial office activities.

✓ **DETAIL THE HOURS OF OPERATION AND THE NUMBER OF EMPLOYEES**

The proposed office development will support a total of 400 employees.

The activities for the proposed office building will be conducted on normal business.

✓ **DETAIL THE EXPECTED DAILY VISITORS/USERS/GUESTS**

The employees of the proposed office development are estimated at 400 and are anticipated to use the office on normal business hours basis, 5 days a week; the tenants will also have occasional visitors and/or guests.

✓ **DESCRIBE ANY REASONABLE FORESEEABLE EFFECTS FROM CONSTRUCTION AND/OR THE SITE THAT MAY IMPACT THE NEIGHBORS.**

The construction of the proposed office building will involve demolition of the existing apartment complex. The underground parking structure will require excavation and removal of approximately 35,000 cubic yards of dirt. The construction of the parking structure will be a reinforced concrete structure with the remaining of the above ground structure to be wood framed. Construction impact to the neighbors will be noise.

The project will utilize Best Management Practices (BMPs) for compliance with all State and Local Codes for storm water quality during construction. A Storm Water Pollution Prevention Plan will be implemented to minimize or prevent sediment or erosion to neighboring sites.

The addition of the new office building into the Financial Center (replacing the existing apartment complex) will increase the density of the existing commercial office uses which would increase the potential for a source of noise from the project area.

✓ **DETAIL ALL SECURITY MEASURES**

There will be security lighting around the proposed project.

City of FRESNO

Planning & Development Department
Development Partnership Center (DPC)
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

Master Application Form

#: R-11-008, A-11-006, C-11-088, VTPM 2008-07-AMENDED

Check all that apply:

☑	Plan Amendment	☐	Site Plan Review	☐	Amendment ☐ Major ☐ Minor
☑	Rezone	☐	Variance	☐	Revised Exhibit ☐ Major ☐ Minor
☑	Conditional Use Permit	☐	Minor Deviation	☐	Easement Encroachment
☐	Tentative Tract Map	☑	Tentative Parcel Map	☐	Lot Line Adjustment
☐	Voluntary Parcel Merger	☐	Fresno Green Project	☐	Public Art Project
☐	Annexation	☐	Other:		

Project Name: Fig Garden Financial Center Phase IV

Project Address: 5204 N. Palm Avenue Fresno, CA. 93704 (site address) A.P.N 417-240-37, 417-231-16, 17

Size of Site: (See Attached) Sq. Ft. 3.96 Ac. Historical Project? (Building on registry and/or over 50 yrs. old) No

Project Description (attach additional pages if necessary): (See Attached)

Proposed: C-P (Administrative + Professional Office) Proposed: Commercial Office

Zoning Designation: R-1-AH + R-2 General Plan Designation: Med-High + Med-Low Residential

List all ~~previously approved and/or~~ pending entitlements, associated with this project/site (provide application number(s), if available): A-11-006, C-11-088, VTPM 2008-07-AMENDED

Please read carefully before signing or filing.
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PRIMARY CONTACT, check all that apply ☑ Applicant ☐ Owner ☐ Other

Name: Signature:

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Company/Organization: McCormick, Barstow, Sheppard, Wayte & Carruth, LLP

Address: 5 River Park Place East City: Fresno Zip: 93720

Email: jeff.reid@mccormickbarstow.com Phone: (559) 433-2310

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Name: Scott A. Mommer Signature:

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Address: 4694 W. Jacquelyn Avenue City: Fresno Zip: 93722

Email: smommer@ larsandersen.com Phone: (559) 276-2790 x 12

Note: This application will not be accepted for processing without the mandatory attachments. Please see the corresponding **Application Submittal Requirements** for the checklist(s) of required documents.

FOR INTERNAL USE ONLY

DEVELOPMENT PARTNERSHIP CENTER			
Received By:		Date:	
Verification By:		Date:	
Application Fee:		EA Fee:	
PZ No:	11-3-008	Zone District:	

SUPPORTING INFORMATION
FOR
MASTER APPLICATION FORM

REZONE

✓ PROJECT DESCRIPTION

The owners of the Fig Garden Financial Center propose to expand the existing Fig Garden Financial Center (see Figure I-1 Existing Site Plan) and to incorporate into its environs a new mid-rise office building. This new structure will be developed on lands that lie immediately east of the existing Financial Center Development within the center (the "Site Addition"). The Site Addition comprising APNs 417-231-16, 417-231-17 and 417-240-37, (see FIGURE I-5 Existing Zoning Map) is planned medium high residential and medium low residential.

The proposed project will comprise a total of net useable area 104,593 square feet on four floors. Also, proposed is a parking structure under the office building. The proposed office building will be located on lands presently zoned R1-AH and R-2, for which a Plan Amendment and Rezone will be required.

EXISTING STRUCTURES		
APN	EXISTING COMMERCIAL SQ. FT.	RESIDENTIAL UNITS
417-240-37	---	1(1)
417-231-16	---	44
417-231-17	---	N/A

(1) Note the single family dwelling unit at 525 W. San Jose (417-240-37) was previously removed

The proposed project involves the removal of the approximately existing 44 dwelling units and all on-site structures including the accompanying parking lots, and the construction of a mid-rise four-story office building on 3.96 acres of the project site (Figure II-1 – Proposed Overall Site Plan). At grade parking and a subterranean parking structure is proposed beneath the office building, which would provide a total on-site parking supply of 417 spaces in compliance with the requirements of the City of Fresno Municipal Code. The proposed structure will be 60 feet in height.

The proposed structure would be designed to be consistent with the predominant character and scale of the architecture of the adjacent Financial Center. The proposed project would also incorporate landscaping and other site aesthetics. Figure II-2 (Elevations) illustrates the proposed architectural style.

Currently, there are existing trees on the project site that are part of the existing apartment complex and surrounding single family lot. As currently proposed, all of the trees will be removed or where feasible relocated on the proposed project site. There are no oak or other indigenous species found on the project site. The proposed project would include a Landscape Plan which would provide for trees, shrubs and other ornamental plants.

In order to construct the underground parking structure and proposed site, the grading for the proposed project would require approximately 35,000 cubic yards (cy) of dirt to be excavated and removed from the site. The project will comply with City of Fresno grading and drainage requirements and detailed Grading and Drainage Plans will be provided for final permits.

Utilities required for the proposed project (e.g., electricity, natural gas, sewer and water) already exist on-site. The project will comply with City of Fresno utility requirements and Utility Plans will be provided for final permits.

The project is proposed to be constructed and completed in one phase.

Primary access to the site would be off of North Palm Avenue through the Fig Garden Financial Center's driveway, Shaw Avenue via private driveways (Figure II-3 Access Plan). Both accesses would accommodate ingress and egress into the proposed development, surface parking and garage parking accommodating 445 parking spaces. No public access will be provided from West San Jose Avenue.

- ✓ **PROJECT ADDRESSES** (SEE TABLE MA-I)
- ✓ **ASSESSOR'S PARCEL NUMBERS** (SEE TABLE MA-I AND FIGURES I-7A, I-7B &I-7C)
- ✓ **SIZE OF SITE SQUARE FOOTAGE** (SEE TABLE MA-I)
- ✓ **SIZE OF SITE ACREAGE** (SEE TABLE MA-I)
- ✓ **ZONING DESIGNATION** (SEE TABLE MA-I & FIGURE I-5)
- ✓ **GENERAL PLAN DESIGNATION** (SEE TABLE MA-I & FIGURE I-2)

TABLE MA-I

ADDRESS	APN	SIZE OF SITE SQ. FT.	SIZE OF SITE ACREAGE	ZONING DESIGNATION (EXISTING)	GENERAL PLAN DESIGNATION (EXISTING)
525 W. San Jose Avenue	417-240-37	61,855	1.42	R1-AH	Residential Medium Low Density
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NO ADDRESS	417-231-17	8,276	0.19	R1-AH	Residential Medium Low Density

LEGAL DESCRIPTION FOR PARCELS TO BE REZONED

PARCEL 1: APN 417-231-16:

Lot 80 of California Poultry Farms, in the City of Fresno, County of Fresno, State of California, according to the Map thereof recorded May 2, 1904 in Book 2, Page 82 of Record of Surveys, Records of said County.

Excepting therefrom the South half thereof.

PARCEL 2: APN 417-231-17:

The West 30 feet of the North 278.34 feet of Lot 79 of California Poultry Farms, in the County of Fresno, State of California, according to the Map thereof recorded in Book 2 Page 82 of Record of Surveys, Fresno County Records.

PARCEL 3: APN 417-240-37:

The North 278.34 feet of Lot 79 of California Poultry Farms, as per Map recorded in Book 2, Page 82 of Record of Surveys, Fresno County Records.

Excepting therefrom the East 90 feet thereof and the West 30 feet thereof.

FIGURES

THE OPERATIONAL STATEMENT
FOR
REZONE

- ✓ **PROJECT SITE ADDRESSES** (SEE TABLE SPR-I)
- ✓ **ASSESSOR'S PARCEL NUMBERS (APN)** (SEE TABLE SPR -I)
- ✓ **EXISTING GENERAL PLAN LAND USE DESIGNATION** (SEE FIGURE I-2)
- ✓ **EXISTING ZONING** (SEE FIGURE I-5)

TABLE RZ -I

PROJECT SITE ADDRESS	APN	EXISTING GENERAL PLAN LAND USE DESIGNATION	EXISTING ZONING
525 W. San Jose Avenue	417-240-37	Residential Medium Low Density	R1-AH
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NO ADDRESS	417-231-17	Residential Medium Low Density	R1-AH

✓ **IDENTIFY THE COMMUNITY PLAN**

The project site is located in the Bullard Community Plan (see Figure I-4), and consists of three parcels of land, which two have West San Jose Avenue addresses and one piece is a vacant strip of land and does not have an address. Their current and proposed zoning and use designations are indicated on the above Table SPR-1. The Bullard Community Plan will also be required to be amended for the project scope.

✓ **IDENTIFY THE SPECIFIC PLAN**

The project is not located in a City of Fresno Specific Plan.

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Gunner Andros Investments, LLC has been proactive in its outreach to the neighborhood. Development proposals for the site were the focus of a meeting hosted by Gunner Andros for neighborhood residents. A further meeting to discuss development proposals with neighborhood representatives was also held in coordination with elected representatives. Neighbors have also received several items of written correspondence regarding project plan updates to keep them informed. Gunner Andros has strived to maintain an open door policy and encouraged neighbors and those interested in the project to contact them via phone, email or personal meeting(s).

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The site will be developed (through site access and project orientation) in a fashion that will principally associate this site with immediately adjacent Fig Garden Financial Center. The construction materials and architectural style will be substantially consistent with the existing three office buildings at this location. It will thereby be complementary to its surrounding neighborhood.

In addition, through prior consultations with neighbors in the adjacent residential neighborhoods, we learned of their concerns about noise and other impacts associated with certain approaches to intensified residential uses in these environs. We also learned about their concerns for appropriate set backs for any multi-storied development. The proposed office structure will not include a residential component and will be constructed to the same height and with comparable setbacks as the immediately adjacent office development.

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The project will replace an aged former apartment two-story apartment complex structure with a Class A four story office structure. The office structure will be developed in a style consistent with the three existing adjacent office facilities which comprise the Fig Garden Financial Center. This in-fill development is consistent with some key goals of the 2025 General Plan.

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✓ **DESCRIBE IN DETAIL, THE PROPOSED USE(S)**

The proposed multi-story office development will be utilized for a variety of commercial office activities.

✓ **DETAIL THE HOURS OF OPERATION AND THE NUMBER OF EMPLOYEES**

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The activities for the proposed office building will be conducted on normal business.

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The project will utilize Best Management Practices (BMPs) for compliance with all State and Local Codes for storm water quality during construction. A Storm Water Pollution Prevention Plan will be implemented to minimize or prevent sediment or erosion to neighboring sites.

The addition of the new office building into the Financial Center (replacing the existing apartment complex) will increase the density of the existing commercial office uses which would increase the potential for a source of noise from the project area.

✓ **DETAIL ALL SECURITY MEASURES**

There will be security lighting around the proposed project.

City of FRESNO

Planning & Development Department
Development Partnership Center (DPC)
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

Master Application Form

#: C-11-088, A-11-006, R-11-008, VTPM 2008-07-Amended

Check all that apply:

☑	Plan Amendment	☐	Site Plan Review	☐	Amendment ☐ Major ☐ Minor
☑	Rezone	☐	Variance	☐	Revised Exhibit ☐ Major ☐ Minor
☑	Conditional Use Permit	☐	Minor Deviation	☐	Easement Encroachment
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☐	Voluntary Parcel Merger	☐	Fresno Green Project	☐	Public Art Project
☐	Annexation	☐	Other:		

Project Name: Fig Garden Financial Center Phase IV

Project Address: 5204 N. Palm Avenue Fresno, CA. 93704 A.P.N 417-240-37, 417-231-16,17

Size of Site: (See Attached) Sq. Ft. 3.96 Ac. Historical Project? (Building on registry and/or over 50 yrs. old) No

Project Description (attach additional pages if necessary):

(See Attached)

Proposed: C-P (Administrative + Proffesional Office) Proposed: Commercial Office

Zoning Designation: R-1-AH + R-2 General Plan Designation: Med-High + Med-Low Residential

List all ~~previously approved and/or~~ pending entitlements, associated with this project/site (provide application number(s), if available): A-11-006, R-11-008, VTPM 2008-07-Amended

Please read carefully before signing or filing.
Submission of this application does not imply approval of this permit by the Planning and Development Department. Application approval will become null and void if it is determined that approval was based on omissions or inaccurate information submitted by the applicant.

PRIMARY CONTACT, check all that apply ☑ Applicant ☐ Owner ☐ Other

Name: Signature:

Company/Organization: Gunner Andros Investments, LLC

Address: 555 W. Shaw Avenue, Suite B-4 City: Fresno Zip: 93704

Email: gafresno@gunnerandandros.com Phone: (559) 227-1647

Check all that apply ☐ Applicant ☐ Owner ☑ Other Legal Councel

Name: Jeffrey M. Reid, Esq. Signature:

Company/Organization: McCormick, Barstow, Sheppard, Wayte & Carruth, LLP

Address: 5 River Park Place East City: Fresno Zip: 93720

Email: jeff.reid@mccormickbarstow.com Phone: (559) 433-2310

Check all that apply ☐ Applicant ☐ Owner ☑ Other Site Development Coordinator

Name: Scott A. Mommer Signature:

Company/Organization: Scott A. Mommer Consulting

Address: 4694 W. Jacquelyn Avenue City: Fresno Zip: 93722

Email: smommer@ larsandersen.com Phone: (559) 276-2790 x 12

Note: This application will not be accepted for processing without the mandatory attachments. Please see the corresponding **Application Submittal Requirements** for the checklist(s) of required documents.

FOR INTERNAL USE ONLY

DEVELOPMENT PARTNERSHIP CENTER			
Received By:		Date:	
Verification By:		Date:	
Application Fee:		EA Fee:	
PZ No:	11-9-088	Zone District:	

SUPPORTING INFORMATION
FOR
MASTER APPLICATION FORM

CONDITIONAL USE PERMIT

✓ PROJECT DESCRIPTION

The owners of the Fig Garden Financial Center propose to expand the existing Fig Garden Financial Center (see Figure I-1 Existing Site Plan) and to incorporate into its environs a new mid-rise office building. This new structure will be developed on lands that lie immediately east of the existing Financial Center Development within the center (the "Site Addition"). The Site Addition comprising APNs 417-231-16, 417-231-17 and 417-240-37, (see FIGURE I-5 Existing Zoning Map) is planned medium high residential and medium low residential.

The proposed project will comprise a total of net useable area 104,593 square feet on four floors. Also, proposed is a parking structure under the office building. The proposed office building will be located on lands presently zoned R1-AH and R-2, for which a Plan Amendment and Rezone will be required.

EXISTING STRUCTURES		
APN	EXISTING COMMERCIAL SQ. FT.	RESIDENTIAL UNITS
417-240-37	---	1(1)
417-231-16	---	44
417-231-17	---	N/A

(1) Note the single family dwelling unit at 525 W. San Jose (417-240-37) was previously removed

The proposed project involves the removal of the approximately existing 44 dwelling units and all on-site structures including the accompanying parking lots, and the construction of a mid-rise four-story office building on 3.96 acres of the project site (Figure II-1 – Proposed Overall Site Plan). At grade parking and a subterranean parking structure is proposed beneath the office building, which would provide a total on-site parking supply of 417 spaces in compliance with the requirements of the City of Fresno Municipal Code. The proposed structure will be 60 feet in height.

The proposed structure would be designed to be consistent with the predominant character and scale of the architecture of the adjacent Financial Center. The proposed project would also incorporate landscaping and other site aesthetics. Figure II-2 (Elevations) illustrates the proposed architectural style.

Currently, there are existing trees on the project site that are part of the existing apartment complex and surrounding single family lot. As currently proposed, all of the trees will be removed or where feasible relocated on the proposed project site. There are no oak or other indigenous species found on the project site. The proposed project would include a Landscape Plan which would provide for trees, shrubs and other ornamental plants.

In order to construct the underground parking structure and proposed site, the grading for the proposed project would require approximately 35,000 cubic yards (cy) of dirt to be excavated and removed from the site. The project will comply with City of Fresno grading and drainage requirements and detailed Grading and Drainage Plans will be provided for final permits.

Utilities required for the proposed project (e.g., electricity, natural gas, sewer and water) already exist on-site. The project will comply with City of Fresno utility requirements and Utility Plans will be provided for final permits.

The project is proposed to be constructed and completed in one phase.

Primary access to the site would be off of North Palm Avenue through the Fig Garden Financial Center's driveway, Shaw Avenue via private driveways (Figure II-3 Access Plan). Both accesses would accommodate ingress and egress into the proposed development, surface parking and garage parking accommodating 445 parking spaces. No public access will be provided from West San Jose Avenue.

- ✓ **PROJECT ADDRESSES** (SEE TABLE MA-I)
- ✓ **ASSESSOR'S PARCEL NUMBERS** (SEE TABLE MA-I AND FIGURES I-7A, I-7B &I-7C)
- ✓ **SIZE OF SITE SQUARE FOOTAGE** (SEE TABLE MA-I)
- ✓ **SIZE OF SITE ACREAGE** (SEE TABLE MA-I)
- ✓ **ZONING DESIGNATION** (SEE TABLE MA-I & FIGURE I-5)
- ✓ **GENERAL PLAN DESIGNATION** (SEE TABLE MA-I & FIGURE I-2)

TABLE MA-I

ADDRESS	APN	SIZE OF SITE SQ. FT.	SIZE OF SITE ACREAGE	ZONING DESIGNATION (EXISTING)	GENERAL PLAN DESIGNATION (EXISTING)
525 W. San Jose Avenue	417-240-37	61,855	1.42	R1-AH	Residential Medium Low Density
569 W. San Jose Avenue	417-231-16	102,366	2.35	R-2	Residential Medium High Density
NO ADDRESS	417-231-17	8,276	0.19	R1-AH	Residential Medium Low Density

FIGURES

- FIGURE I-1: EXISTING SITE PLAN
- FIGURE I-2: EXISTING GENERAL PLAN
- FIGURE I-3: PROPOSED GENERAL PLAN
- FIGURE I-4: COMMUNITY BOUNDARY MAP
- FIGURE I-5: EXISTING ZONE MAP
- FIGURE I-6: PROPOSED ZONING MAP
- FIGURE I-7A: APN MAP
- FIGURE I-7B: APN MAP
- FIGURE II-1: SITE PLAN EXHIBIT
- FIGURE II-2: ELEVATIONS EXHIBIT
- FIGURE II-3: ACCESS PLAN

THE OPERATIONAL STATEMENT
FOR
CONDITIONAL USE PERMIT

- ✓ **PROJECT SITE ADDRESSES** (SEE TABLE SPR-I)
- ✓ **ASSESSOR'S PARCEL NUMBERS (APN)** (SEE TABLE SPR -I)
- ✓ **EXISTING GENERAL PLAN LAND USE DESIGNATION** (SEE FIGURE I-2)
- ✓ **EXISTING ZONING** (SEE FIGURE I-5)

TABLE CUP -I

PROJECT SITE ADDRESS	APN	EXISTING GENERAL PLAN LAND USE DESIGNATION	EXISTING ZONING
525 W. San Jose Avenue	417-240-37	Residential Medium Low Density	R1-AH
569 W. San Jose Avenue	417-231-16	Residential Medium High Density	R-2
NO ADDRESS	417-231-17	Residential Medium Low Density	R1-AH

✓ **IDENTIFY THE COMMUNITY PLAN**

The project site is located in the Bullard Community Plan (see Figure I-4), and consists of three parcels of land, which two have West San Jose Avenue addresses and one piece is a vacant strip of land and does not have an address. Their current and proposed zoning and use designations are indicated on the above Table SPR-1. The Bullard Community Plan will also be required to be amended for the project scope.

✓ **IDENTIFY THE SPECIFIC PLAN**

The project is not located in a City of Fresno Specific Plan.

✓ **IDENTIFY THE REDEVELOPMENT PLAN (IF APPLICABLE)**

The project is not located in a City of Fresno Redevelopment Plan.

✓ **DESCRIPTION OF EFFORTS THAT HAVE BEEN MADE TO DISCUSS THE PROPOSAL WITH NEIGHBORS**

Gunner Andros Investments, LLC has been proactive in its outreach to the neighborhood. Development proposals for the site were the focus of a meeting hosted by Gunner Andros for neighborhood residents. A further meeting to discuss development proposals with neighborhood representatives was also held in coordination with elected representatives. Neighbors have also received several items of written correspondence regarding project plan updates to keep them informed. Gunner Andros has strived to maintain an open door policy and encouraged neighbors and those interested in the project to contact them via phone, email or personal meeting(s).

✓ **DESCRIPTION OF HOW THE PROPOSAL IS COMPLEMENTARY TO THE SURROUNDING NEIGHBORHOOD**

The site will be developed (through site access and project orientation) in a fashion that will principally associate this site with immediately adjacent Fig Garden Financial Center. The construction materials and architectural style will be substantially consistent with the existing three office buildings at this location. It will thereby be complementary to its surrounding neighborhood.

In addition, through prior consultations with neighbors in the adjacent residential neighborhoods, we learned of their concerns about noise and other impacts associated with certain approaches to intensified residential uses in these environs. We also learned about their concerns for appropriate set backs for any multi-storied development. The proposed office structure will not include a residential component and will be constructed to the same height and with comparable setbacks as the immediately adjacent office development.

✓ **DESCRIPTION OF HOW THE PROPOSAL HELPS IMPLEMENT THE 2025 FRESNO GENERAL PLAN.**

The project will replace an aged former apartment two-story apartment complex structure with a Class A four story office structure. The office structure will be developed in a style consistent with the three existing adjacent office facilities which comprise the Fig Garden Financial Center. This in-fill development is consistent with some key goals of the 2025 General Plan.

The proposed multi-storied office complex will be developed with a style and massing consistent with adjacent commercial buildings. This style of development will also assist in the General Plan's goal of developing urban design strategies to improve Fresno's visual image and enhance its form and function (2025 General Plan, General Plan Goals, item 12, page 3). The project's design and strategic location also facilitate the General Plan's goal of providing activity centers within plan areas. (2025 General Plan, General Plan goals, item 9, page 3).

More specifically, the General Plan's Urban Form Element includes a statement of strategies for Commercial Land Use (item 7 at page 23). That statement confirms that a quality of life in the city requires commercial developments for employment opportunities. Those commercial uses should be strategically located to ensure accessibility and convenience to the population they service, while minimizing travel requirements, infrastructure demands and adverse impacts, particularly adverse effects on nearby residential areas. (See generally the Objectives and Policies of the City of Fresno 2025 General Plan at C-12). The proposed project is a continuation of the development that comprises the existing Fig Garden Financial Center. That strong market support for the existing Financial Center development is a reflection of its qualities of appropriate access and convenience. The character and amenities of the Fig Garden Financial Center have also proven its capacity to avoid adverse effects on nearby residential neighborhoods. Development of this character in these environs has proven itself to serve as an effective transition between more intensive commercial uses and sensitive residential areas (See General Plan Policy C-12-c, at page 41).

The Urban Form Element of the General Plan also discusses land use activity centers, which have been conceptually located within the environs of this center. Such centers are intended to provide commercial uses and employment centers. The General Plan has a stated intent to support the development of those centers, and to reinforce the goals though mixed-use and intensification (General Plan, Urban Form Element, item 3, page 22). The Activity Center objective and policies are further detailed at page 35 (Objective C-4). Several policies detailed for that objective include the goal of pursuing intensive concentrations of urban uses in strategically located areas to include commercial, employment and higher density residential with pedestrian activities and linkages that provide multi-story facilities with underground parking.

This project provides the infill and intensified employment center development that is one of the prongs of the Activity Center goal. It provides a multi-storied facility with underground parking that intensifies existing urban uses. Its strategic location for these development goals is demonstrated by the fact that the site has obtained conceptual designation as a favored Activity Center location. (See materials prepared for the "Activity Center Presentation to Joint Planning Commission on January 28, 2009" and Fresno Activity Center and Corridor Intensification Study Workshop Materials conducted December 9, 2008, available at http://www.fresno.gov/Government/DepartmentDirectory/PlanningandDevelopment/Planning/Ongoing+Planning+Studies.htm)

Beyond the Activity Center Lands, the General Plan has a broader purpose of facilitating In-Fill Development. Objective C-16 (General Plan page 25) details the goal of establishing more efficient, economical and livable urban forms though the concentration of developments within older, built-up core communities including activity centers. The location of this project, within an older, built-up core community is an effective in-fill and private redevelopment of lands.

✓ **DESCRIBE IN DETAIL, THE PROPOSED USE(S)**

The proposed multi-story office development will be utilized for a variety of commercial office activities.

✓ **DETAIL THE HOURS OF OPERATION AND THE NUMBER OF EMPLOYEES**

The proposed office development will support a total of 400 employees.

The activities for the proposed office building will be conducted on normal business.

✓ **DETAIL THE EXPECTED DAILY VISITORS/USERS/GUESTS**

The employees of the proposed office development are estimated at 400 and are anticipated to use the office on normal business hours basis, 5 days a week; the tenants will also have occasional visitors and/or guests.

✓ **DESCRIBE ANY REASONABLE FORESEEABLE EFFECTS FROM CONSTRUCTION AND/OR THE SITE THAT MAY IMPACT THE NEIGHBORS.**

The construction of the proposed office building will involve demolition of the existing apartment complex. The underground parking structure will require excavation and removal of approximately 35,000 cubic yards of dirt. The construction of the parking structure will be a reinforced concrete structure with the remaining of the above ground structure to be wood framed. Construction impact to the neighbors will be noise.

The project will utilize Best Management Practices (BMPs) for compliance with all State and Local Codes for storm water quality during construction. A Storm Water Pollution Prevention Plan will be implemented to minimize or prevent sediment or erosion to neighboring sites.

The addition of the new office building into the Financial Center (replacing the existing apartment complex) will increase the density of the existing commercial office uses which would increase the potential for a source of noise from the project area.

✓ **DETAIL ALL SECURITY MEASURES**

There will be security lighting around the proposed project.

AMENDED
APPLICATION FOR VESTING TENTATIVE PARCEL MAP P-2008-07

City of FRESNO

Planning & Development Department
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604
Ph: (559) 621-8277

APPLICATION FOR TENTATIVE PARCEL MAP

The following information and attachments are required to be attached to this application.

Existing parcels: Submit copies of recorded grant deeds and/or title report.

Located on the: South side of West San Jose btw. North Colonial & North Maroa Ave.

Assessor's Parcel Numbers: see attached

Zone district(s) see attached

Date property was purchased: see attached

Deed Recorded: Book- see attached Page- see attached Document No.- see attached

Square footage of **existing** parcel(s): see attached

Acreage of **existing** parcel(s) see attached

Number of **proposed** parcels: 2 If over 4 parcels proposed, cite justification by Map Act Section No.

Square footage of **proposed** parcel(s): 172,497 sq. ft.

Acreage of **proposed** parcel(s): 3.96 acres

Existing use of parcel(s) to be divided: see attached

Proposed use of the new parcels/related applications: see attached for use (see Table VTM-1 & Figure 1-3)

Source of water: City of Fresno Method of Sewage disposal: City of Fresno

Signature(s) of Record Owner(s):*

Name (print): Gunner Andros Investments, LLC Address: 555 W. Shaw Ave., #B4, Fresno, 93704 Phone: (559) 227-1647

Signature of agent (if applicable):

Name (print): Address: Phone:

Signature of person preparing map:

Name (print): Scott A. Mommer Address: 4694 W. Jacquelyn Ave., Fresno, 93722 Phone: (559) 276-2790 x-12
Lars Andersen & Associates, Inc.

FOR OFFICIAL USE ONLY

Date Received Received By:

TENTATIVE PARCEL MAP NO.

Fees Paid: $

HTE No.:

Planner:

NOTE: Approval of the Tentative Parcel Map is based on submitted data. Conditions affecting the property which do not appear on this application or the map may void approval.

*** All owner(s) must either sign the application or must provide a letter of authorization.**

PROJECT APPLICATION FOR
VESTING TENTATIVE PARCEL MAP P-2008-07

TABLE VTM-I

ADDRESS	APN	CURRENT ZONING	PROPOSED ZONING	CURRENT GENERAL PLAN	PROPOSED GENERAL PLAN	ACRES	SQ/ FT	PROPERTY PURCHASED	DEED RECORDED BOOK PAGE DOCUMENT NO
525 W. San Jose Avenue	417-240-37	R1-AH	C-P /CZ	Residential Medium Low Density	Commercial Office	1.42	61,855	12/29/2005	12/29/2005 2005-0303673
569 W. San Jose Avenue	417-231-16	R-2	C-P /CZ	Residential Medium High Density	Commercial Office	2.35	102,366	12/30/2005	12/30/2005 2005-0305627
No Address	417-231-17	R1-AH	C-P /CZ	Residential Medium Low Density	Commercial Office	0.19	8,276	12/29/2005	12/29/2005 2005-0303673
					Acreage to be Rezoned and Use Amended	3.96	172,497		

FIGURES

- FIGURE I-2: EXISTING GENERAL PLAN
- FIGURE I-3: PROPOSED GENERAL PLAN
- FIGURE I-4: COMMUNITY BOUNDARY MAP
- FIGURE I-5: EXISTING ZONE MAP
- FIGURE I-6: PROPOSED ZONING MAP

THE OPERATIONAL STATEMENT
FOR
VESTING TENTATIVE PARCEL MAP P-2008-07

- ✓ **PROJECT SITE ADDRESSES** (SEE TABLE VTPM-I)
- ✓ **ASSESSOR'S PARCEL NUMBERS (APN)** (SEE TABLE VTPM -I)
- ✓ **EXISTING GENERAL PLAN LAND USE DESIGNATION** (SEE FIGURE I-2)
- ✓ **EXISTING ZONING** (SEE FIGURE I-5)

TABLE VTPM -I

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In addition, through prior consultations with neighbors in the adjacent residential neighborhoods, we learned of their concerns about noise and other impacts associated with certain approaches to intensified residential uses in these environs. We also learned about their concerns for appropriate set backs for any multi-storied development. The proposed office structure will not include a residential component and will be constructed to the same height and with comparable setbacks as the immediately adjacent office development.

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The project will replace an aged former apartment two-story apartment complex structure with a Class A four story office structure. The office structure will be developed in a style consistent with the three existing adjacent office facilities which comprise the Fig Garden Financial Center. This in-fill development is consistent with some key goals of the 2025 General Plan.

The proposed multi-storied office complex will be developed with a style and massing consistent with adjacent commercial buildings. This style of development will also assist in the General Plan's goal of developing urban design strategies to improve Fresno's visual image and enhance its form and function (2025 General Plan, General Plan Goals, item 12, page 3). The project's design and strategic location also facilitate the General Plan's goal of providing activity centers within plan areas. (2025 General Plan, General Plan goals, item 9, page 3).

More specifically, the General Plan's Urban Form Element includes a statement of strategies for Commercial Land Use (item 7 at page 23). That statement confirms that a quality of life in the city requires commercial developments for employment opportunities. Those commercial uses should be strategically located to ensure accessibility and convenience to the population they service, while minimizing travel requirements, infrastructure demands and adverse impacts, particularly adverse effects on nearby residential areas. (See generally the Objectives and Policies of the City of Fresno 2025 General Plan at C-12). The proposed project is a continuation of the development that comprises the existing Fig Garden Financial Center. That strong market support for the existing Financial Center development is a reflection of its qualities of appropriate access and convenience. The character and amenities of the Fig Garden Financial Center have also proven its capacity to avoid adverse effects on nearby residential neighborhoods. Development of this character in these environs has proven itself to serve as an effective transition between more intensive commercial uses and sensitive residential areas (See General Plan Policy C-12-c, at page 41).

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✓ **DETAIL THE HOURS OF OPERATION AND THE NUMBER OF EMPLOYEES**

The proposed office development will support a total of 400 employees.

The activities for the proposed office building will be conducted on normal business.

✓ **DETAIL THE EXPECTED DAILY VISITORS/USERS/GUESTS**

The employees of the proposed office development are estimated at 400 and are anticipated to use the office on normal business hours basis, 5 days a week; the tenants will also have occasional visitors and/or guests.

✓ **DESCRIBE ANY REASONABLE FORESEEABLE EFFECTS FROM CONSTRUCTION AND/OR THE SITE THAT MAY IMPACT THE NEIGHBORS.**

The construction of the proposed office building will involve demolition of the existing apartment complex. The underground parking structure will require excavation and removal of approximately 35,000 cubic yards of dirt. The construction of the parking structure will be a reinforced concrete structure with the remaining of the above ground structure to be wood framed. Construction impact to the neighbors will be noise.

The project will utilize Best Management Practices (BMPs) for compliance with all State and Local Codes for storm water quality during construction. A Storm Water Pollution Prevention Plan will be implemented to minimize or prevent sediment or erosion to neighboring sites.

The addition of the new office building into the Financial Center (replacing the existing apartment complex) will increase the density of the existing commercial office uses which would increase the potential for a source of noise from the project area.

✓ **DETAIL ALL SECURITY MEASURES**

There will be security lighting around the proposed project.

City of FRESNO

Planning & Development Department
Development Partnership Center (DPC)
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

Environmental Assessment Application

1. APPLICANT'S NAME: Gunner Andros Investmnts
ADDRESS: 555 W. Shaw Ave., Ste B4
CITY & ZIP: Fresno, Ca. 93704
TELEPHONE: (559) 227-1674
EMAIL: gafresno@gunnerandandr
SIGNATURE:

2. CONSULTANT'S NAME: Jeffrey Reid - MBSW&C
ADDRESS: 5 river Park Place East
CITY & ZIP Fresno, Ca. 93720
TELEPHONE: (559) 433-2310
EMAIL: jeff.reid@mccormickbarsto
SIGNATURE:

Applicant's Consultant (if any) will only be sent a copy of the completed environmental findings. If box is checked, the applicant will also be sent a copy ☑

3. DESCRIPTION OF PROPOSED PROJECT:

3a. Narrative Description – Describe outstanding characteristics, including architectural characteristics, type of construction, number of stories, activities resulting from the proposed project and other major features:

(See Attached)

3b. Area of Parcel: (See Attached) Acres or Square Feet (See Attached)

3c. Proposed Project is located on the: South (side of) West San Jose Avenue

between North Colonial Avenue and North Maroa Avenue

Street Address: 5204 N. Palm Avenue Fresno, Ca. 93704

3d. Existing Zoning: (See Attached) 3e. Assessor's Parcel Number: (See Attached)

3f. Related entitlement (indicate by ☑)

- ☑ Rezoning: Proposed Zone(s) (See Attached)
- ☐ Tentative Tract Map; if known, TT Map No.
- ☐ Site Plan Review
- ☑ Conditional Use Permit
- ☑ Parcel Map Vesting Tentative Parcel Map 2008-07
- ☑ Other, Identify: General Plan Amendment

4. IF RESIDENTIAL USE is proposed, number of dwelling units: N/A

5. IF NON-RESIDENTIAL USE is proposed, identity: Office

5a. Non-residential Floor area: (See Attached)

5b. Estimated total number of employees: 400

5c. Total Number of off-street parking spaces provided: 417

FOR STAFF USE ONLY

PLANNING & DEVELOPMENT DEPARTMENT – CITY OF FRESNO

Application No.
Date:
P & Z No.
Received By:

6. If this project involves a Site Plan Review and/or rezoning for an industrial use, describe in detail the use intended (such as sheet metal fabrication, auto body painting, warehouse, meat packing, frozen food processing, truck trailer assembly, etc.):

No Industrial Use proposed

7. Identify probable sources of noise generated by the proposed project that affect the surrounding area. If noise is considered moderate or severe, describe measures to be taken to reduce the effect.

The addition of the new office building (replacing the existing Apartment Complex) will increase the density of the existing office uses, which would be the sole potential source of noise on an ongoing basis. However, during development of the site, construction noise will also be generated

8. Describe known sources of noise in the vicinity that may impinge upon the proposed project site:

None

9. Describe other characteristics of the proposed project that will cause smoke, odors, or gases:

None

10. Describe existing structures on the site and other site characteristics:

See Attached

11. Describe the existing use of the site and other site characteristics:

See Attached Project Description

12. Adjoining Land Uses: (Example: North – new single story apartments)

North	Land uses to the north of the Site are Planned Medium Residential
South	Land uses to the south of the Site are Planned Medium/Low Residential (Figure I-2)
East	Land uses to the east of the Site are Planned Medium/Low Residential (Figure I-2)
West	Land uses to the west of the Site are Planned Commercial (Figure I-2)

13. Is the proposed project site within 200 yards of an existing or proposed freeway? ☐ Yes ☑ No;
Within 200 yards of a railroad? ☐ Yes ☑ No

14. It is the applicant's opinion that significant adverse effects on the environment ☐ will ☑ will not result from the proposed project.

15. Other comments or information. Attach additional sheets if necessary.

SUPPORTING INFORMATION
FOR

ENVIRONMENTAL ASSESSMENT APPLICATION

✓ **PROJECT DESCRIPTION**

The owners of the Fig Garden Financial Center propose to expand the existing Fig Garden Financial Center (see Figure I-1 Existing Site Plan) and to incorporate into its environs a new mid-rise office building. This new structure will be developed on lands that lie immediately east of the existing Financial Center Development within the center (the "Site Addition"). The Site Addition comprising APNs 417-231-16, 417-231-17 and 417-240-37, (see FIGURE I-5 Existing Zoning Map) is planned medium high residential and medium low residential.

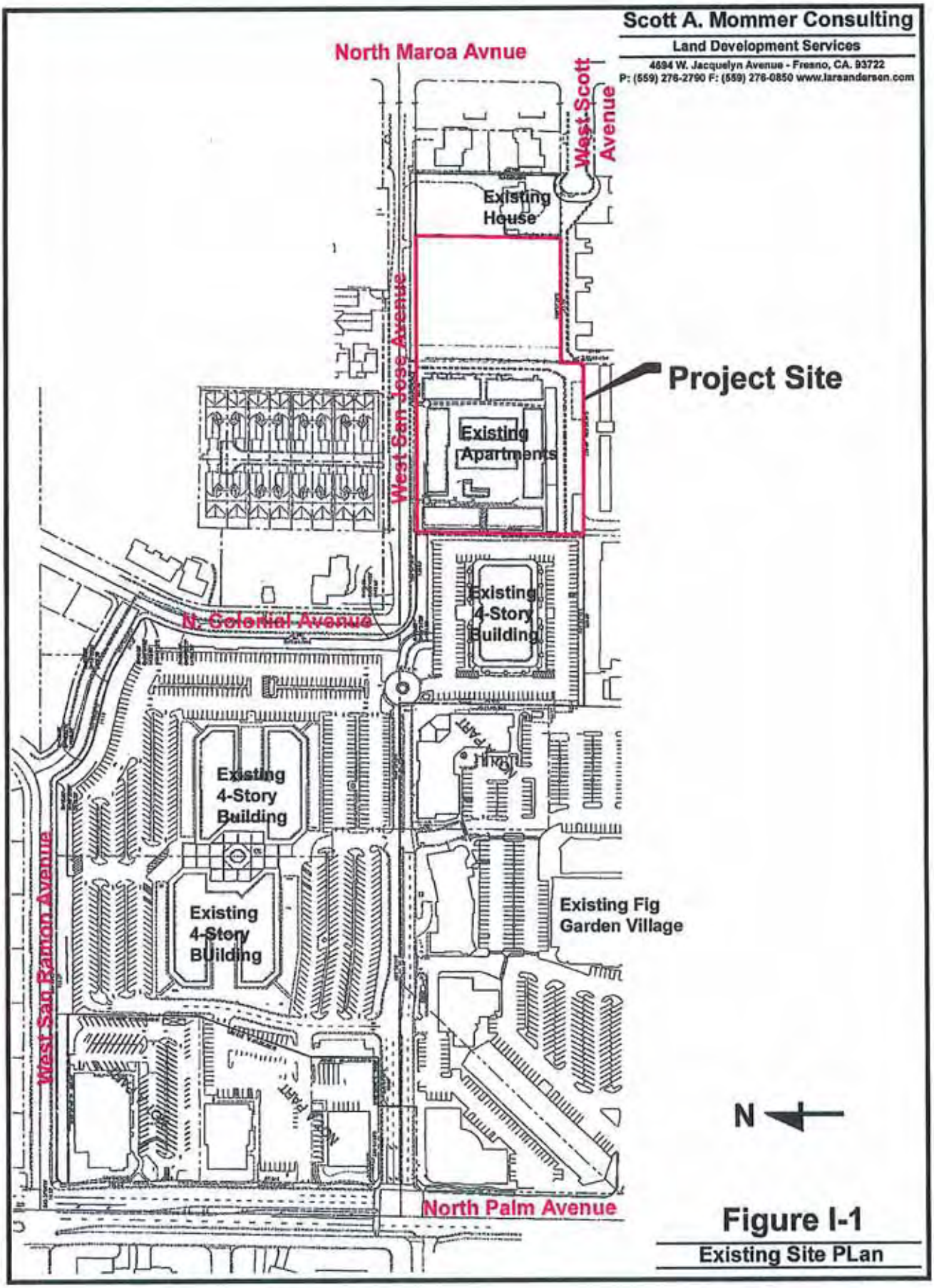
The proposed project will comprise a net usable area total of 104,593 square feet on four floors. Also, proposed is a parking structure under the office building consisting of 84,048 square feet. The proposed office building will be located on lands presently zoned R1-AH and R-2, for which a Plan Amendment and Rezone will be required.

TABLE VTM-I

ADDRESS	APN	CURRENT ZONING	PROPOSED ZONING	CURRENT GENERAL PLAN	PROPOSED GENERAL PLAN	ACRES	SQ / FT
525 W. San Jose Ave	417-240-37	R1-AH	C-P /CZ	Residential Medium Low Density	Commercial Office	1.42	61,855
569 W. San Jose Ave	417-231-16	R-2	C-P /CZ	Residential Medium High Density	Commercial Office	2.35	102,366
No Address	417-231-17	R1-AH	C-P /CZ	Residential Medium Low Density	Commercial Office	0.19	8,276
					TOTAL ACREAGE	**3.96**	**172,497**
					ACREAGE TO BE REZONED & USE AMENDED	**3.96**	**172,497**

FIGURES

- FIGURE I-1: EXISTING SITE PLAN
- FIGURE I-2: EXISTING GENERAL PLAN
- FIGURE I-5: EXISTING ZONE MAP


Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com
North Maroa Avnue
West Scott Avenue
Existing House
West San Jose Avenue
Project Site
Existing Apartments
N. Colonial Avenue
Existing 4-Story Building
Existing 4-Story Building
Existing 4-Story BUilding
West San Ramon Avenue
Existing Fig Garden Village
N
North Palm Avenue
Figure I-1
Existing Site PLan

Existing 2025 Fresno General Plan Land Use Map

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com

LEGEND

RESIDENTIAL
- Low Density (0.0-2.18 D.U./acre)
- Medium Low Density (2.19-4.98 D.U./acre)
- Medium Density (4.99-10.37 D.U./acre)
- Medium High Density (10.38-18.15 D.U./acre)
- High Density (18.16-43.56 D.U./acre)
- Residential (Central Area)

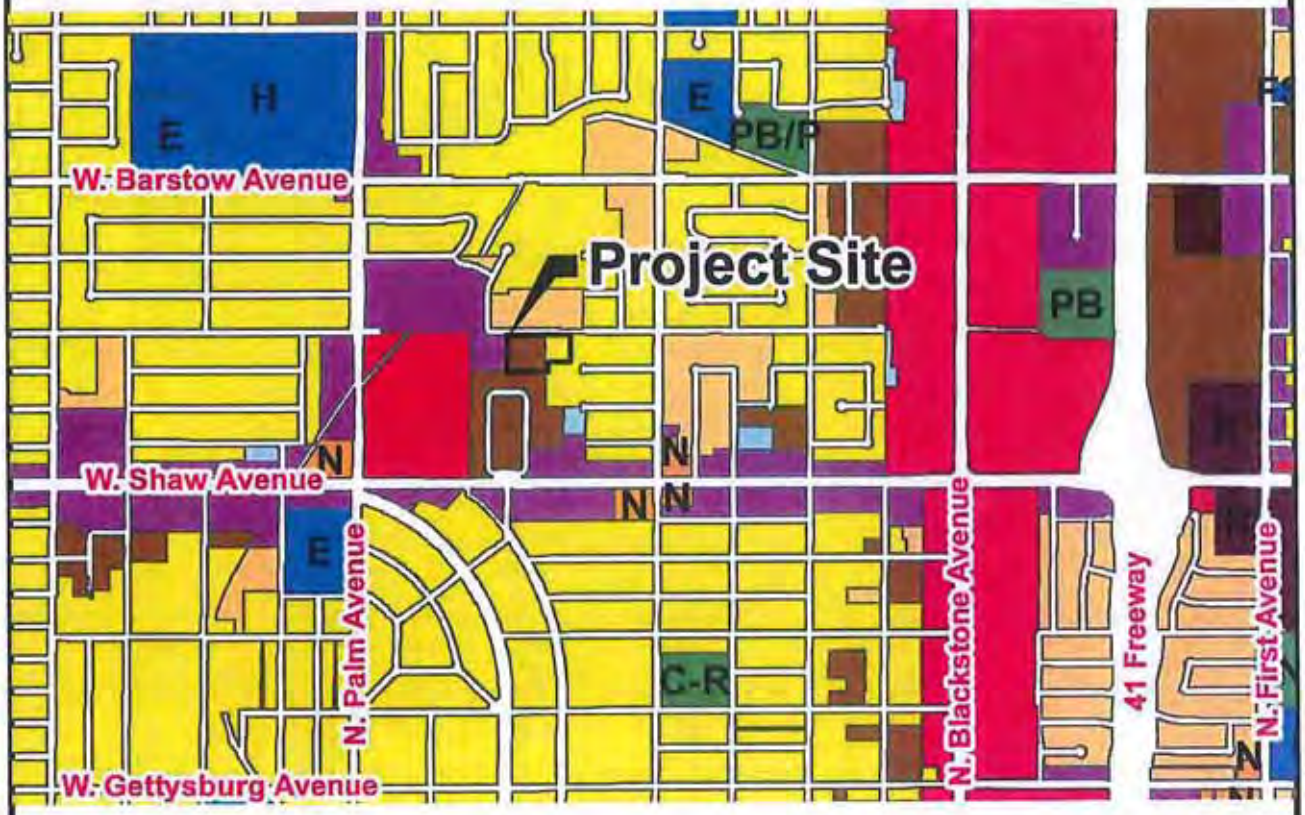
COMMERCIAL
- Parking
- Office
- Neighborhood
- Limited Neighborhood
- Community
- Commercial-Recreational
- General-heavy
- Special
- Business Park
- Regional
- Commercial (Central Area)
- Commercial mixed use level 1 (Central Area)
- Commercial mixed use level 2 (Central Area)

OPEN SPACE
- Clear Zone
- Commercial-Recreational
- Community Park
- Flood Control Project
- Golf Course
- Lake, Pond
- Multi-Use
- Neighborhood Park
- Outdoor Environmental education area
- Open Space
- Park
- Ponding Basin
- Ponding Basin (Park use)
- Regional Park

BOUNDARIES
- Existing Fresno Sphere of Influence
- Growth Areas

PUBLIC FACILITIES
- Public/Quasi-public Facility
- Special School
- Elementary School
- Elementary & Junior High Schools
- Elementary & Middle School
- Elementary, Middle & High School
- Junior High School
- Middle School
- High School
- College
- Cal State University, Fresno
- Airport
- Cemetery
- Church
- Convention Center (Central Area)
- Community Activity Center
- Convalescent Hospital
- Fairgrounds
- Fire Station
- Government Offices
- Hospital
- Medical Center
- Neighborhood Center
- PG & E Substation
- Police Dressing Station
- Post Office
- Water Recharge Basin
- Civic Center (Central Area)
- Municipal Service Center (Central Area)
- School (Central Area)
- County Court House (Central Area)
- Waste Water Treatment Facility

INDUSTRIAL
- Light
- Heavy
- Commercial/Industrial (Central Area)



Existing Land Uses on project site:
- Commercial Office
- Medium-High Density Residential
- Medium-Low Density Residential

Figure I-2
Existing General Plan Map

Proposed 2025 Fresno General Plan Land Use Map

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsanderson.com

LEGEND

RESIDENTIAL
- Low Density (0.0-2.18 D.U./acre)
- Medium Low Density (2.19-4.98 D.U./acre)
- Medium Density (4.99-10.37 D.U./acre)
- Medium High Density (10.38-18.15 D.U./acre)
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- Neighborhood Park
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- Elementary School
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- Elementary, Middle & High School
- Junior High School
- Middle School
- High School
- College
- Cal State University, Fresno
- Airport
- Cemetery
- Church
- Convention Center (Central Area)
- Community Activity Center
- Convalescent Hospital
- Fairgrounds
- Fire Station
- Government Offices
- Hospital
- Medical Center
- Neighborhood Center
- PG & E Substation
- Police Dressing Station
- Post Office
- Water Recharge Basin
- Civic Center (Central Area)
- Municipal Service Center (Central Area)
- School (Central Area)
- County Court House (Central Area)
- Waste Water Treatment Facility

INDUSTRIAL
- Light
- Heavy
- Commercial/Industrial (Central Area)

Proposed Land Uses on project site:

Commercial Office

Figure I-3

Proposed General Plan Map

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsenderson.com

City of Fresno
Community Plan Boundary Map

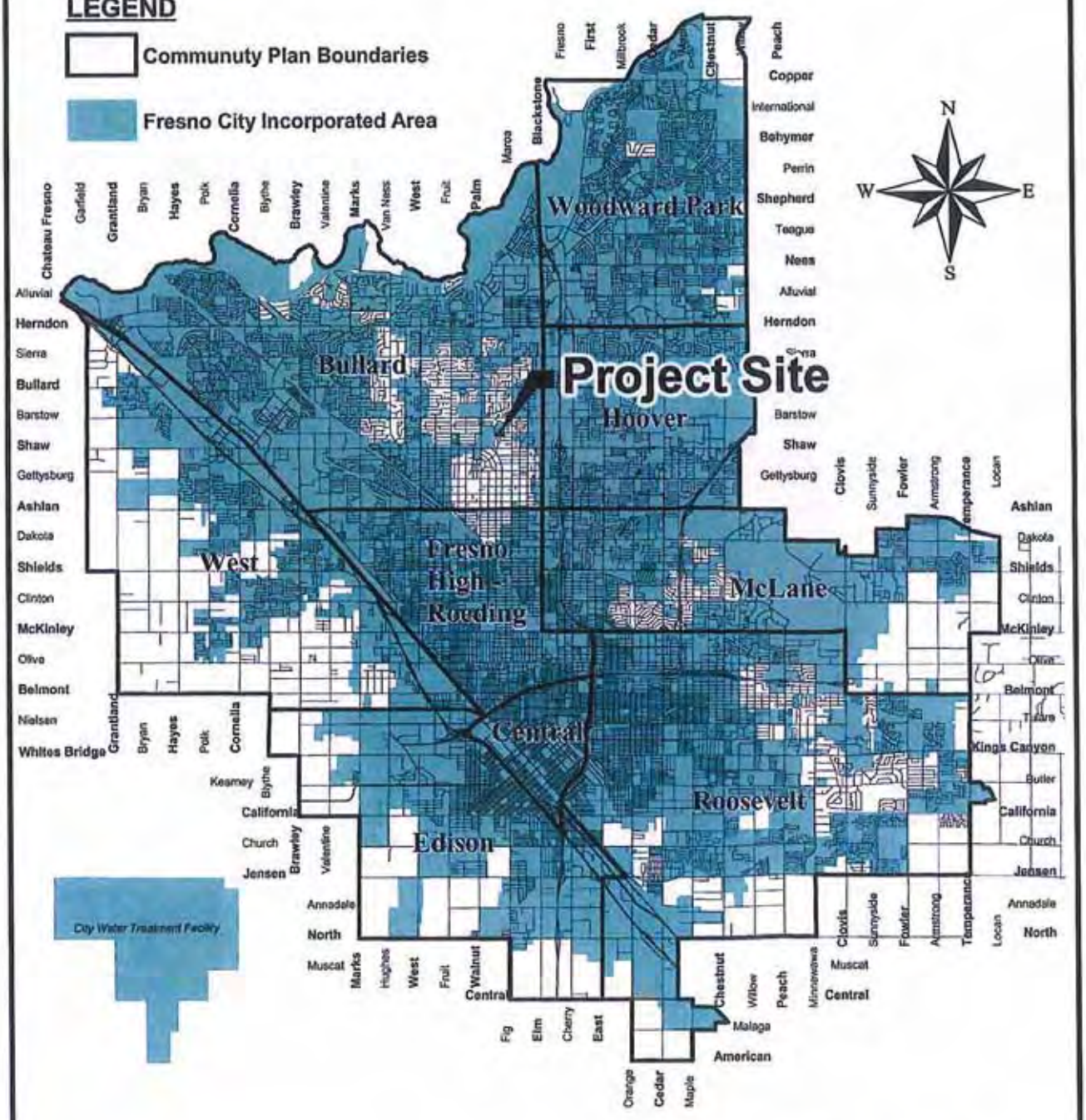


Figure I-4
Community Plan Boundary Map

Existing City of Fresno Zoning Map

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com

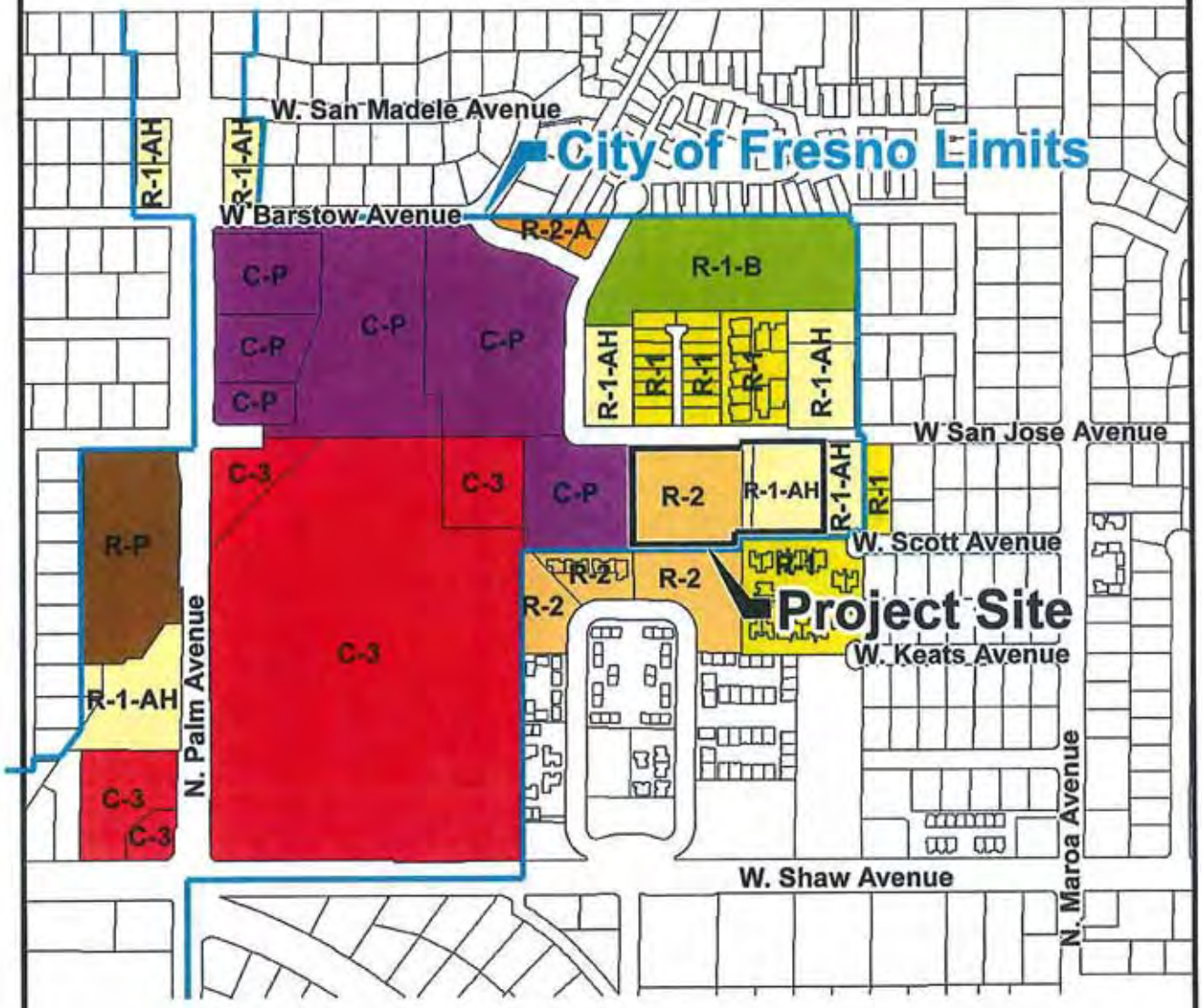


Figure I-5
Existing Zoning Map

Proposed City of Fresno Zoning Map

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsanderson.com

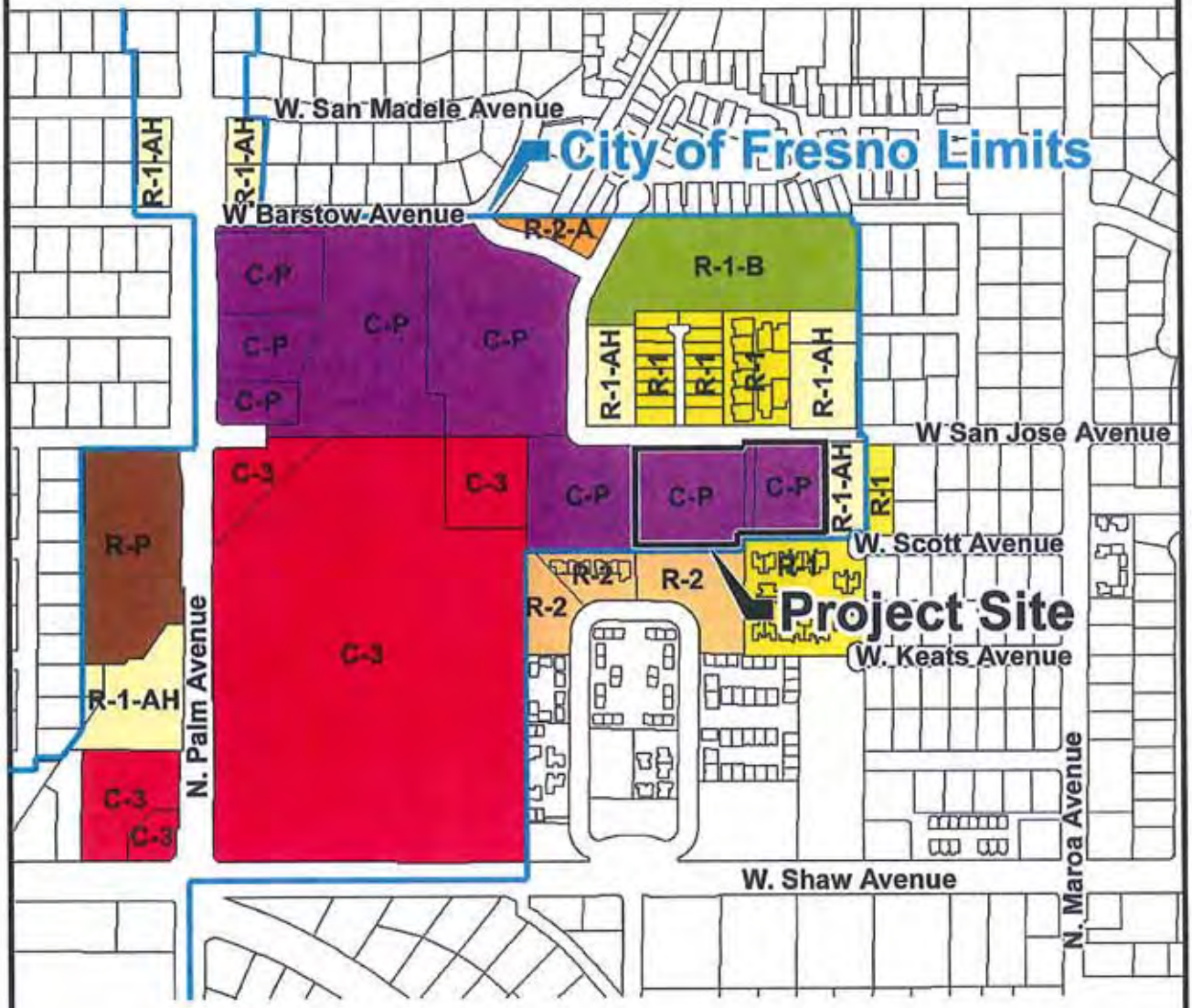
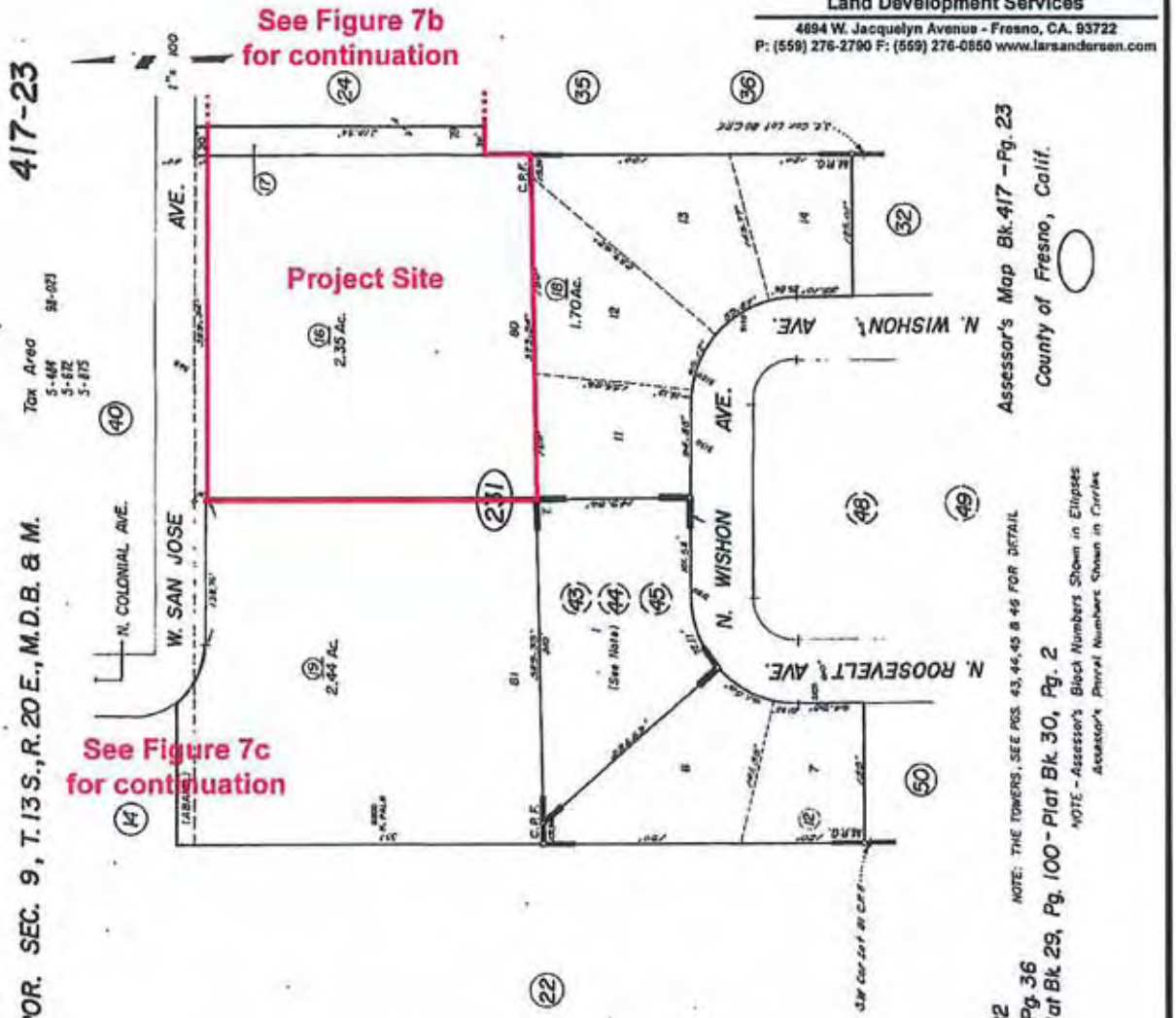


Figure I-6
Proposed Zoning Map

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com



— NOTE —
This map is for Assessment purposes only; it is not to be construed as portraying legal ownership or divisions of land for purposes of zoning or subdivision law.

Figure I-7a
APN Map: 417-23

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com

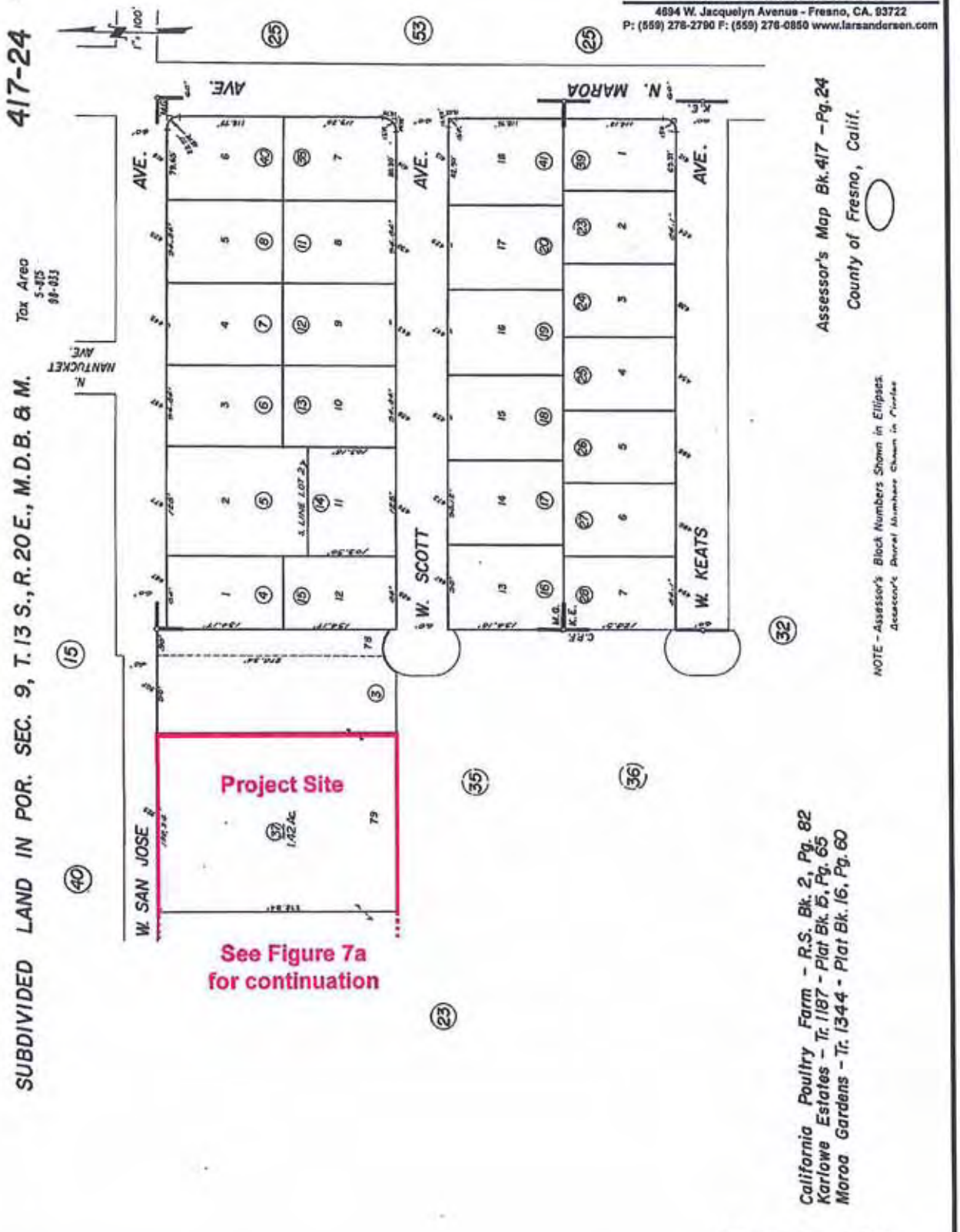


Figure I-7b
APN Map: 417-24

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com

Site Plan Exhibit

Figure II-1
Site Plan Exhibit

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com

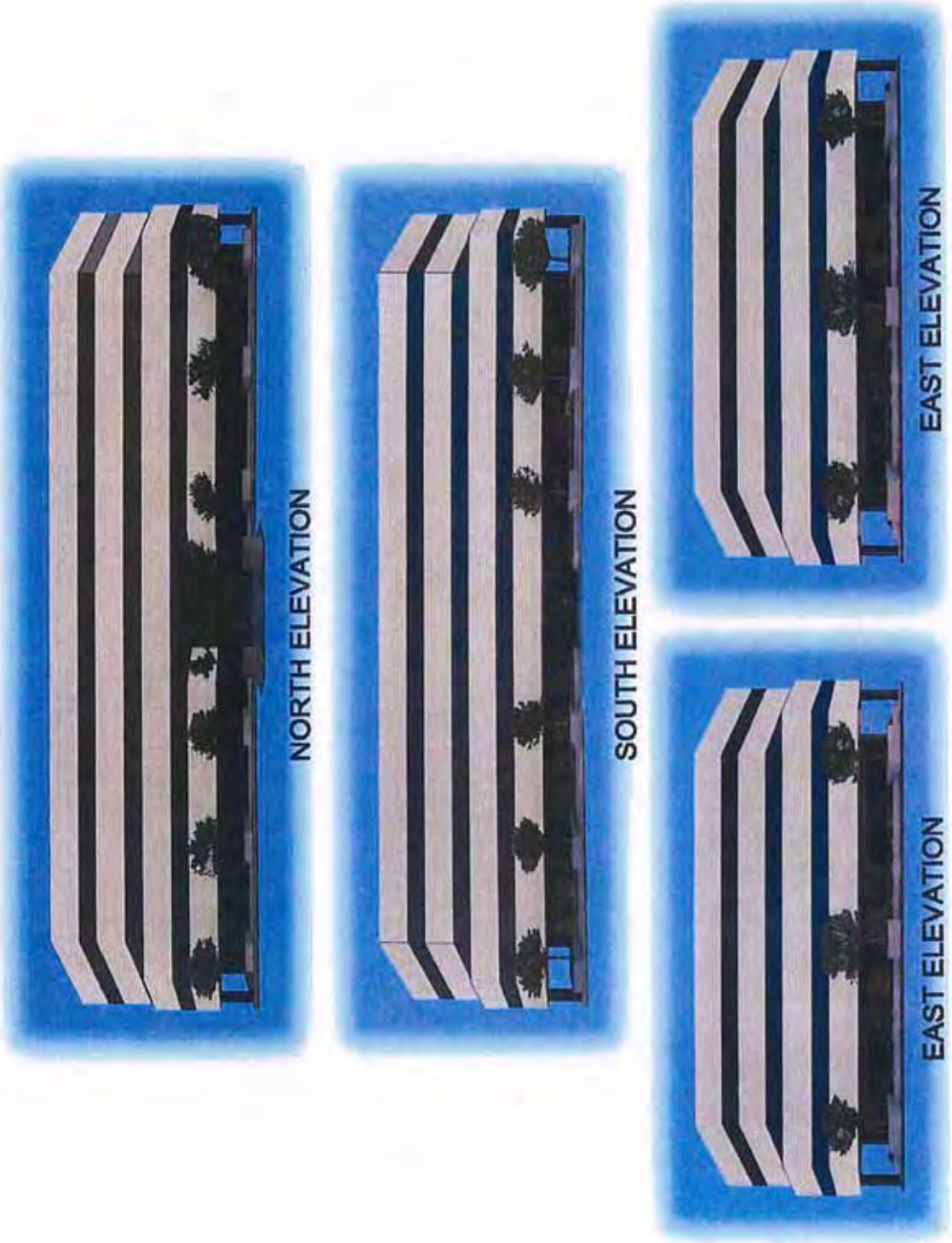


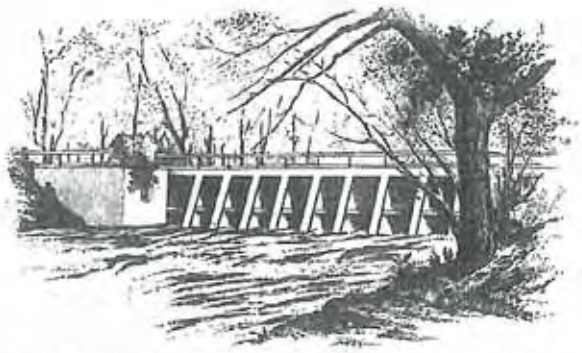
Figure II-2
Elevations Exhibit

Scott A. Mommer Consulting
Land Development Services
4694 W. Jacquelyn Avenue - Fresno, CA. 93722
P: (559) 276-2790 F: (559) 276-0850 www.larsandersen.com

N

Figure II-3
Access Exhibit

E-FILE



YOUR MOST VALUABLE RESOURCE - WATER

OFFICE OF
FRESNO IRRIGATION DISTRICT

TELEPHONE (559) 233-7161
FAX (559) 233-8227
2907 S. MAPLE AVENUE
FRESNO, CALIFORNIA 93725-2218

July 6, 2011

Mr. Mike Sanchez
City of Fresno
Development and Resources Management
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

RE: Notice of Preparation of a Draft Environmental Impact Report
Fig Garden Financial Center Phase IV Project

Dear Mr. Sanchez:

The Fresno Irrigation District (FID) has received and reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Fig Garden Financial Center Phase IV Project (Project). The site is located northwest of Shaw and Maroa avenues. The Project includes the development of a four story commercial office building with an underground parking structure and at grade parking.

FID's comments are as follows:

1. FID previously reviewed and commented on the subject site as Plan Amendment No. A-11-006, Rezone No. R-11-008, Vesting Tentative Parcel Map No. 2008-07, and Conditional Use Permit No. C-11-088 on July 6, 2011. Those comments still apply for the subject property and a copy is attached for your reference.

Thank you for the opportunity to review and comment on the subject DEIR. We appreciate your consideration of our comments and look forward to receiving responses to them. Should you have any questions, please feel free to contact James Shields at jshields@fresnoirrigation.com or (559) 233-7161 ext. 319.

Sincerely,

William R. Stretch

William R. Stretch, P.E.
Chief Engineer

Attachment

G:\Agencies\City\EIR\Fig Garden Financial Center Phase IV Project - NOP DEIR.doc

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF SCOPING MEETING

DATE June 30, 2011

To: Responsible Agencies, Agencies with Jurisdiction by Law, Trustee Agencies, Involved Federal Agencies and Agencies/People Requesting Notice

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) and Notice of Scoping Meeting for Fig Garden Financial Center Phase IV Project.

Project Title: **Fig Garden Financial Center Phase IV Project**

Project Applicant: Gunner & Andros Investments, LLC

Public Review Period: NOP response period is from June 30, 2011 to July 30, 2011

Lead Agency

City of Fresno
Development and Resources
Management Department
2600 Fresno Street, Room 3043
Fresno, California 93721
(559) 621-4040
Fax: (559) 498-1026
Contact: Mike Sanchez, Planning Manager
mike.sanchez@fresno.gov

Consulting Firm Preparing the Draft EIR

Denise Duffy & Associates, Inc.
947 Cass St. Suite 5
Monterey, CA. 93940

(831) 373-4341
(831) 373-1417 (fax)
Contact: Leianne Humble, Senior Planner
lhumble@ddaplanning.com

The project description, location, and the potential environmental effects are discussed below.

The City of Fresno (City) will be the lead agency preparing an Environmental Impact Report (EIR) for the Fig Garden Financial Center Phase IV Project. This EIR is being prepared without an initial study pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15060(d) on the basis that the City has determined that an EIR will clearly be required for the Project. CEQA, Guidelines Section 15082, states that once a decision is made to prepare an EIR, the lead agency must prepare a Notice of Preparation (NOP). The purpose of the NOP is to provide responsible agencies and interested persons with sufficient information describing the proposed project and its potential environmental effects to enable them to make a meaningful response as to the scope and content of the information to be included in the EIR.

This NOP requests comments from the public and public agencies on the scope of the EIR. Responses to the NOP will help the City determine the scope of the EIR and ensure an appropriate level of environmental review. Due to the time limits mandated by State law, your

response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice.

The City of Fresno will hold a scoping meeting at 6:00 P.M. on Thursday, July 7, 2011 in the Council Chambers of Fresno City Hall, 2600 Fresno Street, Fresno, California. All interested agencies, parties, and the general public are invited to attend. For additional information, please call Mike Sanchez, Planning Manager, at (559) 621-8040.

Please send your written responses to Mr. Mike Sanchez, Planning Manager, Fresno Planning & Development Department, at the above address. Please include in your response the name of a contact person in your agency/entity.

Date June 30, 2011 Signature _____
Mike Sanchez, Planning Manager

Project Location: The project is located in the City of Fresno in Fresno County (refer to Regional Map). The project site address is 525 West San Jose Avenue and 569 West San Jose Avenue. The project site is situated near the northeast corner of North Palm Avenue and West Shaw Avenue, and is bounded by North Palm Avenue to the west, West San Ramon Avenue, North Colonial Avenue and West San Jose Avenue to the north, the Fig Garden Village shopping center to the south, and single- and multi-family residential development to the south and east. The attached Vicinity Map shows the site location and existing structures on the property. The project is located on approximately 3.96 acres (comprised of APNs 417-240-37, 417-231-16 and 417-231-17).

Project Description: The proposed project includes the development of a four story commercial office building, comprising a total of net useable area 104,593 square feet, with an underground parking structure and at grade parking to provide parking for approximately 445 vehicles. The underground structure will be interconnected with an existing underground parking structure that serves an adjacent four story commercial office building. Development entitlements for this project include a general plan amendment, a rezone application, a conditional use permit, and a vesting tentative parcel map.

The office building structure would be designed to be consistent with the predominant character and scale of the architecture of the adjacent Financial Center. The proposed project would also incorporate landscaping and other site aesthetics. The project is proposed to be constructed and completed in a Single Phase.

Primary access to the site would be off of North Palm Avenue through the Fig Garden Financial Center's driveway, and from Shaw Avenue via private driveways. No public access will be provided from West San Jose Avenue, though emergency fire access and emergency pedestrian gate will be available. No parking will be permitted along West San Jose Avenue.

Project's Technical, Economic and Environmental Characteristics:

The project will be developed through private capital and financing. The project applicant has submitted formal entitlements that depict its environmental characteristics and are on file with Development and Resource management. Illustrations are also available for viewing at http://www.fresno.gov/Government/DepartmentDirectory/PlanningandDevelopment/Planning/MajorProjectsunderReview.htm

Currently, there are existing trees on the project site that are part of the existing apartment complex. As currently proposed, all of the onsite trees will be removed on the proposed project site. There are no oak or other indigenous species found on the project site. The proposed project would include a Landscape Plan which would provide for trees, shrubs and other ornamental plants.

In order to construct the underground parking structure and proposed site, the grading for the proposed project would require approximately 35,000 cubic yards (cy) of dirt to be excavated and removed from the site. The project will comply with City of Fresno grading and drainage requirements and detailed Grading and Drainage Plans will be provided for final permits.

Utilities required for the proposed project (e.g., electricity, natural gas, sewer and water) already exists to the site. The project will comply with City of Fresno utility requirements and Utility Plans will be provided for final permits.

Project Objectives: Fig Garden Financial Center Phase IV Project is proposed to meet the applicant's following objectives:

- The underlying purpose of the project is to replace an aged former apartment two-story apartment complex structure with a Class A four story office structure developed in a style consistent with the three existing adjacent office facilities which comprise the Fig Garden Financial Center, at a scale that is economic to develop, lease and manage.

- Develop the project site in a fashion that takes advantage of the site's strategic location as a primary location for activity centers within plan areas.

- Assist in the General Plan's goal of developing urban design strategies to improve Fresno's visual image and enhance its form and function.

- Provide an in-fill commercial office use that is strategically located to ensure accessibility and convenience to the population it serves, while minimizing travel requirements, infrastructure demands and adverse impacts.

- Develop the subject site in a manner that provides an effective transition between more intensive commercial uses and sensitive residential areas.

Intended Uses of EIR: The EIR will be used in support of the following entitlement considerations by the City of Fresno as the Lead Agency.

- Certification of the EIR.
- A General Plan Amendment, revising the project site planned land use designation from Residential Medium Low Density and Residential Medium High Density to Commercial Office.
- A Rezoning Amendment, revising the project site zoning from R1-AH and R-2 to CP.
- A Vesting Tentative Parcel Map, to combine three existing separate parcels into a single parcel (and adjusting the parcel line between the project site and an adjacent parcel).
- A Conditional Use Permit, to authorize a four-story, 60-foot building height, office development totaling 104,593 square feet with an underground parking structure.
- A Site Plan for the project.
- A minor Site Plan amendment for the existing approved site plan for an adjacent property (5200 North Palm) to conform that parcel's site plan to the Tentative Parcel Map and the improvements proposed for the project's Site Plan.
- Grading and Building Permit Approvals

The following agencies are also presently expected to use the EIR for their decision making for certain entitlements, including those listed below.

- The Fresno Metropolitan Flood Control Districts – co-approval with the City of Fresno of final drainage plans.
- The San Joaquin Valley Air Pollution Control District - permits for demolition and site clearance, and for indirect source review under its Rule 9510.
- California Regional Water Quality Control Board Central Valley Region National - Pollutant Discharge Elimination Permit, Storm Water Pollution Prevention Plan

Issues To Be Addressed In The EIR: The EIR is being prepared to assess and disclose to decision makers and the public potential environmental impacts that may arise in connection with implementation of the proposed project. The Lead Agency has determined that an EIR is clearly required for the project and has therefore elected to skip further initial review of the project and begin work directly on the EIR process pursuant to CEQA Guidelines Section 15060(d). The EIR will address issues related to aesthetics, air quality, agricultural and forest

resources, biology, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation and circulation, public utilities and services systems, and greenhouse gas and global climate change. In addition, the EIR will include a discussion of the cumulative impacts of the project when considered together with other closely related future projects.

ATTACHED FIGURES

Regional Map
Vicinity Map

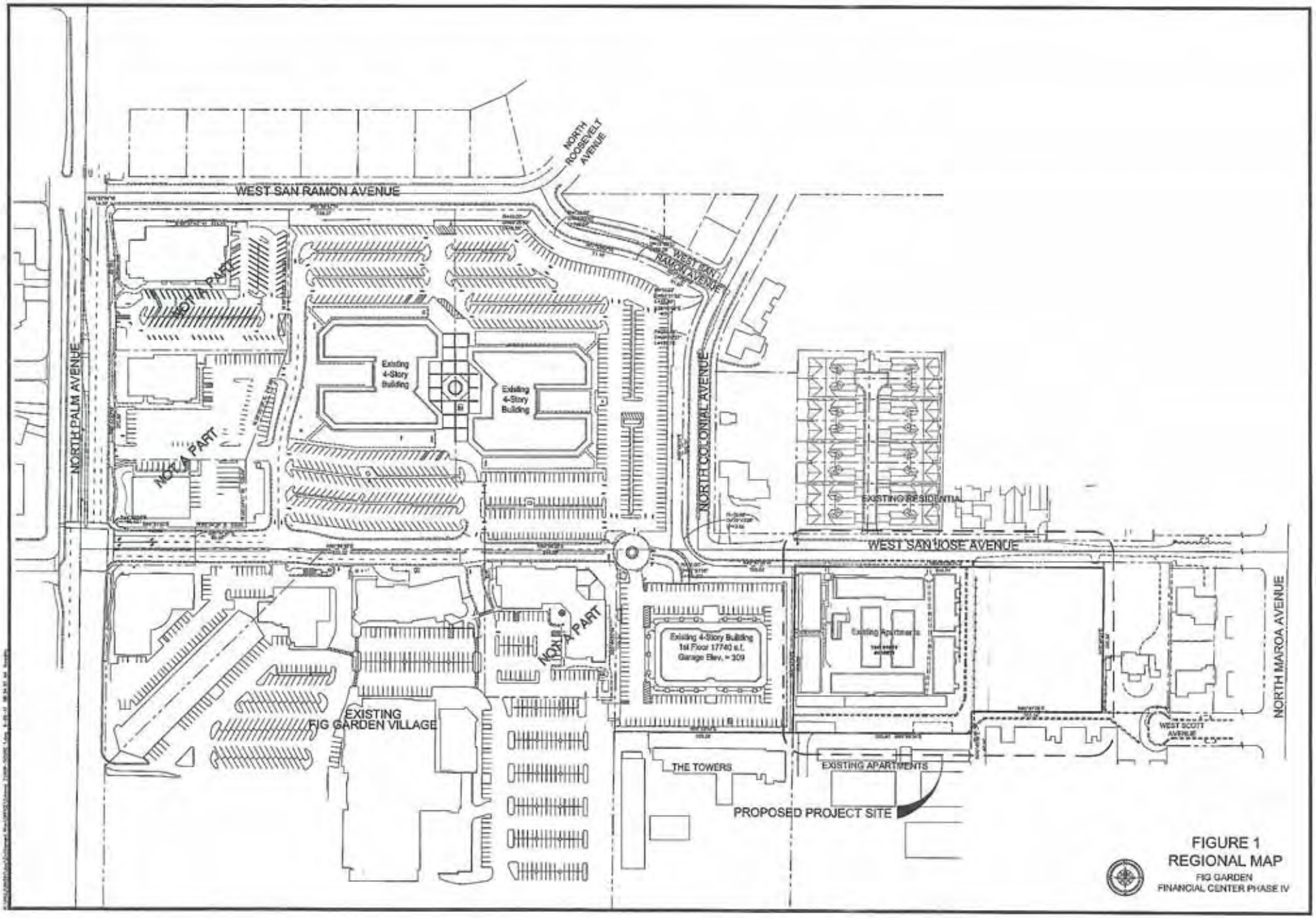


FIGURE 1
REGIONAL MAP
FIG GARDEN
FINANCIAL CENTER PHASE IV

FIGURE 2
VICINITY MAP
FIG GARDEN
FINANCIAL CENTER PHASE IV

550.10 "DD"

CITY OF FRESNO - DEVELOPMENT AND RESOURCE MANAGEMENT DEPARTMENT
REQUEST FOR COMMENTS, CONDITIONS, ENVIRONMENTAL ASSESSMENT, AND ENTITLEMENT APPLICATION REVIEW OF PLAN AMENDMENT APPLICATION NO. A-11-006, REZONE APPLICATION NO. R-11-008, VESTING TENTATIVE PARCEL MAP NO. 2008-07, AND CONDITIONAL USE PERMIT APPLICATION NO. C-11-088

FMFCD

Return Completed Form to:
Mike Sanchez
Email: Routing@fresno.gov
Telephone: 559-621-8277
Development and Resource Management
2600 Fresno Street, Third Floor
Fresno CA 93721-3604

PROJECT DESCRIPTION AND LOCATION:

Plan Amendment Application No. A-11-006, Rezone Application No. R-11-008, Vesting Tentative Parcel Map 2008-07, and Conditional Use Permit Application No. C-11-088 were filed by Scott Mommer, on behalf of Gunner Andros Investments, LLC, and pertain to 3.96± acres of property located on the south side of West San Jose Avenue between North Colonial and North Maroa Avenues. The Plan Amendment proposes to amend the 2025 Fresno General Plan and Bullard Community Plan from the medium-high and medium-low density residential planned land use designations to the commercial office land use designation. The Rezone Application proposes to reclassify the property from the R-2 *(Low Density Multiple Family Residential)* and R-1-AH *(Single Family Residential, horses permitted)* zone districts to the C-P/cz *(Administrative and Professional Office/conditions of zoning)* zone district. Vesting Tentative Parcel Map proposes merging the three parcels. The Conditional Use Permit Application proposes the construction of a mid-rise four story 104,593 square-foot office building with at grade parking and a subterranean parking structure beneath the office building; also proposed is the removal of the existing 44 dwelling units, all on-site structures, and demolition of the accompanying on-site parking lots.

APN: 417-240-37, 417-231-16 & 17 ZONING: R-2 & R-1-AHB to C-P/cz SITE ADDRESS: 5204 North Palm Avenue

DATE ROUTED: June 28, 2011 **COMMENT DEADLINE: July 18, 2011**

If no response is received by the comment deadline, it will be assumed you have no comments to submit.

WILL THIS PROJECT AFFECT YOUR AGENCY/JURISDICTION? (If yes, specify.)

REFER TO FMFCD NOTICE OF REQUIREMENTS FOR CUP 2011-088.

SUGGESTION(S) TO REDUCE IMPACTS/ADDRESS CONCERNS:

SAME AS ABOVE

REQUIRED CONDITIONS OF APPROVAL:

SAME AS ABOVE

IS ANY ADDITIONAL INFORMATION NEEDED FOR YOU TO COMPLETE YOUR REVIEW? (Be specific):

NO

REVIEWED BY: GARY CHAPMAN ENG. TECH II 456-3292 7/5/11

Name and Title | Telephone Number | Date

Council District 2; Bullard Community Plan

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS

File No. 210.413

FR CUP No. 2011-088

PUBLIC AGENCY

MIKE SANCHEZ
DEVELOPMENT SERVICES/PLANNING
CITY OF FRESNO
2600 FRESNO ST., THIRD FLOOR
FRESNO, CA 93721-3604

DEVELOPER

GUNNER ANDROS INVESTMENT, LLC
555 W. SHAW AVE., SUITE B4
FRESNO, CA 93704

PROJECT NO: **2011-088**
ADDRESS: **5204 N. PALM AVE.**
APN: **417-231-16, 17, 417-240-03, 37**
SENT: 7/5/11

Drainage Area(s)	Preliminary Fee(s)
DD	$20,037.00

TOTAL FEE: $20,037.00

The proposed development will generate storm runoff which produces potentially significant environmental impacts and which must be properly discharged and mitigated pursuant to the California Environmental Quality Act and the National Environmental Policy Act. The District in cooperation with the City and County has developed and adopted the Storm Drainage and Flood Control Master Plan. Compliance with and implementation of this Master Plan by this development project will satisfy the drainage related CEQA/NEPA impact of the project mitigation requirements.

The proposed development shall pay drainage fees pursuant to the Drainage Fee Ordinance prior to issuance of a building permit at the rates in effect at the time of such issuance. The fee indicated above is valid through 2/28/12 based on the site plan submitted to the District on 6/28/11 Contact FMFCD for a revised fee in cases where changes are made in the proposed site plan which materially alter the proposed impervious area.

Considerations which may affect the fee obligation(s) or the timing or form of fee payment:

a.) Fees related to undeveloped or phased portions of the project may be deferrable. .

b.) Fees may be calculated based on the actual percentage of runoff if different than that typical for the zone district under which the development is being undertaken and if permanent provisions are made to assure that the site remains in that configuration.

c.) Master Plan storm drainage facilities may be constructed, or required to be constructed in lieu of paying fees.

d.) The actual cost incurred in constructing Master Plan drainage system facilities is credited against the drainage fee obligation.

e.) When the actual costs incurred in constructing Master Plan facilities exceeds the drainage fee obligation, reimbursement will be made for the excess costs from future fees collected by the District from other development.

f.) Any request for a drainage fee refund requires the entitlement cancellation and a written request addressed to the General Manager of the District within 60 days from payment of the fee. A non refundable $300 Administration fee or 5% of the refund whichever is less will be retained without fee credit.

Approval of this development shall be conditioned upon compliance with these District Requirements.

1. X **a.** Drainage from the site shall BE DIRECTED TO THE INLET ON SAN JOSE AVENUE

   X **b.** Grading and drainage patterns shall be as identified on Exhibit No. 2

FR CUP No. 2011-088

____ **c.** The grading and drainage patterns shown on the site plan conform to the adopted Storm Drainage and Flood Control Master Plan.

2. The proposed development shall construct and/or dedicate Storm Drainage and Flood Control Master Plan facilities located within the development or necessitated by any off-site improvements required by the approving agency:

____ Developer shall construct facilities as shown on Exhibit No. 1 as "MASTER PLAN FACILITIES TO BE CONSTRUCTED BY DEVELOPER".

__X__ None required.

3. The following final improvement plans shall be submitted to the District for review prior to final development approval:

__X__ Grading Plan

__X__ Street Plan

____ Storm Drain Plan

____ Water & Sewer Plan

____ Final Map

____ Other

____ None Required

4. Availability of drainage facilities:

__X__ **a.** Permanent drainage service is available provided the developer can verify to the satisfaction of the City that runoff can be safely conveyed to the Master Plan inlet(s).

____ **b.** The construction of facilities required by Paragraph No. 2 hereof will provide permanent drainage service.

____ **c.** Permanent drainage service will not be available. The District recommends temporary facilities until permanent service is available. TEMPORARY SERVICE IS AVAILABLE THROUGH

____ **d.** See Exhibit No. 2.

5. The proposed development:

____ Appears to be located within a 100 year flood prone area as designated on the latest Flood Insurance Rate Maps available to the District, necessitating appropriate floodplain management action. (See attached Floodplain Policy.)

__X__ Does not appear to be located within a flood prone area.

6. ____ The subject site contains a portion of a canal or pipeline that is used to manage recharge, storm water, and/or flood flows. The existing capacity must be preserved as part of site development. Additionally, site development may not interfere with the ability to operate and maintain the canal or pipeline.

FR CUP No. 2011-088

7. The Federal Clean Water Act and the State General Permits for Storm Water Discharges Associated with Construction and Industrial Activities (State General Permits) require developers of construction projects disturbing one or more acres, and discharges associated with industrial activity not otherwise exempt from National Pollutant Discharge Elimination System (NPDES) permitting, to implement controls to reduce pollutants, prohibit the discharge of waters other than storm water to the municipal storm drain system, and meet water quality standards. These requirements apply both to pollutants generated during construction, and to those which may be generated by operations at the development after construction.

   a. State General Permit for Storm Water Discharges Associated with Construction Activities, approved August 1999, (modified December 2002) A State General Construction Permit is required for all clearing, grading, and disturbances to the ground that result in soil disturbance of at least one acre (or less than one acre\ if part of a larger common plan of development or sale). Permittees are required to: submit a Notice of Intent to be covered and must pay a permit fee to the State Water Resources Control Board (State Board), develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, and complete an annual certification of compliance.

   b. State General Permit for Storm Water Discharges Associated with Industrial Activities, April, 1997 (available at the District Office). A State General Industrial Permit is required for specific types of industries described in the NPDES regulations or by Standard Industrial Classification (SIC) code. The following categories of industries are generally required to secure an industrial permit: manufacturing; trucking; recycling; and waste and hazardous waste management. Specific exemptions exist for manufacturing activities which occur entirely indoors. Permittees are required to: submit a Notice of Intent to be covered and must pay a permit fee to the State Water Resources Control Board, develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, sample storm water runoff and test it for pollutant indicators, and annually submit a report to the State Board.

   c. The proposed development is encouraged to select and implement storm water quality controls recommended in the Fresno-Clovis Storm Water Quality Management Construction and Post-Construction Guidelines (available at the District Office) to meet the requirements of the State General Permits, eliminate the potential for non-storm water to enter the municipal storm drain system, and where possible minimize contact with materials which may contaminate storm water runoff.

8. A requirement of the District may be appealed by filing a written notice of appeal with the Secretary of the District within ten days of the date of this Notice of Requirements.

9. The District reserves the right to modify, reduce or add to these requirements, or revise fees, as necessary to accommodate changes made in the proposed development by the developer or requirements made by other agencies.

10. X See Exhibit No. 2 for additional comments, recommendations and requirements.

Gerald E. Lakeman
District Engineer

Gary Chapman
Project Engineer

CC:

SCOTT A. MOMMER CONSULTING

4694 W. JACQUELYN AVE.

FRESNO, CA 93722

FR CUP No. 2011-088

OTHER REQUIREMENTS
EXHIBIT NO. 2

The District's existing Master Plan drainage system is designed to serve medium high density and medium low density residential uses and the existing Master Plan storm drainage facilities do not have capacity to serve the proposed office commercial land use. The developer shall be required to mitigate the impacts of the increased runoff from the proposed office commercial land use to a rate that would be expected if developed to the medium high density and medium low density residential. The developer may either make improvements to the existing pipeline system to provide additional capacity or may use some type of permanent peak reducing facility in order to eliminate adverse impacts on the existing system. Implementation of the mitigation measures may be deferred until the time of development. Should the developer choose to construct a permanent peak-reducing facility, such a system would be required to reduce runoff from a ten-year storm produced by a office commercial density development, to a two-year discharge, which would be produced by the property if developed medium high density and medium low density residential.

The proposed underground parking shall be isolated from intrusion of storm water runoff by elevating the entrance/exit. In addition, major storm flows shall be directed towards the south west.

In an effort to improve storm runoff quality, outdoor storage areas shall be constructed and maintained such that material that may generate contaminants will be prevented from contact with rainfall and runoff and thereby prevent the conveyance of contaminants in runoff into the storm drain system.

The District encourages, but does not require that roof drains from non-residential development be constructed such that they are directed onto and through a landscaped grassy swale area to filter out pollutants from roof runoff.

Runoff from areas where industrial activities, product, or merchandise come into contact with and may contaminate storm water must be directed through landscaped areas or otherwise treated before discharging it off-site or into a storm drain. Roofs covering such areas are recommended. Cleaning of such areas by sweeping instead of washing is to be required unless such wash water can be directed to the sanitary sewer system. Storm drains receiving untreated runoff from such areas that directly connect to the District's system will not be permitted. Loading docks, depressed areas, and areas servicing or fueling vehicles are specifically subject to these requirements. The District's policy governing said industrial site NPDES program requirements are available. Contract the District's Environmental Department for further information regarding these policies related to industrial site requirements.

Development No. CUP 2011-088

550.10 "DD"

CITY OF FRESNO - DEVELOPMENT AND RESOURCE MANAGEMENT DEPARTMENT
REQUEST FOR COMMENTS, CONDITIONS, ENVIRONMENTAL ASSESSMENT, AND ENTITLEMENT APPLICATION REVIEW OF PLAN AMENDMENT APPLICATION NO. A-11-006, REZONE APPLICATION NO. R-11-008, VESTING TENTATIVE PARCEL MAP NO. 2008-07, AND CONDITIONAL USE PERMIT APPLICATION NO. C-11-088

FMFCD

Return Completed Form to:
Mike Sanchez
Email: Routing@fresno.gov
Telephone: 559-621-8277
Development and Resource Management
2600 Fresno Street, Third Floor
Fresno CA 93721-3604

PROJECT DESCRIPTION AND LOCATION:

Plan Amendment Application No. A-11-006, Rezone Application No. R-11-008, Vesting Tentative Parcel Map 2008-07, and Conditional Use Permit Application No. C-11-088 were filed by Scott Mommer, on behalf of Gunner Andros Investments, LLC, and pertain to 3.96± acres of property located on the south side of West San Jose Avenue between North Colonial and North Maroa Avenues. The Plan Amendment proposes to amend the 2025 Fresno General Plan and Bullard Community Plan from the medium-high and medium-low density residential planned land use designations to the commercial office land use designation. The Rezone Application proposes to reclassify the property from the R-2 *(Low Density Multiple Family Residential)* and R-1-AH *(Single Family Residential, horses permitted)* zone districts to the C-P/cz *(Administrative and Professional Office/conditions of zoning)* zone district. Vesting Tentative Parcel Map proposes merging the three parcels. The Conditional Use Permit Application proposes the construction of a mid-rise four story 104,593 square-foot office building with at grade parking and a subterranean parking structure beneath the office building; also proposed is the removal of the existing 44 dwelling units, all on-site structures, and demolition of the accompanying on-site parking lots.

APN: 417-240-37, 417-231-16 & 17 ZONING: R-2 & R-1-AHB to C-P/cz SITE ADDRESS: 5204 North Palm Avenue

DATE ROUTED: June 28, 2011 **COMMENT DEADLINE: July 18, 2011**

If no response is received by the comment deadline, it will be assumed you have no comments to submit.

WILL THIS PROJECT AFFECT YOUR AGENCY/JURISDICTION? (If yes, specify.)

REFER TO FMFCD NOTICE OF REQUIREMENTS FOR TPM 2008-007 REV 2.

SUGGESTION(S) TO REDUCE IMPACTS/ADDRESS CONCERNS:

SAME AS ABOVE

REQUIRED CONDITIONS OF APPROVAL:

SAME AS ABOVE

IS ANY ADDITIONAL INFORMATION NEEDED FOR YOU TO COMPLETE YOUR REVIEW? (Be specific):

NO

REVIEWED BY: GARY CHAPMAN ENG. TECH II 456-3292 7/5/11

Name and Title Telephone Number Date

Council District 2; Bullard Community Plan

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS

File No. 210.411

FR TPM No. 2008-007REV2

PUBLIC AGENCY

MIKE SANCHEZ
DEVELOPMENT SERVICES/PLANNING
CITY OF FRESNO
2600 FRESNO ST., THIRD FLOOR
FRESNO, CA 93721-3604

DEVELOPER

GUNNER ANDROS INVESTMENT, LLC
555 W. SHAW AVE., SUITE B4
FRESNO, CA 93704

PROJECT NO: **2008-007REV2**
ADDRESS: **5204 N. PALM AVE.**
APN: **417-231-16, 17, 417-240-03, 37**
SENT: 7/5/11

Drainage Area(s)	Preliminary Fee(s)
DD	$20,037.00

TOTAL FEE: $20,037.00

The proposed development will generate storm runoff which produces potentially significant environmental impacts and which must be properly discharged and mitigated pursuant to the California Environmental Quality Act and the National Environmental Policy Act. The District in cooperation with the City and County has developed and adopted the Storm Drainage and Flood Control Master Plan. Compliance with and implementation of this Master Plan by this development project will satisfy the drainage related CEQA/NEPA impact of the project mitigation requirements.

The proposed development shall pay drainage fees pursuant to the Drainage Fee Ordinance prior to approval of the final map at the rates in effect at the time of such approval. The fee indicated above is based on the tentative map. Contact the FMFCD project engineer prior to approval of the final map for the fee.

Considerations which may affect the fee obligation(s) or the timing or form of fee payment:

a.) Fees related to undeveloped or phased portions of the project may be deferrable.

b.) Fees may be calculated based on the actual percentage of runoff if different than that typical for the zone district under which the development is being undertaken and if permanent provisions are made to assure that the site remains in that configuration.

c.) Master Plan storm drainage facilities may be constructed, or required to be constructed in lieu of paying fees.

d.) The actual cost incurred in constructing Master Plan drainage system facilities is credited against the drainage fee obligation.

e.) When the actual costs incurred in constructing Master Plan facilities exceeds the drainage fee obligation, reimbursement will be made for the excess costs from future fees collected by the District from other development.

f.) Any request for a drainage fee refund requires the entitlement cancellation and a written request addressed to the General Manager of the District within 60 days from payment of the fee. A non refundable $300 Administration fee or 5% of the refund whichever is less will be retained without fee credit.

Approval of this development shall be conditioned upon compliance with these District Requirements.

1. X **a.** Drainage from the site shall BE DIRECTED TO THE INLET ON SAN JOSE AVENUE

   X **b.** Grading and drainage patterns shall be as identified on Exhibit No. 2

FR TPM No. 2008-007REV2

___ **c.** The grading and drainage patterns shown on the site plan conform to the adopted Storm Drainage and Flood Control Master Plan.

2. The proposed development shall construct and/or dedicate Storm Drainage and Flood Control Master Plan facilities located within the development or necessitated by any off-site improvements required by the approving agency:

___ Developer shall construct facilities as shown on Exhibit No. 1 as "MASTER PLAN FACILITIES TO BE CONSTRUCTED BY DEVELOPER".

__X__ None required.

3. The following final improvement plans shall be submitted to the District for review prior to final development approval:

__X__ Grading Plan

__X__ Street Plan

___ Storm Drain Plan

___ Water & Sewer Plan

___ Final Map

___ Other

___ None Required

4. Availability of drainage facilities:

__X__ **a.** Permanent drainage service is available provided the developer can verify to the satisfaction of the City that runoff can be safely conveyed to the Master Plan inlet(s).

___ **b.** The construction of facilities required by Paragraph No. 2 hereof will provide permanent drainage service.

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___ **d.** See Exhibit No. 2.

5. The proposed development:

___ Appears to be located within a 100 year flood prone area as designated on the latest Flood Insurance Rate Maps available to the District, necessitating appropriate floodplain management action. (See attached Floodplain Policy.)

__X__ Does not appear to be located within a flood prone area.

6. ___ The subject site contains a portion of a canal or pipeline that is used to manage recharge, storm water, and/or flood flows. The existing capacity must be preserved as part of site development. Additionally, site development may not interfere with the ability to operate and maintain the canal or pipeline.

FR TPM No. 2008-007REV2

7. The Federal Clean Water Act and the State General Permits for Storm Water Discharges Associated with Construction and Industrial Activities (State General Permits) require developers of construction projects disturbing one or more acres, and discharges associated with industrial activity not otherwise exempt from National Pollutant Discharge Elimination System (NPDES) permitting, to implement controls to reduce pollutants, prohibit the discharge of waters other than storm water to the municipal storm drain system, and meet water quality standards. These requirements apply both to pollutants generated during construction, and to those which may be generated by operations at the development after construction.

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   b. State General Permit for Storm Water Discharges Associated with Industrial Activities, April, 1997 (available at the District Office). A State General Industrial Permit is required for specific types of industries described in the NPDES regulations or by Standard Industrial Classification (SIC) code. The following categories of industries are generally required to secure an industrial permit: manufacturing; trucking; recycling; and waste and hazardous waste management. Specific exemptions exist for manufacturing activities which occur entirely indoors. Permittees are required to: submit a Notice of Intent to be covered and must pay a permit fee to the State Water Resources Control Board, develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, sample storm water runoff and test it for pollutant indicators, and annually submit a report to the State Board.

   c. The proposed development is encouraged to select and implement storm water quality controls recommended in the Fresno-Clovis Storm Water Quality Management Construction and Post-Construction Guidelines (available at the District Office) to meet the requirements of the State General Permits, eliminate the potential for non-storm water to enter the municipal storm drain system, and where possible minimize contact with materials which may contaminate storm water runoff.

8. A requirement of the District may be appealed by filing a written notice of appeal with the Secretary of the District within ten days of the date of this Notice of Requirements.

9. The District reserves the right to modify, reduce or add to these requirements, or revise fees, as necessary to accommodate changes made in the proposed development by the developer or requirements made by other agencies.

10. X See Exhibit No. 2 for additional comments, recommendations and requirements.

Gerald E. Lakeman
District Engineer

Gary Chapman
Project Engineer

CC:

SCOTT A. MOMMER CONSULTING

4694 W. JACQUELYN AVE.

FRESNO, CA 93722

FR TPM No. 2008-007REV2

OTHER REQUIREMENTS
EXHIBIT NO. 2

The District's existing Master Plan drainage system is designed to serve medium high density and medium low density residential uses and the existing Master Plan storm drainage facilities do not have capacity to serve the proposed office commercial land use. The developer shall be required to mitigate the impacts of the increased runoff from the proposed office commercial land use to a rate that would be expected if developed to the medium high density and medium low density residential. The developer may either make improvements to the existing pipeline system to provide additional capacity or may use some type of permanent peak reducing facility in order to eliminate adverse impacts on the existing system. Implementation of the mitigation measures may be deferred until the time of development. Should the developer choose to construct a permanent peak-reducing facility, such a system would be required to reduce runoff from a ten-year storm produced by a office commercial density development, to a two-year discharge, which would be produced by the property if developed medium high density and medium low density residential.

The proposed underground parking shall be isolated from intrusion of storm water runoff by elevating the entrance/exit. In addition, major storm flows shall be directed towards the south west.

The following paragraphs only apply towards development of the individual parcels and are not conditions for the recording of the map.

In an effort to improve storm runoff quality, outdoor storage areas shall be constructed and maintained such that material that may generate contaminants will be prevented from contact with rainfall and runoff and thereby prevent the conveyance of contaminants in runoff into the storm drain system.

The District encourages, but does not require that roof drains from non-residential development be constructed such that they are directed onto and through a landscaped grassy swale area to filter out pollutants from roof runoff.

Runoff from areas where industrial activities, product, or merchandise come into contact with and may contaminate storm water must be directed through landscaped areas or otherwise treated before discharging it off-site or into a storm drain. Roofs covering such areas are recommended. Cleaning of such areas by sweeping instead of washing is to be required unless such wash water can be directed to the sanitary sewer system. Storm drains receiving untreated runoff from such areas that directly connect to the District's system will not be permitted. Loading docks, depressed areas, and areas servicing or fueling vehicles are specifically subject to these requirements. The District's policy governing said industrial site NPDES program requirements are available. Contract the District's Environmental Department for further information regarding these policies related to industrial site requirements.

Fresno Unified School District

Preparing Career Ready Graduates

Facilities Management & Planning

BOARD OF EDUCATION
Michelle A. Asadoorian, President
Janet Ryan, Clerk
Valerie F. Davis
Lindsay Cal Johnson
Carol Mills, J.D.
Larry A. Moore
Tony Vang., Ed.D.

SUPERINTENDENT
Michael E. Hanson

July 1, 2011

Mike Sanchez
Development and Resource Management
City of Fresno
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

SUBJECT: **PLAN AMENDMENT APPLICATION NO. A-11-006**
REZONE APPLICATION R-11-008
VESTING TENTATIVE PARCEL MAP 2008-07
CONDITIONAL USE PERMIT APPLICATION C-11-088
5204 N. PALM AVE. (APN 417-240-37, 417-231-16 & 17)
FIG GARDEN FINANCIAL CENTER OFFICE EXPANSION

Dear Mr Sanchez,

In response to your request for review and comment on Plan Amendment Application No. A-11-006, Rezone Application R-11-008, Vesting Tentative Parcel Map 2008-07, and Conditional Use Permit C-11-088, Fresno Unified School District submits the following.

Any urban commercial development occurring as a result of project approval will have an impact on the District's student housing capacity. Commercial development generates employees, and the children of employees will need to be housed in district schools. The District, through local funding, is in a position to mitigate its shortage of classrooms to accommodate planned population growth for the foreseeable future. However, the District recognizes that the legislature, as a matter of law, has deemed, under Government Code Section 65996, that all school facilities impacts are mitigated as a consequence of SB 50's Level 1, 2 and 3 developer fee legislative provisions.

Any new development on the subject property or conversion of non-habitable to habitable space is subject to development fees of $2.97 per square foot for residential and $0.47 per square foot for commercial development. However, per Government Code section 65995, "a 'credit' is to be given per square foot to all commercial and industrial construction for any structures (commercial, industrial, or residential) that were demolished on the site after the beginning of a project," therefore only the difference of square footage for the proposed project would be charged. Any new development on the property will be subject to the development fee prior to issuance of a building permit.

1. Attendance area information. The project is presently within the attendance areas of the schools identified below

Elementary School.	Kratt
Intermediate School	Tenaya
High School.	Bullard

2. Transportation will be available for students attending the above identified elementary, intermediate and high schools in accordance with District standards in effect at the time of enrollment. The cost of transportation is currently $41.50 per hour The cost of providing transportation services to students from the project will add to District transportation expenses.

3 Based on the 400 proposed employees, this project could potentially generate 60 K-12 students which may have an impact on nearby schools. Additional transportation could be required if the assigned neighborhood schools cannot accommodate the increased number of students.

Thank you for the opportunity to comment. Please contact me at 457-3074 if you have any questions or require additional information regarding our comments.

Sincerely,

Lisa LeBlanc, Executive Director
Facilities Management and Planning

LL:hh

477 W. San Jose Avenue
Fresno, California 93704
August 24, 2011

Mr. Mike Sanchez, Planning Manager
City of Fresno Planning & Development Department
2600 Fresno Street
Fresno, CA 93721
July 25, 2011

Dear Mr. Sanchez:

Attached are written comments on the NOP for the Fig Garden Financial Center Phase IV project. Please consider these comments in response to the NOP. We are currently on the mailing list for all notices regarding this project.

Very truly yours,

Frank and Carolyn Fries
Email: ffries54@att.net

EIR SCOPING MEETING
JULY 7, 2011
NOP COMMENT CARD

Please consider the following comments in response to the NOP:

1. Continuation of sloping berm that currently runs along San Ramon to San Jose Avenues. We understand the berm will be continued down San Jose Avenue to be consistent with the existing berm that runs down San Ramon, Colonial and onto San Jose. However, we would like to see the Developer/City include redwood trees in the berm landscaping as these provide excellent screening of the high rise building and are also conducive to the existing landscaping and the natural rural feel of the neighborhood. We also feel the inclusion of a partial sidewalk along the San Jose berm is unnecessary (it will lead to nowhere) and again would not be consistent with the existing landscape which includes only curbs and gutters.
2. We ask that the existing redwoods and deodor pines remain in place and that the project be designed to include them in the landscape. This would include the redwoods on the East side of the existing building that will be connected via the courtyard of the proposed building. We would like to see these mature trees that currently provide significant screening for the San Jose neighborhood incorporated into the proposed landscape of the new project. We also ask that any new trees that are planted be of a significant mature size.
3. We understand a new traffic study will take place. We would like to again emphasize that there is a large number of cars that currently use San Jose/Colonial/San Ramon as a cut through between Maroa and Palm all hours of the day. Few of these cars honor the speed limit. We believe the construction of an additional building will bring more traffic through the neighborhood. Making a left hand turn onto Palm from San Ramon (traveling West) is pretty much impossible not to mention extremely dangerous. We would like you to consider a reconfiguration of the outlet at San Ramon to Palm to not allow traffic to enter the neighborhood off of Palm and only allow a right hand turn from San Ramon onto Palm all hours of the day. This would provide an exit for residents in the neighborhood and could also serve as an entrance for emergency vehicles. All residents in the neighborhood can access their property off of Maroa. We do not, under any circumstances, want a signal light installed at San Ramon and Palm as this would result in even more traffic moving through the neighborhood. Another solution might be to install several "gentle" speed bumps along San Ramon and San Jose to slow traffic and deter cut through traffic.
4. Courtyard. We are concerned that the proposed courtyard to be constructed between the existing and proposed building will be significantly larger than the one that exists between the two other buildings located along San Jose Avenue. Given the existing courtyard at the older building site is of significant size, we would propose that the new courtyard be of the same size, thereby reducing the infringement of the building on the neighborhood.
5. Garage fans. The proposed project includes four new garage fans that will be located in four areas of the parking lot closest to the neighborhood. The existing fans can already be heard within the neighborhood. We request that there be proper acoustics installed to insure the fan noise will not be heard when in operation.
6. Lighting. Lighting was one subject that was not addressed at the July meeting. We have driven our neighborhood and the Fig Garden Financial area to see how it is currently lit. There are currently street lights located along the north side of San Jose Avenue from the corner of Colonial going East. The last street light is located at the end of the property where the parking lot west of the proposed building will end. As a result, there should be no need for additional

street lights. The lights located within the parking lot area should be of such a height that they do not infringe on the neighboring homes and should not be located directly along the San Jose side of the parking area (as there are already street lights), nor on the East side of the parking lot. Any lights that are installed should have side barriers to avoid shining into the neighborhood.

7. Habitat. Our neighborhood currently has a number of birds, squirrels, a neighborhood fox, and raccoons. We are concerned that this construction project could have a very negative effect on this habitat.
8. Dust/Dirt mitigation. We would request that construction equipment not be allowed to enter and leave via San Jose Avenue. There is concern regarding this type of traffic on an already busy, narrow and pot ridden residential street as well as the issue of excessive amounts of dust and dirt. We are also concerned about the dust/dirt that will be generated from the tear down of the existing apartment complex as well as the digging for the underground parking and construction site itself. I am a heart transplant patient with a compromised immune system and spent 9 months in the hospital and incurred the loss of an eye due to an aspergillus infection (airborne fungus common to construction sites). We live 3 doors down from the proposed project. If this project is to proceed, we request the strictest dust/dirt mitigation efforts be imposed to protect the neighborhood residents, including the following:
    - Prior to digging and throughout the day, the ground be wet down in order to prevent soil from becoming airborne. The work should be monitored on a continuous basis.
    - All excavated dirt and materials be covered when not in use.
    - All trucks transporting excavated dirt and materials be covered and not be routed through the neighborhood.
    - All trucks should be staged in the site areas to avoid picking up and tracking dust and mud onto streets close to the neighborhood.

Mr. Mike Sanchez,
City of Fresno Planning and Development Dept.
2600 Fresno St.
Fresno, Ca.

RE: nop comment letter for Fig Garden Financial center Phase lV

Dear Mike,
My concerns are:
Traffic,
I request that you include a cumulative traffic analysis showing effects of increased traffic at the intersection of Palm and Shaw And generally the effects on Palm Ave between Shaw and Herndon, taking into consideration the traffic already generated by Bullard High School and the Palm Bluffs business district.
I request that the study include the intersection at Palm and San Ramon Ave.
I request that there would be no access to San Jose Ave. from the office complex except for emergency vehicles.

Aesthetics and biological resources:
I request that a study be implemented to address the possibility of saving the mature Deodar Cedar trees that exist on the property. These trees are characteristic of this neighborhood development from many years ago and may be of historical significance.
They would certainly bring forth much needed shade and screening for the benefit of the neighbors.

Noise
I request the placement of the circulation garage fans be specified and that a study be done on then level of noise generated by these fans.
Thank you for your consideration.
Regards,
Mrs. Lori Geisler

f-lgeisler@comcast.net
(559)447-1193
494 W. San Jose Ave.
Fresno 93704

f-lgeisler@comcast.net

Mike Sanchez

From: Lori Geisler [f-lgeisler@comcast.net]
Sent: Tuesday, July 26, 2011 5:35 PM
To: Mike Sanchez; lhumble@ddaplanning.com; smommer@larsandersen.com
Cc: waymon kissler; Jeff Christensen
Subject: Gunner Andros Fig Garden Office Complex phase 4

Mike Sanchez City of Fresno Planning Dept
Scott Mommer c/o Lars Andersen Co.
Leianne Humble Denise Duffy & Assoc, Inc.

My concerns are:
Traffic,
W. San Jose ave., (our street) is already in poor condition and the county informs me that they make decisions for improvements based on volume of traffic. I
request that you include a traffic analysis on W San Jose Ave taking into consideration the increased traffic generated by the office complex and the additional traffic
created by the construction of the office complex.

Aesthetics,
I request that the planting along W. Sam Jose Ave. be consistent with the landscaping of the adjacent office buildings, same plants and trees, block walls and
no sidewalks.

Thank you for your consideration.
Regards,
Mrs. Lori Geisler

EIR Scoping Meeting
July 7, 2011
NOP Comment Card

Name Waymon Kissler
Address 445 W. San Jose
City Fresno Zip 93704
Email wkissler

Please consider the following comments in response to the NOP (please print):

1. Consistent boundaries all around FGFC.
2. Fix street (San Jose); install speed bumps
3. Traffic already congested; need mitigation
4. Underground Pollution from Cons. from noise

A Notice of Preparation (NOP) has been completed for this project. Written comments on the NOP will be accepted from June 30, 2011 through the close of the public review period on July 30, 2011.

Please drop comments in the comment box at this meeting or mail your written comments to: Mike Sanchez, Planning Manager, City of Fresno Planning & Development Department, 2600 Fresno Street, Fresno, CA 93721

Friday, July 17, 2011

Mr. Mike Sanchez
Fresno City Planning and Development Department
2600 Fresno Street
Fresno, CA 93721

Dear Mr. Sanchez:

EIR (NOP) Comments and Concerns:

Overview: Although this project (FGFC Phase IV) extends commercial development into a quiet residential neighborhood, it makes far more sense that the previously projected behemoth apartment building. The most important aspect is that it will apparently not change the character of the neighborhood, something very important to the single-story, owner-occupied dwellings of the area.

NOP Comments and EIR Considerations

Probable Environmental Effects: Please consider, investigate, and mitigate where appropriate the following comments:

1. Aesthetics: The project needs to maintain the continuity of the curbing which extends itself from just north of the Eden Park Apartments property line clear around to San Ramon and Palm Avenues. Therefore it would be inane to follow the letter of the law and put in a 600-feet-long "sidewalk to nowhere." Aesthetically, then, it will look much better the buffer already in place is maintained along the North end of the project.

   Also meriting close attention relates to the landscaping. There are, in fact, indigenous trees (e.g. Deodars) on the proposed grounds of the construction sight which deserve serious consideration of saving.
2. Air Quality: Construction should make every effort to keep the dust down to a minimum.
3. Biological Resources: No significant negative impact foreseen.
4. Cultural Resources: A major abortion of a cultural resource has already taken place, entirely without regard or respect for historical preservation. The old "Doc Adams" farmhouse, formerly at 525 W. San Jose Avenue, was razed by the developers in question before anyone in the neighborhood knew what was happening or the V@FG project was introduced. This goes to

show that the deal had gone down long before attempting to achieve legal status for its future development.

The farmhouse in question very well could have been classified as an historical building ticketed for cultural preservation/renovation/restoration.

There was no analysis based on archeological investigation and historic evaluation of the razed farmhouse, which was nigh onto 100 years old.

5. Geology and Soils: No Significant impact.
6. Hazards and Hazardous Materials: None Known.
7. Hydrology and Water Quality: Conservation and regulation needs to be assured.

8. Land Use & Planning: This project has been promoted as infill, when truth be told an historical farmhouse and a viable apartment building had to be removed in order to create artificial infill circumstances. Poor planning, indeed.

Noise: Construction noise needs to be kept to a minimum.

9. Public Services/Utilities: Effects need to be studied.
10. Traffic: A major problem already exists in people using W. San Jose Ave. as short-cut bypass for Shaw Ave. to avoid dealing with Shaw and Palm Avenues. Even though the developers claim all access will approach from Palm and/or Shaw Avenues, traffic will overflow to the East on San Jose on an already too-well-traveled street. What is really needed on W. San Jose west of Maroa Avenue are speed-bumps to slow down the speeders who do use the street as a short-cut bypass. A speed-limit sign would also be a helpful and welcome addition.

The project traffic study conducted for the EIR should be stamped and signed by the engineer.

11. Cumulative Impacts: Much heavier traffic problems
12. Alternatives: Too late for that.

I am requesting that each of the above topics be carefully and dutifully and legally studied, the results published, and mitigation procedures be explored to bring the proposed project closer to fitting in with the character of the neighborhood.

Sincerely,

W. C. Kissler

Waymon C. Kissler 559-248-0824
Neighborhood Watch Captain

Leianne Humble

From: Richard Nordstrom [richnord74@sbcglobal.net]
Sent: Sunday, July 10, 2011 4:37 PM
To: mike.sanchez@fresno.gov; Leianne Humble
Cc: MARGARET NORDSTROM
Subject: Fig Garden Financial Center Phase IV Project

I am sorry I missed the meeting on the 6th of July. However, I hope it is not too late to pose a few questions for the EIR report. It seems to me that the report has three questions to address that are of importance to the impact of the project on the surrounding residents. A.) I note that there are plans for parking for 445 vehicles. It would be nice to know the average vehicle ownership (number of cars) per family in the target family income group. If average rents are $3,000 then how many cars do people who can afford this rent own? Is the plan sufficient for this type of renter? B.) Suppose four nurses go together to rent an appartment. This would be 4 cars per that unit. Are there systems in place to prevent such an overload of an appartment in light of the limited parking? C.) Finally, since there is a plan for access via the "parking lot at Fig Garden Village", how will he study address the effect of traffic at peak periods? It would seem that the report needs at least three scenarios ..... a projected traffic pattern with some, none or all cars exiting via the parking lot .... a projected traffic pattern with some, none or all cars exiting via Palm .... a projected pattern with some, none or all cars exiting via Maroa.

from Richard Nordstrom

Be who you are and say what you feel...
because those that matter... don't mind...
and those that mind...don't matter!

Mr.Mike Sanchez, Planning Manager
City of Fresno Planning & Development Department
2600 Fresno Street
Fresno, CA 93721
July 25, 2011

Dear Mr. Sanchez:

Attached are written comments on the NOP for the Fig Garden Financial Center Phase IV project. We ask that these comments be considered in response to the NOP and that our names be added to the mailing list to receive all future correspondence and notices relative to this project.

Very truly yours,

Name Cyndi Parkinson
Address/City 568 W. San Jose Ave. Fresno Ca. 93704
Email parkyc@aol.com

Name John Gomes
Address/City 562 W. San Jose Ave., Fresno 93704
Email pzmojohn@yahoo.com

#6 - Disagree - Partially
#3 - Disagree with "gentle" speed bumps as a solution.

Name Janet Gomes
Address/City 562 W. San Jose
Email KEFGHYE@ATT.NET

SAME AS ABOVE

Name Susan Grunwald
Address/City 572 W. San Jose
Email SusanJohnT@SBC Global

#6 Same as above
#3 Same as above
#8 please fumigate before demolishing.

Name [signature]
Address/City 572 W. San Jose
Email Sam

EIR SCOPING MEETING
JULY 7, 2011
NOP COMMENT CARD

Please consider the following comments in response to the NOP:

1. Continuation of sloping berm that currently runs along San Ramon to San Jose Avenues. We understand the berm will be continued down San Jose Avenue to be consistent with the existing berm that runs down San Ramon, Colonial and onto San Jose. However, we would like to see the Developer/City include redwood trees in the berm landscaping as these provide excellent screening of the high rise building and are also conducive to the existing landscaping and the natural rural feel of the neighborhood. We also feel the inclusion of a partial sidewalk along the San Jose berm is unnecessary (it will lead to nowhere) and again would not be consistent with the existing landscape which includes only curbs and gutters.
2. We ask that the existing redwoods and deodor pines remain in place and that the project be designed to include them in the landscape. This would include the redwoods on the East side of the existing building that will be connected via the courtyard of the proposed building. We would like to see these mature trees that currently provide significant screening for the San Jose neighborhood incorporated into the proposed landscape of the new project. We also ask that any new trees that are planted be of a significant mature size.
3. We understand a new traffic study will take place. We would like to again emphasize that there is a large number of cars that currently use San Jose/Colonial/San Ramon as a cut through between Maroa and Palm all hours of the day. Few of these cars honor the speed limit. We believe the construction of an additional building will bring more traffic through the neighborhood. Making a left hand turn onto Palm from San Ramon (traveling West) is pretty much impossible not to mention extremely dangerous. We would like you to consider a reconfiguration of the outlet at San Ramon to Palm to not allow traffic to enter the neighborhood off of Palm and only allow a right hand turn from San Ramon onto Palm all hours of the day. This would provide an exit for residents in the neighborhood and could also serve as an entrance for emergency vehicles. All residents in the neighborhood can access their property off of Maroa. We do not, under any circumstances, want a signal light installed at San Ramon and Palm as this would result in even more traffic moving through the neighborhood. Another solution might be to install several "gentle" speed bumps along San Ramon and San Jose to slow traffic and deter cut through traffic.
4. Courtyard. We are concerned that the proposed courtyard to be constructed between the existing and proposed building will be significantly larger than the one that exists between the two other buildings located along San Jose Avenue. Given the existing courtyard at the older building site is of significant size, we would propose that the new courtyard be of the same size, thereby reducing the infringement of the building on the neighborhood.
5. Garage fans. The proposed project includes four new garage fans that will be located in four areas of the parking lot closest to the neighborhood. The existing fans can already be heard within the neighborhood. We request that there be proper acoustics installed to insure the fan noise will not be heard when in operation.
6. Lighting. Lighting was one subject that was not addressed at the July meeting. We have driven our neighborhood and the Fig Garden Financial area to see how it is currently lighted. There are currently street lights located along the north side of San Jose Avenue from the corner of Colonial going East. The last street light is located at the end of the property where the parking lot west of the proposed building will end. As a result, there should be no need for additional

street lights. The lights located within the parking lot area should be of such a height that they do not infringe on the neighboring homes and should not be located directly along the San Jose side of the parking area (as there are already street lights), nor on the East side of the parking lot. Any lights that are installed should have side barriers to avoid shining into the neighborhood

7. Habitat. Our neighborhood currently has a number of birds, squirrels, a neighborhood fox, and raccoons. We are concerned that this construction project could have a very negative effect on this habitat.
8. Dust/Dirt mitigation. We would request that construction equipment not be allowed to enter and leave via San Jose Avenue. There is concern regarding this type of traffic on an already busy, narrow and pot ridden residential street as well as the issue of excessive amounts of dust and dirt. We are also concerned about the dust/dirt that will be generated from the tear down of the existing apartment complex as well as the digging for the underground parking and construction site itself. If this project is to proceed, we request the strictest dust/dirt mitigation efforts be imposed to protect the neighborhood residents from dust/dirt and airborne fungus diseases, including the following:
    - Prior to digging and throughout the day, the ground be wet down in order to prevent soil from becoming airborne. The work should be monitored on a continuous basis.
    - All excavated dirt and materials be covered when not in use.
    - All trucks transporting excavated dirt and materials be covered and not be routed through the neighborhood.
    - All trucks should be staged in the site areas to avoid picking up and tracking dust and mud onto streets close to the neighborhood.

TO: MIKE SANCHEZ, PLANNING MANAGER, CITY OF FRESNO PLANNING AND DEVELOPMENT DEPARTMENT, 2600 FRESNO STREET, FRESNO CA 93721

FROM: MARY KATHERINE (KATY) RAU, 552 W. SAN JOSE, FRESNO CA 93704 (MKRAU@COMCAST.NET).

RE: **FIG GARDEN FINANCIAL CENTER, PHASE IV, NOP COMMENT AFTER EIR SCOPING METING, JULY 7, 2011**

DATE: 7/15/2011

I think the proposed structure is a wise use of the land and would mesh well with the existing residential neighborhood. The notes below reflect specific concerns.

Aesthetics: The streets which border the northern side of the existing Financial Center campus, San Ramon, Colonial, and a small stretch of San Jose, are landscaped without sidewalks, and with a berm sloping up from the roadway to a block fence. Extending the berm landscaping style eastward on San Jose, in front of the Phase IV building and parking lot, would give nice continuity to the overall design and soften the visual impact of a new office building on San Jose. This street, at least between Colonial and Maroa, is characterized by low density housing and abundant trees.

Biological Resources: The building site has a number of mature fir and deodar trees, which are distinctive to the neighborhood and add to its visual appeal. We hope that these can be preserved as far as possible.

Hydrology: The current storm drainage on San Jose is challenged during moderate or heavy rainfall, with flooding from side to side of the street. Increased runoff is likely after Phase IV converts the existing open field and the garden-style apartments to cement and asphalt surfaces. The project should be graded to minimize water flow to San Jose, and additional drainage should be in place before the structure and surface parking are completed.

Noise: Phase IV extends the existing underground parking along San Jose. The noise from venting fans is a concern to the neighborhood, since the existing vent fans are quite audible in operation.

Light Pollution: Phase IV is bounded on three sides by individual homes or small multi-family complexes. The least intrusive lighting should be used for the parking areas and perimeter drive around the office building.

Katy Rau

July 28, 2011

Terry B Stone
457 W San Jose
Fresno, CA 93704

Mike Sanchez, Planning Manager
City of Fresno Planning & Development Dept
2600 Fresno St
Fresno, CA 93721

Dear Mr. Sanchez:

This letter is in regard to the scope and content of the Draft Environmental Report for the Fig Garden Financial Center phase four project.

I am requesting that the scope and content of the Draft Environmental Impact Report include study, evaluate and require that the items listed below be incorporated into the project.

I am a home owner living on West San Jose, near the proposed project site. My neighbors and I on West San Jose, between the proposed project and N Maroa, love our street just as it exists today. West San Jose, near the Financial Center, is a beautiful, narrow country lane like street with few sidewalks; allowing for a lush border of trees, shrubs and ground cover to grace the intimate sides of our narrow street. Our narrow tree-lined lane is very similar in beauty, charm and ambiance, to the beautiful country lane like streets that exist within Fresno's treasured and highly acclaimed Old Fig Garden neighborhood.

Within Old Fig Garden, as on West San Jose, it is a widely known fact among the homeowners there, that the complete absence of sidewalks on the narrow streets is a major contributing factor to the street's beauty, charm and wonderful country lane like ambiance. That ambiance, charm, unique beauty and country lane like tranquility is why Old Fig Garden is considered to be one of Fresno's finest amenities.

An amenity that the homeowner's have for many years gone to great lengths to protect and preserve.

We homeowners, living on West San Jose, like the homeowners of Old Fig Garden, have a heartfelt desire to protect and preserve the beauty and country lane like charm that currently exists on our lovely little street. We consider that charm to be one of our finest amenities.

In the interest of protecting the country lane like ambiance, beauty and tranquility, serenity that now exists on West San Jose, I am requesting that the items listed below be included in the scope and content of the Draft Environmental Impact Report and that the items be studied, evaluated and required to be incorporated into the project.

<u>One</u>
That there be no sidewalks on West San Jose.

Two
That there be no widening of the pavement at that portion of the street that border the now vacant parcel.

Three
That the transition buffer zone be extended to what is now the edge of the pavement; thus helping to preserve the wonderful country lane like atmosphere of our narrow street.

Four
That the proposed new buffer transition zone for phase four be identical to the beautiful buffer zones that now exist along West San Jose, North Colonial, and West San Ramon.

Five
That the fast and tall growing species of pine or redwood trees be planted along West San Jose and also along the east boundary of the project; that the mature trees growing along West San Jose be preserved.

Implementation of the measures outlined above would help ensure that the Old Fig Garden like charm of our street will be protected, preserved and cherished for years to come.

I am 66 and suffer from periodic asthmatic bronchitis, allergies and other respiratory problems. My neighbor has a serious, life threatening heart condition that is subject to infection from pathogens associated with airborne dirt and dust particles.

Please provide for a study to be conducted to determine what disease causing pathogens exist within the soil to be excavated in order to prevent the possibility of serious illness to myself and my neighbors from airborne pathogens associated with the airborne dirt and dust pollution to be expected leaking from the many hundreds of dump truck loads required to remove 35,000 cubic yards of soil from the job site.

I am requesting that an alternate route be found for those dump trucks that does not involve their traveling on West San Jose between the job site and North Maroa Avenue.

Please include in the scope and content of the Draft Environmental Impact Report all of the concerns, requests, and items outlined in the letter, along with a written response to each. Thank you.

Sincerely,

Terry B. Stone

EIR Scoping Meeting
July 7, 2011
NOP Comment Card

Name VALERIE WELK-KISSLER
Address 925 W. SAN JOSE
City FRESNO Zip 93704
Email wckissler@comcast.net

Please consider the following comments in response to the NOP (please print):

PLEASE SEND ME (PDF FILE IS FINE)
THE LANDSCAPE DESIGN, LISTING ALL
THE PROPOSED TREES, SHRUBS, PLANTINGS -
THANKS!

A Notice of Preparation (NOP) has been completed for this project. Written comments on the NOP will be accepted from June 30, 2011 through the close of the public review period on July 30, 2011.

Please drop comments in the comment box at this meeting or mail your written comments to: Mike Sanchez, Planning Manager, City of Fresno Planning & Development Department, 2600 Fresno Street, Fresno, CA 93721

July 25, 2011

Mike Sanchez
Fresno City Planning and Development
2600 Fresno Street
Fresno, CA. 93721

Mr. Sanchez,

EIR (NOP) Concerns and Comments – for consideration, investigation and mitigation

1. Aesthetics
   Maintenance of the curbing which extends from north of Eden park Apartments to San Ramon and Palm Avenue is necessary. Putting in a sidewalk which begins and ends, going nowhere, is not necessary. The existing indigenous trees (Deodars) should remain.
2. Air Quality
   The dust created by construction should e kept at a minimum, due to the health and welfare of the existing neighbors.
3. Biological Resources
   Awareness of existing endangered species (i.e., the kit fox family) and the wide variety of birds (i.e., hawks, hummingbirds, etc.) should be taken into account during construction.
4. Cultural Resources
   The "Doc Adams" farmhouse has, sadly, already been razed, without any analysis done as to preservation or possible uses.
5. Geology and Soils
   The existing soil needs to be analyzed as to water use and planting of landscape.
6. Hazards and Hazardous Materials
   None known.
7. Hydrology and Water Quality
   As a Fresno County Master Gardener, I am concerned about the choice of landscape plants being water conscious, and requested a list of plants at the Scoping meeting, but as of this date, have not received any such list.
8. Land Use and Planning
   Noise during construction should be respected according to City ordinances.
9. Public Services/Utilities
   Issues involving electrical power overload in the neighborhood need to be studied.

10. Traffic

There should be no access to West San Jose, as there is already a problem with traffic which spills from and to Shaw Avenue. Speed limit sighs and speed bumps would help with this.

Cumulative impacts

a. Water usage
b. Traffic spillage onto West San Jose Avenue
c. Possible overload on electricity in the area

11. Alternatives

None known.

In closing, each of the above topics should be addressed on the EIR, with all results published and available to all members of the neighborhood.

Most sincerely,

Valerie Welk-Kissler

Valerie Welk-Kissler
425 W. San Jose Ave.
Fresno, CA. 93704-2315

APPENDIX B

AIR QUALITY & GREENHOUSE GAS ANALYSIS

Donald Ballanti

Certified Consulting Meteorologist

1424 Scott Street
El Cerrito, CA 94530
(510) 234-6087
Fax: (510) 234-6087

Air Quality and Greenhouse Gas Analysis for the Fig Garden Financial Center Phase IV, Fresno, CA.

Prepared For:

Scott Mommer Consulting
10657 East San Felipe Avenue
Clovis, CA. 93619

August 2011

INTRODUCTION

This Air Quality and Greenhouse Gas analysis was prepared to assess the impacts due to the proposed Fig Garden Financial Center Phase IV development, which will be located on the south side of West San Jose Avenue between Maroa and Palm Avenues in the City of Fresno. The approximately 3.96 acre site is currently occupied by a vacant, single-level apartment complex with 44 units. The proposed project will be comprised of a four-story 104,593 square foot office building.

This report describes the existing air quality setting and potential effects from project implementation on the site and its surrounding area. The air quality analysis for the proposed project included construction and operational air quality modeling and greenhouse gas emissions modeling. URBEMIS 2007 program was used to quantify project related emissions of criteria pollutants. The URBEMIS-2007 results and other forecasting methods were used to quantify greenhouse gas emissions. The modeling methodology and output are provided in Appendices 1 and 2.

ENVIRONMENTAL SETTING

Air Pollution Climatology

The project is located in the City of Fresno which is located in the San Joaquin Valley Air Basin. The air basin is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation). The mountains surrounding the air basin form natural horizontal barriers to the dispersion of air contaminants.

The air basin has an “inland Mediterranean” climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight is a catalyst in the formation of some air pollutants (such as ozone), and the air basin averages more than 260 sunny days per year.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. Marine air moves into the air basin from the San Joaquin River Delta. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Mojave Desert Air Basin portion of Kern County. As the wind moves through the valley, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

Inversions are also an important component of regional air quality. Inversions occur when a layer of warm air sits over cooler air, trapping the cooler air beneath. These inversions trap pollutants from dispersing vertically and the mountains surrounding the air basin trap the pollutants from dispersing horizontally. Strong temperature inversions occur throughout the air basin in the summer, fall, and winter. Daytime temperature inversions occur at elevations of 2,000 to 2,500 feet above the San Joaquin Valley floor during the summer and at 500 to 1,000 feet during the winter. The result is a relatively high concentration of air pollution in the valley during inversion episodes.

Pollutants of Concern

The criteria pollutants of greatest concern for the project area are ozone, PM_{10}, and $PM_{2.5}$. Although the air basin is in attainment of the federal and state carbon monoxide standards, carbon monoxide is a pollutant of concern, due to the potential for localized "hotspots" to occur. Other pollutants of concern are toxic air contaminants, asbestos, and greenhouse gases. The following provides a summary of the pollutants of concern for the project area.

Ozone

Ozone is not emitted directly into the air but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include ROG and NO_x (ozone precursors are discussed below), react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. Often, the effects of emitted ROG and NO_x are felt a distance downwind of the emission sources. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials.

Reactive Organic Gases

Reactive organic gases (ROG) are defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participate in atmospheric photochemical reactions. ROG consist of non-methane hydrocarbons and oxygenated hydrocarbons. There are no state or federal ambient air quality standards for ROG because they are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formulation of ozone. ROG are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} levels and lower visibility.

Nitrogen Oxides

During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides or NO_x. This occurs primarily in motor vehicle internal combustion engines, and

fossil fuel-fired electric utility facilities and industrial boilers. The pollutant NO_x is a concern because it is an ozone precursor, which means that it helps form ozone. When NO_x and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight and heat to form ozone. NO_x can also be a precursor to PM_{10} and $PM_{2.5}$.

Particulate Matter (PM_{10} and $PM_{2.5}$)

Particulate matter is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small that they can only be detected using an electron microscope.

The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers (µm) in diameter pose the greatest problems, because they can get deep into lungs and the bloodstream. The United States Environmental Protection Agency (EPA) health standards have been established for two categories of particulate matter:

- PM_{10} – "inhalable coarse particles" with diameters larger than 2.5 micrometers and smaller than 10 micrometers and

- $PM_{2.5}$ – "fine particles," with diameters that are 2.5 micrometers and smaller. For reference, $PM_{2.5}$ is approximately one-thirtieth the size of the average human hair.

Although the PM_{10} standard is intended to regulate "inhalable coarse particles" that ranged from 2.5 to 10 micrometers in diameter, PM_{10} measurements contain both fine and coarse particles. These particles come in many sizes and shapes and can be made up of hundreds of different chemicals. Some particles, known as primary particles, are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks, or fires. Others form in complicated reactions in the atmosphere from chemicals such as sulfur dioxides and nitrogen oxides that are emitted from power plants, industrial activity, and automobiles. These particles, known as secondary particles, make up most of the fine particle pollution in the United States.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. Other non-road engines and vehicles (such as construction equipment and boats) contribute about 22 percent of all CO emissions nationwide. Higher levels of CO generally occur in areas with heavy traffic congestion. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural

sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are sources of CO indoors.

CO is described as being a local pollutant, as higher concentrations are found only close to the source. High CO levels develop primarily during winter, when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

Toxic Air Contaminants

A toxic air contaminant is defined as an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. Toxic air contaminants are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those toxic air contaminants that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Diesel Particulate Matter

CARB identified the PM emissions from diesel-fueled engines as a toxic air contaminant in August 1998 under California's toxic air contaminant program. In California, diesel engine exhaust has been identified as a carcinogen, known as diesel particulate (DPM).

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 40 percent of the statewide total, with an additional 57 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources, contributing about 3 percent of emissions, include shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations.

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States.

Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers to the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults.

The Department of Conservation, Division of Mines and Geology published a guide entitled, "A General Location Guide For Ultramafic Rocks In California - Areas More Likely To Contain Naturally Occurring Asbestos," dated August 2000, for generally identifying areas that are likely to contain naturally occurring asbestos. A review of a map containing areas more likely to have rock formations containing naturally occurring asbestos in California indicates that the project site is not in an area that is likely to contain naturally occurring asbestos. Therefore, this report does not include natural-occurring asbestos as a potential impact of the project.

Greenhouse Gases

Definition

Constituent gases of the earth's atmosphere called greenhouse gases play a critical role in the earth's radiation budget by trapping infrared radiation emitted from the earth's surface, which would otherwise have escaped into space. This phenomenon, known as the "Greenhouse Effect," is responsible for maintaining a habitable climate. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations, leading to a trend of unnatural changes to the earth's natural climate, known as global warming or climate change.

Greenhouse gases are global pollutants, unlike ozone, carbon monoxide, particulate matter, and toxic air contaminants, which are pollutants of regional and local concern. California State law defines greenhouse gases as:

Carbon Dioxide (CO_2)
Methane (CH_4)
Nitrous Oxide (N_2O)
Hydrofluorocarbons
Perfluorocarbons
Sulfur Hexafluoride

The overall approach to the GHG calculation in this report is based upon the technical advisory of the Governor's Office of Planning and Research (OPR) embodied in the document *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*. According to the Governor's Office of Planning and Research, the most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide. The last 3 of the six identified

GHGs are primarily emitted by industrial facilities. For this analysis, only carbon dioxide, methane and nitrous oxide emissions will be considered. These primary greenhouse gases are described below.

Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, the concentration of carbon dioxide in the atmosphere has increased 35 percent. Carbon dioxide is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining GWPs for other GHGs.

Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the United States, the top three sources of methane are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, which is used for space and water heating, steam production, and power generation. The GWP of methane is 21.

Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 310.

Potential Environmental Effects

The United Nations Intergovernmental Panel on Climate Change (IPCC) has declared that worldwide, average temperatures are likely to increase by approximately 3°F to 7°F by the end of the 21st century. However, a global temperature increase does not translate to a uniform increase in temperature in all locations on the earth. Regional climate changes are dependent on multiple variables, such as topography. One region of the earth may experience increased temperature, increased incidents of drought, and similar warming effects, whereas another region may experience a relative cooling. According to the IPCC's Working Group II Report website, climate change impacts to North America may include diminishing snowpack, increasing evaporation, exacerbated shoreline erosion, exacerbated inundation from sea level rising, increased risk and frequency of wildfire, increased risk of insect outbreaks, increased experiences of heat waves, and rearrangement of ecosystems, as species and ecosystem zones shift northward and to higher elevations.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming, although there is uncertainty concerning the magnitude and rate of the warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

Although certain environmental effects are widely accepted to be a potential hazard to certain locations, such as rising sea level for low-lying coastal areas, it is currently infeasible to predict all environmental effects of climate change on any one location.

Greenhouse Gas Emissions Inventory and Trends

In 2004, total worldwide greenhouse gas emissions were estimated to be 20,135 million metric tons of carbon dioxide equivalent ($MMTCO_2e$), excluding emissions/removals from land use, land use change, and forestry; greenhouse gas emissions in the U.S. were 7,074.4 $MMTCO_2e$.

In 2004, California produced 500 $MMTCO_2e$, including imported electricity and excluding combustion of international fuels and carbon sinks or storage, which is approximately 7 percent of U.S. emissions. The largest source of greenhouse gases in California is transportation, contributing 41 percent of the State's total greenhouse gas emissions. Electricity generation is the second-largest source, contributing 22 percent of the State's greenhouse gas emissions. The inventory for California's greenhouse gas emissions between 2000 and 2006 is presented in Table 1.

Ambient Air Quality

The CARB and San Joaquin Valley Air Pollution Control District (SJVAPCD) operate air monitoring stations in throughout the air basin. The closest monitoring station to the project site is the Fresno First Street site.

Table 2 summarizes 2008 through 2010 published monitoring data from CARB's Aerometric Data Analysis and Management System for the Fresno First Street. Ambient air pollution concentrations in the project area regularly exceeded the state 1-hour ozone standard and the federal 8-hour standard in the last 3 years. In the same timeframe, the project area exceeded the state daily PM_{10} standard and the federal $PM_{2.5}$ standard. However, the project area did not exceed the federal or state CO standards, nor did the project area exceed the federal PM_{10} standard.

Sensitive Receptors/Nearby Sources

Certain populations, such as children, the elderly, and persons with preexisting respiratory or cardiovascular illness, are particularly sensitive to the health impacts of air pollution. For purposes of CEQA, the SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The nearest sensitive receptors to the site are existing residences south, east and north of the project site.

The California Air Resources Board's CHAPIS program (Community Health Air Pollution Information System) was used to determine that no major stationary sources of criteria

Table 1: California Greenhouse Gas Emissions Inventory 2000-2006

Category	Emissions $MMTCO_2e$						
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Agriculture and Forestry	20.91	21.12	24.34	24.48	24.78	25.20	26.25
Commercial	12.98	12.58	14.46	13.07	13.15	12.97	13.25
Electricity Generation (Imports)	42.97	52.38	50.61	56.29	58.59	54.92	49.92
Electricity Generation (In State)	60.76	64.66	51.56	49.77	58.08	52.45	56.99
Industrial	107.93	105.47	107.44	106.41	100.99	100.51	103.00
Not Specified	8.75	9.60	10.47	11.33	12.20	12.90	13.52
Residential	32.20	30.45	30.22	29.88	31.54	30.94	31.12
Transportation	171.94	174.62	181.32	178.90	183.03	185.82	185.77
Total	**458.45**	**470.89**	**470.42**	**470.12**	**482.35**	**475.70**	**479.80**

Source: California Air Resources Board, California Greenhouse Gas Inventory for 2000-2006 by Category as Defined in the Scoping Plan, http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_2009-03-13.pdf. Accessed May 10, 2010.

Table 2: Air Quality Monitoring Summary

Pollutant	Averaging Time (Units)	2008	2009	2010
Ozone	Maximum 1 Hour (ppm) Days > State Standard (0.09 ppm)	**0.157** 44	**0.121** 36	**0.127** 16
	Maximum 8 Hour (ppm) Days > 2008 Federal Standard (0.075 ppm) Days > State Standard (0.07 ppm)	**0.132** 62 86	**0.104** 51 73	**0.107** 26 51
Nitrogen dioxide (NO_2)	Annual Average (ppm)	0.016	0.014	0.013
	Max 1 Hour (ppm) Days > State Standard	0.070 0	0.068 0	0.077 0
Carbon monoxide (CO)	Maximum 1 Hour (ppm)[1]	3.34	2.96	2.90
	Maximum 8 Hour (ppm) Days > State Standard (9.0 ppm) Days > Federal Standard (9 ppm)	2.34 0 0	2.07 0 0	2.03 0 0
Fine particulate matter (PM_{10})	State Annual Average (20 µg/m^3)	**35.1**	**30.9**	**25.9**
	Maximum 24 Hour (µg/m^3) [2] Days > State Standard (50 µg/m^3) Days > Federal Standard (150 µg/m^3)	**77.7** 15 0	**71.9** 8 0	**88.6** 5 0
Ultra fine particulate matter ($PM_{2.5}$)	Annual Average (µg/m^3)	**17.3**	**15.1**	**13.0**
	Maximum 24 Hour (µg/m^3) Est. Days > Federal Standard (35 µg/m^3)	**79.5** 50.9	**82.3** 35.8	**58.3** 21.7

Notes:
> = exceed
ppm = parts per million
Exceedances are listed in **bold.**

[1]The CARB does not report 1-hour average CO concentrations in its database, only 8-hour CO concentrations. Therefore, the 1-hour CO concentration was derived by dividing the 8-hour concentration by 0.7.

Source: California Air Resources Board, Aerometric Data Analysis and Management (ADAM), 2011. (http: //www.arb.ca.gov./adam/cgi-bin/adamtop/d2wstart).

or toxic air pollutants are located near the proposed project site. The site is not within 500 feet of any freeways.

REGULATORY FRAMEWORK

Air pollutants are regulated at the national, state, and air basin level; each agency has a different degree of control. The EPA regulates at the national level. The California Air Resources Board (CARB) regulates at the state level and SJVAPCD regulates at the air basin level.

U.S. Environmental Protection Agency

The EPA handles global, international, national, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance in air pollution programs, and sets National Ambient Air Quality Standards, also known as federal standards. There are federal standards for six common air pollutants, called criteria air pollutants, which were identified resulting from provisions of the Clean Air Act of 1970. The six criteria pollutants are:

- Ozone
- Carbon Monoxide
- Lead
- Sulfur Dioxide
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Nitrogen dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants.

California Air Resources Board (CARB)

The State Implementation Plan for the State of California is administered by CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. A State Implementation Plan is prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards. The State Implementation Plan incorporates individual federal attainment plans for regional air districts. Federal attainment plans prepared by each air district are sent to CARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring) control measures and strategies and enforcement mechanisms.

CARB also administers California Ambient Air Quality Standards for the 10 air pollutants designated in the California Clean Air Act. The 10 state air pollutants are the six criteria pollutants listed above as well as visibility reducing particulates, hydrogen sulfide,

sulfates, and vinyl chloride. Visibility-reducing particles are suspended particulate matter. Federal and state ambient air quality standards are summarized in Table 3.

CARB published *Air Quality and Land Use Handbook: A Community Health Perspective* in 2005. This document provides information and guidance on siting sensitive receptors in relation to sources of toxic air contaminants. The sources of toxic air contaminants identified in the Land Use Handbook are high-traffic freeways and roads, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and large gasoline dispensing facilities. If the project involves siting a sensitive receptor or source of toxic air contaminant discussed in the Land Use Handbook, siting mitigation may be added to avoid potential land use conflicts, thereby reducing the potential for health impacts to the sensitive receptors.

San Joaquin Valley Air Pollution Control District

The air pollution control agency for the Air Basin is the SJVAPCD. The SJVAPCD is responsible for regulating emissions primarily from stationary sources, certain area-wide sources, and indirect sources. The SJVAPCD maintains air quality monitoring stations throughout the Air Basin. The SJVAPCD, in coordination with the eight countywide transportation agencies, is also responsible for developing, updating, and implementing the Air Quality Plans (AQPs) for the Air Basin. In addition, the SJVAPCD has prepared the *Guide for Assessing and Mitigating Air Quality Impacts*, which sets forth recommended thresholds of significance, analysis methodologies, and provides guidance on mitigating significant impacts.

Attainment Status

There are three terms used to describe whether an air basin is exceeding or meeting federal and state standards: Attainment, Nonattainment, and Unclassified. Areas are designated attainment or nonattainment on a per-pollutant basis. An air basin is designated as "attainment" if all the standards for an air pollutant are met. If there is inadequate or inconclusive data to make a definitive attainment designation for a pollutant, the air basin is considered "unclassified." The current attainment designations for the project area are shown in Table 4.

Air Quality Plans

As described above under Federal and State Regulatory Agencies, a State Implementation Plan is a federal requirement; each state prepares an plan to describe existing air quality conditions and measures that will be followed to attain and maintain the National Ambient Air Quality Standards. In addition, state ozone standards have planning requirements. However, state PM_{10} standards have no attainment planning requirements, but air districts must demonstrate that all measures feasible for the area have been adopted.

Table 3: Federal and State Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	Federal Standard
Ozone (O_3)	1 hour	0.09 ppm	—
	8 hour	0.070 ppm	0.075 ppm
Respirable particulate matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3
	Mean	20 µg/m^3	—
Fine particulate matter ($PM_{2.5}$)	24 hour	—	35 µg/m^3
	Mean	12 µg/m^3	15.0 µg/m^3
Carbon monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hour	9.0 ppm	9 ppm
Nitrogen dioxide (NO_2)	1 hour	0.18 ppm	—
	Mean	0.030 ppm	0.053 ppm
Sulfur dioxide (SO_2)	1 hour	0.25 ppm	0.10 ppm
	24 hour	0.04 ppm	0.14 ppm
	Mean*	—	0.030 ppm
Lead	30-day	1.5 µg/m^3	—
	Rolling 3-month	—	0.15 µg/m^3**
	Quarter	—	1.5 µg/m^3
Sulfates	24 hour	25 µg/m^3	No Federal Standard
Hydrogen sulfide	1 hour	0.03 ppm	
Vinyl chloride**	24 hour	0.01 ppm	
Visibility-reducing particles	8 hour	Extinction coefficient of 0.23 per kilometer, visibility of 10 miles or more from particles when relative humidity is less than 70%.	

Abbreviations:
ppm = parts per million
µg/m^3 = micrograms per cubic meter
30-day = 30-day average
Quarter = Calendar quarter
Mean = Annual Arithmetic Mean
Source: California Air Resources Board, Ambient Air Quality Standards (9/08/10)
http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

Table 4: Air Basin Attainment Status

Pollutant	Designation Status	
	Federal	**State**
Ozone- 1 Hour	No federal standard	Nonattainment/Severe
Ozone- 8-Hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead	No Designation	Attainment
Sulfates	No federal standards	Attainment
Hydrogen sulfide		Unclassified
Visibility-reducing particles		Unclassified
Source: San Joaquin Valley Air Pollution Control District, Air Quality Standards and Valley Attainment Status, http://www.valleyair.org/aqinfo/attainment.htm, accessed August 9, 2011.		

Ozone Plans

The air basin is designated nonattainment of state and federal health-based air quality standards for ozone. To meet CAA requirements for the one-hour ozone standard, the SJVAPCD adopted an Extreme Ozone Attainment Demonstration Plan in 2004, with an attainment date of 2010. EPA revoked the federal 1-hour ozone standard and replaced it with an 8-hour standard. Although EPA revoked the 1-hour ozone standard effective June 15, 2005, the requirement to submit a plan for that standard remained in effect for the San Joaquin Valley. On June 30, 2009, EPA proposed approval and partial disapproval of San Joaquin Valley's 2004 Extreme Ozone Attainment Plan for 1-hour ozone. EPA proposed to approve the plan revisions for the San Joaquin Valley as meeting applicable Clean Air Act requirements except for the provision addressing the reasonably available control technology requirements that the State withdrew. On December 11, 2009, the final approval of the San Joaquin Valley's 2004 Extreme Ozone Attainment Demonstration Plan was signed by EPA. The plan, prepared by the San Joaquin Valley Air Pollution Control District, shows that the area will have in place the controls necessary to meet the 1-hour ozone standard by the area's Clean Air Act deadline of 2010.

The air basin is classified as serious nonattainment for the federal 8-hour ozone standard with an attainment date of 2013. On April 30, 2007, the SJVAPCD's Governing Board adopted the 2007 Ozone Plan, which contained analysis showing a 2013 attainment target to be unfeasible. The 2007 Ozone Plan details the plan for achieving attainment on schedule with an "extreme nonattainment" deadline of 2026. At its adoption of the 2007 Ozone Plan, the SJVAPCD also requested a reclassification to extreme nonattainment. CARB approved the plan in June 2007.

State ozone standards do not have an attainment deadline but require implementation of all feasible measures to achieve attainment at the earliest date possible.

Particulate Matter Plans

The air basin was designated nonattainment of state and federal health-based air quality standards for PM_{10}. To meet Clean Air Act requirements for the PM_{10} standard, the SJVAPCD adopted a PM_{10} Attainment Demonstration Plan (Amended 2003 PM_{10} Plan and 2006 PM_{10} Plan), which has an attainment date of 2010.

The SJVAPCD adopted the 2007 PM_{10} Maintenance Plan and Request for Redesignation (2007 PM_{10} Plan) on September 20, 2007. The 2007 PM_{10} Plan contains modeling demonstrations that show the air basin will not exceed the federal PM_{10} standard for 10 years after the expected EPA redesignation, monitoring, and verification measures, and a contingency plan. Even though EPA revoked the federal annual PM_{10} standard, the 2007 PM_{10} Maintenance Plan addresses both the annual and 24-hour standards because both standards were included in the EPA-approved State Implementation Plan. EPA finalized the determination that the air basin attained the PM_{10} standards on October 17, 2007, effective October 30, 2007. On September 25,

2008, EPA re-designated the air basin as attainment for the federal PM_{10} standard and approved the PM_{10} Maintenance Plan.

The air basin is also designated nonattainment for the new federal $PM_{2.5}$ annual standard. The SJVAPCD adopted the 2008 $PM_{2.5}$ Plan on April 30, 2008. The $PM_{2.5}$ Plan that demonstrates the air basin will attain the 1997 federal standard by 2014 and make progress toward attaining the 2006 federal 24-hour standard. Barring delays due to legal challenges, the SJVAPCD estimates that attainment plans for the federal 2006 standard will be required by 2012 or 2013 with an attainment deadline of 2020. Measures contained in the 2003 PM_{10} Plan will also help reduce $PM_{2.5}$ levels and will provide progress toward attainment until new measures are implemented for the $PM_{2.5}$ Plan, if needed.

State PM_{10} standards have no attainment planning requirements, but air districts must demonstrate that all measures feasible for the area have been adopted.

District Rules Applicable to the Project

The SJVAPCD rules and regulations that apply to this project include but are not limited to the following:

- SJVAPCD Rule 2201 – New and Modified Stationary Source Review.

- SJVAPCD Rule 3180 – Administrative Fees for Indirect Source Review (ISR). The purpose of this rule is to recover the SJVAPCD's costs for administering the requirements of Rule 9510 (Indirect Source Review).

- SJVAPCD Rule 4002 - National Emissions Standards for Hazardous Air Pollutants. The purpose of the rule is to incorporate the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations and the National Emission Standards for Hazardous Air Pollutants for Source Categories from Part 63, Chapter I, Subchapter C, Title 40, Code of Federal Regulations to protect the health and safety of the public from hazardous air pollutants, such as asbestos.

- SJVAPCD Rule 4102 – Nuisance. The purpose of this rule is to protect the health and safety of the public, and applies to any source operation that emits or may emit air contaminants or other materials.

- SJVAPCD Rule 4601 – Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling.

- SJVAPCD Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from

asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641.

- SJVAPCD Regulation VIII – Fugitive PM_{10} Prohibitions. Rule 8011-8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc.

- SJVAPCD Rule 9510 – Indirect Source Review. This rule reduces the impact of NO_x and PM_{10} emissions from growth on the Air Basin. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through onsite mitigation, offsite SJVAPCD-administered projects, or a combination of the two. This project will submit an Air Impact Assessment application in accordance with Rule 9510's requirements.

Climate Change/Greenhouse Gas Regulation

International and Federal

In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess "the scientific, technical and socio economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation."

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change. Under the Convention, governments gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

A particularly notable result of the United Nations Framework Convention on Climate Change efforts is a treaty known as the Kyoto Protocol, which went into effect on February 16, 2005. When countries sign the Protocol, they demonstrate their commitment to reduce their emissions of greenhouse gases or engage in emissions trading. More than 170 countries are currently participating in the Protocol. Industrialized countries are required to reduce their greenhouse gas emissions by an average of 5 percent below their 1990 levels by 2012. In 1998, United States Vice President Al Gore symbolically signed the Protocol; however, in anticipation of the signing, the U.S. Senate approved a non-binding "Sense of the Senate" resolution in July 1997 by a margin of 95-0 that expressed opposition to the treaty's provisions, most notably the disparity in greenhouse gas emissions reduction obligations between industrialized nations and developing nations. In 2001, President, George W. Bush, indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009,

international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto, which yielded a non-binding agreement.

The EPA currently does not regulate greenhouse gas emissions from motor vehicles. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that EPA regulate four greenhouse gases, including carbon dioxide, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Court held that petitioners have a standing to challenge the EPA and that the EPA has statutory authority to regulate emissions of greenhouse gases from new motor vehicles.

In April 2009, the EPA published a Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act. The EPA is proposing to find that the current and projected concentrations of the mix of six key greenhouse gases—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations. The EPA is further proposing to find that the combined emissions of CO_2, CH_4, N_2O, and HFCs from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases and hence to the threat of climate change. The proposed action does not itself impose any requirements on industry or other entities. However, the finding, if finalized by the EPA, is a key step in regulating greenhouse gases under the Clean Air Act.

State

There have been significant legislative and regulatory activities that affect climate change and greenhouse gases in California. Relevant legislation is discussed below.

Title 24

Although it was not originally intended to reduce greenhouse gas emissions, California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. The 2008 Standards went into effect January 1, 2010, and supersede the 2005 Standards. Projects that apply for a building permit on or after this date must comply with the 2008 Standards. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

AB 1493

California Assembly Bill 1493 (Pavley), enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger

vehicles and light-duty trucks. Regulations adopted by CARB would apply to 2009 and later-model-year vehicles. CARB estimates that the regulation would reduce climate change emissions from the light-duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030. However, the regulation was stalled by automaker lawsuits and by the EPA's refusal to grant California an implementation waiver. However, President Obama asked the EPA to review its denial of the waiver. The EPA granted California's waiver June 30, 2009, enabling California to enforce AB 1493.

Executive Order S-3-05

California Governor Arnold Schwarzenegger signed Executive Order S-3-05 on June 1, 2005, which established the following reduction targets for greenhouse gas emissions:

- By 2010, reduce greenhouse gas emissions to 2000 levels;
- By 2020, reduce greenhouse gas emissions to 1990 levels; and
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target. To meet these targets, the Governor directed the Secretary of the California EPA to lead a Climate Action Team (CAT) made up of representatives from the Business, Transportation, and Housing Agency; the Department of Food and Agriculture; the Resources Agency; the CARB; the Energy Commission; and the Public Utilities Commission. The CAT's Report to the Governor in 2006 contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met.

Executive Order S-01-07

Executive Order S-01-07 was signed by the Governor on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. It also requires that a Low Carbon Fuel Standard for transportation fuels be established for California.

SB 97

SB 97 was passed in August 2007 and added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

AB 32

In 2006, the California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing greenhouse gas emissions in California. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. CARB is the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases.

The CARB approved the 1990 greenhouse gas emissions level of 427 $MMTCO_2e$ on December 6, 2007. Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$.

The CARB approved the Climate Change Scoping Plan (Scoping Plan) in December 2008. The Scoping Plan outlines actions to obtain the goal set out in AB 32 of reducing emissions to 1990 levels by the year 2020. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health". The measures in the Scoping Plan will be in place by 2012. The Scoping Plan's recommendations for reducing greenhouse gas emissions to 1990 levels by 2020 providing for emission reduction measures, including a cap-and-trade program linked to Western Climate Initiative partner jurisdictions, green building strategies, recycling and waste-related measures, and Voluntary Early Actions and Reductions. AB 32 did not amend CEQA or establish regulatory standards to be applied to new development or environmental review of projects within the State.

SB 375

SB 375 passed the Senate on August 30, 2008 and was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of greenhouse gas emissions, which emits over 40 percent of the total greenhouse gas emissions in California. SB 375 states that "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) it requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing greenhouse gas emissions, (2) it aligns planning for transportation and housing, and (3) it creates specified incentives for the implementation of the strategies.

Executive Order S-13-08

Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and

welfare of its population and to its natural resources." Pursuant to the requirements in the order, in December 2009, the California Natural Resources Agency released its 2009 California Climate Adaptation Strategy. The Strategy is the " . . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Local

Climate Change Action Plan

On August 21, 2008, the SJVAPCD Governing Board approved a proposal, called the Climate Change Action Plan, to begin a public process to bring together stakeholders, land use agencies, environmental groups, and business groups, and conduct public workshops to develop comprehensive policies for CEQA guidelines and a carbon exchange bank, and voluntary greenhouse gas emissions mitigation agreements for the Governing Board's consideration.

SJVAPCD CEQA Greenhouse Gas Guidance

On December 17, 2009, the SJVAPCD Governing Board adopted "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA" and the policy, "District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency." The SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that project specific greenhouse gas emissions have on global climatic change. The SJVAPCD found the effects of project-specific emissions to be cumulative, and without mitigation, that their incremental contribution to global climatic change could be considered cumulatively considerable. The SJVAPCD found that this cumulative impact is best addressed by requiring all projects to reduce their greenhouse gas emissions, whether through project design elements or mitigation.

The SJVAPCD's approach is intended to streamline the process of determining if project-specific greenhouse gas emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document.

Best Performance Standards would be established according to performance-based determinations. Projects complying with Best Performance Standards would not require specific quantification of greenhouse gas emissions and would be determined to have a less than significant cumulative impact for greenhouse gas emissions. Projects not complying with Best Performance Standards would require quantification of greenhouse

gas emissions and demonstration that greenhouse gas emissions have been reduced or mitigated by 29 percent, as targeted by CARB's AB 32 Scoping Plan. Furthermore, quantification of greenhouse gas emissions would be required for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates Best Performance Standards.

For stationary source permitting projects, Best Performance Standards means "The most stringent of the identified alternatives for control of greenhouse gas emissions, including type of equipment, design of equipment and operational and maintenance practices, which are achieved-in-practice for the identified service, operation, or emissions unit class." For development projects, Best Performance Standards means "Any combination of identified greenhouse gas emission reduction measures, including project design elements and land use decisions that reduce project specific greenhouse gas emission reductions by at least 29 percent compared with business as usual." The SJVAPCD proposes to create a list of all approved Best Performance Standards to help in the determination as to whether a proposed project has reduced its greenhouse gas emissions by 29 percent.

San Joaquin Valley Carbon Exchange

The SJVAPCD initiated work on the San Joaquin Valley Carbon Exchange in November 2008. While the Climate Change Action Plan indicated that the greenhouse gas emission reduction program would be called the San Joaquin Valley Carbon Exchange, SJVAPCD staff has proposed to incorporate a method to register voluntary greenhouse gas emission reductions into its existing Rule 2301 - Emission Reduction Credit Banking through amendments of the rule.

In its present draft form, the amendments to Rule 2301 would provide a mechanism to preserve voluntary, high-quality greenhouse gas emission reductions. The draft rule will allow the use of registered greenhouse gas emission reductions for any purpose and will not impose any restrictions on their use. The draft amendments to Rule 2301 will allow greenhouse gas emission reductions that fall into two different categories to be registered with the SJVAPCD: non-protocol greenhouse gas emission reductions and protocol-based greenhouse gas emission reduction credits.

IMPACTS AND MITIGATION

Methodology

The analysis that follows was prepared using a variety of data sources and air quality models. The Traffic Impact Study for the project, prepared by TPG Consulting, Inc., was used to obtain intersection Levels of Service (LOS) for the CO Hotspot Analysis and average daily trip generation to model operational motor vehicle emissions. Annual increases in vehicular and area emissions associated with the project were estimated using the URBEMIS 2007 (Version 9.2.4) computer program. Construction emissions for the project were also modeled using URBEMIS.

Carbon dioxide emissions were estimated using the URBEMIS-2007 output and a variety of methods to estimate non-vehicular emissions.

Thresholds of Significance

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, air quality impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation
- 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)
- Expose sensitive receptors to substantial pollutant concentrations
- Create objectionable odors affecting a substantial number of people

Appendix G states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. SJVAPCD guidance provides that a project would have a significant impact if:

- All control measures in compliance with the requirements of Regulation VIII-Fugitive Dust Prohibition are not incorporated into project design or implemented during construction
- Construction-related emissions of ROG or NO_x exceed 10 tons per year.
- Operational regional emissions of ROG or NO_x exceed 10 tons per year.
- Project results in a carcinogenic risk (i.e., risk of contracting cancer) greater than 10 in one million and/or a non-carcinogenic Hazard Index (HI) of 1 for the Maximally Exposed Individual (MEI), as recommended in the SJVAPCD's *Guidance for Air Dispersion Modeling*.[1]

[1] San Joaquin Valley Air Pollution Control District, *Guidance for Air Dispersion Modeling*, January 2007.

- The project would locate receptors near an existing odor source where one confirmed complaint per year (averaged over a three year period), or three unconfirmed complaints per year (averaged over a three year period) have been experienced by existing receptors as close as the project to the odor source; or by existing receptors in the vicinity of a similar facility considering distance, frequency, and odor control, where there is currently no nearby development and for proposed odor sources near existing receptors.

California Environmental Quality Act (CEQA) guidelines provide that a project would have a significant GHG impact if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or

- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

The first criteria may be evaluated by performing a direct calculation of the GHG emissions from the project. The SJVAPCD adopted a guidance document on December 17, 2009, for assessing GHG emissions for projects in the SJVAB, but concluded that a numerical GHG significance threshold was not supported by current scientific knowledge. Instead, the SJVAPCD guidance recommends compliance with best performance standards (BPS) to reduce GHG emissions or demonstrate that a project results in a reduction of GHG emissions by 29 percent compared to an established baseline. Accordingly, while GHG emissions can be quantified, there is no significance threshold relevant to the proposed Project that has been adopted by any federal, state, or local agency to evaluate the significance of the proposed Project under CEQA.

The SJVAPCD adopted the *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* in late 2009.[2] According to the guidance, while other agencies have proposed draft numerical thresholds for GHG emissions, notably CARB, the Bay Area Air Quality Management District, and the South Coast Air Quality Management District, SJVAPCD staff concluded that "the existing science is inadequate to support quantification of the extent to which project specific GHG emissions would impact global climatic features… Therefore, the SJVAPCD did not establish a numerical threshold for GHG emissions for land use projects. The SJVAPCD guidance recommends the use of BPS to assess the significance of GHG emissions. The SJVAPCD expects that compliance with the recommended BPS would reduce a project's GHG emissions by a target of 29 percent or more, compared an established baseline. The 29 percent reduction target is based on the goal of AB 32, which is to reduce the state's GHG emissions to 1990 levels by 2020.

[2] San Joaquin Valley Air Pollution Control District, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, December 2009.

The SJVAPCD supports the use of performance based standards, but also recognizes that performance standards have not been developed for all sources of GHG emissions. The SJVAPCD guidance provides BPS for sources of GHG emissions from land-use developments that are typical of most projects. The process for establishing source performance standards is expected to be ongoing, as mitigation measures and GHG emission reduction techniques will evolve and improve over time.

As an alternative to complying with the SJVAPCD's recommended BPS, projects that demonstrate a reduction of 29 percent in GHG emissions from the established baseline would also be considered to result in a less than significant impact under CEQA. Based on the above, the project's significance with respect to GHG emissions and global climate change will be assessed based on project features and GHG reduction measures that are consistent with the SJVAPCD's recommended BPS and the 29 percent reduction target as compared with and established *Business as Usual (BAU*) baseline for commercial developments.

Impact 1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan

The SJVAPCD has prepared attainment plans for the SJVAB in order to demonstrate achievement of the state and federal ambient air quality standards for ozone, PM_{10}, and $PM_{2.5}$. The attainment plans are based on, among other things, future growth in the SJVAB based on adopted general plans.

The project would replace the 44 apartment units on the project site with a four-story 104,593 square foot office building. This land use change would not conflict with or obstruct implementation of applicable air quality plans. The regional emissions associated with the project are evaluated under Impact 4 below.

Mitigation Measures

No mitigation is necessary.

Impact 2: The proposed project would result in short-term construction emissions but would not exceed the threshold of significance for ROG and NO_x.

Construction impacts include fugitive dust and other particulate matter, as well as exhaust emissions generated by demolition of existing buildings, earthmoving activities, and operation of grading equipment during site preparation. Construction emissions are caused by onsite or offsite activities. Onsite emissions principally consist of exhaust emissions from heavy-duty construction equipment, motor vehicle operation, and fugitive dust from disturbed soil. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles, as well as worker traffic, but also include road dust.

Construction equipment used on the project site will result in exhaust emissions consisting of NO_x, ROG, CO, PM_{10}, $PM_{2.5}$, CO and minor amounts of sulfur dioxide.

Construction activities are carried out in discrete steps, each of which has a unique mix of equipment. Therefore, the construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and the prevailing weather conditions. The analysis used URBEMIS to estimate emissions from the construction of the project.

The URBEMIS program was run assuming the applicant's 16.5-month construction schedule. It was assumed that construction would begin on February 12, 2012 and would be completed by July 2013.

The unmitigated analysis includes compliance with SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions). Compliance with Regulation VIII is required. Therefore, the following measures were included in the analyses:

- Apply soil stabilizers to inactive areas.
- Replace ground cover in disturbed areas quickly.
- Water exposed surfaces twice daily.
- Stabilize soil in equipment loading/unloading areas.
- Reduce speed on unpaved roads to less than 15 miles per hour.
- Manage haul road dust by watering twice daily.

Maximum annualized construction emissions are shown below in Table 5. Emissions would not exceed the SJVAPCD's regional thresholds during construction. This is a less than significant impact.

Mitigation Measures

Although construction emissions are less than significant, San Joaquin Valley APCD requires the following mitigation measures to be implemented during construction.

The proposed project shall include in all construction contracts the measures specified in SJVAPCD Regulation VIII (as it may be amended for application to all construction projects generally) to reduce fugitive dust impacts. These measures include, but are not limited to the following:

- *All disturbed areas, including storage piles, which are not being actively utilized for construction purpose, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover.*
- *All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or a chemical stabilizer/suppressant.*

Table 5: Maximum Annualized Construction Emissions

	Annualized Emissions (tons)			
	ROG	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
	2.64	**2.35**	**0.76**	**0.33**
SJVAPCD Threshold	10	10	-	-
Significant?	No	No	-	-

- *All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing the application of water or by presoaking.*
- *When materials are transported off site, all materials shall be covered, effectively wetted to limit visible dust emissions, or at least 6 inches of freeboard space from the top of the container shall be maintained.*
- *All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.*
- *Use of blower devices is expressly forbidden.)*
- *Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, storage piles shall be effectively stabilized of fugitive dust emissions by utilizing sufficient water or chemical stabilizer/suppressant*

Equipment used during grading activities shall include one of the following:

- *Diesel oxidation catalysts or other amendment to achieve a 15 percent reduction in NOx emissions*
- *An engine tier of three of higher*
- *An engine of year 2006 or newer*

During all phases of project construction, construction equipment shall be properly maintained in accordance with the manufacturer's specifications; maintenance shall include proper tuning and timing of engines. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction and subject to inspection by the SJVAPCD.

During all phases of project construction, the developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use.

During all phases of project construction, on-site electrical hookups shall be provided for electric construction tools, including saws, drills, and compressors, to eliminate the need for diesel-powered electric generators.

Impact 3: The proposed project would result in less-than-significant impacts with respect to Toxic Air Contaminant (TAC) emissions.

The California Air Resources Board has identified particulate emissions from diesel fueled engines as a Toxic Air Contaminant (TAC). During construction various diesel-powered vehicles and equipment would be in use on the site. The SJVAPCD CEQA guidance recommends that a Health Risk Assessment be prepared for permanent sources of TAC emissions, such as a truck loading dock or a emergency diesel generator. The project would not involve any operational sources of TACs.

Small amounts of diesel particulate would be released during some phases of construction. The bulk of diesel engine use on site would occur during the initial phases of construction such as demolition and site preparation. These construction phases would occur over a period of about 2 to 3 months.

Health risks from TACs are a function of both concentration and duration of exposure. Thresholds of significance for TACs are based on lifetime exposures assumed to be 70 years. Construction diesel emissions are temporary, affecting an area for a period of weeks. Additionally, construction related sources are mobile and transient in nature. Because of the relatively short duration of exposure at any one location, the SJVAPCD guidance and procedures do not recommend that Health Risk Assessment be prepared for normal construction activities, and the District does not have any screening procedures to evaluate construction health effects. Given the shore duration of construction emissions of diesel particulate, health risks from construction emissions of diesel particulate would be a less-than-significant impact.

Mitigation Measures

No mitigation is necessary.

Impact 4: The proposed project would result in operational emissions that would not exceed the threshold of significance for ROG and NO_x and result in a less-than-significant regional air quality impact.

Operational, or long-term, emissions occur over the life of the project. Operational emissions include mobile and area source emissions. Area source emissions are from consumer products, heaters that consume natural gas, gasoline-powered landscape equipment, and architectural coatings (painting). Mobile emissions are from motor vehicles, which are often the largest single, long-term source of air pollutants from development projects.

Table 6 shows the new auto and area source emissions of regional pollutants that would result from the proposed project, based upon output from the URBEMIS-2007 computer program. Also shown are the SJVAPCD thresholds of significance. The project would not exceed the SJVAPCD's regional threshold for NO_x and ROG; therefore, this would be considered a less-than-significant impact.

Mitigation Measures

No mitigation is necessary.

Impact 5: The proposed project would increase Carbon Monoxide (CO) concentrations along streets, but would not cause a violation of the air quality standard or contribute substantially to an existing or projected air quality violation.

Table 6: Operational Emissions (2013)

Source	Emissions (tons/year)			
	ROG	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Source Emissions	0.13	0.13	0.01	0.01
Vehicular Emissions	1.79	3.12	1.78	0.41
Total	**1.92**	**3.25**	**1.79**	**0.42**
SJVAPCD Threshold	10	10	-	-
Significant?	No	No	-	-

The SJVAPCD's *Guide for Assessing and Mitigation Air Quality Impacts* provides that if neither of the following criteria are met at all intersections affected by the development project, the project can be said to have no potential to create a violation of the CO standard:

- The Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F, and

- The project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

The traffic impact study[3] prepared for the proposed project forecasts that, with recommended traffic mitigation, all roadway segments and intersections studied would operate at LOS D or better with approved growth and the addition of project traffic. However, in the cumulative case level of service would drop to LOS E or worse at two intersections: Bullard Avenue at Palm Avenue and Maroa Avenue at Shaw Avenue. These intersections would have the highest potential for causing a CO hotspot.

Using the CALINE4 model and the statewide CO protocol developed by Caltrans, potential CO hotspots were analyzed at the two worst-case intersections under existing conditions and with the addition of traffic from the proposed project and approved projects. As shown in Table 7, the estimated 1-hour and 8-hour average CO concentrations are below the state and national ambient air quality standards. No CO hotspots are anticipated as a result of traffic-generated emissions by the project in combination with other anticipated development in the area.

The CALINE-4 model was also applied to the two worst-case intersections for cumulative plus project traffic conditions in the year 2030. Even with increased traffic volumes and congestion, cumulative concentrations are below current levels due to the gradual reduction in per-mile emission rates from vehicles as older, more polluting vehicles are replaced by newer, cleaner vehicles. Therefore, the mobile emissions of CO from the project are not anticipated to contribute substantially to an existing or projected air quality violation of CO either singly or cumulatively. The proposed project would have no potential to create a violation of the CO standards, and would have a less-than-significant impact on CO air quality.

Mitigation Measures

No mitigation is necessary.

[3] TGP Consulting, *Fig Garden Financial Center Phase IV Traffic Impact Study*, August 2011.

Table 7: Worst-Case Carbon Monoxide Concentrations, in Parts Per Million

Intersection	Existing (2011)		Existing + Project+ Approved (2011)		Project + Cumulative (2030)	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
Bullard/ Palm	5.3	3.7	5.4	3.8	3.2	2.2
Maroa/ Shaw	6.6	4.6	6.8	4.8	3.5	2.5
Ambient Standard	20.0	9.0	20.0	9.0	20.0	9.0
Significant?	No	No	No	No	No	No

Impact 6: The proposed project would not create objectionable odors affecting a substantial number of people.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. SJVAPCD has determined the common land use types that are known to produce odors in the air basin. Included in the types of land uses that are known to create odors are wastewater treatment facilities, chemical manufacturing plants, painting/coating operations, feed lots/dairies, composting facilities, landfills, and transfer stations.

As the proposed project would not include any of the above land uses, it is not expected that the project would expose sensitive receptors to objectionable odors. The project would not be considered a new sensitive receptor. Therefore, the proposed project would have a less than significant impact on odors.

Mitigation Measures

No mitigation is necessary.

Impact 7: The proposed project would not emit a significant amount of greenhouse gas (GHG) emissions.

Operational or long-term GHG emissions sources include the following:

- Motor vehicles and trucks,
- Natural gas usage,
- Offsite electricity generation,
- Water transport and wastewater treatment (refers to the electricity required to transport and treat the water that would be used for the project),
- Solid waste emissions from decomposition in a landfill, and
- Area sources such as maintenance equipment exhaust emissions.

As discussed in the regulatory section, the SJVAPCD's guidance for addressing GHG emissions is to establish a list of GHG emission reduction measures with pre-quantified GHG emission reduction effectiveness. These best performance standards (BPS), however, have not yet been established. Projects implementing BPS would not require quantification of GHG emissions. In the absence of defined BPS, a project would be required to quantify project-specific GHG emissions and demonstrate that project-specific GHG emissions would be reduced or mitigated by at least 29% compared to Business As Usual (BAU). Projects achieving at least as 29% GHG emission reduction

would be determined to have a less than significant individual and cumulative impact for GHG. [4]

BAU, as established by the California Air Resources Board, is a projected emission inventory and does represent actual business or operational practices generating GHG emissions. BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures in place.

The 29-percent GHG emission reductions may be achieved through any combination of GHG emission reduction measures, including emission reductions achieved as a result of changes in building and appliance standards occurring since the 2002-2004 baseline period. It is appropriate to include standards and regulations that reduce emissions by the Scoping Plan's 2020 target year because the energy used by the project purchased from the grid will result in much lower emissions as the renewable energy portfolio standard is implemented over time. Motor vehicle GHG emissions associated with the project will also decline over time as state and federal fuel efficiency standards are implemented.

BAU emissions for the project are shown in Table 8. The methodology for determining these sources is described in Appendix 2.

Table 9 summarizes assumed reductions in greenhouse gas emissions from state regulations and AB32 measures.

The project site and design incorporate a number of factors that would be expected to reduce GHG emissions. The SJVAPCD's *Interim GHG Emission Reduction Calculator* was applied to the project to estimate emissions reductions from these factors. The following measures were assumed to apply to the project site/design:

Measure 1: Bike Racks
Measure 2: End of Trip Measures
Measure 4: Proximity to Bike Path/Bike Lane
Measure 5: Pedestrian Network
Measure 15: Office Mixed Use Proximate
Measure 22: Urban Mixed Use Measure

The SJVAPCD calculator estimated that the above measures would reduce GHG emissions by 10.375%. This reduction was applied to vehicular emissions only.

[4] San Joaquin Valley Air Pollution Control District, *Addressing Greenhouse Gas Emissions Impacts Under the California Environmental Quality Act*, December 17, 2009.

Table 8: Operational Business as Usual Greenhouse Gas Estimates

Source	**Emissions ($MTCO_2e$ per year)**
Transportation (motor vehicles)	1,899.96
Natural gas	153.34
Electricity	543.02
Water transport/Treatment	14.03
Waste	344.19
Area Sources	0.23
Total	**2,954.77**
Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalents	

Table 9: Greenhouse Gas Emission Reductions from State Regulations and AB32 Measures

Sector	**Affected Emission Sources**	**California Legislation**	**Reduction from 2020 GHG Sector Inventory (%)**	**Total Regulation Reductions for the Applicable Sector (%)**
Mobile	Transportation	AB 1493 Pavley LCFS Passenger Vehicle Efficiency	26.9	26.9
Area	Natural Gas	Energy Efficiency Measures	9.5%	9.5
Indirect	Electricity	RPS	21.0%	26.2
		Energy Efficiency Measures	15.7%	
Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; RPS = Renewable Portfolio Standard Source: Bay Area Air Quality Management District, *BAAQMD CEQA Air Quality Guide*lines, revised June 2010.				

Table 10 shows a summary of resulting project emissions compared to emissions under the Business as Usual (BAU) assumption. Project reductions and future regulations would reduce emissions by approximately 30.1 percent. This reduction would comply with the SJVAPCD threshold of a 29-percent reduction in emissions. Impacts from GHG emissions would, therefore, be less than significant.

Impact 7: The proposed project would not have a significant cumulative air quality impact.

The SJVAB is in nonattainment for the federal and standards for ozone, PM_{10}, and $PM_{2.5}$. Construction of the proposed project would not exceed SJVAPCD's thresholds for ROG, NO_x, and PM emissions, and would not have a cumulative significant impact. The project's operational emissions also do not exceed the SJVAPCD thresholds for ROG and NO_x, which are ozone precursors. According to the SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts*, "Any proposed project that would individually have a significant air quality impact…would also be considered to have a significant cumulative air quality impact." The project would not exceed the threshold of significance for ozone precursors, but would still contribute cumulatively to air pollution resulting from growth in the air basin.

To address cumulative impacts, the San Joaquin Valley Air Basin has implemented SJVAPCD Rule 9510. This rule reduces the impact of NO_x and PM_{10} emissions from growth on the Air Basin. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through onsite mitigation, offsite SJVAPCD-administered projects, or a combination of the two. This project will submit an Air Impact Assessment application in accordance with Rule 9510's requirements. Compliance with SJVAPCD Rule 9510 will avoid the project's contribution to cumulative air quality impacts, so project cumulative air quality impacts would be less than significant.

Mitigation Measures

None required.

Table 10: 2020 Greenhouse Gas Emissions with Project Reductions and Future Regulations

Source	**Business as Usual Emission Inventory ($MTCO_2e$/ year)**	**Emissions With Project Design Reductions $MTCO_2e$**	**Emissions with State Regulations and AB32 Measures $MTCO_2e$**
Transportation	1,899.96	1,702.83	1,231.15
Natural gas	153.34	153.74	138.77
Electricity	543.02	543.02	343.73
Water transport/Treatment	14.03	14.03	8.88
Solid Waste	344.19	344.19	344.19
Area Sources	0.23	0.23	0.21
Total	**2,954.77**	**2,758.04**	**2,066.93**
Percent Emission Reductions from Business as Usual			**30.1**
$MTCO_2e$ = metric tons of carbon dioxide equivalents			

APPENDIX 1: URBEMIS OUTPUT

Construction

Estimates of construction phase emissions were made using a program called URBEMIS-2007 (Version 9.2.4). URBEMIS-2007 is a program that estimates the emissions that result from development projects. Land use projects can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial facilities. URBEMIS-2007 contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

The project was assumed to be built in a 16.5 month period with construction beginning February 2012. The lengths of the various construction phases during the build out period were estimated using a construction phase calculator developed by the San Joaquin Valley Air Pollution Control District. The URBEMIS-2007 default values for equipment, vehicle and other activities were utilized. The air quality modeling assumed that five our phases of construction would occur: demolition, site grading, paving, building construction, and architectural coating.

The analysis included compliance with SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions). Compliance with Regulation VIII is required. The following measures were included in the analysis:

- Apply soil stabilizers to inactive areas.
- Replace ground cover in disturbed areas quickly.
- Water exposed surfaces twice daily.
- Stabilize soil in equipment loading/unloading areas.
- Reduce speed on unpaved roads to less than 15 miles per hour.
- Manage haul road dust by watering twice daily.

URBEMIS-2007 output is attached.

Operation

<u>On-Road Vehicular Emissions</u>

Inputs to the URBEMIS-2007 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Default trip lengths and average trip speeds for Fresno County were used. The analysis was carried out assuming a 2013 vehicle mix.

Area Source Emissions

Area source emissions were also quantified using the URBEMIS-2007 program. The URBEMIS-2007 estimated emissions from the following sources:

Natural Gas Combustion
Landscaping Emissions
Architectural Coatings

The URBEMIS-2007 program was used to quantify operational emissions on an annual basis. The program output is attached.

APPENDIX 2: GREENHOUSE GAS CALCULATIONS

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG's has been implicated as a driving force for global climate change. Definitions of climate change vary between and across regulatory authorities and the scientific community, but in general can be described as the changing of the earth's climate caused by natural fluctuations and anthropogenic activities that alter the composition of the global atmosphere.

According to the Governor's Office of Planning and Research, the most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide. Greenhouse gas emissions were estimated using guidance from the California Air Pollution Control Officers Association (CAPCOA).[5]

Methane (CH_4) and nitrous (N_2O) are more powerful global warming gases than CO_2, so the emissions were multiplied by a correction factor to estimate "carbon dioxide equivalents", designated as CO_2e. CH_4 was assumed to have a Global Warming Potential (GWP), 21 times that of CO_2, while N_2O was assumed to have a Global Warming Potential 310 times that of CO_2.

Transportation

Transportation emissions in tons of CO_2 per year were estimated by the URBEMIS program to be 2,095.65 tons/year or 1,900.75 MT/year. This emission is for CO_2 only, and must be adjusted to account for other greenhouse gas components. The URBEMIS annual emissions were divided by 0.95 to adjust from CO_2 to $CO2_e$.[3] The result is 1,899.96 MT/year.

Area Sources

Area sources are local combustion of fuel. Area sources covered in this section includes maintenance equipment. Natural gas usage from the primary building heating is not included in this category. Natural gas related- CO_2 emissions were calculated as part of Electricity and Natural Gas emissions as explained below.

The resulting emission estimate was 0.23 MT/year of CO_2e.

[5] CAPCOA, *Quantifying Greenhouse Gas Mitigation Measures, Appendix B: Calculation Methods for Unmitigated Emissions*, August 2010.

Electricity and Natural Gas

Electricity and natural gas usage were estimated by multiplying the project square footage by office space office usage rates taken from the California Commercial End-Use Survey, published by the California Energy Commission. The survey contains natural gas (and electricity) consumption data by major utility and climate zone, and by type of commercial use.[6] The resulting usages were 1,485.22 mwh/year for electricity and 2,887.81 Million Btu/year for natural gas.

Once electricity and natural gas use were estimated, GHG emissions were estimated using CO_2, CH_4, and N_2O emission factors as reported in the California Climate Action Registry's General Reporting Protocol, version 3.1.[7] The resulting emissions were then converted to CO_2e by multiplying CH_4 and N_20 emissions by their GWP values of 21 and 310, respectively. The emission factors are shown below.

	CO_2	CH_4	N_2O
Electricity	804.54	0.0067	0.0037
Units	lbs CO_2/mwh	lbs CH_4/mwh	lbs N_20/MWH
Natural Gas	53.06	0.005	0.0001
Units	CO_2 (kg CO_2/MMBtu)	CH_4 (kg/MMBtu)	N_2O (kg/MMBtu)

The resulting emissions estimates were 543.02 and 153.34 MT/year CO_2e for electricity and natural gas, respectively.

Water Usage

Delivering and treating water for use at the project site requires energy. This embodied energy associated with the distribution of water to the end user is associated with the electricity to pump and treat the water. GHG emissions due to water use are related to the energy used to convey, treat and distribute water. Thus, these emissions are indirect emissions from the production of electricity to power these systems.

Therefore, to quantify the GHG emissions associated with the distribution of water to an end user, the carbon intensity of electricity is used along with the amount of electricity used in pumping and treating the water. Because water used outdoors within a project would not be treated at a wastewater treatment facility, the calculation of energy use is different for indoor water use and outdoor water use. Indoor water use was assumed to be 67% of total usage and outdoor usage assumed to be 33% of total usage.

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[6] California Energy Commission, *California Commercial End-Use Survey*, March 2006.
[7] California Climate Action Registry, *General Reporting Protocol, Version 3.1*, January 2009.

Total water consumption was estimated based on an assumed 400 sq. ft. of office space per employee and a daily water use of 85.59 gallons per employee.[8],[9] Indoor water usage for the project was estimated at 5,473,098 gallons per year. Outdoor water usage for the project was estimated at 2,695,705 gallons per year. The electrical demand for water was determined using the stated volumes of water and energy intensities values (i.e., energy use per unit volume of water) provided by reports from the California Energy Commission (CEC) on energy use for California's water systems.[10] Sources considered include water conveyance, water treatment, water distribution and wastewater treatment. Once electricity use associated with these sources were estimated and summed, the GHGs associated with that electricity use were calculated using the same GHG emission factors as described in the Electricity and Natural Gas discussion.

For northern California, the estimated embodied energy for indoor water use is 5,411 kwH/million gallons and the estimated embodied energy for outdoor water use is 3,500 kwH/million gallons. Applying these factors to the above water usage estimates results in an estimated 39,050 kwh/year used in the conveyance, distribution and treatment of water. This estimated embedded electrical demand was used to estimate related GHG emissions using the same methodology described above for electricity. The resulting GHG emission estimate was 14.03 MT/year CO_2e.

Solid Waste

The amount of solid waste that the project would generate was estimated at 1,129.57 tons per year based on a generation rate of 0.0108 tons per year per square foot.[11] The solid waste GHG emissions included two components: truck hauling emissions and emissions resulting from the decomposition of solid waste.

Assuming at 15 ton truck capacity, the project's solid waste generation was estimated to result in 75.3 round trips to a landfill. Assuming a 40-mile roundtrip distance to the landfill, annual vehicle miles traveled (VMT) would be 3012.19. The VMT estimate was multiplied by EMFAC2007 emission rates for heavy-duty trucks traveling at an average speed of 35 mph (1,780.4 grams/mile). A similar calculation for methane emissions was made using the EMFAC2007 emission rate of 0.05 grams of CH4 per mile. After adjusting methane emissions with a GWP factor of 21, the truck-related emissions of CO_2e was 5.32 MT/year.

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[8] Energy Information Administration, 1995 Commercial Building Energy Consumption Survey, (http://www.eia.gov/emeu/consumptionbriefs/cbecs/pbawebsite/office/office_howmanyempl.htm)

[9] San Francisco PUC, *Wholesale Customer Water Demand Projections Technical Report*, November 2004.

[10] Navigant Consulting, *Refining Estimates of Water-Related Energy Use in California,* prepared for the California Energy Commission, CEC-500-2006-116, 2006.

[11] CalRecycle, Estimated Solid Waste Generation Rates for Commercial Establishments (http://www.calrecycle.ca.gov/wastechar/Commercial.htm)

U.S. EPA WARM Model emission rates for mixed solid waste decomposition were used to estimate GHG emissions from decomposition of solid waste. The emission factor, assuming energy recovery, was 0.30 tons CO_2e per short ton.[12] Multiplying this emission factor by the yearly generation rate yielded an estimate of 338.87 MT/year from the decomposition of solid waste. Total emissions from truck emissions and decomposition emissions would be 344.19 MT/year CO_2e.

[12] U.S. Environmental Protection Agency, *Waste Reduction Model (WARM), (Step 5: View Emission/Energy Factors)*, 2009. (http://www.epa.gov/climatechange/wycd/ waste/calculators/Warm_Form.html

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Users\Weatherman\AppData\Roaming\Urbemis\Version9a\Projects\projects\Fig Garden Office Construction.urb924

Project Name: Fig Garden Office Construction

Project Location: Fresno County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.38	2.06	1.89	0.00	0.54	0.13	0.67	0.11	0.12	0.24	296.50
2012 TOTALS (tons/year mitigated)	0.38	2.06	1.89	0.00	0.22	0.13	0.35	0.05	0.12	0.17	296.50
Percent Reduction	0.00	0.00	0.00	0.00	58.95	0.00	47.31	58.67	0.00	28.26	0.00
2013 TOTALS (tons/year unmitigated)	1.32	0.95	1.05	0.00	0.00	0.06	0.07	0.00	0.06	0.06	161.06
2013 TOTALS (tons/year mitigated)	1.32	0.95	1.05	0.00	0.00	0.06	0.07	0.00	0.06	0.06	161.06
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

2012	0.38	2.06	1.89	0.00	0.54	0.13	0.67	0.11	0.12	0.24	296.50
Demolition 02/12/2012-03/08/2012	0.01	0.14	0.08	0.00	0.10	0.01	0.11	0.02	0.01	0.03	21.38
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.65
Demo On Road Diesel	0.00	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.76
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
Fine Grading 03/08/2012-04/27/2012	0.05	0.41	0.23	0.00	0.43	0.02	0.45	0.09	0.02	0.11	43.47
Fine Grading Dust	0.00	0.00	0.00	0.00	0.43	0.00	0.43	0.09	0.00	0.09	0.00
Fine Grading Off Road Diesel	0.05	0.41	0.21	0.00	0.00	0.02	0.02	0.00	0.02	0.02	41.58
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90
Asphalt 04/27/2012-05/18/2012	0.02	0.12	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	12.51
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.02	0.11	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	10.18
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64
Building 04/27/2012-06/30/2013	0.30	1.40	1.50	0.00	0.00	0.10	0.10	0.00	0.09	0.09	219.13
Building Off Road Diesel	0.28	1.31	0.93	0.00	0.00	0.09	0.09	0.00	0.08	0.08	143.48
Building Vendor Trips	0.01	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.94
Building Worker Trips	0.02	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.72

2013	1.32	0.95	1.05	0.00	0.00	0.06	0.07	0.00	0.06	0.06	161.06
Building 04/27/2012-06/30/2013	0.20	0.95	1.04	0.00	0.00	0.06	0.07	0.00	0.06	0.06	159.72
Building Off Road Diesel	0.19	0.90	0.66	0.00	0.00	0.06	0.06	0.00	0.06	0.06	104.57
Building Vendor Trips	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.89
Building Worker Trips	0.01	0.02	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.26
Coating 05/16/2013-06/30/2013	1.12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
Architectural Coating	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34

Phase Assumptions

Phase: Demolition 2/12/2012 - 3/8/2012 - Demolition of Existing Structures

Building Volume Total (cubic feet): 492100

Building Volume Daily (cubic feet): 25900

On Road Truck Travel (VMT): 359.72

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 3/8/2012 - 4/27/2012 - Site Grading/Preparation

Total Acres Disturbed: 4.69

Maximum Daily Acreage Disturbed: 1.17

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/27/2012 - 5/18/2012 - Site Paving

Acres to be Paved: 1.17

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 4/27/2012 - 6/30/2013 - Building Construction

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 5/16/2013 - 6/30/2013 - Painting

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 130

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

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	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012	0.38	2.06	1.89	0.00	0.22	0.13	0.35	0.05	0.12	0.17	296.50
Demolition 02/12/2012-03/08/2012	0.01	0.14	0.08	0.00	0.10	0.01	0.11	0.02	0.01	0.03	21.38
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.65
Demo On Road Diesel	0.00	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.76
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
Fine Grading 03/08/2012-04/27/2012	0.05	0.41	0.23	0.00	0.11	0.02	0.13	0.02	0.02	0.04	43.47
Fine Grading Dust	0.00	0.00	0.00	0.00	0.11	0.00	0.11	0.02	0.00	0.02	0.00
Fine Grading Off Road Diesel	0.05	0.41	0.21	0.00	0.00	0.02	0.02	0.00	0.02	0.02	41.58
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90
Asphalt 04/27/2012-05/18/2012	0.02	0.12	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	12.51
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.02	0.11	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	10.18
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64
Building 04/27/2012-06/30/2013	0.30	1.40	1.50	0.00	0.00	0.10	0.10	0.00	0.09	0.09	219.13
Building Off Road Diesel	0.28	1.31	0.93	0.00	0.00	0.09	0.09	0.00	0.08	0.08	143.48
Building Vendor Trips	0.01	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.94
Building Worker Trips	0.02	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.72

2013	1.32	0.95	1.05	0.00	0.00	0.06	0.07	0.00	0.06	0.06	161.06
Building 04/27/2012-06/30/2013	0.20	0.95	1.04	0.00	0.00	0.06	0.07	0.00	0.06	0.06	159.72
Building Off Road Diesel	0.19	0.90	0.66	0.00	0.00	0.06	0.06	0.00	0.06	0.06	104.57
Building Vendor Trips	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.89
Building Worker Trips	0.01	0.02	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.26
Coating 05/16/2013-06/30/2013	1.12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
Architectural Coating	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/8/2012 - 4/27/2012 - Site Grading/Preparation

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name:

Project Name: Fig Garden Office Operation

Project Location: Fresno County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.13	0.13	0.25	0.00	0.00	0.00	152.95

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.79	3.12	20.99	0.02	1.78	0.41	2,095.65

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.92	3.25	21.24	0.02	1.78	0.41	2,248.60

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.13	0.11	0.00	0.00	0.00	152.70
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.11						
TOTALS (tons/year, unmitigated)	0.13	0.13	0.25	0.00	0.00	0.00	152.95

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
General office building	1.79	3.12	20.99	0.02	1.78	0.41	2,095.65
TOTALS (tons/year, unmitigated)	1.79	3.12	20.99	0.02	1.78	0.41	2,095.65

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General office building		13.20	1000 sq ft	104.59	1,380.59	11,186.21
					1,380.59	11,186.21

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.3	0.7	99.1	0.2
Light Truck < 3750 lbs	10.7	1.9	93.4	4.7
Light Truck 3751-5750 lbs	21.9	0.9	99.1	0.0
Med Truck 5751-8500 lbs	12.0	0.8	99.2	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	76.2	23.8
Lite-Heavy Truck 10,001-14,000 lbs	0.8	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.4	0.0	14.3	85.7
Heavy-Heavy Truck 33,001-60,000 lbs	2.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.5	54.3	45.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
General office building				35.0	17.5	47.5

APPENDIX C

SPECIAL STATUS SPECIES

Special Status Species – Database Results

Species	Status (USFWS/ CDFG/CNPS)	General Habitat	Potential Occurrence within Project Vicinity
MAMMALS			
Antrozous pallidus Pallid bat	-- / CSC / --	A wide variety of habitats are utilized including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Also relatively common on bridges.	**Unlikely** Roosting habitat does not exist on the project site.
Dipodomys nitratoides exilis Fresno kangaroo rat	FE / SE / --	Alkali sink-open grassland habitats in western Fresno county. Bare alkaline clay-based soils subject to seasonal inundation, with more friable soil mounds around shrubs & grasses.	**Unlikely** Habitat for this species does not exist on the project site. Project site is fragmented; surrounded by residential and commercial property.
Euderma maculatum Spotted bat	-- / -- / --	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	**Unlikely** Roosting habitat does not exist on the project site.
Eumops perotis californicus Western mastiff bat	-- / CSC / --	Many open habitats including conifer and deciduous woodlands, coastal scrub, grassland, and chaparral. Roost in crevices in cliff faces, high buildings, trees, and tunnels.	**Unlikely** Roosting habitat does not exist on the project site.

Species	Status (USFWS/ CDFG/CNPS)	General Habitat	Potential Occurrence within Project Vicinity
Lasiurus cinereus Hoary bat	-- / -- / --	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or edge for feeding. Generally roost in dense foliage of trees; does not use buildings for roosting. Winters in California and Mexico and often migrates towards summer quarters in the north and east during the spring. Young are born and reared in summer grounds, which is unlikely to occur in California.	**Unlikely** Roosting habitat does not exist on the project site.
Perognathus inornatus inornatus San Joaquin pocket mouse	-- / -- / --	Typically found in grasslands and blue oak savanna, needs friable soils.	**Unlikely** Habitat for this species does not exist on the project site. Project site is fragmented; surrounded by residential and commercial property.
Taxidea taxus American badger	-- / CSC / --	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	**Unlikely** Habitat for this species does not exist on the project site. Project site is fragmented; surrounded by residential and commercial property.
Vulpes macrotis mutica San Joaquin Kit fox	FE / ST / --	Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance. Live in annual grasslands or grassy open stages dominated by scattered brush, shrubs, and scrub.	**Unlikely** Habitat for this species does not exist on the project site. High levels of human disturbance. Project site is fragmented; surrounded by residential and commercial property.

Species	Status (USFWS/ CDFG/CNPS)	General Habitat	Potential Occurrence within Project Vicinity
BIRDS			
Agelaius tricolor Tricolored blackbird	-- / CSC / --	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	**Unlikely** Habitat for this species does not exist on the project site. No open water on project site.
Athene cunicularia hypugea Burrowing owl	-- / CSC / --	Year round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.	**Unlikely** Project site is fragmented and surrounded by commercial and residential property. Although some mammal burrows were observed on site, no signs of burrowing owl activity were observed.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FC / SE / --	Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation.	**Unlikely** Habitat for this species does not exist on the project site. Project site is fragmented; surrounded by residential and commercial property. No open water on project site.
Eremophila alpestris actia California horned lark	-- / WL / --	Short-grass prairies, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats. Builds open cup-like nests on the ground.	**Unlikely** Habitat for this species does not exist on the project site.

Species	Status (USFWS/ CDFG/CNPS)	General Habitat	Potential Occurrence within Project Vicinity
REPTILES AND AMPHIBIANS			
Actinemys marmorata Western pond turtle (includes *A. m. pallida* and *A. m. marmorata* as recognized by the DFG)	-- / CSC / --	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	**Unlikely** Habitat for this species does not exist on the project site. No open water on project site.
Ambystoma californiense California tiger salamander	FT / SC&CSC / --	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	**Unlikely** Breeding habitat for this species does not exist on the project site. Closest known occurrence is a historic museum reference from 1879. Second closest occurrence is approximately 9.5 KM from the project site, beyond the known dispersion of this species.
Spea hammondii Western spadefoot toad	-- / CSC / --	Grasslands with shallow temporary pools are optimal habitats for the western spadefoot. Occur primarily in grassland habitats, but can be found in valley and foothill woodlands. Vernal pools are essential for breeding and egg laying.	**Unlikely** Breeding habitat for this species does not exist on the project site. Closest occurrence is approximately 6.5 KM from the project site. . Project site is fragmented; surrounded by residential and commercial property.
FISH			
Mylopharodon concephalus Hardhead	-- / CSC / --	Demersal; freshwater.	**Not Present** No open water present on the project site.

Species	Status (USFWS/ CDFG/CNPS)	General Habitat	Potential Occurrence within Project Vicinity
INVERTEBRATES			
Branchinecta lynchi Vernal pool fairy shrimp	FT / -- / --	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	**Not Present** No vernal pools on the project site.
Branchinecta mesovallensis Mid-valley fairy shrimp	-- / -- / --	Northern claypan vernal pools scattered throughout the lower elevations of the San Joaquin Valley.	**Not Present** No vernal pools on the project site.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT / -- / --	Inhabit established mature elderberry shrubs. Endemic to moist Valley Oak woodlands a ling margin of streams and rivers. Lower Sacramento to upper San Joaquin Valley.	**Unlikely** Habitat for this species does not exist on the project site.
Linderiella occidentalis California linderiella fairy shrimp	-- / -- / --	Ephemeral ponds with no flow. Generally associated with hardpans.	**Not Present** No vernal pools on the project site.
Lytta moesta Moestan blister beetle	-- / -- / --	Found on flowers. The species was collected in Kern and Tulare counties in the 1930s. The historical distribution also includes Fresno, Madera, Santa Cruz, and Stanislaus counties.	**Unlikely** Habitat for this species does not exist on the project site.
Lytta molesta Molestan blister beetle	-- / -- / --	Found on the flowers and foliage of certain plants (*Lupinus* and *Trifolium*). Inhabits the central valley of California, from Contra Costa to Kern and Tulare counties. May be associated with dried vernal pools.	**Unlikely** Habitat for this species does not exist on the project site.
PLANTS			
Castilleja campestris ssp. succulenta Succulent owl's-clover	FT / SE / 1B	Vernal pools; elevation 50-750 meters. Annual herb hemiparasitic. Blooms: April-May.	**Not Present** Species not observed during botanical surveys.

Species	Status (USFWS/ CDFG/CNPS)	General Habitat	Potential Occurrence within Project Vicinity
Caulanthus californicus California jewel flower	FE / SE / 1B	Chenopod scrub, pinyon and juniper woodland, valley and foothill grassland; elevation 61-1000 meters. Annual herb. Blooms: February-May.	**Not Present** Species not observed during botanical surveys.
Eryngium spinosepalum Spiny-sealed button-celery	-- / -- / 1B	Valley and foothill grassland, vernal pools; elevation 80-255 meters. Annual/perennial herb. Blooms: April-May.	**Not Present** Species not observed during botanical surveys.
Leptosiphon serrulatus Madera leptosiphon	-- / -- / 1B	Cismontane woodland and lower montane coniferous forest; elevation 300-1300 meters. Annual herb. Blooms: April-May.	**Not Present** Species not observed during botanical surveys.
Orcuttia inaequalis San Joaquin Valley Orcutt grass	FT / SE / 1B	Vernal pools; elevation 10-755 meters. Annual herb. Blooms: April-September.	**Not Present** Species not observed during botanical surveys.
Orcuttia pilosa Hairy Orcutt grass	FE / SE / 1B	Vernal pools; elevation 46-200 meters. Annual herb. Blooms: May-September.	**Not Present** Species not observed during botanical surveys.
Pseudobahia bahiifolia Hartweg's golden sunburst	FE / SE / 1B	Cismontane woodland, valley and foothill grasslands/clay, often acidic; elevation 15-150 meters. Annual shrub. Blooms: March-April.	**Not Present** Species not observed during botanical surveys.
Sagittaria sanfordii Sanford's arrowhead	-- / -- / 1B	Marshes and swamps; elevation 0-650 meters. Rhizomatous herb emergent. Blooms: May-October.	**Not Present** Species not observed during botanical surveys.
Tropidocarpum capparideum Caper-fruited tropidocarpum	-- / -- / 1B	Valley and foothill grasslands (alkaline hills); elevation 1-455 meters. Annual herb. Blooms: March-April.	**Not Present** Species not observed during botanical surveys.
Tuctoria greenei Greene's tuctoria	FE / SR / 1B	Valley grassland, freshwater wetlands, wetland-riparian; found in vernal pools; 30-1070 meters. Annual herb. Blooms: May-September.	**Not Present** Species not observed during botanical surveys.

STATUS DEFINITIONS

Federal

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
-- = no listing

State

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SR = listed as Rare under the California Endangered Species Act
SC = Candidate for listing under the California Endangered Species Act
CSC = California Department of Fish and Game Species of Concern
CFP = California Fully Protected Animal
WL = California Department of Fish and Game Watch List
-- = no listing

California Native Plant Society

1B = List 1B species; rare, threatened or endangered in California and elsewhere
List 4 = Limited distribution (CNPS Watch List)
-- = no listing

POTENTIAL TO OCCUR

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys
High = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of suitable habitat conditions
Moderate = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of marginal habitat conditions within the site
Low = species known to occur in the vicinity from the CNDDB or other documentation; lack of suitable habitat or poor quality
Unlikely = species not known to occur in the vicinity from the CNDDB or other documentation, no suitable habitat is present within the site
Not Present = species was not observed during surveys

APPENDIX D

HISTORICAL EVALUATION

507 W. San Jose Avenue, Fresno, CA
Historical Evaluation

January 2010

Prepared for
Denise Dufy and Associates
947 Cass St. Suite 5
Monterey, CA 93940

Prepared by
Johnson Architecture
942 East Olive Avenue
Fresno, CA 93721

JOHNSON
Architecture

I. Executive Summary

This historical evaluation was prepared at the request of Leianne Humble, with Denise Duffy & Associates, Inc., in order to determine whether the single-family residence located at 507 W. San Jose Avenue, Fresno, California qualifies as a potential historic resource in accordance with Article 5 §15064.5 of the California Environmental Quality Act (CEQA) Guidelines. Generally, resources over 45 years of age may be considered historically significant under CEQA. The residence at 507 W. San Jose Avenue was constructed in c. 1950 and is approximately 60 years of age. In December 2009 the property was researched and evaluated as a potential historical/cultural resource in accordance with the California Register of Historical Resources (California Register) by Johnson Architecture. Complete demolition is proposed for the residence, which is located on California Assessor's Parcel Number (APN) 714-240-03, in Fresno California.

II. Methodology

Determinations of historical significance require a number of issues to be considered. Factors of significance include: the property's history (both construction and use); the history of the surrounding community; the association with important persons or uses; the number of resources associated with the property; the potential for the resource to be the work of a master architect, builder, craftsman, landscape gardener, or artist; the historical, architectural, or landscape influences that have shaped the design of the property and its pattern of use; what alterations have taken place, and how many changes have affected the historical integrity of the property; and the current condition of the property. These questions and related issues must be answered before a formal determination of significance can be made.

The methodological approach for this historical property evaluation consisted of a site visit, research on the property, neighborhood and associated persons conducted at the City of Fresno Development Department, Fresno County Public Library, and Historic Sanborn Fire Insurance Maps for the City of Fresno.

In December 2009 a site visit was made to the property in order to photograph the subject residence and the surrounding setting. During the site visit a brief architectural description of the residence was created for use in this document. Research conducted at the City of Fresno Community Development Department included a review of building permit information for the subject property.

Research conducted at the Fresno Public Library included a review of Fresno County City Directories and the library catalogue for any additional reference resources related to the property. Additional research was conducted online and using Johnson Architecture's in-house reference library. Additionally a review of the California State Office of Historic Preservation's *Historic Property Data File for Fresno County* was performed to determine whether any documentation for the property was previously submitted for inclusion in the California Historical Resources Information System (CHRIS) files.

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The Department of Parks and Recreation 523 Forms (DPR forma) for the subject property are included as Appendix A.

III. Historic Context

Historic contexts are organizing structures for interpreting history that group information about historic properties that share a common theme, common geographical area, and a common time period. The establishment of these contexts provides the foundation for decision-making concerning the planning, restoration, and treatment of historic properties.

Introduction

A historic context statement analyzes the historical development of a community according to guidelines written by the National Park Service and specified in *National Register Bulletin 16*. It contains information about historical trends and properties organized by important themes during a particular period of time. A historic context statement is linked with tangible built resources through the concept of property type: a grouping of individual properties based on shared physical or associative characteristics. Because historic context are organized by theme, place and time, they link historic properties to important historic trends, thereby providing a framework for understanding the potential significance of a property.[1] A historic context statement is intended to highlight historical trends that help to explain the evolution of a particular built environment.

Fresno Context Statement

Fresno's Early Development

The County of Fresno was founded in 1856, from portions of Mariposa, Merced and Tulare Counties. The town of Millerton, present day location of Millerton Dam was designated as the first seat of government for Fresno County. It would not be until the Central Pacific Railroad Company (CPRC), the predecessor of the Southern Pacific Railroad Company, established a passenger/freight station, as part of the San Joaquin Division that the town of Fresno, or as it was first known "Fresno Station" would develop. This line running through Fresno County connected the northern part of California with Los Angeles. The various railroad stations that developed along the diagonal rail corridor grew into towns, growing outward from the stations on axis streets along a rectangular grid, with Fresno as one of the largest.

The desire to establish a railroad station and town in the vast stretch of agricultural land now occupied by Fresno came about during an inspection tour of Central Pacific Railroad rail lines in 1871. During the 1871 inspection made by officials of the railroad (including director Leland Stanford) a visit was made to a 2,000-acre ranch owned by A. Y. Easterby, located east of Fresno's eventual site.[2] Impressed by the quality of the land Stanford and railroad officials determined that a town would be located in this region. Following Stanford's visit the Contract and Finance Company (the Central Pacific's real

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estate subsidiary) purchased 4,480 acres of land from the German Syndicate of San Francisco. This group of real estate speculators had previously purchased 80,000 acres of undeveloped land in central California.[3] With land secured rail expansion could begin.

Fresno was founded in May of 1872. The original town site, surveyed by Edward H. Mix was organized on a grid, which straddled the rail corridor and extended to the east side of the CPRC tracks along Front Street (present day H Street). The grid featured uniform blocks measuring 302-by-400-foot blocks; each with 25-by-150-foot lots and twenty-foot alleys.[4] On June 26, 1872 the CPRC offered the lots for sale for between $60 and $250.[5] The lots were purchased by entrepreneurs from the surrounding area eager to open Fresno's first businesses. By November 1872 Fresno had grown to include four hotels and restaurants, saloons, three livery stables, two stores, and a few permanent dwellings.[6]

The devastation of the town of Millerton by a flood in 1867 resulted in the transfer of the Fresno County Seat from Millerton to the town of Fresno in 1874, after a special election held throughout Fresno County on March 23, 1874.[7] Fresno's status as the new County Seat led to a period of prosperity in the following decades. By the end of 1874, Fresno Station had grown to include fifty-five buildings, complete with a county hospital and school.[8] In 1876, four years after the founding of Fresno Station the first water system was established in town by George McCullough and Lyman Andrews. The two men purchased a 50-by-150-foot corner lot in downtown Fresno on what is now the current location of the Guarantee Savings Building on Fulton Street, and dug a one hundred foot well with large holding tank. The original well and tank soon proved inadequate with Fresno's continued growth and increasing demand for water. McCollough and Andrews purchased property at the corner of Fresno and O Streets for the construction of a water tower that would better serve Fresno's populous. Architect George Washington Maher designed the impressive 100-foot-tall Fresno Water Tower constructed in 1894, symbolizing the importance water had for Fresno and the greater valley region.[9]

The agricultural success of the land and the service and mobility made possible with the railroad, enabled Fresno to become the leading agricultural center of the San Joaquin Valley. As a result of this economic prosperity Fresno was incorporated as a fifth class city in 1885 when population totals reached the necessary levels to qualify. As a fifth class city Fresno was provided with additional governing powers from the State of California, enabling the city to collect property taxes and other municipal assessments. The January 1885 Sanborn Map delineates scattered development throughout an approximate six-block radius of the CPRC station near the corner of H and Mariposa Streets. The January 1885 Sanborn Map indicates a strip of commercial shops, lodging houses, banks, offices, restaurants, and saloons from the base of H Street along Mariposa Avenue to approximately K Street (present day Van Ness Avenue). The 1885 Sanborn Map reflects that the city's earliest residential dwellings were sited north/northwest of Mariposa Avenue along Fresno and Merced Street, and along H, J, K, and I Streets. In 1888, the Sanborn Fire Insurance Company surveyed the growing town of Fresno again. This survey indicates that additional residential development occurred

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north/northwest of Tuolumne, Stanislaus, Calaveras, H, I, J, and, K Streets. In addition to these residential developments, the area east of Mariposa Avenue was developed with residential buildings along Tulare, Kern, Inyo, Mono, and Ventura Streets, as well as infill lots along H, I, J, K, L, M, and N Streets.[10] The 1898 Sanborn Fire Insurance Company survey for Fresno shows that Fresno experienced continued growth of residential dwellings. However, the 1898 map indicates that there had been no major commercial or industrial developments within the town at that time. The survey from this year shows that the Fresno City High School had been constructed on the east side of O Street between Tuolomne and Stanislaus Streets. Land sales beyond the city limits, especially north of present-day Divisadero Street, were a result of the need to expand both residential and commercial areas.

In many ways Fresno's prominence as a city was marked by the construction of the city's two railroad depots. The Southern Pacific Railroad Depot constructed in 1889 located near the corner of H and Tulare Streets replaced an earlier depot and is considered to be the oldest extant commercial building in Fresno. The "Fresno Station" serves as an example of the Victorian style prevalent at the turn of the 20th century. Fresno's continued economic success was marked by the construction of the Mission Revival style Santa Fe Railroad Depot on Tulare Street in 1899. The depot functioned first as a station for the San Francisco and San Joaquin Valley Railroad (later the Santa Fe Railroad). The San Francisco and San Joaquin line reached Fresno in 1896. The line's arrival marked an end to the monopoly the Southern Pacific had on Fresno's railroad traffic.[11] Both of these depots are symbols of the valley's thriving agricultural economy and have been nationally recognized by their inclusion on the National Register of Historic Places. By the 1890s the transformation from small town to city was evident with the thriving commercial center of Fulton Street (known as "J" Street until 1923), the formation of the Mariposa Street cross-axis leading east to the Fresno County Court House, and the Victorian-style buildings occupying Fresno's downtown. During the 1890s the city expanded from 2.94 square miles in 1890 to 34.862 in 1900, with an increase in population from 10,818 to 12,470.[12]

The 1910 census for Fresno showed a total population of 24,892. City boosters, hoping to achieve a population of 50,000 by the opening of the 1915 Panama Pacific Expositions held at San Diego and San Francisco, began promoting Fresno as 'the product of new conditions in California' offering a solid economy and being 'one of the most attractive places to be found along the Pacific Coast' with handsome public buildings, a chamber of commerce, several established city parks, a $1,000,000 Santa Fe Railroad terminal, eight banks, a building and loan association, and developing land tracts outside the city proper such as the Bullard Tract.[13]

Early Metropolitan Image

The first efforts for urban planning in Fresno County began in 1916. On April 21, 1916 the Fresno City Board of Trustees passed ordinance No. 794, which established Fresno's first planning commission, one of the oldest planning commissions in the state

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of California. An architect and planner by the name of Charles Henry Chaney from San Francisco was hired to prepare a plan for Fresno that would address the anticipated growth following WWI. Chaney's report established community development programs and a plan for organized growth. In this report Chaney proposed a civic center, a street system that would accommodate the increased use of the automobile, a park and recreation plan, a scenic road and boulevard system, railroad consolidation and a union passenger and freight station, and downtown revitalization. The report was filed on June 1, 1918, but it was not adopted by the city commission until July 6, 1923 and did not become effective until August 6, 1923.[14] However, this early attempt to establish a plan for the growing city of Fresno illustrates the desire citizens had to establish Fresno as a metropolitan center in the San Joaquin Valley.

In 1919 several streets within Fresno's downtown were renamed. I Street was renamed Broadway Street and K Street was renamed Van Ness in an effort to give Downtown Fresno a more metropolitan image. In 1923 J Street was renamed Fulton Street to commemorate Fresno businessman and streetcar entrepreneur Fulton G. Berry who died in 1910.

Early 20th Century Neighborhood Developments
Fresno's early residential neighborhoods developed north of the downtown. The development of these neighborhoods was spurred by the northward development of the Fresno Traction Company electric streetcar line.

The Fresno Street Railroad was organized in 1888 and began service in January of 1889. In 1901 the company was taken over by Fresno City Railway Company and converted to electric. The name of the streetcar line was changed to Fresno Traction Company in 1903 and continued to operate under that name until 1939, when mass transit changed once again and streetcars were replaced by bus.'[15]

In 1902 the Fresno City Railway Company opened its Forthcamp Avenue line, thereby connecting the newer suburban additions north of town to Fresno's city grid and supporting Fresno's first suburban building boom.[16] One of Fresno's first residential neighborhoods to develop north of Fresno's downtown in the late 19th and early 20th century is known as the Lower Fulton-Van Ness District.[17] The Lower Fulton-Van Ness neighborhood features examples of late 19thand early 20th century house types from small cottages to large mansions.

The Fresno City Railway Company continued to expand streetcar lines northward to accommodate growing suburban developments such as the College Addition. A high concentration of Revival style homes can be found in the College Addition, platted in 1912 and developed with the Fresno Normal School in 1911 (today Fresno City College) to the south, the Fresno High School campus (1920-1922) to the west.[18] The homes in this area were designed by architects and builders for affluent clients, and provide an example of the broad range of styles common to American upper-middle class housing in the 1910s and 1920s.

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Van Ness Heights was a neighborhood located along North Van Ness Boulevard that experienced most of its growth during the mid-1930s. At this time the majority of the homes were designed in the Spanish Revival style, so popular in California during the 1930s. However, a variety of styles can be found along North Van Ness Boulevard, including: Colonial Revival style, Tudor style, Spanish Revival style, and Monterey style.

Another tract development that spurred further northward residential development was the Wilson's North Fresno Tract in Fresno's Tower District neighborhood. The boundaries of this eighteen-block area are Olive Avenue to the south, Broadway (south of Floradora) and the rear property line of Echo Avenue (north of Floradora) on the west, McKinley Avenue on the north, and Maroa Avenue on the east. This tract features single-family and multi-family buildings, the majority of which are built in the Craftsman Bungalow and Revival styles. The four-unit apartment block was a common building type in this area through the 1910s and 1920s.

Wylie Giffen and J.C. Forkner developed the Forkner Giffen Fig Gardens in 1919. Horace Cotton, a landscape architect from San Francisco, designed the Fig Garden tract of large acre lots complete with Fig trees. The homes are custom built and reflect a variety of styles characteristic of early and mid-century architectural styles from Colonial Revival to International style.

World War II and the Built Environment

World War II brought a completely different focus on architecture. The emphasis was now on mass production in order to accommodate current demand as well as affordable cost. Design was ruled by the simplification and standardization of housing for mass assembly. Architects were devoted to finding a housing solution that would serve the needs of contemporary American society, while remaining affordable.

Innovative uses of space and materials developed during the war influenced the design of residential architecture after World War II. Ideas first applied during the war, such as the use of inexpensive materials in home construction, the integration of indoor and outdoor living space to improve the quality of life, and the elimination of formal spaces like dining rooms when space is limited, all became integral components of postwar, middle class housing.[19]

The design of modest housing after the war was also influenced by the federal government's initiatives in the 1930s and 1940s to encourage home ownership. Construction of single-family homes increased after the Federal Housing Administration (FHA) established mortgage terms conducive to the average American family. During the 1940s FHA programs helped to finance military housing and homes needed for returning veterans. In 1944 the Servicemen's Readjustment Act, more commonly known as the GI Bill, also helped families attain home ownership.

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During World War II, in the years 1940 to 1945, Fresno's population in the incorporated areas increased by only 2,200. However, the newly developing neighborhoods just outside the city grew much faster, totaling an estimated 35,000 people.[20] This growth pattern reflects the development of suburban sprawl during the war years. With a large number of people moving into the suburban areas desperate need for housing was created.

Postwar Fresno

Modernism took on a new force in the post World War II era. The war not only ended the Great Depression, but created the conditions for productive postwar collaboration between the federal government, private industry and organized labor. The economic and political strength of the U.S. at the end of the war placed the country and its citizens at an advantage as the strongest world power with the largest and richest economy in the world thus providing the environment for great economic spending and production. With renewed wealth and self-confidence the United States took precedence in creating an architectural idiom of a new modern lifestyle.

In the years following World War II California experienced a period of unparalleled prosperity and optimism spurred by unprecedented urban growth and economic expansion. California's population increased by fifty-three percent between 1940 and 1950.[21] Fresno too felt the impact of a significant increase in population. The 1940 census reported 60,685 people living in Fresno while the 1950 census reported a population of 91,669.[22]

The population explosion throughout California resulted in a building boom that transformed how Californian's lived and left an impact on the built environment, with the adoption of Modern design as a widely used architectural building style. The population explosion coupled with America's love of the automobile spurred the development of the automobile-centered suburb. Building efforts began in earnest with the construction of housing developments, new civic and public buildings, highway improvements, churches, schools, and commercial developments. The postwar architect abandoned historic precedents and created an architecture drawn from the Modernist styles of the pre-war years, implementing a renewed concern for landscape and site relationships, the use of natural materials, and innovative building technologies resulting in a new regional architecture.

Growth of Suburbia

Fresno's Suburban Development
Like much of California, Fresno experienced population growth following the end of World War II, resulting in residential and commercial development beyond original city boundaries. Like most of the country in the postwar period, Fresno experienced a severe housing shortage following World War II, which brought about a series of residential

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housing projects. Large numbers of transient agricultural laborers and thousands of returning servicemen and their families put a strain on the city's resources sending city commissioners scrambling to find adequate shelter. Shortages of building materials and state and federal restrictions gave priority to the construction of homes and facilities needed by returning veterans. Public housing for veterans developed in the area near the new Veterans Hospital in East Fresno.[23]

Prior to World War II the only residential development north of Shields Avenue was the Fig Garden district, considered a rural estate subdivision. Following the war Fresno's builders began the process of subdividing and building tract homes on large tracts of land north of Shields Avenue as the city expanded outward. The 1950s saw significant growth in residential developments. These developments were typically located within close proximity to new regional shopping centers, schools and the new office park developments developing outside of the traditional downtown commercial and urban center.

Residential tracts developed during this period in the city and county of Fresno included Mayfair tract No. 2 (1948), extending east from the intersection of McKinley Avenue and the Herndon Canal; Sierra Sky Park (1946), on Herndon Avenue east of Highway 99; Wilshire Gardens (1948), a 20-acre property located at the northwest corner of Fresno St. and McKinley Avenue, developed by Allen Lew and Art Lambert; University Terrace (1949), extending northwest from the intersection of Dakota and First Streets; the University Portals neighborhood (1953), located north of Barstow Avenue and east of First Street; Maroa Heights (1953), bounded by Barstow Avenue to the north, San Jose Avenue to the south, Del Mar Avenue to the east, and Maroa Avenue to the west; the Fig Garden Rancho and Thunderbird Heights, tract developments (1956) located in the Fig Garden Estates, a short distance from Fig Garden Village, in the vicinity of Palm and Shaw Avenues; and Sun Garden Acres (1968), bounded by Shaw Avenue to the north, Gettysburg Avenue to the south, Maple Avenue to the east, and Cedar Avenue to the west. Sun Garden Acres was developed with its own specific plan and drew most of its residents from the academic faculty of California State University Fresno. The Sunnyside neighborhood located on Fresno's far east side bounded by Chestnut Avenue to the west featured large estate size lots with custom homes, many of which were architect designed.

Ranch Style

The Ranch style was the dominant style of residential design during the mid-century.[24] It was based on the early Spanish haciendas built throughout Mexico and Southern California in the 1800s and characterized by a single-story sprawling floor plan, with integration of indoor and outdoor space. The ranch home of the mid-century was built on a smaller scale than the sprawling haciendas of old California, lots were usually 1/8-1/4 acre in size.

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Cliff May is credited with reintroducing the Ranch house in the 1930s, and is the architect associated with the style on the west coast. May's Ranch style designs of the 1930s were more picturesque and influenced by the early California haciendas. After the war his work responded to the times and adopted the modern characteristic of post-and-beam construction, creating a modern version of the Ranch style that combined the characteristic indoor/outdoor living spaces of the haciendas with the simplified lines of Modernism. In 1958 May published a book of his designs in conjunction with *Sunset Magazine* called *Western Ranch House*. This book had widespread influence resulting in the construction of both Cliff May Ranch style homes and Cliff May inspired Ranch style homes throughout California.

The Ranch house proved to be the architectural style best suited to neighborhood-scale development. The ranch house could be inexpensively constructed and mass-produced, thereby providing housing at a reasonable cost to middle America. During the 1940s and 1950s the Ranch house appeared in subdivisions throughout the United States, most prevalently in California. The ranch house was used by developers in a variety of styles; a practice that led to its renown as the most popular housing type of the postwar era.[25]

IV. Architectural Analysis

The Ranch house was the most popular house type in the United States during the late 1950s and 1960s. Its one-story configuration, low horizontal massing, and sprawling plan characterize the Ranch house. Other features may include a low-pitched or flat roof and a wide entry porch. A garage is frequently integrated into the design and attached to the residence. The Ranch house may be situated among other similar houses which together present consistent siting, setbacks and landscaping.

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507 W. San Jose Avenue. Photo courtesy of Johnson Architecture, December 2009.

The single-family residence located at 507 W. San Jose Avenue is an example of the Ranch style. The residence was constructed in approximately 1950. This one-story house has an irregular, rectangular footprint and hipped roof, sheathed in composite shingles, with wide eaves and exposed rafter tails. A dropped, secondary, shed roof is located on the east elevation, and marks the carport and entrance to the residence. The exterior walls are covered in wood siding. The buildings visible fenestration pattern includes: single, aluminum-frame, slider windows and a fixed, aluminum-frame, projecting bay window. The principal residential entry appears to be from the primary north elevation and cannot be viewed from the public right of way.

Two windows punctuate the primary north elevation. The dominant window is a projecting, aluminum-frame, fixed bay window. Adjacent to the bay window is a single, aluminum-frame slider.

A clear view of the west elevation was obstructed by plant growth and was not visible due to limited access.

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The east elevation appears to be divided into two wings: The north wing located under the shed roof and a projecting south wing with a dropped hip roof. At the time of the site visit, visibility of the east elevation by plant growth, a fence, and limited access.

The rear (south) elevation was not visible due to limited access.

Architect/Builder
No original building permits could be located for this residence. Four permits were located at the City of Fresno Building Department. The earliest extant permit is dated December 31, 1954 and is from the Fresno County Health Department for the inspection of the septic tank. In 1958 a building permit was pulled for the construction of a tool shed. In 1963 an electrical permit was pulled on the residence. A William H. Bliss is listed as owner of the property. A permit was pulled in 1977 for a sewer connection. The owner is listed as a Mrs. T.A. Vauder and the property is listed as a rental.

V. California Register of Historical Resources Significance Criteria

All resources listed in or formerly determined eligible for the National Register are eligible for the California Register. In addition, properties designated under municipal or county ordinances are also eligible for listing in the California Register. A historical resource must be significant at the local, state, or national level under one or more of the following criteria:

Criterion 1: Event or Patterns of Events

It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States

The 507 W. San Jose Avenue residence has not been associated with an important event or patterns of events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. The property is not eligible under Criterion 1: Events or Patterns of Events.

Criterion 2: Important Person(s)

It is associated with the lives of persons important to local, California, or national history

Historical research has determined that the 507 W. San Jose Avenue property is not directly associated with any important persons in local, state, regional, or national history. Consequently, the home does not qualify under California Register Criterion 2: Important Person(s).

Criterion 3: Design/Construction

It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values

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The 507 W. San Jose Avenue property was originally built in approximately 1950 in the Ranch architectural style. Although the exterior of the residence appears to be basically unaltered from its original design, it does not embody the distinctive characteristics of the Ranch style, and does not rise to the level of significance necessary for listing on the California Register. The property is not eligible for listing on the California Register of Historical Resources under Criterion 3: Design/Construction.

Criterion 4: Information Potential

It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation

Beyond what is discussed in this evaluation, the 507 W. San Jose Avenue property has not yielded, and are unlikely to yield information important to prehistory, or local, state, regional or national history, and, consequently, do not qualify under California Register Criterion 4: Information Potential.

VI. Evaluation of Integrity

In addition to having significance, resources must retain enough of their historic character of appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is the authenticity of a historical resource's physical identity and evidenced by the survival of characteristics or historical fabric that existed during the resource's period of significance. There are seven elements of integrity recognized and employed by both the National Register of Historic Places and the California Register of Historical Resources: location, design, setting, materials, workmanship, feeling, and association. A resource that is not considered to retain enough integrity for listing on the National Register may still be eligible for listing on the California Register.

These seven aspects of integrity have been applied to the single-family residence located at 507 W. San Jose Avenue. The residence was constructed c. 1950 and is approximately 60 years of age and had potential to be considered a historical resource.

Location

Location is the place where the historic property was constructed or the place where the historic event occurred.

The residence remains in its original location along the north border of the property. Therefore, this aspect of the property's integrity has not been diminished.

Design

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

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The exterior volume and massing of the residence is intact. However, changes to the exterior of the building are evident in the replacement of materials. Overall the integrity of the residence has been diminished.

Setting

Setting is the physical environment of a historic property, constituting topographic features, vegetation, manmade features, and relationships between buildings or open space.

The residence maintains its original use as domestic dwelling. Therefore, this aspect of the property's integrity has not been diminished.

Materials

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

507 W. San Jose Ave.:

Materials have been replaced and changes have been made to a number of structural features, including: doors, roof, and wall cladding. In addition, exterior building materials have experienced significant deterioration. Therefore, this aspect of the property's integrity has been diminished.

Workmanship

Workmanship is the physical evidence of the crafts of a particular culture, people, or artisan during any given period in history or pre-history.

507 W. San Jose Ave.:

The original workmanship of this structure provides physical evidence of construction methods and styles of residential development in the mid twentieth century

Feeling

Feeling is a property's expression of the aesthetic or historical sense of a particular period of time.

The building has maintained its original residential use and the setting is intact. Therefore, the property retains its original feeling, and this aspect of integrity has not been diminished.

Association

Association is the direct link between an important historic event or person and a historic property.

There are no records that indicate that the residential structure located at 507 W. San Jose Avenue have any direct link between an important historic event, person, or historic property. Integrity of Association is not applicable to this building.

In summary, the single-family residence located at 507 W. San Jose Avenue retains a minimal degree of integrity. In regards to setting, location, and feeling, the properties

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have undergone minimal change and are predominantly intact. However, the buildings design, materials and workmanship have been altered. Integrity of association is not applicable to this building. Although the residence does retain some integrity as a whole the property does not retain sufficient integrity to be considered an historic resource.

VII. Application of CEQA

CEQA Public Resources Code §21084.1 provides that any project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. Public Resources Code §5020.1(q) defines "substantial adverse change" as demolition, destruction, relocation, or alteration such that the significance of the historical resource would be impaired. According to Public Resources Code §5024.1, an historical resource is a resource that is listed in, or determined to be eligible for listing in the California Register of Historical Resources; included in a local register of historical resources; or is identified as significant in an historic resource survey if that survey meets specified criteria.

The 507 W. San Jose Avenue residence is not eligible for listing on the California Register of Historical Resources either individually or as part of an historic district. The building has been associated with an important person or event significant in local, regional, California or national history. The dwelling is not architecturally significant for embodying the distinctive characteristics of a type, period, or method of construction, and the residence does not appear to represent the work of a master or possesses high artistic value. Lastly, the dwelling has not yielded, or is likely to yield information important in the prehistory or history of the area.

According to CEQA Guidelines §15064.5(a)(3), a lead agency can find a resource has been determined to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the determination is supported by substantial evidence in light of the whole record.

The 507 W. San Jose Avenue residence is not eligible for the California Register of Historical Resources and is not considered significant in the architectural, engineering, scientific, agricultural, educational, social, political, military, or cultural annals of California. The residence, therefore does not qualify as historical resources under CEQA Guidelines §15064.5(a)(3).

VIII. Conclusions

The 507 W. San Jose Avenue residence does not qualify for listing on the California Register of Historical Resources either individually or as part of an historic district. The building has not been identified as maintaining an association with an important event or person in local, regional, California or national history. The building does not display distinctive construction or design characteristics, or represents the work of a master, or possesses high artistic values. Lastly, the 507 W. San Jose Avenue residence has not yielded and is not likely to yield any information important to prehistory or history.

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Consequently, the property does not qualify as an historical resource under the California Environmental Quality Act (CEQA).

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IX. Bibliography

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Endnotes

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[10] Sanborn Fire Insurance Map – Fresno, CA, Sheets 1-24, May 1888.
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[12] Clough and Secrest, 122.
[13] M.B. Levick, *Fresno County California* (Fresno, CA: Sunset Magazine Homeseekers' Bureau, 1912) 1.
[14] Clough and Secrest, 11.
[15] When Fresno Rode the Rails
[16] www.historicfresno.org, (viewed January 7, 2008).
[17] Ibid, (viewed January 7, 2008).
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[19] Esther McCoy, *Case Study Houses, 1945-1962 (Hennessey and Ingalls: Los Angeles, 1977)* 16.
[20] Clough and Secrest, 61.
[21] Kevin Starr, Embattled Dreams: California in War and Peace 1940-1950 (Oxford University Press, 2003) 193-194.
[22] Clough and Secrest, 14.
[23] Clough and Secrest, 63.
[24] See section V: Fresno mid-century Modernism sub-styles for a description of the Ranch Style.
[25] Alan Hess. *The Ranch House* (Harry N. Abrams: New York, 2005) 67.

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APPENDIX A

DPR 523 Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial _____N/A_____
NRHP Status Code___5D3_____
Other Listings_____
Review Code_____ Reviewer_____ Date_____

P1. Resource Name(s) or Number: 507 W. San Jose Avenue
***P2. Location: *a. County:** Fresno
***b. USGS 7.5' Quad:** Unavailable
c. Address: 507 W. San Jose Avenue
d. Assessor's Parcel Number: 417-240-03

***P3a. Description:**
The single-family residence located at 507 W. San Jose Avenue is an example of the Ranch style. The residence was constructed in approximately 1950. This one-story house has an irregular, rectangular footprint and hipped roof, sheathed in composite shingles, with wide eaves and exposed rafter tails. A dropped, secondary, shed roof is located on the east elevation, and marks the carport and entrance to the residence. The exterior walls are covered in wood siding. The buildings visible fenestration pattern includes: single, aluminum-frame, slider windows and a fixed, aluminum-frame, projecting bay window. The principal residential entry appears to be from the primary north elevation and cannot be viewed from the public right of way. Two windows punctuate the primary north elevation. The dominant window is a projecting, aluminum-frame, fixed bay window. Adjacent to the bay window is a single, aluminum-frame slider. A clear view of the west elevation was obstructed by plant growth and was not visible due to limited access. The east elevation appears to be divided into two wings: The north wing located under the shed roof and a projecting south wing with a dropped hip roof. At the time of the site visit, visibility of the east elevation by plant growth, a fence, and limited access. The rear (south) elevation was not visible due to limited access.

***P3b. Resource Attributes:** HP2 Single Family Property
***P4. Resources Present:** √ Building oStructure oObjectoSite oDistrict oElement of District oOther

P5b Photo date: December 2009

***P6. Date Constructed/Age and Sources:**
Date: 1950
Field study, City of Fresno building permits

***P7. Owner and Address:**
Aileen T. Vander Meulen Living Trust

***P8. Recorded by:**
Lauren MacDonald
Architectural Historian
Johnson Architecture
942 E. Olive Ave., Fresno, CA 93728

***P9. Date Recorded:** December 2009

***P10. Survey Type:** Intensive Level: Pre-1960 Properties

***P11. Report Citation:** Johnson Architecture, *507 W. San Jose Avenue Historical Evaluation Survey,* January 2010

***Attachments:** ● Building, Structure and Object Report

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #_____
HRI#_____

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**: 6Z

***Resource Name or # 507 W. San Jose Avenue**

B3. Original Use: Single Family Residence **B4. Present Use**: Single Family Residence

***B5. Architectural Style:** Ranch style

***B6. Construction History:**

The residence at 507 W. San Jose Avenue was originally constructed c. 1950 (field survey and building permits). Research was unable to determine what alterations have been made to the building.

***B7. Moved?** ✓**No** ☐**Yes** ☐**Unknown** **Date:** **Original Location:**

***B8. Related Features:** None

B9a. Architect: Not Identified **B9b. Builder**: Not Identified

***B10. Significance: Theme:** Suburban Development **Area:** Fresno **(**Fresno County)

Period of Significance: 1950 **Property Type:** Residential, vernacular **Applicable Criteria:** N/A

The subject parcel was developed with the single-story dwelling identified as 507 W. San Jose Avenue c. 1950. An incremental review of he Polk City Directory for Fresno between the years 1949 and 2005 provided a record of occupancy for 507 W. San Jose Avenue. Identified occupants include: 1949 (no listing); 1953, Calvin R. Antrim; 1955 William L. Adams; 1960 William H. Bliss; 1964-1970 Meulen Vander; 1970, Walter Cidrley; 1975, Frank Loggins; 1980, Steve Cleary; 1985-1996, no listing; and 2000 to present, Aileen T. Vandermeuler. No information was found on any of the current or past owners of the property that would indicate that any of the individuals were important persons in local, state, regional, or national history.

The building retains a moderate degree of integrity; the location, design, setting, workmanship, feeling, and association appear to be unchanged. However, materials have undergone some alterations.

The property at 507 W. San Jose Ave. does not qualify to be individually eligible for inclusion on the National Register of Historic Places or the California Register of Historical Resources.

B11. Additional Resource Attributes: No additional resource attributes.

***B12. References:**

County of Fresno Planning & Development Department-Building Permit Records, Historic Site Records.
Fresno County Library-History and Geneology Room and City Directories
**See Report Bibliography for complete list of references*

B13. Remarks:

***B14. Evaluator:** Lauren MacDonald

***Date of Evaluation:** December 2009

North

(This space reserved for official comments.)

APPENDIX E

GEOTECHNICAL ANALYSIS

MOORE TWINING ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING FEASIBILITY INVESTIGATION

PROPOSED FIG GARDEN FINANCIAL CENTER PHASE IV

NEAR THE SOUTHWEST CORNER OF

SAN JOSE AVENUE AND MAROA AVENUE

FRESNO, CALIFORNIA

Project Number: D48704.01

For:

Gunner Andros Investments, LLC
555 West Shaw Avenue, Suite B4
Fresno, California 93704

June 17, 2011

www.mooretwining.com

PH: 800.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

MOORE TWINING ASSOCIATES, INC.

June 17, 2011 D48704.01

Mr. Dennis Frye
Gunner Andros Investments, LLC
555 West Shaw Avenue, Suite B4
Fresno, California 93704

Subject: **Geotechnical Engineering Feasibility Investigation Report**
Proposed Fig Garden Financial Center, Phase IV
Near the Southwest Corner of San Jose Avenue and Maroa Avenue
Fresno, California

Dear Mr. Frye:

We are pleased to submit this geotechnical engineering feasibility investigation report prepared for the proposed Fig Garden Financial Center, Phase IV to be located near the southwest corner of the intersection San Jose Avenue and Maroa Avenue in Fresno, California. The intent of this report is to summarize pertinent geotechnical conditions pertaining to the project for use in planning.

We appreciate the opportunity to be of service to Gunner Andros Investments, LLC. If you have any questions regarding this report, or if we can be of further assistance, please contact us at your convenience at (800) 268-7021.

Sincerely,
MOORE TWINING ASSOCIATES, INC.

Dean B. Ledgerwood II, PG
Project Geologist
Geotechnical Engineering Division

EXECUTIVE SUMMARY

The purpose of our investigation was to identify potential geotechnical feasibility issues for planning purposes.

It is our understanding the proposed construction will consist of a four-story above-ground structure with a basement parking level (five total floor levels) of approximately 27,500 square feet in plan view dimension for the above ground building dimension and approximately 84,048 square feet in plan view dimension for the parking garage basement level. Appurtenant construction is anticipated to include asphaltic concrete pavements, underground utilities, and landscape areas.

Based on the proposed construction, it is anticipated that maximum dead and live loads for interior columns will be about 450 kips.

A total of seven (7) test borings were drilled at the subject site to depths of about 30 to 51½ feet below site grades (BSG). The near surface soils encountered generally consisted of silty sands extending from the ground surface to depths of about 5 feet to 15 feet BSG. The near surface sands were underlain by poorly graded sands extending to the depths ranging from 36 feet to 45 feet BSG. Interbedded layers of silty sands and sandy silts were encountered below the poorly graded sands to the maximum depth explored of 51½ feet BSG. Silty sand fill soils were encountered in the majority of the test borings to depths ranging from 1 foot to 2 feet BSG.

The site is considered geotechnically suitable for the proposed construction with regard to support of the proposed structure. Specific recommendations for design of foundations, floor slabs and pavements will be included in a future design level geotechnical engineering investigation report.

Based on review of nearby water well data reported on the Department of Water Resources Groundwater Database Website, historic ground water depths are reported to be greater than 50 feet BSG.

The potential for fault rupture is considered low. A total seismic settlement of ½ inch and a differential seismic settlement of about ¼ inch in 40 feet were estimated based on the design horizontal ground acceleration determined in accordance with the 2010 CBC.

This executive summary should not be used for design or construction and should be reviewed in conjunction with the attached report.

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TABLE OF CONTENTS (Continued)

GEOTECHNICAL ENGINEERING FEASIBILITY INVESTIGATION

PROPOSED FIG GARDEN FINANCIAL CENTER PHASE IV

NEAR THE SOUTHWEST CORNER OF

SAN JOSE AVENUE AND MAROA AVENUE

FRESNO, CALIFORNIA

Project Number: D48704.01

1.0 INTRODUCTION

This report presents the results of a geotechnical engineering feasibility investigation for the proposed Fig Garden Financial Center Phase IV, to be located near the southwest corner of San Jose Avenue and Maroa Avenue in Fresno, California. Moore Twining Associates, Inc. (Moore Twining) was authorized by Gunner Andros Investments, LLC to conduct this investigation.

The contents of this report include the purpose of the investigation and the scope of services provided. The site history, previous studies, existing site features, and anticipated construction are discussed. In addition, a description of the investigative procedures used and our findings obtained are presented. Finally, the report provides an evaluation of the findings, general conclusions, and related recommendations. The report appendices contain the drawings (Appendix A); the logs of borings (Appendix B); and the results of laboratory tests (Appendix C).

The Geotechnical Engineering Division of Moore Twining performed the investigation.

2.0 PURPOSE AND SCOPE OF INVESTIGATION

2.1 Purpose: The purpose of the geotechnical engineering feasibility investigation was to conduct a field exploration, a laboratory testing program, evaluate the data collected during the field and laboratory portions of the investigation, and provide the following:

2.1.1 Identification of pertinent geotechnical conditions for use in project planning;

2.1.2 Conclusions regarding the potential for liquefaction, fault rupture, seismic settlement, and recommendations for CBC seismic near source factors and coefficients;

2.1.3 Recommendations for future geotechnical investigations for use in project design; and

2.1.4 Conclusions regarding soil corrosion potential.

This investigation did not include a floodplain investigation, compaction tests, environmental investigation, or environmental audit. This report should not be used for design or construction of on or off-site improvements. Specific geotechnical recommendations for design will be provided as part of future investigations.

2.2 Scope: Our original proposal dated March 5, 2008 and subsequent contract amendments, outlined the scope of our services. The actions undertaken during the investigation are summarized as follows.

2.2.1 Plan sheets 1, 2, 3, and 4, of the Entitlement Plans entitled Fig Garden Financial Center Phase IV, prepared by Scott A. Mommer Consulting, identified by project number SM091.08, dated May 23, 2011, were reviewed.

2.2.2 A ground-level dimension plan prepared by Togawa Smith, Martin Residential, Inc., dated February 12, 2009, was reviewed.

2.2.3 Low elevation aerial photographs of the site were reviewed.

2.2.4 A site reconnaissance and subsurface exploration were conducted.

2.2.5 A report titled "Geotechnical Engineering Investigation, Fig Garden Financial Center - Phase II, Fresno, California" dated November 22, 1989 and a supplemental report dated January 4, 1990, prepared by BSK & Associates, Inc., were reviewed.

2.2.6 Laboratory tests were conducted to determine selected physical and engineering properties of the subsurface soils.

2.2.7 Mr. Dennis Frye (Gunner Andros Investments, LLC), Mr. Scott Mommer (Scott A. Mommer Consulting) and Mr. Art Lucas Scott A. Mommer Consulting) were consulted during this investigation.

2.2.8 The data obtained from the investigation were evaluated to develop an understanding of the subsurface conditions and engineering properties of the subsurface soils.

2.2.9 This report was prepared to present the purpose and scope, background information, field exploration procedures, findings, evaluations, conclusions, and recommendations.

3.0 BACKGROUND INFORMATION

The site history, previous studies, existing site features, and the anticipated construction are summarized in the following subsections.

3.1 Previous Studies and Site History: Moore Twining Associates, Inc. prepared a Phase I Environmental Site Assessment (Phase I) for this project in 2009. The areas of planned development were reportedly used previously for agriculture and portions of the project were subsequently developed for residential use. Aerial photographs from the years 1937, 1950, 1957, 1961, 1965, 1967, 1973, 1977, 1993, 1998 and 2005 were reviewed as part of the preparation of the Phase I report. Based on our review of the aerial photographs, the subject site was in agricultural use and occupied by residential and shed-like structures prior to 1937. The 1950 aerial photograph shows a residential structure within the eastern portion of the site. The existing apartment building development, located within the western portion of the property, was present in the 1973 aerial photograph. Based on our recent site observations (February 2009), the former structures (residence and shed like structures) located within the central portion of the property have been demolished and removed from the site.

The "Geotechnical Engineering Investigation, Fig Garden Financial Center - Phase II, Fresno, California" dated November 22, 1989 and the supplemental report dated January 4, 1990, prepared by BSK & Associates, Inc., were also reviewed as part of this investigation. The reports were prepared to address the design of the adjacent office building west of the site.

The BSK & Associates, Inc., geotechnical report dated November 22, 1989 indicated the proposed structure was to consist of a four-story office building with a below ground basement. The report indicated the office would be approximately 90,000 square feet in plan dimensions. The report indicated maximum building and basement parking loads of 640 kips and 200 kips, respectively.

The referenced geotechnical report indicates that a total of four borings were drilled to depths ranging from 20 to 40 feet below site grades. The report indicated loose sandy silts within the upper 8 to10 feet and indicated the "underlying soils" were "firm to medium dense." Fills over hardpan soils were also reported in one of the borings to a depth of 9 feet below site grade.

The report recommended a drilled pier foundation system to support the column loads. The report recommended a minimum pier length of 30 feet and a minimum of 2 feet in diameter. The report indicated total settlements of 1 to 1 ½ inches for the office building and ¾ to 1 inch for the parking structure.

The report also recommended that 2 feet of soils below the basement level should be over-excavated and compacted as engineered fill. The bottom of the overexcavation should be "scarified to a minimum depth of 6 inches" and compacted to 90 percent of the maximum density prior to placing fill.

The report indicated pavement section of 3 inches of AC over 7 inches of Class II AB over 8 inches of compacted soils based on a traffic index and R-value of 6.0 and 36, respectively.

The BSK & Associates, Inc. supplemental report dated January 4, 1990 provided alternative recommendations for supporting the building on shallow foundations. The report noted differential settlement of between ½ and ¾ inch between the building and the parking structure footings were considered acceptable. The report recommended over-excavation depths of a minimum of 2 feet, as measured from basement - level parking structure subgrade. A minimum of 4 feet of over-excavation and compaction of engineered fill was recommended below the parking structure footings. The report recommended that engineered fill soils be compacted to 92 percent compaction and moisture conditioned to optimum. The report also indicated that soils within the upper 8 inches of the "finished subgrade" of basement and driveways be compacted to 95 percent compaction.

No other previous geotechnical engineering, geological, or environmental studies conducted for this site were provided for review during this investigation. If available, these reports should be provided for review and consideration for this project.

3.2 **Site Description:** The project site is located near the southwest corner of San Jose Avenue and Maroa Avenue in Fresno, Fresno County, California. At the time of our field exploration, the subject site was bound to the north by San Jose Avenue with single family housing beyond; to the east by single family housing; to the south by existing multi-family housing, and to the west by an existing multi-story office building and paved parking areas.

At the time of this investigation, the western portion of the subject site was occupied by an existing multi-family apartment complex with asphaltic concrete pavements. The complex includes eight (8) apartment buildings, a restroom building, in-ground swimming pool, landscaping with numerous large, mature trees and interior walkways, carports and asphaltic concrete pavements. Numerous underground utilities associated with the apartment complex were noted throughout the western portion of the site. In addition, based on the conceptual grading plan provided, existing dry wells are identified within the limits of the existing apartment complex. The central portion of the site consisted of vacant property with some scattered mature trees. At the time of our observations, the surface soils in the central portion of the site appeared relatively loose from recent discing operations. Construction debris, such as piping, concrete and wood, were observed in areas where former structures were located. The eastern portion of the site was occupied by a single family residence (507 W. San Jose Avenue) and landscaping including numerous large trees. In addition, timber utility poles were observed within portions of the site.

The conceptual grading plan indicates an in-ground swimming pool was previously located near one of the former residences within the central portion of the site. At the time of this investigation, depressions were noted within the limits of the former swimming pool and one of the former structures. The depressions located within the former swimming pool and residence were noted to be approximately 2½ feet and 1 foot deep, respectively.

At the time of this investigation, the subject site was noted to be relatively flat. Based on review of the conceptual grading plan provided by Lars Andersen and Associates, the existing elevation of the subject site ranged from approximately 318 feet AMSL to 320.5 feet AMSL.

3.3 Anticipated Construction: According to the site plan, the project site is approximately 4.69 acres. It is our understanding the proposed construction will consist of a four-story above-ground structure with a basement parking level (five total floor levels) of approximately 27,500 square feet in plan view dimension for the above ground building dimension and approximately 84,048 square feet in plan view dimension for the parking garage basement level. The proposed building is anticipated to consist of reinforced concrete, steel and wood framing systems with a concrete slab-on-grade within the basement level. Appurtenant construction is anticipated to include an asphaltic concrete parking, underground utilities, concrete hardscape areas, and landscape areas.

Based on the anticipated construction, it is assumed that maximum dead and live loads for interior columns and perimeter walls will be about 450 kips and 6 kips per lineal foot, respectively. For the purpose of this report, allowable total and differential static settlements of 1 ½ inch and ¾ inch in 40 feet, respectively, were considered for foundations.

Based on our conversations with Lars Andersen and Associates, earthwork cuts up to about 10 feet are expected to achieve site grades within the basement level. Areas outside the basement level are anticipated to consist of relatively shallow cuts and fills to achieve design grades.

4.0 INVESTIGATIVE PROCEDURES

The field exploration and laboratory testing program conducted for this investigation are summarized in the following subsections.

4.1 Field Exploration: The field exploration consisted of a site reconnaissance, drilling test borings, soil sampling, and standard penetration tests.

4.1.1 Site Reconnaissance: The site reconnaissance consisted of walking the site and noting visible surface features. The visual reconnaissance was conducted by Mr. Max Miljevich Moore Twining Staff Engineer, on April 22, 2008. Subsequent observations by Moore Twining in 2011 as part of preparation of the Phase I report were also reviewed. The features noted are described in the background information section of this report.

4.1.2 Drilling Test Borings: On April 22, 2008, a total of seven (7) test borings were drilled at the subject site to depths of about 30 to 51½ feet below site grades (BSG). The field investigation was performed under the technical supervision of a registered civil engineer from our firm. The test borings were logged and the soils were classified in general accordance with the Unified Soil Classification System. The depths and locations selected for the borings were based on the anticipated location of the proposed building, existing site constraints, type of construction, estimated depth of influence of foundation loads, and subsurface soil conditions. The approximate locations of the borings are shown on Drawing No. 2 in Appendix A of this report.

The borings were advanced using a CME-75 drill rig equipped with 6⅝-inch outside diameter (O.D.) hollow-stem augers. The soils encountered in the borings were sampled at an approximate depth interval of 5 feet and returned to our laboratory for testing. The presence and elevation of free water, if any, in the borings were noted and recorded during drilling and immediately following completion of the borings. Test boring locations were determined by pacing with reference to existing site features shown on the site plan. The locations, as described, should be considered accurate to within about 10 feet. The test borings were generally loosely backfilled with material excavated during the drilling operations; thus, some settlement should be anticipated. However, one of the borings (B-7) was backfilled with pea gravel for approximately the upper 5 feet.

Test boring logs are provided in Appendix B of this report. A Key to Boring Logs is also presented in Appendix B following the logs. The descriptions on the logs are based on field observations and laboratory test results.

4.1.3 Soil Sampling: Standard penetration tests were conducted, and both disturbed and relatively undisturbed soil samples were obtained.

The standard penetration resistance, N-value, is defined as the number of blows required to drive a standard split barrel sampler into the soil. The standard split barrel sampler has a 2-inch O.D. and a 1⅜-inch inside diameter (I.D.). The sampler is driven by a 140-pound weight free falling 30 inches. The sampler is lowered to the bottom of the bore hole and set by driving it an initial 6 inches. It is then driven an additional 12 inches and the number of blows required to advance the sampler the additional 12 inches is recorded as the N-value.

Relatively undisturbed soil samples for laboratory tests were obtained by pushing or driving a California modified split barrel ring sampler into the soil. The soil was retained in brass rings, with a 2½ inch O.D. and 1-inch in height. The lower 6-inch portions of the samples were placed in close-fitting, plastic, airtight containers which, in turn, were placed in cushioned boxes for transport to Moore Twining's laboratory for classification and testing. Bulk samples of soil were obtained during drilling to test for Resistance (R)-value, expansion index, moisture-density relationships, and corrosion analyses.

5.0 FINDINGS AND RESULTS

The findings and results of the field exploration and laboratory testing are summarized in the following subsections.

5.1 Surface Conditions: At the time of our field exploration (April 22, 2008), the western portion of the site was occupied by an existing apartment complex. Approximately eight (8) two-story structures, a restroom building, an in-ground swimming pool, asphaltic concrete pavements, exterior concrete slabs-on-grade, etc., were noted throughout the existing apartment complex. In addition, various underground utilities and dry wells are anticipated within the limits of the existing apartment complex. The eastern portion of the site was developed for residential use and included a single family residence. Further, the central portion of the site was previously developed and included several structures and an in-ground swimming pool, which have since been demolished and removed. Two depressions were noted within the limits of the former residence and swimming pool indicated on the conceptual grading plan. Some construction debris (concrete, wood, etc.) was observed within the near surface soils in the central portion of the site.

5.2 Soil Profile: The near surface soils encountered generally consisted of silty sands extending from the ground surface to depths ranging from about 5 feet to 15 feet BSG. The near surface silty sands were underlain by poorly graded sands extending to depths ranging from 36 feet to 45 feet BSG. Interbedded layers of silty sands and sandy silts were encountered below the poorly graded sands to the maximum depth explored of 51½ feet BSG. It should be noted that shallow fill soils were encountered in a majority of the test borings extending to depths of from 1 foot to 2 feet BSG. In addition, dense to very dense cemented soils (hardpan) were encountered at depths of approximately 2 to 10 feet BSG.

The foregoing is a general summary of the soil conditions encountered in the test borings drilled for this investigation. Detailed descriptions of the soils encountered at each test boring are presented on the logs of borings in Appendix B. The stratification lines shown on the logs represent the approximate boundary between soil types; the actual in-situ transition may be gradual.

5.3 Soil Engineering Properties: The following is a description of the soil engineering properties as determined from our field exploration.

Silty Sands: The silty sands ranging from the ground surface to depths ranging from about 5 to 15 feet BSG were loose to very dense as determined by standard penetration resistance, N-values, ranging from 7 to greater than 50 blows per foot. Five (5) in-situ soil samples revealed dry densities ranging from 98.8 to 129.3 pounds per cubic foot. The native silty sand samples tested exhibited low compressibility characteristics as indicated by two (2) consolidation tests (results of 4.5 and 5.0 percent consolidation under a load of 8 kips per square foot). Upon inundation, the sample exhibited low collapse potential (results of 1.1 and 2.5 percent collapse under a load of 2 kips per square foot).

The results of a direct shear test performed on one (1) near surface soil sample indicated an angle of internal friction of 23 degrees, with a cohesion value of 420 pounds per square foot. One (1) expansion index (E.I.) test indicated very low expansion potential (E.I. = 0).

Poorly Graded Sands: Below the near surface silty sands, various interbedded layers of loose to medium dense poorly graded sands were encountered, as indicated by standard penetration resistance, N-values, ranging from 6 to 23 blows per foot. Two (2) samples revealed dry densities of 94.6 and 101.4 pounds per cubic foot. The results of a direct shear test performed on one (1) poorly graded sand sample indicated an angle of internal friction of 34 degrees, with a cohesion value of 180 pounds per square foot.

Sandy Silts: The sandy silts encountered were stiff to hard as determined by standard penetration resistance, N-values, ranging from 9 to 40 blows per foot.

Deeper Silty Sands: Below the near surface silty sands various interbedded layers of silty sands encountered were loose to medium dense as determined by standard penetration resistance, N-values, ranging from 7 to 25 blows per foot.

Moisture/Density Relationship: A maximum density optimum moisture determination test was conducted on a near surface silty sand sample collected from between the ground surface and a depth of about 5 feet BSG. The results of the maximum density optimum moisture test indicated a maximum dry density of 129.4 pounds per cubic foot and an optimum moisture of 7.5 percent.

R-Value Test: Two (2) R-value tests conducted on near surface silty sand samples collected between the ground surface and a depth of 5 feet BSG indicated R-values of 27 and 40.

Chemical Tests: Chemical test performed on two (2) silty sand samples at depths of 1 to 5 feet and 10 to 11½ feet BSG indicated pH values of 7.0 and 8.4; minimum resistivity values of 8,000 and 58,000 ohms per centimeter; chloride concentrations of 0.00088 percent by weight and "non detect" (reporting limit of 0.00060 percent by weight); and sulfate concentrations of 0.00085 percent by weight and "non detect" (reporting limit of 0.00060 percent by weight), respectively.

In addition, chemical test performed on one (1) poorly graded sand at a depth of 10 to 11 feet BSG indicated a pH value of 8.4, minimum resistivity value of 5,300 ohms per centimeter; chloride concentration of "non detect" (reporting limit of 0.00060 percent by weight); and sulfate concentration of 0.010 percent by weight.

5.4 Groundwater Conditions: Groundwater was not encountered at the time of drilling (April 2008), to the maximum depth explored of 51½ feet BSG. Based on review of nearby water well data reported on the Department of Water Resources Groundwater Database Website, historic ground water depths are reported to be greater than 50 feet BSG.

However, water table elevations fluctuate with time, since they are dependent upon seasonal precipitation, irrigation, land use, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field exploration may vary from those encountered both during the construction phase and the design life of the project. The evaluation of such factors was beyond the scope of this investigation.

6.0 EVALUATION

The data and methodology used to develop conclusions and recommendations for planning purposes are summarized in the following subsections. The evaluation was based upon the subsurface soil conditions determined from our investigation and our understanding of the proposed construction. The conclusions obtained from the results of our evaluations are described in the Conclusions and Recommendations section of this report.

6.1 Surface Conditions and Existing Improvements: At the time of the field investigation, the western portion of the site was occupied by an existing apartment complex with an existing in-ground swimming pool. Existing foundations, underground utilities, asphaltic concrete pavements, etc., associated with the existing apartment complex were noted. In addition, existing dry wells, identified on the conceptual grading plan provided by Lars Andersen and Associates, are anticipated. The exact depth of the existing subsurface improvements (i.e., foundations, utilities, dry wells, etc.) were unknown at the time of this investigation.

The eastern portion of the subject site includes an existing single family residence. Based on review of the site plan provided, it is our understanding that two former residences with shed buildings and an underground swimming pool were previously demolished on-site. Depressions within the approximate limits of the former buildings and swimming pool area were noted at the time of this investigation. In addition, scattered concrete and asphaltic concrete debris was noted at the surface.

As a part of site preparation, all existing subsurface structures (i.e., foundations, dry wells, underground utilities, etc.), should be completely removed and backfilled as engineered fill.

6.2 Expansive Soils: One of the potential geotechnical hazards evaluated at this site is the expansion potential of the near surface soils. Over time, expansive soils will experience cyclic drying and wetting as the dry and wet seasons pass. Expansive soils experience volumetric changes (shrink/swell) as the moisture content of the clayey soils fluctuate. These shrink/swell cycles can impact foundations and lightly loaded slabs-on-grade when not designed for the anticipated expansive soil pressures.

In evaluation of the expansive soils at the site, expansion testing was performed on representative samples of the near surface soils which are anticipated to be within the zone of influence of the planned improvements. The expansion testing was performed and classified by expansion potential

in accordance with ASTMD4829 are summarized in Appendix C of this report. The results of expansion index testing indicated that the near surface soils exhibit very low expansion potential as indicated by expansion index value of zero (0). Accordingly, no special mitigation measures are required for this site due to expansive soils.

6.3 Foundation Support - General: Based on the magnitude of the anticipated foundation loads and the soils conditions encountered, both shallow and deep foundation systems consisting of cast-in-drilled-hole pier foundations were evaluated for this project. Based on our evaluations, both shallow and deep foundations are considered feasible for the project from a geotechnical perspective.

6.4 Static Settlement and Bearing Capacity of Shallow Foundations: The potential for excessive total and differential static settlement of shallow foundations was evaluated based on the anticipated foundation loading. The increases in effective stress to underlying soils which can occur from new foundations and structures, placement of fill, etc. can cause vertical deformation of the soils, which can result in damage to the overlying structure(s) and improvements. The differential component of settlement is often the most damaging. In addition, the allowable bearing pressures for the soils supporting the foundations were also evaluated for shear, or punching type failure of the soils due to the anticipated foundation loads.

Based on the anticipated foundation loads, excessive static settlements were estimated if shallow foundations were supported on native soils. Therefore, over-excavation and recompaction of the subgrade soils below foundations would be required for support of new foundations. Based on preliminary static settlement analysis and considering the foundation loads of 450 kips for interior columns and 6 kips per foot for perimeter walls, over-excavation and compaction of engineered fill below foundations of approximately 2 feet was be required to reduce the static settlements to within 1½ inch total and ¾ inch differential in 40 feet. The site preparation should be assessed as part of future geotechnical studies as part of preparation of detailed recommendations.

Given that the proposed structure includes a full height basement, over-excavation and compaction below foundations would increase the depth and extent of temporary excavations adjacent to the public right of way and the westerly adjacent parking lot. Provisions for support of temporary excavations should be included in future construction planning.

6.5 Temporary Basement Excavations: The project includes a basement level parking area anticipated to extend a minimum of approximately 10 feet below the present ground surface. Therefore, temporary excavations and shoring are anticipated as part of the proposed construction. It is recommended that existing improvements adjacent to the temporary excavations be inspected and conditions documented by a preconstruction survey prior to, during, and after construction of the new improvements, and any related distress should be repaired prior to completion of the project. The future design level geotechnical investigation should include recommendations for support of temporary excavations, preconstruction surveys and monitoring.

6.6 Fault Rupture and Seismic Design Parameters: The project site is not located in an Alquist-Priolo Earthquake Fault Zone. The closest active or potentially active fault is theClovis Fault located approximately 9 miles (14.5 km) east of the site. Accordingly, the potential for ground rupture at the site is considered low.

It is our understanding that the 2010 CBC will be used for structural design, and that seismic site coefficients are needed for design.

Based on the 2010 CBC, the site is classified the site is classified as a stiff soil (D) site with standard penetration resistance, N-values averaging between 15 and 50 blows per foot in the upper 100 feet BSG.

The seismic ground shaking levels at the site will be mitigated by designing the structure in accordance with the requirements of the California Building Code for seismic loading conditions. Based on the 2010 CBC and considering a five percent damped design spectral response acceleration for short period (S_{DS}) of 0.467, the CBC design horizontal ground acceleration was estimated to be 0.19g.

A table providing the recommended seismic coefficient and earthquake spectral response acceleration values for the project site is included below. The following values were developed using the Ground Motion Parameter Calculator provided by United States Geological Survey (http://earthquake.usgs.gov/) in accordance with the 2010 CBC.

Item	2010 CBC Value
Site Class	D
Spectral Response At Short Period (0.2 Second), Ss	0.501
Spectral Response At 1-Second Period, S_1	0.221
Site Coefficient, Fa	1.399
Site Coefficient, Fv	1.958
Maximum considered earthquake spectral response acceleration for short period, S_{MS}	0.701

Item	2010 CBC Value
Maximum considered earthquake spectral response acceleration for 1 second, S_{M1}	0.432
Five percent damped design spectral response acceleration for short period, S_{DS}	0.467
Five percent damped design spectral response acceleration at 1-second period, S_{D1}	0.288

6.7 **Liquefaction and Seismic Settlement:** Liquefaction and seismic settlement are conditions that can occur under seismic shaking from earthquake events. Liquefaction describes a phenomenon in which a saturated, cohesionless soil loses strength during an earthquake as a result of induced shearing strains. Lateral and vertical movement of the soil mass, combined with loss of bearing, usually results. Saturated, loose, cohesionless soils, higher intensity earthquakes, and particularly long duration of ground shaking are the requisite conditions for liquefaction.

One of the most common phenomena that occurs during seismic shaking is the induced settlement of loose, unconsolidated sediments. This can occur in unsaturated and saturated granular soils. Considering the historic depth to ground water, liquefaction is not considered a factor in design for this site.

Seismic settlement analyses were conducted based on soil properties revealed by test borings. The analysis was conducted based on the corrected SPT N-value data from soils encountered in test boring B-1 and B-5 to estimate the potential seismic settlement. The evaluations were conducted for soils encountered using the computer program LiquefyPro, developed by CivilTech Software. The design horizontal ground acceleration as defined by the 2010 CBC of 0.19g and a design earthquake magnitude of 5.9 were used. The N-values generated based on the test borings were used in the analysis. Groundwater depths of greater than 50 feet were used in the analysis.

The results of the seismic settlement analyses indicated that dry seismic settlement would occur as a result of the 2010 CBC design horizontal ground acceleration in the loose sand layers encountered between 10 and 40 feet BSG. The results indicated an estimated total seismic settlement of ½ inch and a differential seismic settlement of about ¼ inch in 40 feet.

6.8 Corrosion Protection: The risk of corrosion of construction materials relates to the potential for soil-induced chemical reaction. Corrosion is a naturally occurring process whereby the surface of a metallic structure is oxidized or reduced to a corrosion product such as iron oxide (i.e., rust). The metallic surface is attacked through the migration of ions and loses its original strength by the thinning of the member. Corrosion can eventually damage or destroy a metallic object.

Soils make up a complex environment for potential metallic corrosion. The corrosion potential of a soil depends on soil resistivity, texture, acidity, field moisture and chemical concentrations. In order to evaluate the potential for corrosion of metallic objects in contact with the onsite soils, chemical testing of soil samples was performed by Moore Twining as part of this report. The test results are included in Appendix C of this report. Conclusions regarding the corrosion potential of the soil tested are included in the Conclusions and Recommendations section of this report. If piping or concrete are placed in contact with imported soils, these soils should be analyzed to evaluate the corrosion potential of these soils.

If the manufacturers or suppliers cannot determine if materials are compatible with the soil corrosion conditions, a professional consultant, i.e., a corrosion engineer, with experience in corrosion protection should be consulted to provide design parameters. Moore Twining does not provide corrosion engineering services.

6.9 Sulfate Attack of Concrete: Degradation of concrete in contact with soils due to sulfate attack involves complex physical and chemical processes. When sulfate attack occurs, these processes can reduce the durability of concrete by altering the chemical and microstructural nature of the cement paste. Sulfate attack is dependent on a variety of conditions including concrete quality, exposure to sulfates in soil/groundwater and environmental factors. The standard practice for geotechnical engineers in evaluation of the soils anticipated to be in contact with concrete is to perform testing to determine the sulfates present in the soils. The test results are then compared with the provisions of ACI 318, section 4.3 to provide guidelines for concrete exposed to sulfate-containing solutions. Common methods used to resist the potential for degradation of concrete due to sulfate attack from soils include, but are not limited to the use of sulfate-resisting cements, air-entrainment and reduced water to cement ratios.

The soil corrosion data should be provided to the manufacturers or suppliers of materials that will be in contact with soils (pipes or ferrous metal objects, etc.) to provide assistance in selecting the protection and materials for the proposed products or materials. If the manufacturers or suppliers cannot determine if materials are compatible with the soil corrosion conditions, a professional consultant, i.e., a corrosion engineer, with experience in corrosion protection should be consulted to provide design parameters.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the data collected during the field investigation and laboratory testing, our geotechnical experience in the vicinity of the project site, and our understanding of the anticipated construction, we present the following general conclusions and recommendations.

7.1 The site is suitable for the proposed construction with regard to support of the proposed improvements. Recommendations to achieve stable subgrade conditions by over-excavation below proposed new foundations and preparation of the near surface subgrade soils below pavement and hardscape areas will be provided in the future design level geotechnical investigation. In addition, specific recommendations for design of foundations will be included in the future design level geotechnical investigation report. The future geotechnical investigation should include test borings in the remaining areas of the site and supplemental analysis of allowable bearing capacity and static settlement for foundations.

7.2 In general, the near surface soils encountered generally consisted of silty sands extending from the ground surface to depths ranging from about 5 feet to 15 feet BSG. The near surface sands were underlain by poorly graded sands extending to depths ranging from 36 feet to 45 feet BSG. Interbedded layers of silty sands and sandy silts were encountered below the poorly graded sands to the maximum depth explored of 51½ feet BSG. Silty sand fill soils were encountered in the majority of the test borings from the surface to depths ranging from 1 foot to 2 feet BSG. In addition, dense to very dense cemented soils (hardpan) were encountered at depths ranging from approximately 2 to 10 feet BSG.

7.3 Based on our review of the site plans provided, it is our understanding that a former in-ground swimming pool was located in the northern portion of the site. Also, a shallow depression was noted within the vicinity of the former swimming pool. Therefore, it is anticipated that loose fill soils may be present within the former swimming pool backfill. Also, it should be noted that shallow fills (from the surface to 1-2 feet BSG) were encountered throughout the majority of the site area. As part of site preparation, areas of proposed new improvements should include over-excavation of the existing undocumented fill soils, followed by placement, moisture conditioning, and compaction of on-site soils as compacted engineered fill. The existing fills should be anticipated to contain construction debris including concrete, wood, piping, etc. In addition to removal of the existing fill soils, existing foundations, underground utilities, dry wells and other site improvements are present in the western and eastern portion of the subject site. The existing improvements and all soils disturbed as part of demolition and removal of the existing improvements should be excavated and the areas backfilled with engineered fill.

7.4 The near surface soils possess a very low expansion potential.

7.5 The site is not located in an earthquake fault zone designated pursuant to the Alquist-Priolo Earthquake Fault Zoning Act (1972). The nearest known potentially active fault is the Clovis Fault, with the nearest surface trace of the fault mapped about 9 miles (14.5 km) east of the site. Based on the site proximity to the nearest known potentially active fault, the potential for fault rupture at the site is considered low.

7.6 The proposed building shall be designed by a licensed structural engineer to mitigate the anticipated seismic ground shaking in accordance with the 2010 CBC for seismic loading conditions.

7.7 The results of soil sample analyses indicate that the near surface soils exhibit a "moderately corrosive" to "progressively non corrosive" corrosion potential to buried metal objects.

7.8 The near-surface soils exhibit fair support characteristics for pavements when compacted as engineered fill. Recommendations for over-excavation and compaction of engineered fill soils below pavement areas will be included in the future design level geotechnical investigation.

7.9 The subject site is relatively flat and onsite stormwater systems are anticipated as part of the development, therefore, excessive surface runoff of stormwater over soils is not anticipated to be significant. Furthermore, undeveloped areas of the site will be vegetated or will include a landscape cover. Thus, the risk for erosion within the site is considered low.

7.10 The design horizontal ground acceleration for this site was estimated to be 0.19g.

7.11 The results of the seismic settlement analysis indicate total and differential seismic settlement of ½ inch and ¼ inch in 40 feet, respectively.

7.12 Groundwater was not encountered at the time of drilling (April 2008), to the maximum depth explored of 51½ feet BSG. Based on review of nearby water well data reported on the Department of Water Resources Groundwater Database Website, historic ground water depths are reported to be greater than 50 feet BSG.

8.0 NOTIFICATION AND LIMITATIONS

8.1 The conclusions and recommendations presented in this report are based on the information provided regarding the proposed construction, and the results of the field and laboratory investigation, combined with interpolation of the subsurface conditions between boring locations. The nature and extent of subsurface variations between borings may not become evident until construction.

8.2 If variations or undesirable conditions are encountered during construction, Moore Twining should be notified promptly so that these conditions can be reviewed and the recommendations reconsidered where necessary. It should be noted that unexpected conditions frequently require additional expenditures for proper construction of the project.

8.3 If the proposed construction is relocated or redesigned, or if there is a substantial lapse of time between the submission of our report and the start of work (more than 12 months) at the site, or if conditions have changed due to natural cause or construction operations at or adjacent to the site, the conclusions and recommendations contained in this report should be considered invalid unless the changes are reviewed and our conclusions and recommendations modified or approved in writing.

8.4 Changed site conditions, or relocation of proposed structures, may require additional field and laboratory investigations to determine if our conclusions and recommendations are applicable considering the changed conditions or time lapse.

8.5 The conclusions and recommendations contained in this report are valid only for the project discussed in the Anticipated Construction section of this report. The use of the information and recommendations contained in this report for structures on this site not discussed herein or for structures on other sites not discussed in this report is not recommended. The entity or entities that use or cause to use this report or any portion thereof for another structure or site not covered by this report shall hold Moore Twining, its officers and employees harmless from any and all claims and provide Moore Twining's defense in the event of a claim.

8.6 This report is issued with the understanding that it is the responsibility of the client to transmit the information and recommendations of this report to developers,

owners, buyers, architects, engineers, designers, contractors, subcontractors, and other parties having interest in the project so that the steps necessary to carry out these recommendations in the design, construction and maintenance of the project are taken by the appropriate party.

8.7 Our professional services were performed, our findings obtained, and our recommendations prepared in accordance with generally-accepted engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

We appreciate the opportunity to be of service to Gunner Andros Investments, LLC. If you have any questions regarding this report, or if we can be of further assistance, please contact us at your convenience.

Sincerely,
MOORE TWINING ASSOCIATES, INC.

for

Dean B. Ledgerwood II, PG
Project Geologist
Geotechnical Engineering Division

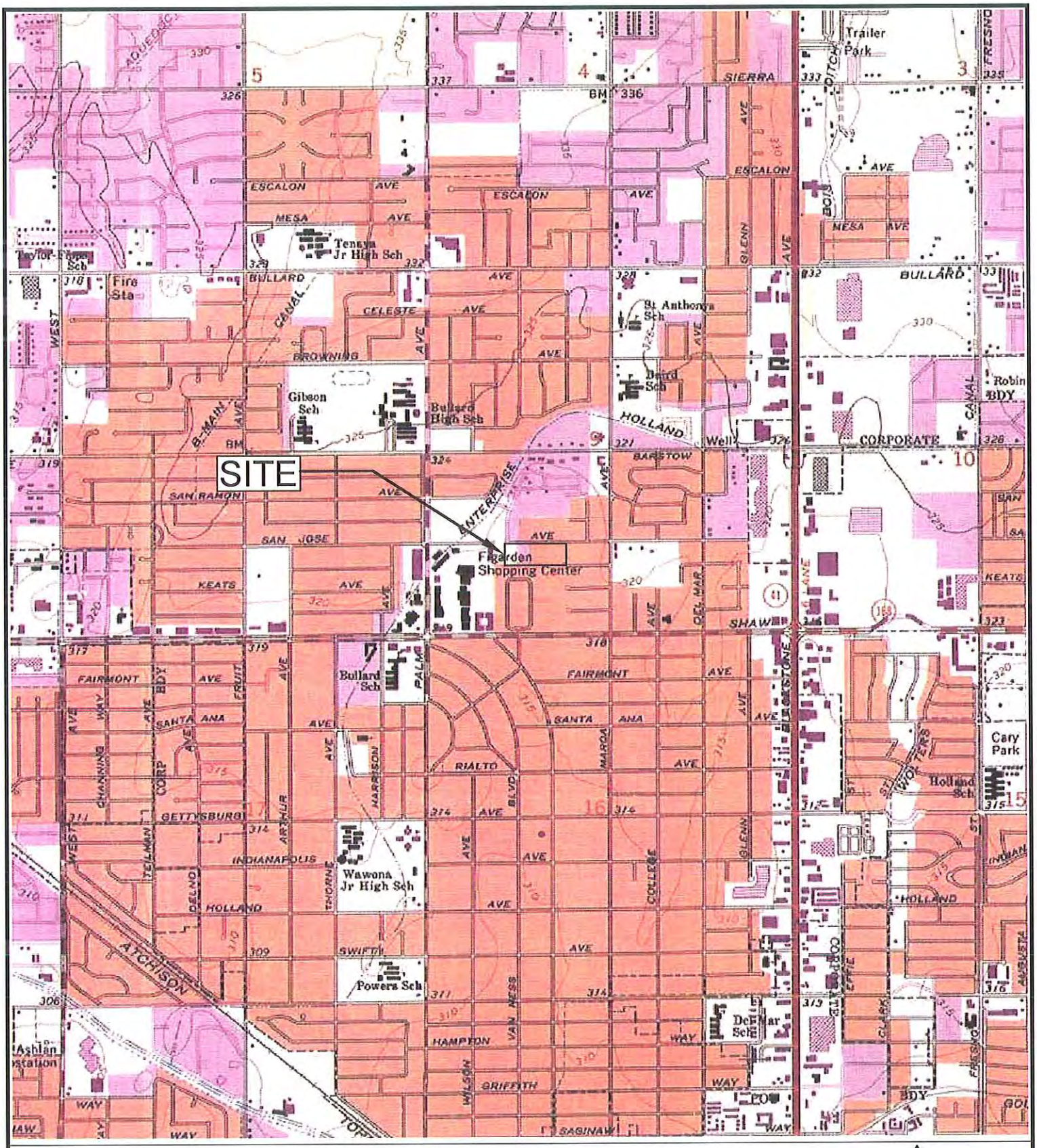
Read L. Andersen, RGE
Manager
Geotechnical Engineering Division

APPENDIX A

DRAWINGS

Drawing No. 1 - Site Location Map

Drawing No. 2 - Test Boring Location Map



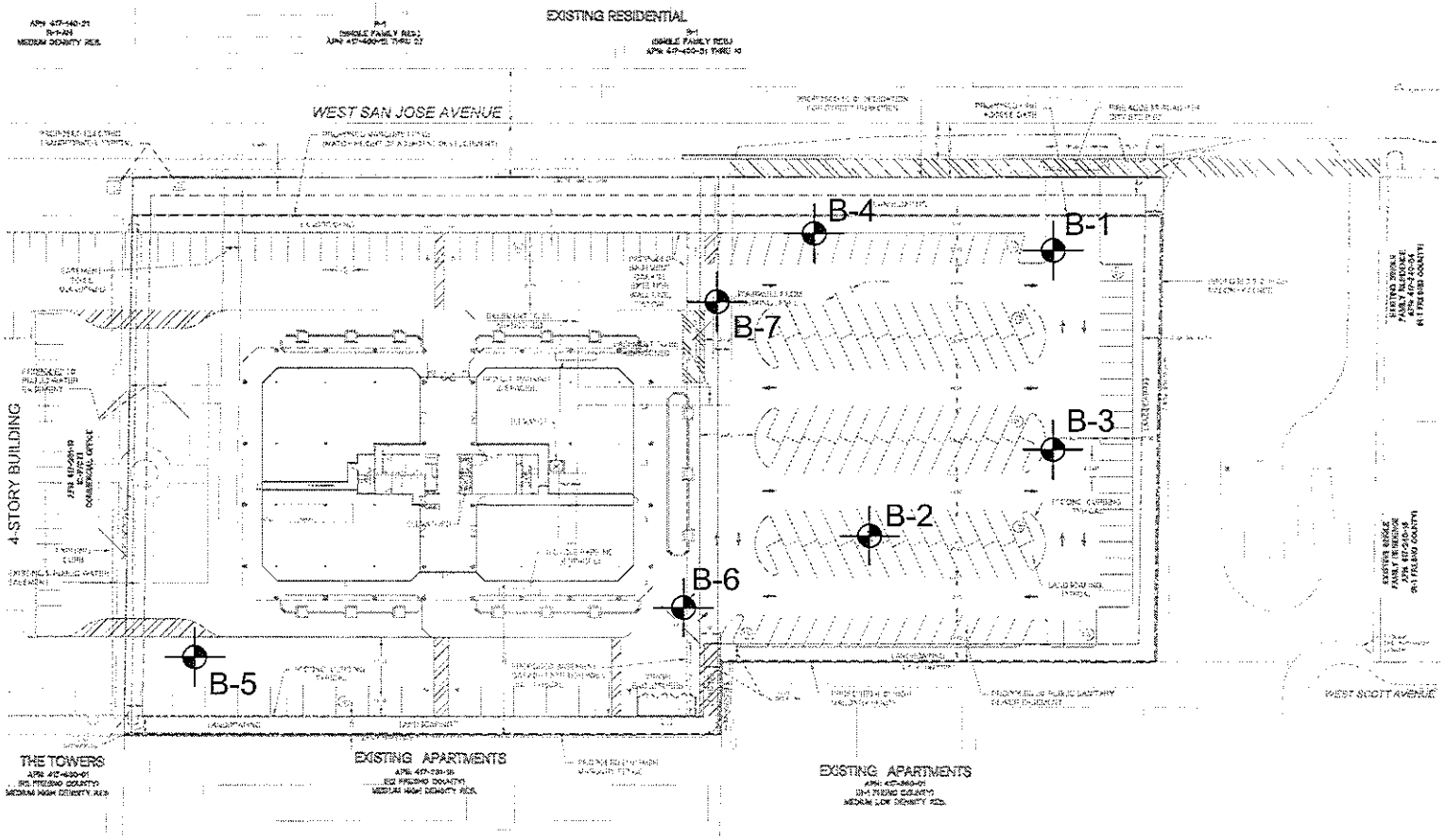
SOURCE: U.S.G.S. TOPOGRAPHIC MAP, 7 ½ MINUTE SERIES
FRESNO NORTH, CALIFORNIA QUADRANGLE, PHOTOREVISED 1981

0 2000
APPROXIMATE SCALE IN FEET

SITE LOCATION MAP
FIG GARDEN FINANCIAL CENTER PHASE IV
SAN JOSE AVENUE AND MAROA AVENUE
FRESNO, CALIFORNIA

FILE NO.: 48704-01-01	DATE: 06/22/11
DRAWN BY: RM	APPROVED BY:
PROJECT NO. D48704.01	DRAWING NO. 1

MOORE TWINING ASSOCIATES, INC.



APPROXIMATE TEST BORING LOCATION

N

0 100

APPROXIMATE SCALE IN FEET

TEST BORING LOCATION MAP
FIG GARDEN FINANCIAL CENTER PHASE IV
SAN JOSE AVENUE AND MAROA AVENUE
FRESNO, CALIFORNIA

FILE NO. 48704-01-02	DATE DRAWN: 06/22/11
DRAWN BY: RM	APPROVED BY:
PROJECT NO. D48704.01	DRAWING NO. 2

MOORE TWINING ASSOCIATES, INC.

APPENDIX B

LOGS OF BORINGS

This appendix contains the final logs of borings. These logs represent our interpretation of the contents of the field logs and the results of the field and laboratory tests.

The boring logs and related information depict subsurface conditions only at these locations and at the particular time designated on the logs. Soil conditions at other locations may differ from conditions occurring at these test boring locations. Also, the passage of time may result in changes in the soil conditions at these test boring locations.

In addition, an explanation of the abbreviations used in the preparation of the logs and a description of the Unified Soil Classification System are provided at the end of Appendix B.

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-1

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

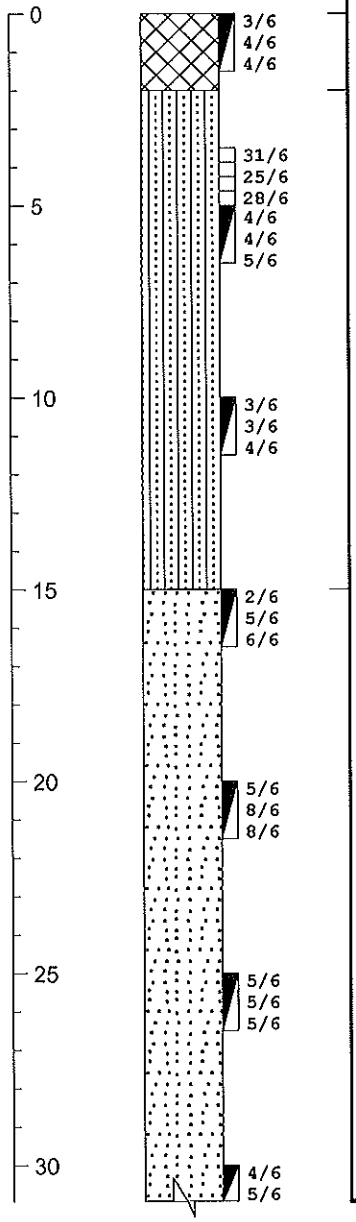
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E



USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
FILL	SAND, Silty; Loose, moist, fine to medium, light brown to brown, with trace fine gravel		8	
SM	SAND, Silty; Loose, moist, fine to medium, light brown to brown, with trace fine gravel	DD=98.8pcf	53	6
	No gravel		9	
	Decrease in silt content			
			7	1
SP	SAND, Poorly Graded; Medium dense, fine to medium, light brown		11	
			16	1
			10	
	Slight silt increase		11	1

Notes:

Figure Number B-1

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-1

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

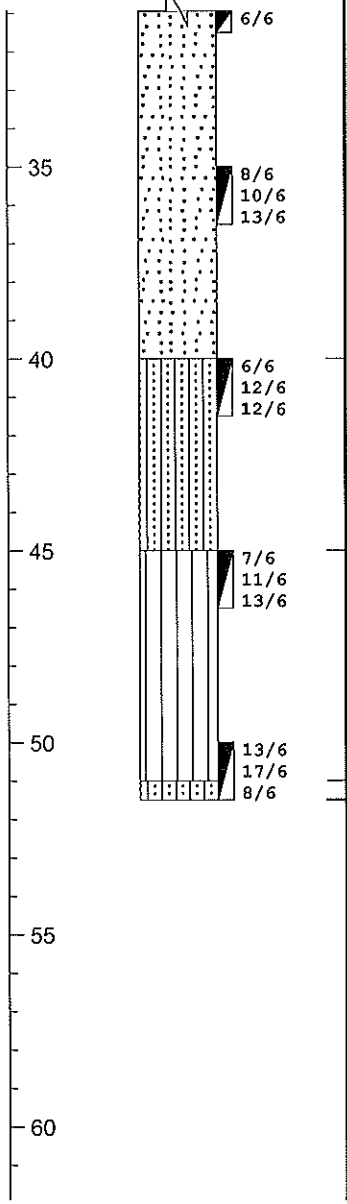
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
			Light gray, decrease in silt content		23	
		SM	SAND, Silty; Medium dense, moist, fine to coarse, light brown, with trace fine gravel		24	4
		ML	SILT, Sandy; Very stiff, moist, slight plasticity, light brown, with trace clay		24	
					25	3
		SM	SAND, Silty; Medium dense, moist, fine to medium, light brown with reddish brown			
			Bottom of boring at 51.5 feet			

Notes:

Figure Number B-1

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-2

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

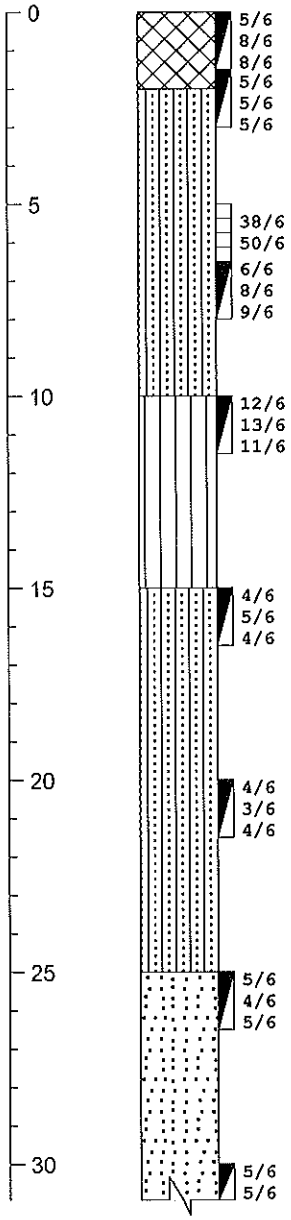
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0		FILL	SAND, Silty; Medium dense, moist, fine to medium, reddish brown, with roots and trace clay		16	4
					10	
		SM	SAND, Silty; Medium dense, moist, fine to medium, reddish brown, with trace clay			
5				c=420ksf ø=23°	>50	5
			Hardpan	DD=120.7pcf	17	
10		ML	SILT, Sandy; Very stiff, moist, non plastic		24	15
15		SM	SAND, Silty; Loose, damp, fine to medium, reddish brown		9	
20			Increase in coarse sand		7	1
25		SP	SAND, Poorly Graded; Loose, moist, fine to coarse, light brown		9	
30			Light gray		9	1

Notes:

Figure Number B-2

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-2

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
35	4/6 3/6 4/6 6/6				10	
40	3/6 3/6 4/6		Loose, trace gravel		7	2
45			Bottom of boring at 41.5 feet			
50						
55						
60						

Notes:

Figure Number B-2

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-3

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

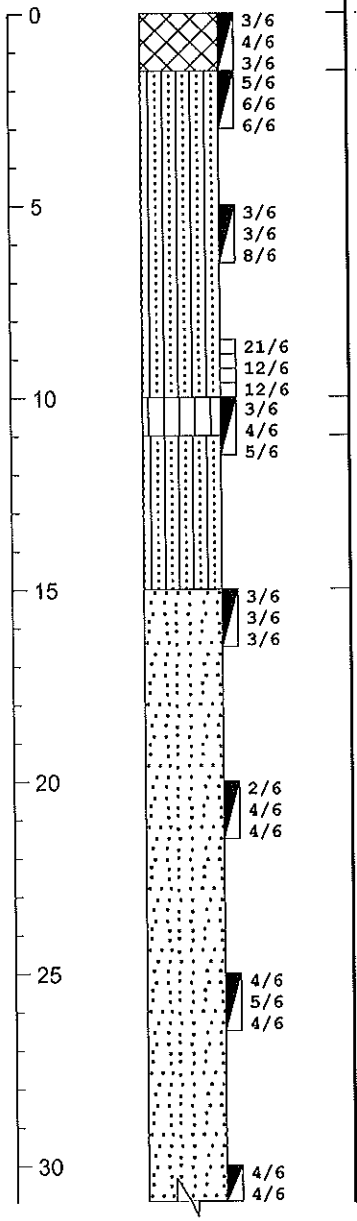
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0		FILL	SAND, Silty; Loose, moist, fine to medium, reddish brown, with roots and trace gravel		7	6
		SM			12	
5			SAND, Silty; Medium dense, moist, fine to medium, reddish brown		11	
				DD=111.2pcf	24	1
10		ML	SILT, Sandy; Stiff, moist, non plastic, light gray		9	
		SM	SAND, Silty; Loose, moist, fine to medium, light brown			
15		SP	SAND, Poorly Graded; Loose, moist, fine to coarse, brown		6	4
20			Increase in coarse sand		8	
25			Light gray		9	2
30					9	

Notes:

Figure Number B-3

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-3

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
35	5/6 8/6 7/6 8/6	ML	SILT, Sandy; Stiff, moist, slight plasticity, gray, trace clay Bottom of boring at 36.5 feet		15	3
40						
45						
50						
55						
60						

Notes:

Figure Number B-3

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-4

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

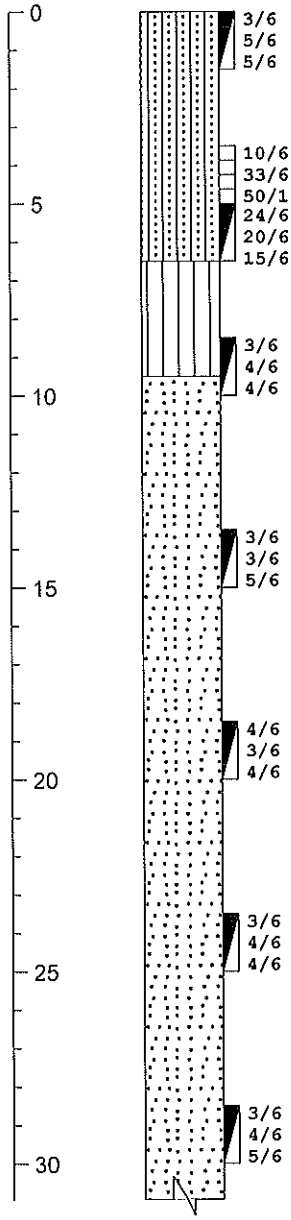
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		SM	SAND, Silty; Medium dense, moist, fine to medium, reddish brown	EI=0	10	
			Hardpan	DD=129.3pcf	>50	5
					35	
		ML	SILT, Sandy; medium stiff, moist, non plastic, light gray		8	1
		SP	SAND, Poorly Graded; Loose, fine to coarse, reddish brown			
					8	
			Light gray		7	1
					8	
					9	1

Notes:

Figure Number B-4

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-4

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Project Number: D48704.01

Drilled By: T.B.

Date: 4/22/08

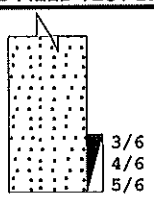
Drill Type: CME 75

Elevation: N/A

Auger Type: HSA 65/8" O.D.

Depth to Groundwater: N/E

Hammer Type: TRIP

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
					9	
35			Bottom of boring at 35 feet			
40						
45						
50						
55						
60						

Notes:

Figure Number B-4

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-5

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

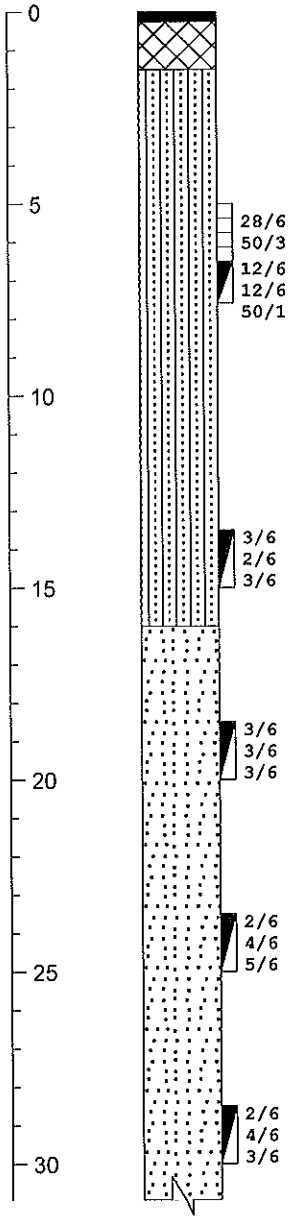
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
		AC	Asphaltic Concrete=3 inches			
		FILL	SAND, Silty; Moist, fine to medium, reddish brown			
		SM	SAND, Silty; Very dense, moist, fine to medium, red, brown			
					>50	8
			Hardpan		>50	
			Loose, increase coarse sand		5	8
		SP	SAND, Poorly Graded; Loose, moist, fine to coarse, light reddish brown		6	
			Light gray		9	7
					7	

Notes:

Figure Number B-5

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-5

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

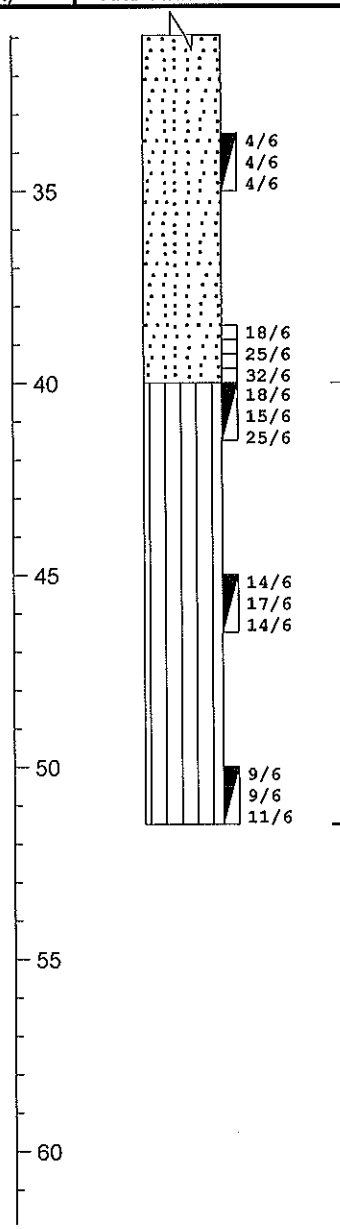
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/22/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
					8	
				DD=94.6pcf SAND=48% -200=52%	57	
		ML	SILT, Sandy; Hard, moist, slight plasticity, light gray, with iron oxide staining, with some clay Non plastic, no clay, increase in fine sand		40	
			Slight plasticity, trace clay		31	19
					20	
			Bottom of boring at 51.5 feet			

Notes:

Figure Number B-5

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-6

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

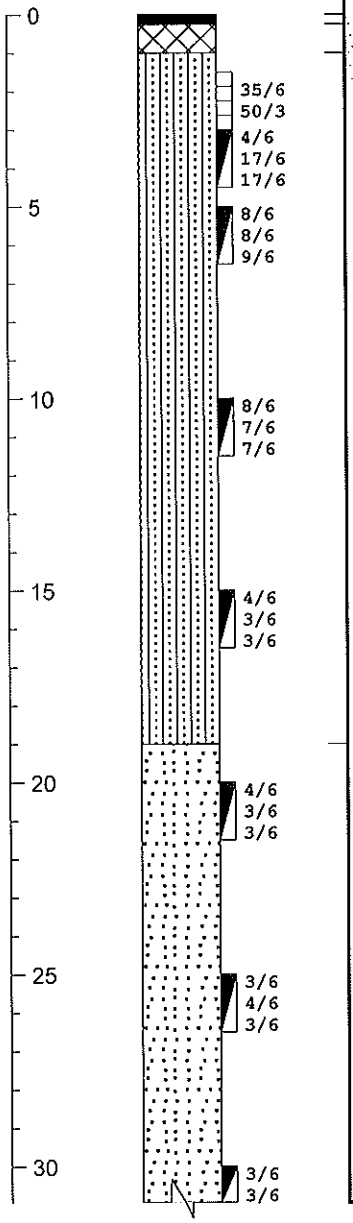
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/23/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0		AC	Asphaltic Concrete=3 inches			
		FILL SM	SAND, Silty; Moist, fine to medium, reddish brown, with trace clay and gravel, Hardpan	DD=126.6pcf	>50	8
			SAND, Silty; Moist, dense, fine, reddish brown		34	
5			Medium dense, trace clay		17	9
10			Increase in clay content		14	
15			Loose, increase in coarse sand, no clay		6	9
		SP	SAND, Poorly Graded; Loose, moist, fine to coarse, red to brown		6	
25					7	3
30			Light gray		6	

Notes:

Figure Number B-6

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-6

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

Hammer Type: TRIP

Project Number: D48704.01

Date: 4/23/08

Elevation: N/A

Depth to Groundwater: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
35	3/6 7/6 6/6 8/6				14	3
			Bottom of boring at 36.5 feet			
40						
45						
50						
55						
60						

Notes:

Figure Number B-6

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-7

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

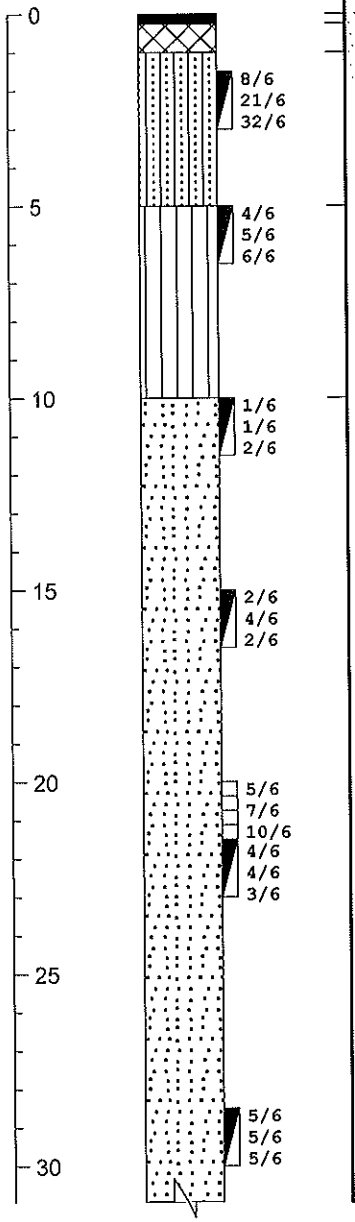
Hammer Type: TRIP

Project Number: D48704.01

Date: 4/23/08

Elevation: N/A

Depth to Groundwater: N/E



ELEVATION/ DEPTH (feet)	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
0	AC	Asphaltic Concrete=3.25 inches			
	FILL	SILT, Sandy; Very dense, moist,		53	
	SM	fine to coarse, reddish brown, with trace clay			
		SAND, Silty; Dense, moist, fine to medium, reddish brown			
5	ML	SILT, Sandy; Stiff, moist, slight plasticity, light brown		11	21
10	SP	SAND, Poorly Graded; Loose, fine to coarse, light brown		3	
15				6	
20			c=180pcf ø=34° DD=101.4pcf	17 7	1
25					
30		Medium dense		10	2

Notes:

Figure Number B-7

MOORE TWINING ASSOCIATES, INC.

TEST BORING B-7

Project: Fig Garden Financial Center Phase IV

Logged By: M.M.

Drilled By: T.B.

Drill Type: CME 75

Auger Type: HSA 65/8" O.D.

Hammer Type: TRIP

Project Number: D48704.01

Date: 4/23/08

Elevation: N/A

Depth to Groundwater: N/E

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Remarks	N-Values blows/ft.	Moisture Content %
35	4/6 4/6 4/6		Loose		8	
40	2/6 4/6 5/6		Interbedded with silt and clay		9	4
			Bottom of boring at 40 feet			
45						
50						
55						
60						

Notes:

Figure Number B-7

KEY TO SYMBOLS

Symbol	Description
Strata symbols	
	Fill
	Silty sand
	Poorly graded sand
	Silt
	Paving
Misc. Symbols	
	Boring continues

Symbol	Description
Soil Samplers	
	Standard penetration test
	California Modified split barrel ring sampler

Notes:

1. Test Borings were drilled on 4/22/08 using a CME 75 equipped with 6 5/8" O.D. Hollow Stem Augers

2. Groundwater was not encountered during drilling of the test borings.

3. Test boring locations were located by pace with reference to the existing site features.

4. These logs are subject to the limitations, conclusions, and recommendations in this report.

5. The "N-value" reported for the California Modified Split Barrel Sampler is the uncorrected field blow count. This value should not be interpreted as an SPT equivalent N-value.

6. Results of tests conducted on samples recovered are reported on the logs. Abbreviations used are:

DD = Natural dry density (pcf)	LL = Liquid limit (%)
UC = Unconfined compression (psf)	PI = Plasticity index (%)
-4 = Percent passing #4 sieve (%)	pH = Soil pH
-200 = Percent passing #200 sieve (%)	SS = Soluble sulfates(%)
SR = Soil resistivity (ohm-cm)	Cl = Soluble chlorides(%)
c = Cohesion (psf)	ϕ = Angle of internal friction (degrees)
TS = Field Torvane Shear Strength test (tsf)	N/A = Not applicable
pcf = pounds per cubic foot	N/E = None encountered
psf = pounds per square foot	

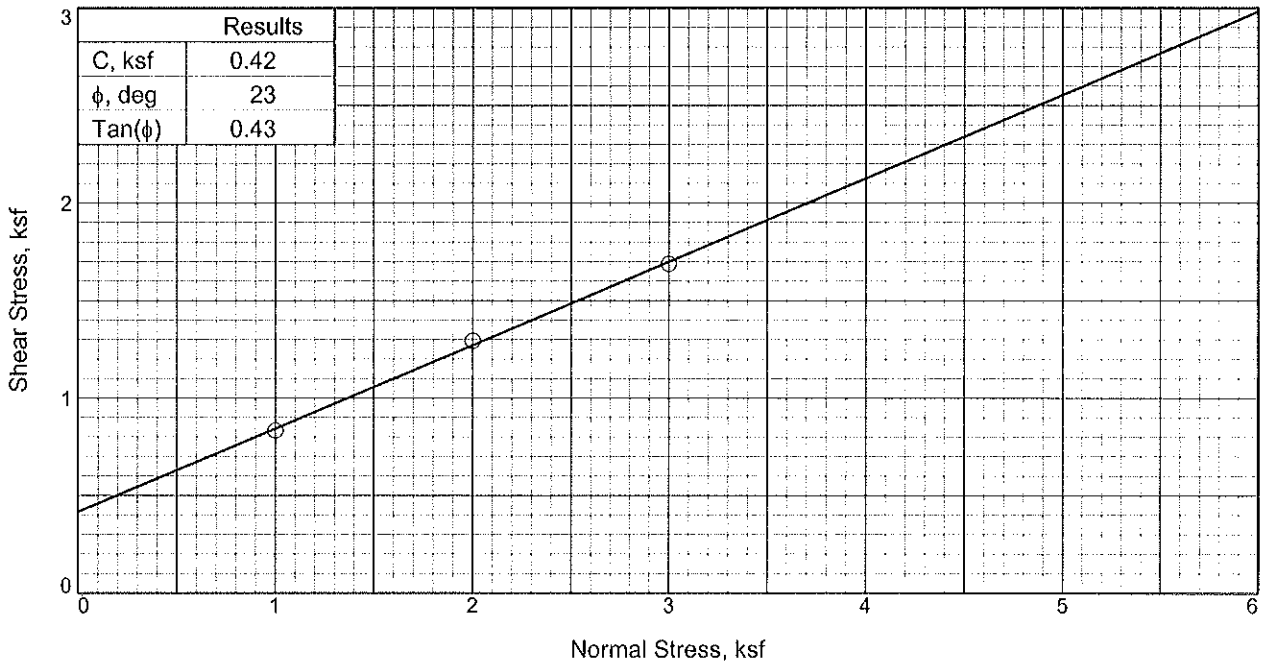
APPENDIX C

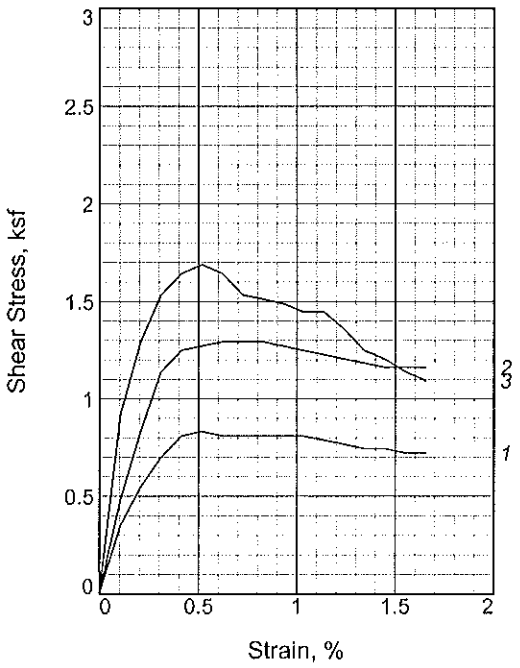
RESULTS OF LABORATORY TESTS

This appendix contains the individual results of the following laboratory tests. The results of the moisture content and dry density tests are included on the test boring logs in Appendix B. These data, along with the field observations, were used to prepare the final test boring logs in Appendix B.

These Included:	To Determine:
Moisture Content (ASTM D2216)	Moisture contents representative of field conditions at the time the sample
Dry Density (ASTM D2216)	Dry unit weight of sample representative of in-situ or in-place undisturbed condition.
Direct Shear (ASTM D3080)	Soil shearing strength under varying loads and/or moisture conditions.
Consolidation (ASTM D2435)	The amount and rate at which a soil sample compresses when loaded, and the influence of saturation on its behavior.
Moisture-Density Relationship (ASTM D1557)	The optimum (best) moisture content for compacting soil and the maximum dry unit weight (density) for a given compactive effort.
Expansion Index (ASTM D4829)	Swell potential of soil with increases in moisture content.

These Included:	To Determine:
Grain-Size Distribution (ASTM D422)	Size and distribution of soil particles, i.e., sand, gravel and fines (silt and clay).
R-Value (CTM 301)	The capacity of a subgrade or subbase to support a pavement section designed to carry a specified traffic load.
Sulfate Content (ASTM D4327)	Percentage of water-soluble sulfate as (SO_4) in soil samples. Used as an indication of the relative degree of sulfate attack on concrete and for selecting the cement type.
Chloride Content (ASTM D4327)	Percentage of soluble chloride in soil. Used to evaluate the potential attack on encased reinforcing steel.
Resistivity (ASTM D1125)	The potential of the soil to corrode metal.
pH (ASTM D4972)	The acidity or alkalinity of subgrade material.





Sample No.		1	2	3
Initial	Water Content, %	4.6	4.6	4.6
	Dry Density, pcf	123.6	119.6	119.6
	Saturation, %	36.0	31.9	31.9
	Void Ratio	0.3385	0.3828	0.3828
	Diameter, in.	2.420	2.420	2.420
	Height, in.	1.000	1.000	1.000
At Test	Water Content, %	17.8	17.7	19.1
	Dry Density, pcf	125.9	122.9	124.5
	Saturation, %	150.2	135.4	153.8
	Void Ratio	0.3144	0.3458	0.3286
	Diameter, in.	2.420	2.420	2.420
	Height, in.	0.982	0.973	0.961
Normal Stress, ksf		1.00	2.00	3.00
Shear Stress, ksf		0.83	1.29	1.69
Strain, %		0.5	0.6	0.5
Ult. Stress, ksf				
Strain, %				
Strain at peak, %		0.5	0.6	0.5

Sample Type:
Description:

Specific Gravity= 2.65
Remarks:

Figure _____

Client:

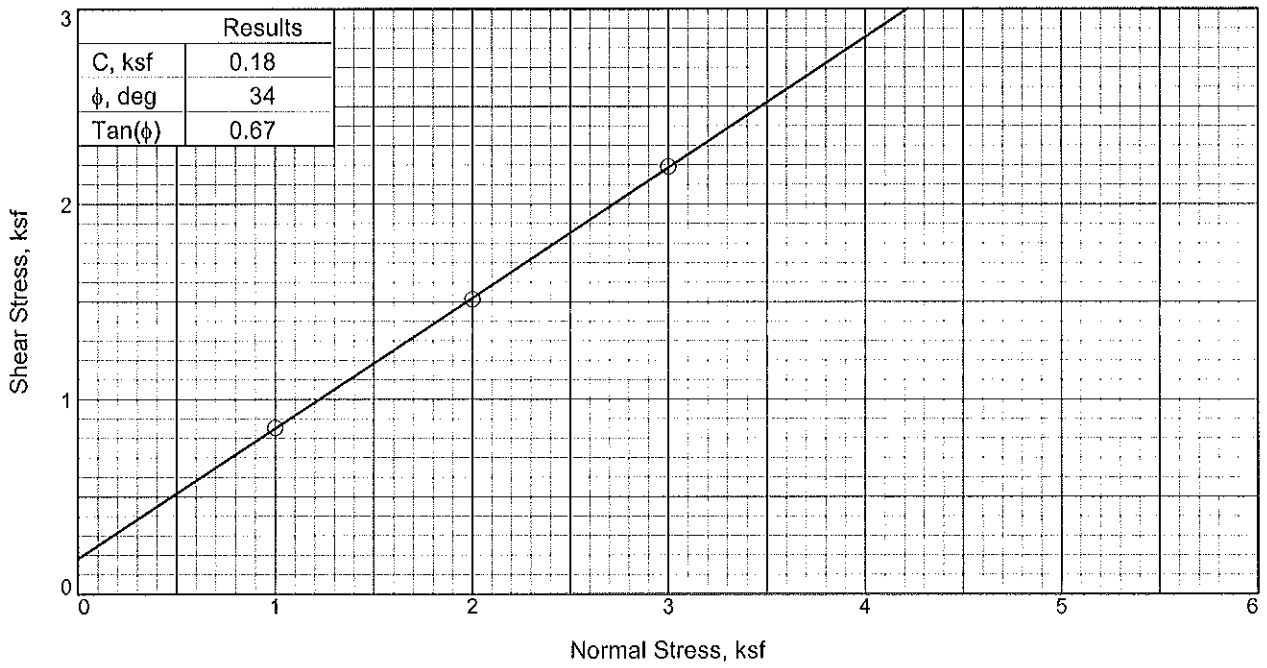
Project: Financial Center Phase IV

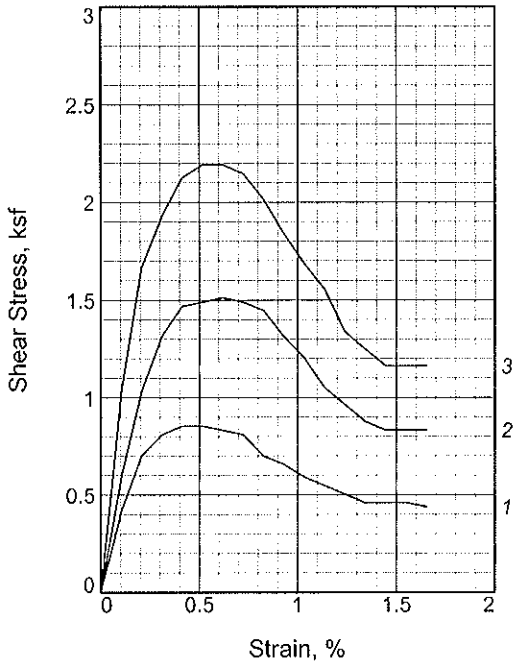
Sample Number: B-2 **Depth:** 5-6.5'

Proj. No.: D48704.01 **Date Sampled:**

DIRECT SHEAR TEST REPORT

Moore Twining Associates, Inc.





Sample No.		1	2	3
Initial	Water Content, %	0.8	0.8	0.8
	Dry Density, pcf	100.8	100.8	100.8
	Saturation, %	3.3	3.3	3.3
	Void Ratio	0.6410	0.6410	0.6409
	Diameter, in.	2.420	2.420	2.420
	Height, in.	1.000	1.000	1.000
At Test	Water Content, %	21.0	23.4	22.8
	Dry Density, pcf	101.3	101.7	102.8
	Saturation, %	87.8	98.9	99.3
	Void Ratio	0.6335	0.6261	0.6094
	Diameter, in.	2.420	2.420	2.420
	Height, in.	0.995	0.991	0.981
Normal Stress, ksf		1.00	2.00	3.00
Shear Stress, ksf		0.85	1.51	2.19
Strain, %		0.4	0.6	0.5
Ult. Stress, ksf				
Strain, %				
Strain at peak, %		0.4	0.6	0.5

Sample Type:
Description:

Specific Gravity= 2.65
Remarks:

Figure _____

Client:

Project: Financial Center Phase IV

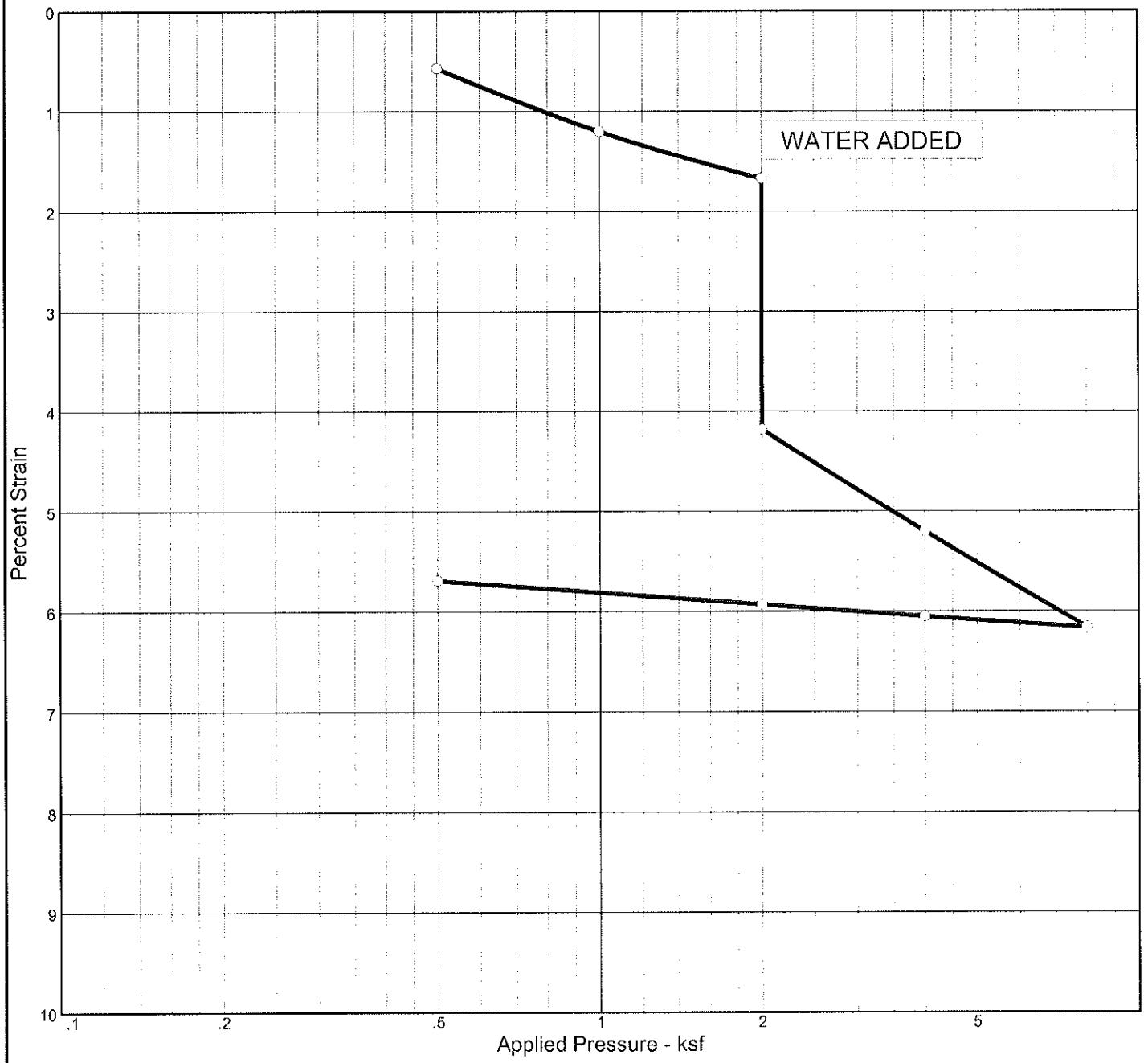
Sample Number: B-7 **Depth:** 20-21.5'

Proj. No.: D48704.01 **Date Sampled:**

DIRECT SHEAR TEST REPORT

Moore Twining Associates, Inc.

CONSOLIDATION TEST REPORT



Natural Sat.	Natural Moist.	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
3.0 %	0.7 %	108.5			2.65		0.12	0.05	0.01		2.5	0.581

MATERIAL DESCRIPTION	USCS	AASHTO

Project No. D48704.01 **Client:**

Project: Financial Center Phase IV

Source: **Sample No.:** B-3 **Elev./Depth:** 8.5-10'

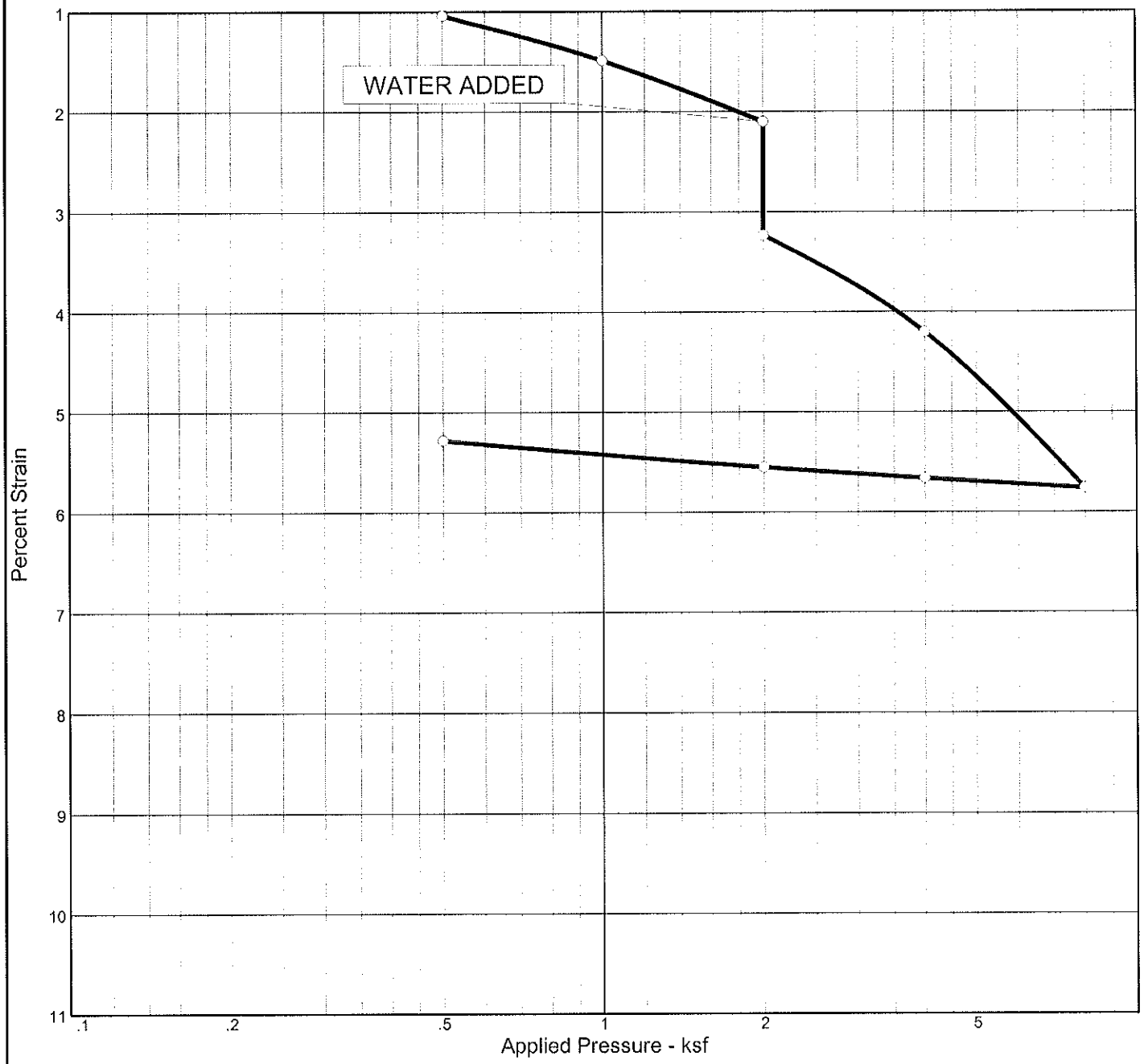
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

CONSOLIDATION TEST REPORT



Natural Sat.	Natural Moist.	Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Clpse. %	e_o
43.6 %	7.9 %	115.5			2.65		4.22	0.08	0.01		1.1	0.478

MATERIAL DESCRIPTION	USCS	AASHTO

Project No. D48704.01 **Client:**

Project: Financial Center Phase IV

Source: **Sample No.:** B-5 **Elev./Depth:** 5-6.5'

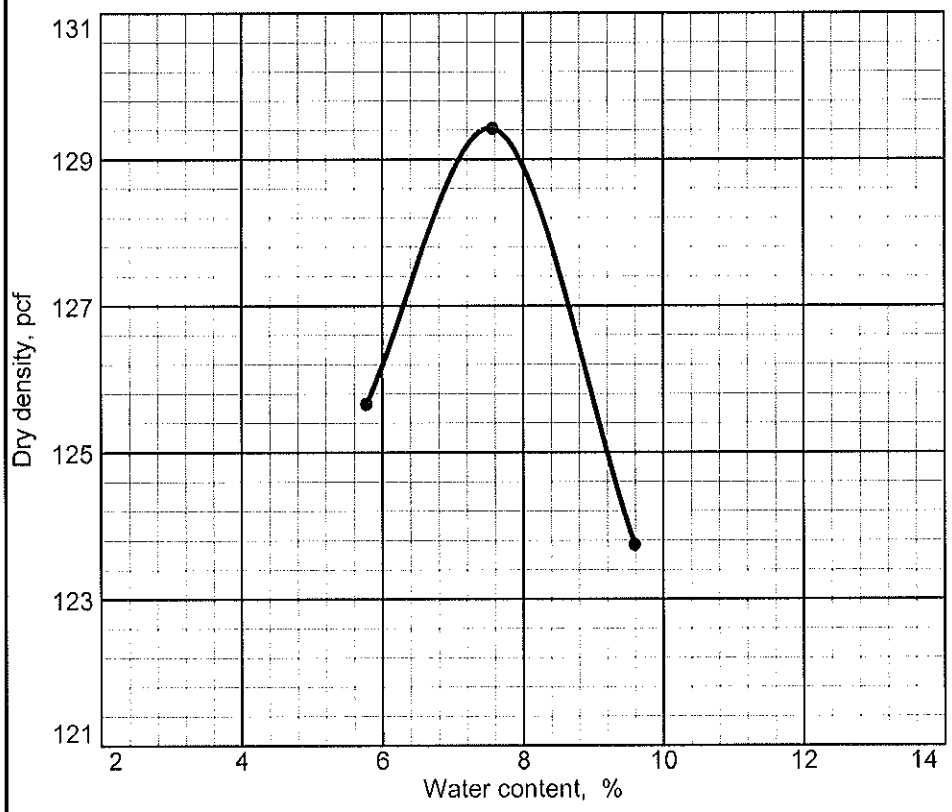
Moore Twining Associates, Inc.

Fresno, CA

Remarks:

Figure

COMPACTION TEST REPORT



Curve No.

Test Specification:
ASTM D 698-07 Procedure A Standard

Hammer Wt.: 5.5 lb.
Hammer Drop: 12 in.
Number of Layers: three
Blows per Layer: 25
Mold Size: .03333 cu.ft.

Test Performed on Material Passing No.4 **Sieve**

Soil Data

NM _____ **Sp.G.** _____
LL _____ **PI** _____
%>No.4 _____ **%<#200** _____
USCS _____ **AASHTO** _____

TESTING DATA

	1	2	3	4	5	6
WM + WS	9.01	8.89	8.80			
WM	4.37	4.37	4.37			
WW + T #1	292.90	300.50	298.60			
WD + T #1	272.30	274.20	282.30			
TARE #1	0.00	0.00	0.00			
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	7.6	9.6	5.8			
DRY DENSITY	129.4	123.7	125.7			

TEST RESULTS

Maximum dry density = 129.4 pcf

Optimum moisture = 7.5 %

Material Description

Project No. D48704.01 **Client:**
Project: Financial Center Phase IV

● **Source:** **Sample No.:** B-2 **Elev./Depth:** 0-5'

Remarks:

Moore Twining Associates, Inc.
Fresno, CA

Figure

MOORE TWINING ASSOCIATES, INC.

EXPANSION INDEX TEST, ASTM D4829

MTA PROJECT NAME:	Fig Garden Development	REPORT DATE:	4/30/2008
		TEST DATE:	4/29/2008
MTA PROJECT NO.:	D48704.01		
SAMPLE I.D.:	B-4 @ 0-5 Feet		
SAMPLED BY:	MM		
SAMPLE DATE:	4/29/2011	TESTED BY:	TD

% PASSING # 4 SIEVE: 100

Initial Moisture Determination:

Pan + Wet Soil Wt., gm	250.0
Pan + Dry Soil Wt., gm	231.4
Pan Wt., gm	0.0
Initial % Moisture Content	8.0

Final Moisture Determination:

Wet Soil Wt., lbs	0.9820
Dry Soil Wt., lbs	0.8603
Final % Moisture Content	14.1

Initial Expansion Data:

Ring + Sample Wt., lbs	0.9295
Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.9295
Remolded Wet Density, pcf	127.8
Remolded Dry Density, pcf	118.3

Final Expansion Data:

Ring + Sample Wt., lbs	0.9820
Ring Wt., lbs	0.0000
Remolded Wt., lbs	0.9820
Remolded Wet Density, pcf	135.0
Remolded Dry Density, pcf	118.3

Expansion Data:

Initial Gage Reading, in:	0.0500
Final Gage Reading, in:	0.0500
Expansion, in:	0
Expansion Index	0

Initial Volume	Final Volume
0.00727222	0.007272

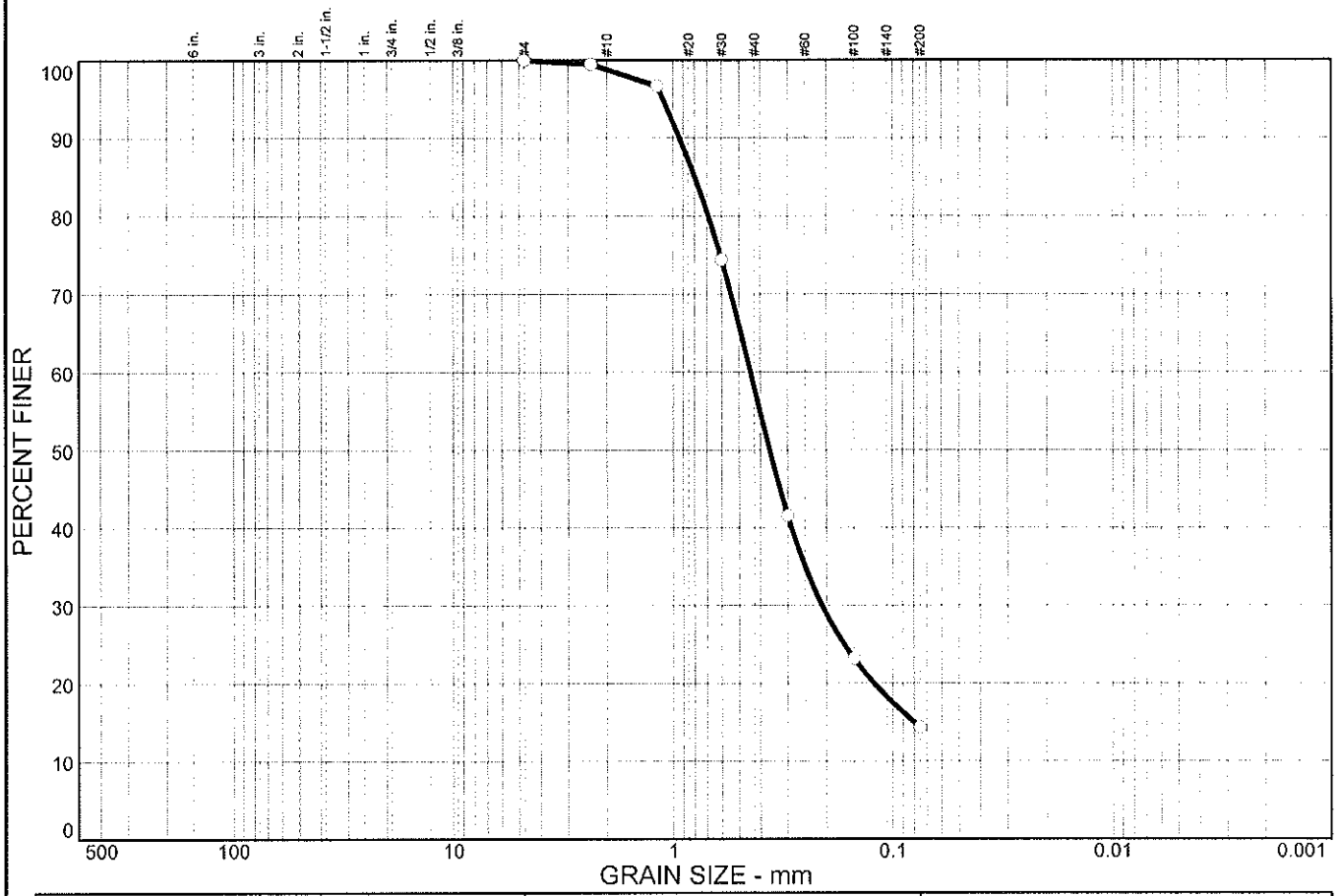
Comments: **(Very Low Expansion Potential)**

Classification of Expansive Soils. (Table No.1 From ASTM D4829)

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

www.mooretwining.com
PH: 800.268.7021
FX: 559.268.7126
2527 Fresno Street
Fresno, CA 93721

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	1.2	41.0	43.5	14.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	99.5		
#16	96.7		
#30	74.4		
#50	41.6		
#100	23.2		
#200	14.3		

* (no specification provided)

Material Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.795 D_{60}= 0.443 D_{50}= 0.362
D_{30}= 0.209 D_{15}= 0.0800 D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

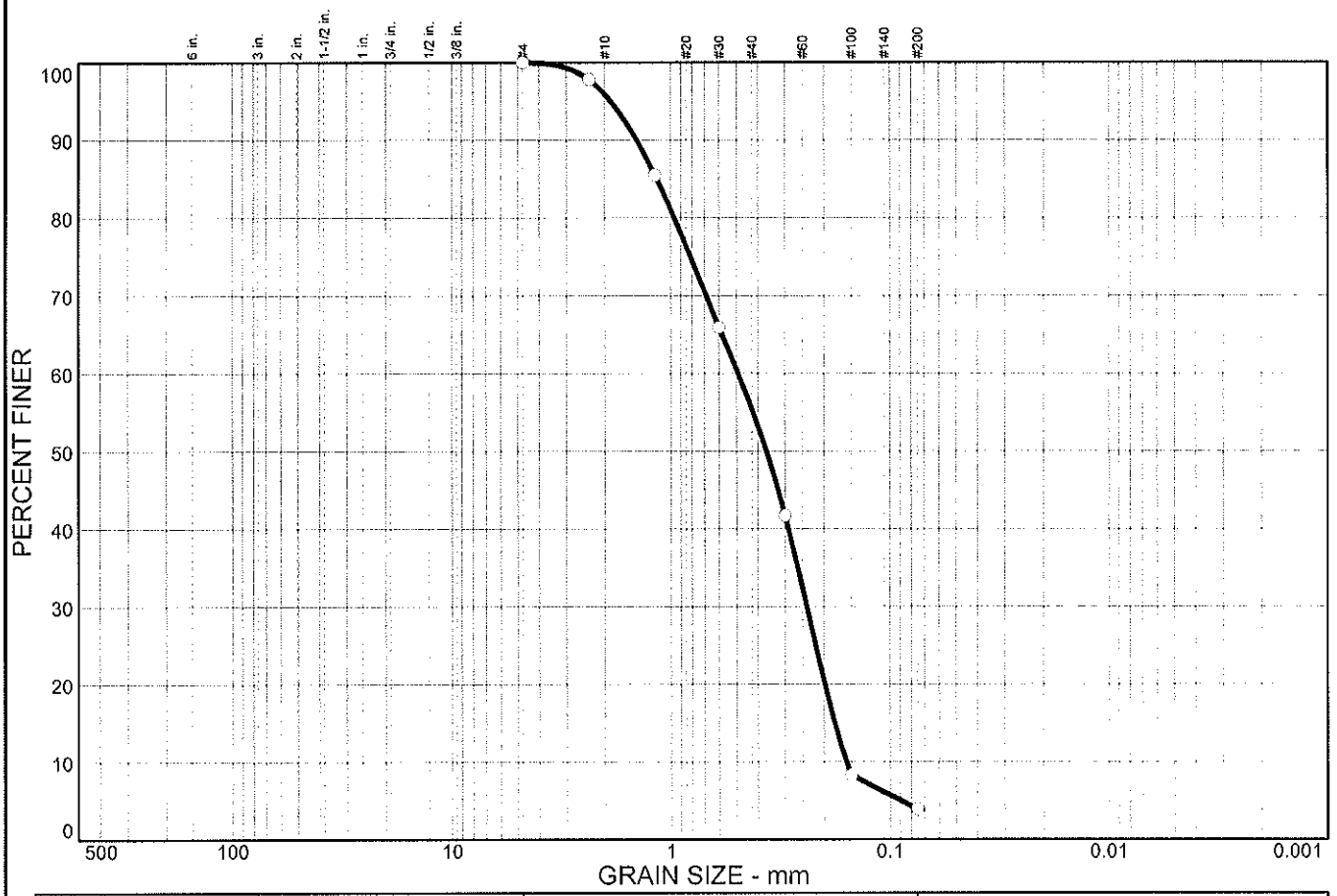
F.M.=1.65

Sample No.: B-3 **Source of Sample:** **Date:**
Location: **Elev./Depth:** 0-1.5'

Moore Twining Associates, Inc.
Fresno, CA

Client:
Project: Financial Center Phase IV
Project No: D48704.01 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	4.1	40.5	51.5	3.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	97.8		
#16	85.5		
#30	65.9		
#50	41.7		
#100	8.3		
#200	3.9		

* (no specification provided)

Material Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.16 D_{60}= 0.492 D_{50}= 0.365
D_{30}= 0.239 D_{15}= 0.179 D_{10}= 0.158
C_u= 3.12 C_c= 0.74

Classification

USCS= AASHTO=

Remarks

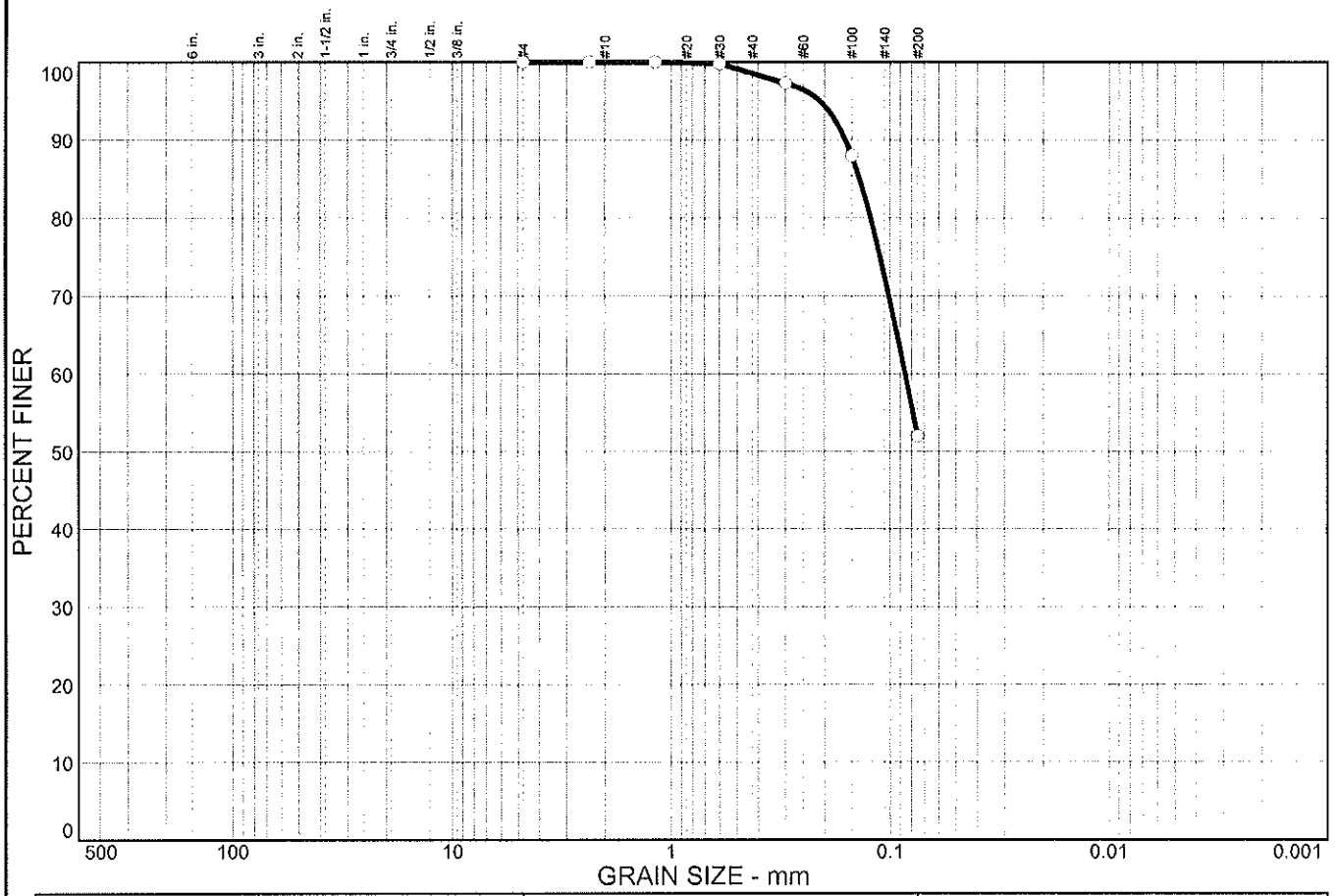
F.M.=2.01

Sample No.: B-5 **Source of Sample:** **Date:**
Location: **Elev./Depth:** 23.5-25'

Moore Twining Associates, Inc.
Fresno, CA

Client:
Project: Financial Center Phase IV
Project No: D48704.01 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	1.4	46.6	52.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#8	100.0		
#16	100.0		
#30	99.8		
#50	97.3		
#100	88.0		
#200	52.0		

* (no specification provided)

Material Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.138 D_{60}= 0.0855 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.15

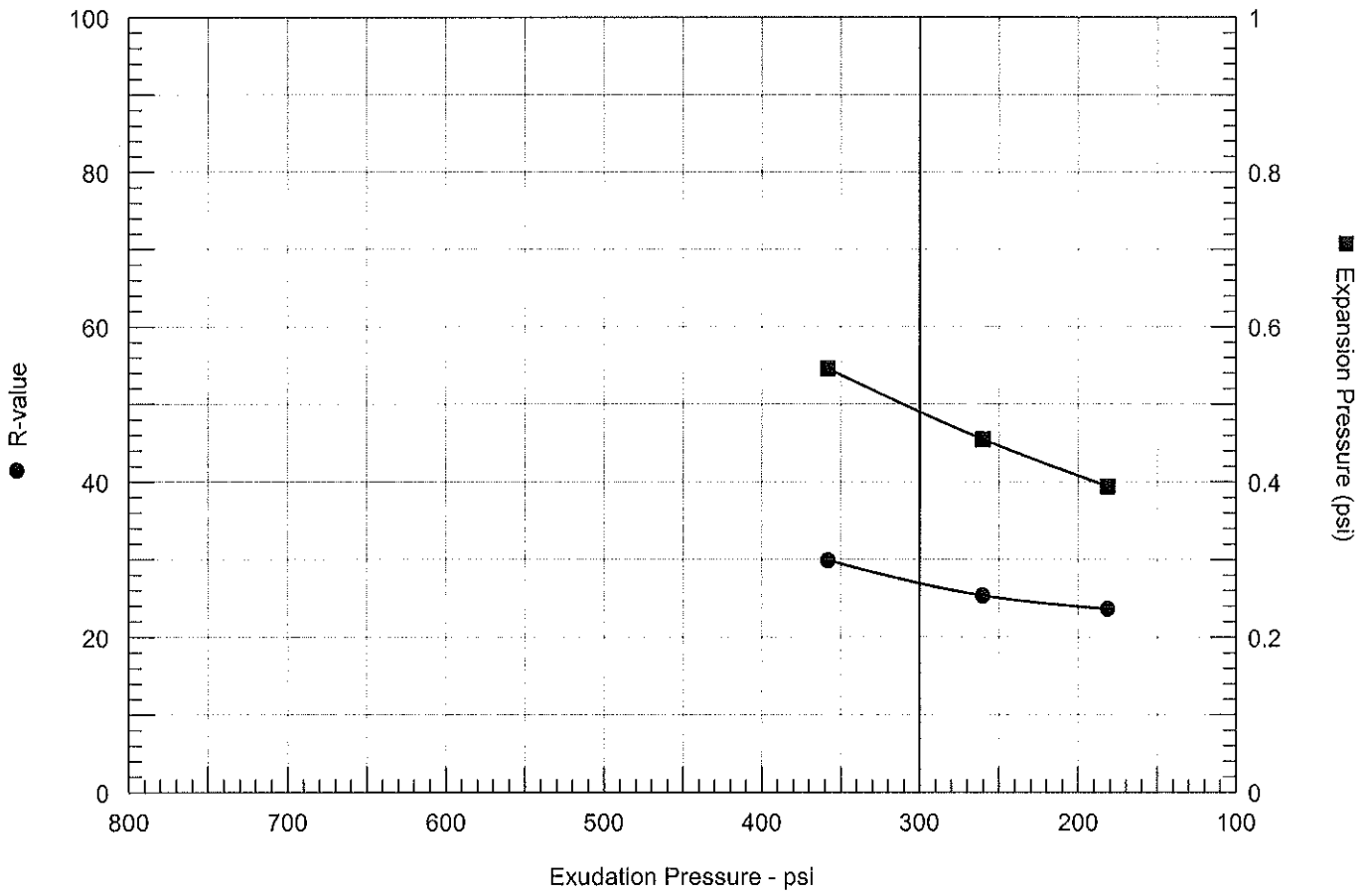
Sample No.: B-5 **Source of Sample:** **Date:**
Location: **Elev./Depth:** 40-41.5'

Moore Twining Associates, Inc.
Fresno, CA

Client:
Project: Financial Center Phase IV

Project No: D48704.01 **Figure**

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - Cal Test 301

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	175	126.1	10.3	0.55	70	2.48	358	30	30
2	100	122.8	11.3	0.39	81	2.54	181	24	24
3	125	124.1	10.8	0.45	82	2.52	260	25	25

Test Results	Material Description
R-value at 300 psi exudation pressure = 27 **Exp. pressure at 300 psi exudation pressure =** 0.49 psi	

Project No.: D48704.01
Project: Financial Center Phase IV
Sample Number: B-2 **Depth:** 0-5'

Date: 6/22/2011

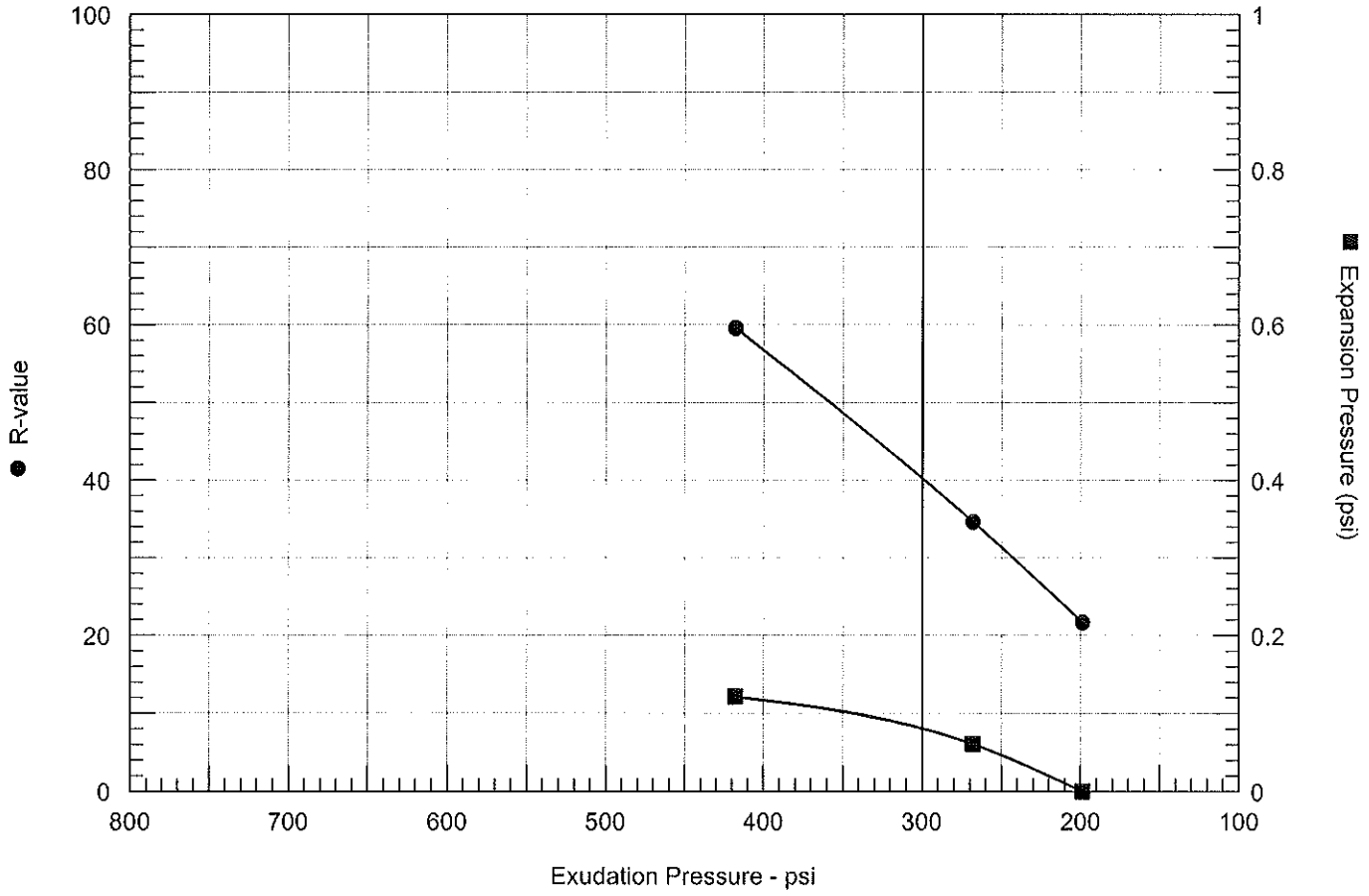
Tested by: 808
Checked by: 871
Remarks:

R-VALUE TEST REPORT

Moore Twining Associates, Inc.

Figure ____

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - Cal Test 301

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	75	130.7	9.7	0.00	86	2.35	199	24	22
2	350	134.3	7.7	0.12	38	2.39	418	62	60
3	225	132.5	8.7	0.06	64	2.36	268	38	35

Test Results	Material Description
R-value at 300 psi exudation pressure = 40 **Exp. pressure at 300 psi exudation pressure =** 0.08 psi	

Project No.: D48704.01
Project: Financial Center Phase IV
Sample Number: B-5 **Depth:** 1-5'

Date: 6/22/2011

Tested by: 871
Checked by: 808
Remarks:

R-VALUE TEST REPORT

Moore Twining Associates, Inc.

Figure _____

MOORE TWINING ASSOCIATES, INC.
CALIFORNIA ELAP CERTIFICATE #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

March 02, 2009

Work Order #: 8E01024

Dean Ledgerwood
MTA Geotechnical Division
2527 Fresno Street
Fresno, CA 93721

RE: Fig Garden

Enclosed are the analytical results for samples received by our laboratory on 05/01/08 . For your reference, these analyses have been assigned laboratory work order number 8E01024.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety. Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Ronald J. Boquist
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.
CALIFORNIA ELAP CERTIFICATE #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Geotechnical Division	Project: Fig Garden	
2527 Fresno Street	Project Number: D48704.01	**Reported:**
Fresno CA, 93721	Project Manager: Dean Ledgerwood	03/02/2009

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-5@1-5	8E01024-02	Soil	05/01/08 16:24	05/01/08 16:34
B-7@10-11	8E01024-03	Soil	05/01/08 16:24	05/01/08 16:34

Moore Twining Associates, Inc.

Ronald J. Boquist, Director of Analytical Chemistry
James H. Brownfield, Quality Assurance Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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CALIFORNIA ELAP CERTIFICATE #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Geotechnical Division	Project: Fig Garden	
2527 Fresno Street	Project Number: D48704.01	**Reported:**
Fresno CA, 93721	Project Manager: Dean Ledgerwood	03/02/2009

B-5@1-5
8E01024-02 (Soil)

Analyte	Result	Reporting Limit	Units	Batch	Prepared	Analyzed	Method	Qualifier
Inorganics								
Chloride	**8.8**	6.0	mg/kg	T8E0603	05/06/08	05/07/08	ASTM D-4327-84	
Chloride	**0.00088**	0.00060	% by Weight	[CALC]	05/06/08	05/07/08	ASTM D4327-84	
Sulfate as SO4	**0.00085**	0.00060	% by Weight	[CALC]	05/06/08	05/07/08	ASTM D4327-84	
pH	**7.0**	0.30	pH Units	T8E0603	05/06/08	05/07/08	ATSM D4972-89 Mod	
Resistivity	**8000**		ohms-cm	T8E0603	05/06/08	05/07/08	ASTM D1125-82	
Sulfate as SO4	**8.5**	6.0	mg/kg	T8E0603	05/06/08	05/07/08	ASTM D4327-84	

MOORE TWINING ASSOCIATES, INC.
CALIFORNIA ELAP CERTIFICATE #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Geotechnical Division	Project: Fig Garden	
2527 Fresno Street	Project Number: D48704.01	**Reported:**
Fresno CA, 93721	Project Manager: Dean Ledgerwood	03/02/2009

B-7@10-11
8E01024-03 (Soil)

Analyte	Result	Reporting Limit	Units	Batch	Prepared	Analyzed	Method	Qualifier
Inorganics								
Chloride	ND	6.0	mg/kg	T8E0603	05/06/08	05/07/08	ASTM D-4327-84	
Chloride	ND	0.00060	% by Weight	[CALC]	05/06/08	05/07/08	ASTM D4327-84	
Sulfate as SO4	**0.010**	0.00060	% by Weight	[CALC]	05/06/08	05/07/08	ASTM D4327-84	
pH	**8.4**	0.30	pH Units	T8E0603	05/06/08	05/07/08	ATSM D4972-89 Mod	
Resistivity	**5300**		ohms-cm	T8E0603	05/06/08	05/07/08	ASTM D1125-82	
Sulfate as SO4	**100**	6.0	mg/kg	T8E0603	05/06/08	05/07/08	ASTM D4327-84	

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

Quality Control Data Available Upon Request

Moore Twining Associates, Inc.
Ronald J. Boquist, Director of Analytical Chemistry
James H. Brownfield, Quality Assurance Manager

MOORE TWINING ASSOCIATES, INC.
CALIFORNIA ELAP CERTIFICATE #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

March 02, 2009

Work Order #: 8E13042

Dean Ledgerwood
MTA Geotechnical Division
2527 Fresno Street
Fresno, CA 93721

RE: Fig Garden

Enclosed are the analytical results for samples received by our laboratory on 05/13/08 . For your reference, these analyses have been assigned laboratory work order number 8E13042.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety. Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Ronald J. Boquist
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.
CALIFORNIA ELAP CERTIFICATE #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Geotechnical Division	Project: Fig Garden	
2527 Fresno Street	Project Number: D48704.01	Reported:
Fresno CA, 93721	Project Manager: Dean Ledgerwood	03/02/2009

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1 @ 10-11.5	8E13042-01	Soil	05/13/08 16:00	05/13/08 16:05

Moore Twining Associates, Inc.
Ronald J. Boquist, Director of Analytical Chemistry
James H. Brownfield, Quality Assurance Manager

MOORE TWINING ASSOCIATES, INC.
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2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

MTA Geotechnical Division	Project: Fig Garden	
2527 Fresno Street	Project Number: D48704.01	**Reported:**
Fresno CA, 93721	Project Manager: Dean Ledgerwood	03/02/2009

B-1 @ 10-11.5

8E13042-01 (Soil)

Analyte	Result	Reporting Limit	Units	Batch	Prepared	Analyzed	Method	Qualifier
Inorganics								
Chloride	ND	6.0	mg/kg	T8E1608	05/16/08	05/16/08	ASTM D-4327-84	
Chloride	ND	0.00060	% by Weight	[CALC]	05/16/08	05/16/08	ASTM D4327-84	
Sulfate as SO4	ND	0.00060	% by Weight	[CALC]	05/16/08	05/16/08	ASTM D4327-84	
pH	**8.4**	0.30	pH Units	T8E1608	05/16/08	05/16/08	ATSM D4972-89 Mod	
Resistivity	**58000**		ohms-cm	T8E1608	05/16/08	05/16/08	ASTM D1125-82	
Sulfate as SO4	ND	6.0	mg/kg	T8E1608	05/16/08	05/16/08	ASTM D4327-84	

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

Quality Control Data Available Upon Request

Moore Twining Associates, Inc.
Ronald J. Boquist, Director of Analytical Chemistry
James H. Brownfield, Quality Assurance Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

APPENDIX F

PHASE I ENVIRONMENTAL REVIEW

MOORE TWINING ASSOCIATES, INC.

PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE

PROPOSED FIG GARDEN FINANCIAL CENTER PHASE V

NEAR THE SOUTHWEST CORNER OF SAN JOSE AVENUE AND MAROA AVENUE

FRESNO, CALIFORNIA

Prepared For:

Scott A. Mommer Consulting.
10657 E. San Felipe Avenue
Clovis, CA 93619

Prepared By:

Moore Twining Associates, Inc.
2527 Fresno Street
Fresno, California 93721

Project Number D48704.0300

June 26, 2011

TABLE OF CONTENTS

LIST OF TABLES, FIGURES, APPENDICES AND ACRONYMS

TABLES

DRAWINGS

APPENDICES

ACRONYMS

AST(s)	Aboveground Storage Tank(s)
AWP	Annual Work Plan
CAL-EPA	State of California, Environmental Protection Agency
CERCLIS	Comprehensive Environmental Responsibility, Compensation, and Liability Information System
CIWMB	California Integrated Waste Management Board
DTSC	Department of Toxic Substances Control
ERNS	Emergency Response and Notification System
FCEHD	Fresno County Environmental Health Department
LUST	Leaking Underground Storage Tank
NPL	National Priority List
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SWIS	Solid Waste Information System
SWRCB	State Water Resource Control Board
TSD	Hazardous Waste Transport, Storage, or Disposal Facilities
US EPA	United States Environmental Protection Agency
USTs(s)	Underground Storage Tanks(s)

1.0 INTRODUCTION

Moore Twining Associates, Inc. (MTA) was retained Scott A. Mommer Consulting to conduct a Phase I Environmental Site Assessment (Phase I) for a Site located near the s outhwestern intersection of San Jose Avenue and Maroa Avenue in the City and County of Fresno, California (Site). This Phase I was conducted in general conformance with the methods and procedures described in the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (Standard Designation ASTM E 1527-05), published November 2005, and in accordance with MTA's proposal, dated June 15, 2011.

1.1 Objective

The objective of this assessment is to identify recognized environmental conditions located at the Site or adjacent properties which could present material risk of harm to public health or to the environment. Recognized environmental conditions are defined within ASTM Designation E-1527 as the presence or likely presence of any hazardous wastes and/or substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

1.2 Scope of Services

This Phase I was performed to evaluate the potential presence of environmental conditions that may have resulted from operations at the Site or at nearby properties. The assessment included a Site reconnaissance, review of available documentation of land-use history for evidence of the use, storage and/or disposal of hazardous substances, and a review of available regulatory information. This Phase I Environmental Assessment included the following tasks:

- A review of the current and past uses of the Site since about 1937;
- A Site reconnaissance to assess evidence of current and/or past use or storage of toxic or hazardous material; on-Site ponds, landfills, drywells, waste streams or other disposal units; visible soil discoloration; aboveground or underground storage tanks; electrical transformers containing polychlorinated biphenyls (PCBs); and drums, barrels and other storage containers;
- A visual survey of adjacent properties to assess their potential to adversely impact the Site;
- A review of available federal and state Environmental Protection Agency (EPA) lists of known or potential hazardous waste sites or landfills, and sites currently under investigation for environmental violations in the Site area. Using area-profile services provided by Environmental Data Resources, Inc. (EDR), MTA cataloged sites in the vicinity of the Site that have been identified on regulatory agency lists. Search criteria were in conformance with ASTM Standard E 1527-05;

- Contact with relevant municipal, co unty and state agencies to review readily available records and permits; and

- Preparation of this written report to present our findings and conclusions.

The scope of our services specifically excluded cultural, archeological, and biological assessments, as well as, sampling and analysis for the potential presence of asbestos containing building materials, lead based paint, or an assessment for radon gas. In addition, the scope of our services did not include the collection and/or analysis of air, soil, surface water, groundwater, or other environmental samples.

1.3 Limitations and Limited Conditions

The purpose of an environmental assessment is to reasonably assess the potential for, or actual impact of, past practices on a given site which may pose an environmental impairment to the site. No assessment is thorough enough to identify all potential environmental impairments at a given site. If environmental impairments have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such conditions on the site, but rather the result of the services performed within the scope, limitations, and cost of the work performed.

The conclusions presented in this report are solely professional opinions based on information provided regarding the Site and the findings of the reconnaissance and records search. Information obtained from the aerial photographs is an interpretation of features observed in the photographs. Actual conditions at the Site may have been different from those interpreted. Conclusions presented are based on conditions as they existed at the time the work was performed. Changes in existing conditions of the Site due to time lapse, natural causes, or operations adjacent to the Site may deem conclusions presented invalid, unless the changes are reviewed and the conclusions reevaluated. Such conditions may require additional field and laboratory investigations to assess if the conclusions are applicable considering the changed conditions.

This work was performed for the sole use of our client. Any reliance on this report by a third party is at such party's sole risk. Others who seek to rely on the findings have a duty to determine the adequacy of this report for their intended use, time, and location. MTA does not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report. No other warranty, either express or implied, is made. The standard of practice is time-dependent. Services provided were performed consistent with generally-accepted professional consulting principles and practices for environmental assessors in Fresno County, California at the time the work was performed. The findings and conclusions presented in this report are solely professional opinions derived in accordance with current standards of professional practice.

2.0 SITE DESCRIPTION

Information concerning the Site was obtained from interviews, a Site reconnaissance, and a review of the documents referenced in Section 4.0 of this report. The Site reconnaissance was conducted by Mr. Philip Marquez, an MTA representative, on June 23, 2011.

2.1 Location and Description of Property

The Site is approximately 3.50 acres in size, and is located at 525 and 569 W. San Jose Avenue, in the City and County of Fresno, California. The Fresno County Assessor's Office has assigned Assessor's Parcel Numbers (APNs) 417-240-37 (525 W. San Jose Avenue), and 417-231-16 (569 W. San Jose Avenue. The Site owners and mailing addresses are listed below:

550 E. Shaw Partnership
555 W. Shaw Avenue, # B-4
Fresno, CA 93704

A Site location map is presented as Drawing 1, and a Site plan, including Site boundaries, is presented as Drawing 2 in Appendix A.

2.2 Physical and Environmental Setting of the Site

Environmental characteristics including topography, geology, soil, and hydrogeology were evaluated based on Site observations, published literature, and maps.

Topography

Topographic map coverage of the Site is provided by the United States Geological Survey (USGS), Fresno North, California, 7.5-minute quadrangle map dated 1965 photorevised 1981. The Site lies within Section 9, Township 13 South, Range 20 East, Mount Diablo Baseline and Meridian. According to the map, the Site is located at an elevation of approximately 320 feet above mean sea level.

Geology

The Site is located within the central portion of the San Joaquin Valley. The San Joaquin Valley is part of the Great Valley Geomorphic Province, a topographic and structural basin bound on the east by the Sierra Nevada and to the west by the Coast Range. The Sierra Nevada, a fault block dipping gently to the southwest, is composed of igneous and metamorphic rocks of pre-Tertiary age which comprise the basement complex beneath the valley (USGS, 1986). The subsurface of the Site and surrounding vicinity is characterized by a thick sequence of unconsolidated sediments.

Soils

According to the Eastern Fresno Area Soil Survey (USDA, 1990), soil at the Site is reported as San Joaquin Sandy Loam. This soil is widely distributed throughout low terraces. The available water holding capacity of this soil is low. Runoff is slow as well. Hardpan is present from a depth of 12 to 24 inches.

Hydrogeology

The depth of first encountered groundwater underlying the Site has not been assessed. However, according to information provided by the California Department of Water Resources (DWR), the depth to first encountered groundwater in the vicinity of the Site is approximately 120 feet below ground surface (bgs). Direction of groundwater flow is reported to generally be southeast.

3.0 INFORMATION FROM THE SITE RECONNAISSANCE

The objective of the Site reconnaissance was to observe the Site for specific indicators of environmental concern. The methodology used during the site reconnaissance included a systematic search of practically accessible areas of the Site and adjacent properties. A Site Plan depicting the Site, adjoining property use, and observed on-Site features is presented as Drawing 2 in Appendix A. Additionally, photographs were taken during the Site walk, and selected photographs of the Site are presented in Appendix B.

The Site reconnaissance was conducted on June 23, 2011, by Mr. Philip Marquez, a representative of MTA.

3.1 Site Reconnaissance - Description of Structures, Roads, and Other Site Improvements

The western portion of the Site is occupied by the vacant Eden Park Apartment complex. This complex includes eight (8) apartment buildings (557, 563, 569, 575, 581, 587, 593, and 599 W. San Jose Avenue), a restroom building with a mail box area, a fenced-in swimming pool, and several covered parking stalls. Two pad-mounted transformers were associated with buildings 557 and 593. The remaining portions of the complex include an asphalt-paved driveway and landscaping. The eastern portion of the Site (formerly occupied by 525 W. San Jose Avenue) was vacant property on the day of MTA's Site reconnaissance. One pole-mounted transformer was observed along the northern edge of the Site.

3.2 Current Uses of the Site

The western portion of the Site is currently occupied by a vacant apartment building complex (Eden Park Apartments). The eastern portion of the Site (525 W. San Jose Avenue) was vacant on the day of MTA's Site reconnaissance.

3.3 Current Uses of the Adjoining Properties

San Jose Avenue borders the northern edge of the Site, beyond which is a residential area. An apartment complex is located south of the Site. A residential area is located east of the Site. An office building complex is located just west of the Site, beyond which is the Fig Garden shopping center.

3.4 Site Reconnaissance - Specific Indicators of Environmental Concern

In addition to the general description of the Site, the following specific indicators of environmental concern were also evaluated for the Site.

Hazardous Substances and Wastes

No hazardous substances or wastes were observed at the Site on the day of MTA's Site reconnaissance.

Drums

No drums were noted at the Site on the day of MTA's Site reconnaissance.

Potential Polychlorinatedbiphenyl (PCB) - Containing Equipment

Pad-mounted transformers were located near the southeastern corner of building 557 and the northeastern corner of building 593, respectively. The transformers are operated and maintained by Pacific Gas and Electric (PG &E). These two transformers appeared to be in good working order and no visual evidence of staining, leakage, odors, or stressed vegetation was observed on and/or around either transformer.

One pole-mounted transformer was noted near the northern edge of the central portion of the Site. This transformer is also operated and maintained by PG & E. The transformer appeared to be in good condition, and no visual evidence of staining, leakage, odors, or stressed vegetation was observed.

Solid Waste

Miscellaneous debris, including pieces of lumber and small light posts were observed throughout the interior of the Eden Park apartment complex. No evidence of staining, leakage, or odors was associated with these items on the day of MTA's Site reconnaissance.

Floor Drains and Sumps

A storm drain system, with three storm drain inlets and a concrete-lined gutter, was observed trending through the paved driveway, located in the southern and eastern portions of 569 W. San Jose Avenue. This system is believed to have been installed during the initial construction of the apartment complex, and is descried as having been a "dry" well system.

According to information obtained from the Fresno County Environmental Health Department (FCEHD), an inspection for the swimming pool associated with 569 W. San Jose Avenue was conducted by the FCEHD on September 9, 1997. According to the inspector's report, the on-Site maintenance person inquired about possibly draining backwash water into an existing on-Site "dry" well. The inspector informed the maintenance person that this would not be allowed.

It appears that this system of "dry" wells was used to collect stormwater and wash water runoff from the asphalt-paved driveway and carport areas. Some surface staining was noted in these areas on the day of MTA's Site reconnaissance. Therefore, a potential exists that constituents of concern could have been washed into the "dry" well system. Soil sampling was conducted within the area of the "dry" well system by MTA in December of 2010. Results of this sampling are summarized in Section 4.6.2.

Other Containers

No other containers were observed on the day of MTA's Site reconnaissance.

Water Wells and Septic Tanks

No wells were observed at the Site on the day of MTA's Site reconnaissance.

The Site addresses of 569 W. San Jose Avenue is currently believed to be connected to City of Fresno sewer and water systems. According to information obtained from the City of Fresno Planning Department, the Eden Park Apartment complex (569 W. San Jose Avenue) was connected to the city system in 1991. Prior to this connection, both properties used septic systems. According to Mr. Lee Brand (Westco Equities), the septic tanks associated with 569 W. San Jose Avenue were removed sometime in the early 1990's. Mr. Brand was unaware of the exact number of septic tanks associated with 569 W. San Jose Avenue. However, he believed that there were several septic tanks associated with this address. The exact locations of these former tanks are not known. However, it is possible that these tanks were located near the on-Site apartment buildings.

According to information obtained from the City of Fresno Planning Department, one septic tank associated with 525 W. San Jose Avenue was demolished in 2007. However, the removal of the associated leach fields was not reported.

Oil and Gas Wells

No oil or gas wells were identified during the Site reconnaissance or shown on California Department of Conservation - Division of Oil and Gas maps reviewed as a part of this assessment.

Pits, Ponds, and Lagoons

Two areas exhibiting depressions were observed in the central portion of the Site (formerly occupied by 525 W. San Jose Avenue). No evidence of staining, leakage, stressed vegetation, or odors was noted within or around the areas of depression, and these depressions are believed to be associated with the demolition of the former residence, several outbuildings, and a swimming pool. These features were reportedly demolished in 2007.

Underground/Aboveground Storage Tanks

No evidence of underground or aboveground storage tanks was observed on-Site at the time of MTA's Site reconnaissance.

Pipelines and Pipes of Unknown Use or Origin

No pipelines or pipes of unknown use or origin were observed at the time of MTA's Site reconnaissance.

Fill Material

According to information obtained from the City of Fresno Planning Department, a former swimming pool associated with 525 W. San Jose Avenue, was demolished along with the on-Site structures and septic tank. The area previously occupied by the swimming pool appears to have been backfilled at that time. Soil sampling was conducted within the area of backfill by MTA in December of 2010. Results of this sampling are summarized in Section 4.6.2.

Other Physical Evidence of Contamination

No other physical eveidence of contamination was observed at the Site on the day of MTA's Site reconnaissance.

4.0 HISTORICAL AND CURRENT INFORMATION OF THE PROPERTY AND ADJOINING PROPERTIES

The history of land-use on and near the Site was determined from a review of historic aerial photographs, topographic maps, and city directories.

4.1 Aerial Photograph Review

Available historical aerial photographs of the Site and vicinity for the years of 1937, 1950, 1957, 1961, 1965, 1967, 1973, 1977, 1993, 1998 and 2005 were reviewed for indications of past use and/or activities which may have involved the manufacture, generation, use, storage, and/or disposal of hazardous materials. Aerial photographs for this assessment were reviewed at the California State University at Fresno (CSUF) map library and on Google Earth (2005 aerial photograph). The following descriptions are interpretations of our examination of the referenced aerial photographs.

1937

Dry crop agriculture is noted in the western portion of the Site, with one elongated shed-like structure noted in the central portion. Row crop agriculture and several shed-like and/or rural residential structures are noted in the eastern portion of the Site.

San Jose Avenue borders the northern edge of the Site, beyond which is an orchard and a rural residential area. Row crop and dry crop agriculture are noted south of the Site. Vacant property is observed east of the Site. An orchard is noted west of the Site.

1950

The western portion of the Site is composed primarily of vacant property, with one elongated shed-like structure. Row crop agriculture, a rural residence and several shed-like structures are noted in the eastern portion of the Site.

San Jose Avenue borders the northern edge of the Site, beyond which is a rural residential area and orchard. A rural residential area, row crop, and an orchard are noted south of the Site. Vacant property is observed east of the Site. Adjacent property, located west of the Site, appears as an orchard.

1957

Vacant property and one elongated shed-like structure are noted in the western portion of the Site. An orchard, a rural residence and several shed-like structures are noted in the eastern portion of the Site.

San Jose Avenue borders the northern edge of the Site, beyond which is a residential area. Vacant property and an orchard are noted south of the Site. A residential area is observed east of the Site. An orchard is noted west of the Site.

1961

The Site and adjacent properties appear essentially unchanged from the 1957 aerial photograph. With the exception that a shopping center complex is observed west of the orchard that is located adjacent to and west of the Site.

1965

Vacant property and one elongated shed-like structure are noted in the western portion of the Site. An orchard, a rural residence, and several shed-like structures are noted in the eastern portion of the Site.

San Jose Avenue borders the northern edge of the Site, beyond which is vacant property and a residential area. Vacant property and what appears to be several apartment complex buildings are noted south of the Site. A residential area is noted east of the Site. An orchard is noted west of the Site, beyond which is a large shopping center complex.

1967

The Site and adjacent properties appear essentially unchanged from the 1965 aerial photograph.

1973

Seven or eight elongated buildings are noted in the western portion of the Site and are believed to be associated with an apartment complex. An orchard, a rural residence, and several small shed-like structures are noted in the eastern portion of the Site.

San Jose Avenue borders the northern edge of the Site, beyond which is vacant property and a residential area. A commercial area and an apartment complex are noted south of the Site. A residential area is noted east of the Site. Vacant property is noted west of the Site, beyond which is a large shopping center complex.

1977

The Site and adjacent properties appear essentially unchanged from the 1973 aerial photograph.

1987

The Site and adjacent properties appear essentially unchanged from the 1977 aerial photograph.

1993

Seven or eight structures, believed to be associated with the existing apartment building complex, are noted in the western portion of the Site. A rural residence and several shed-like structures are noted in the eastern portion of the Site.

San Jose Avenue borders the northern edge of the Site, beyond which is a rural residential area. An apartment complex and a commercial area are noted south of the Site. A residential area is noted east of the Site. A commercial area is noted west of the Site.

1998-2005

The Site and adjacent properties appear essentially unchanged from the 1993 aerial photograph.

4.2 Sanborn Fire Insurance Map Review

MTA reviewed Sanborn Fire Insurance Maps that were provided by EDR. Sanborn Maps can provide historical information regarding a site. Sanborn Map coverage did not include the subject Site.

4.3 Historical City Directory Review

A review of historical Polk City Directories was conducted at the Fresno County Public Library. Historical directories can provide information regarding current and former on-Site occupants. Years reviewed included 1960, 1964, 1970, 1975, 1980 1985, 1990, 1996, 2000, and 2004. A summary of the findings is listed below.

525 W. San Jose Avenue

- 1960-1966: William Adams
- 1970-1975: Denver Peckinpah
- 1980-1996: No Listing
- 2000: Reimer & Reimer Insurance
- 2004: No Listing

569 W. San Jose Avenue

- 1960-1966: No Listings

- 1970: Edwin Patterson
- 1975: Frank Frasier, Edwin Patterson, George Brenner, and Evelyn Blacker
- 1980-1996: Eden Park Garden Apartments
- 2000-2004: Eden Park Apartments

4.4 Building Permit Review

A request to review building permits for the current Site addresses of 525 and 569 W. San Jose Avenue was submitted to the City of Fresno Planning Department.

525 W. San Jose Avenue

- Electrical permit for the installation of wiring, dated September 7, 1960
- Building permit for an addition to the existing living room, dated September 21, 1961
- Plumbing permit for the installation of a septic tank, dated April 30, 1969
- Electrical permit for the installation of a "Service Conductor", dated November 8, 1971
- Demolition Permit # 07-00003260 for the demolition of the residential structure, septic tank, and swimming pool, dated March 26, 2007

569 W. San Jose Avenue

- Building permit for the construction of four apartment buildings, dated June 19, 1968
- Electrical Permit for the installation of wiring, dated June 24, 1968
- Building permit for the installation of a swimming pool, dated February 5, 1969
- Permits for a roof remodel, dated October 6, 1982
- Permit and Inspection for connection to the City of Fresno sewer system, dated December 17, 1991
- Permits for a roof remodel, dated June 15, 1998

4.5 Interviews with Site Representatives

Mr. Dennis Frye (Gunner and Andros Investment, Inc.)

As part of MTA's original investigation, a phone interview was conducted with Mr. Dennis Frye (Gunner & Andros Investment, Inc.) on March 6, 2009. To the best of Mr. Frye's knowledge, the apartment complex (569 W. San Jose Avenue) was first constructed sometime in the late 1960's or early 1970's. Mr. Frye was under the impression that this portion of the Site was primarily vacant property prior to the construction of the complex. Mr. Frye had no knowledge of any on-Site fueling areas or vehicle maintenance areas. Mr. Frye also believed that a rural residential area and swimming pool were previously located at the address of 527 W. San Jose Avenue. However, these improvements have since been demolished.

Mr. Lee Brand (former property owner)

As part of MTA's original investigation, a phone interview was conducted with Mr. Lee Brand of Westco Equities (former property owner) on March 9, 2009. To the best of Mr. Lee's knowledge, the on-Site "dry" well system was likely installed during the original construction of the Eden Park Apartment Complex (569 W. San Jose Avenue). Mr. Brand also stated that the apartment complex was connected to the City of Fresno sewer system in the early 1990's, when the property was annexed by the City of Fresno. Prior to being connected to the city sewer system, Mr. Lee believed that the complex was connected to several septic tanks. Mr. Lee was unsure of the exact number of tanks that existed, but believed that the tanks were closed sometime in the early 1990's.

4.6 Previous and Additional Investigations at the Site

Previous and Additional Investigations can provide the environmental professional with an understanding of previous investigative activity at the Site.

4.6.1 Previous Investigations

An asbestos survey for the Eden Park Apartments was conducted by Krazan and Associates, Inc. The results were documented in a report dated November 1, 2008. Results of the survey are summarized below. A copy of this report is included in Appendix D.

Krazan & Associates, Eden Park Apartments, 569 W. San Jose Avenue, Fresno, CA, dated November 1, 2008.

- According to the survey, 307 samples were collected throughout the apartment complex and were analyzed for the presence of asbestos. Items containing at least 1% asbestos included "Sprayed-on" acoustic tiling, 12 inch by 12 inch square floor tile and associated mastic, flooring mastic, and roof mastic. These items were noted throughout the complex.

Because of the above reported findings, Krazan made the following conclusions:

- If the asbestos-containing materials are left in place, the occupants should avoid buffing, sanding, grinding, or abrading these materials in any way. These activities could potentially release asbestos fibers.

- When building maintenance, repair, renovation, or other activities disturb or damage asbestos-containing materials, asbestos fibers may be released, creating a potential hazard. Therefore, removal of friable and non-friable asbestos-containing materials that have the potential to become friable during demolition and/or renovation is federally regulated under NESHAP.

A Phase I Environmental Site Assessment was also conducted by our firm in March of 2009. A summary of conclusions associated with the subject Site are presented below. A copy of the report text is included in Appendix D.

Moore Twining Associates, Inc., Draft Phase I Environmental Site Assessment, Proposed Fig Garden Mixed-Use Development, Near The Southwest Corner of San Jose Avenue and Maroa Avenue, Fresno, CA, dated March 16, 2009.

ON-SITE RECOGNIZED ENVIRONMENTAL CONDITION

- A storm drain system, with three storm inlet drains and a concrete-lined gutter, was observed trending through the paved driveway, located in the southern and eastern portions of 569 W. San Jose Avenue. This system is believed to have been installed during the initial construction of the apartment complex. According to a Conceptual Grading and Drainage Plan, prepared by Lars Andersen & Associates, Inc., these storm drains were actually part of an on-Site "dry" well system. These "dry" wells are classified as Class V injection wells by the U. S. EPA. According to information obtained from the Fresno County Environmental Health Department (FCEHD), an inspection for the swimming pool associated with 569 W. San Jose Avenue was conducted by the FCEHD on September 9, 1997. According to the inspector's report, the on-Site maintenance person inquired about possibly draining backwash water into an existing on-Site "dry" well. The inspector informed the maintenance person that this would not be allowed. It appears that this system is used to collect stormwater and wash water runoff from the asphalt-paved driveway and carport areas. Some surface staining was noted in these areas on the day of MTA's Site reconnaissance. There is a potential that constituents of concern could have been washed into the "dry" well system. It is MTA's understanding that dry wells are classified by the Environmental Protection Agency (EPA) as Class V Injection Wells, and regulation of their operation, maintenance, and removal are believed to be conducted under the guidance of local regulatory agencies such as the Fresno County Environmental Health Department (FCEHD) and other regulatory agencies. These wells represent a potential Recognized Environmental Condition and sampling of the "dry" wells for potential constituents of concern is recommended. In

addition, it is recommended that this system and all associated components be closed and removed in accordance with local, state, and federal guidelines.

In addition to the above Recognized Environmental Condition, the following potential environmental concerns were noted during this Phase I Environmental Assessment:

- The Site address of 507 W. San Jose Avenue is currently believed to be connected to City of Fresno sewer and water. According to information obtained from the City of Fresno Planning Department, 569 W. San Jose Avenue was connected to City sewer in 1991. Prior to this connection, the property used a septic system. According to Mr. Lee Brand (Westco Equities), the septic tanks associated with 569 W. San Jose Avenue were removed sometime in the early 1990's. Mr. Brand was unaware of the exact number of septic tanks associated with 569 W. San Jose Avenue. However, he believed that there were at least several. The exact location of these former tanks is not known. However, it is possible that they were located near the on-Site apartment buildings. MTA recommends that further investigation into the location of these tanks be conducted. The tanks and associated components (including leach lines and/or fields) should then be removed and disposed of in accordance with local, state, and federal guidelines. If any evidence of staining, leakage, or odors, associated with hazardous materials and/or petroleum products are noted during this removal, our firm should be notified.

- According to information obtained from the City of Fresno Planning Department, one septic tank associated with 525 W. San Jose Avenue was demolished in 2007. However, the closure of associated leach fields was not reported. It is recommended that the location of this leach filled be located and closed in accordance with local, state, and federal guidelines. If any evidence of staining, leakage, or odors, associated with hazardous materials and/or petroleum products are noted during closure, the signatories of this report should be notified.

- A wooden cabinet, containing several cans of paint and a pan filled with an oily substance, was observed within one of the covered parking stalls. Some surface staining was noted in the area in front of the wooden cabinet. The staining was observed within an asphalt-paved parking area, which appeared to be in good condition at the time of MTA's Site reconnaissance. Therefore, the staining would likely be considered de minimis under ASTM Guidelines. However, it is recommended that the cabinet and associated debris (including the pan and its contents) be removed and disposed of in accordance with local, state, and federal guidelines. If any evidence of further spillage, leakage, or staining, is noted during removal, the signatories of this report should be notified.

- MTA did not have access to the interior of the individual apartments or locked storage closets associated with 569 W. San Jose Avenue,. Therefore, these areas were not able to be assessed during the preparation of this Phase I Environmental Site Assessment. In addition, although not observed at the time of MTA's Site reconnaissance, it is believed that chemicals associated with the maintenance and cleaning of the swimming pool (569 W. San Jose

Avenue) would have likely been stored on-Site. It is possible that these materials were stored within one of the locked storage closets noted throughout the apartment complex. MTA recommends that the contents of these areas be characterized. Any hazardous materials and/or petroleum products should be removed and disposed of in accordance with local, state, and federal guidelines. If any evidence of staining, leakage, odors, or stressed vegetation is noted during removal, the signatories of this report should be notified.

- According to historical aerial photographs, the central portion of the Site was used for agricultural purposes (row crop and orchard) from at least 1937 to 1987. Because this area was used for agricultural purposes for such an extended period of time, there is a potential that environmentally persistent pesticides and/or herbicides could have been applied. In addition, the proposed development includes a subsurface parking garage. This component of the development would likely require the export of on-Site soils. Soils containing environmentally persistent pesticides and/or herbicides would potentially require special disposal requirements. Therefore, it is recommended that on-Site soils in the central portion of the Site be sampled and tested for the presence of environmentally persistent pesticides and/or herbicides.

- According to information obtained from the City of Fresno Planning Department, a former swimming pool associated with 525 W. San Jose Avenue was demolished along with the on-Site structures and a septic tank. The area previously occupied by the swimming pool appears to have been back filled at that time. However, the source of fill material used to backfill the pool is unknown. Because the source of this fill material is unknown, it is recommended that the backfill be sampled and tested for potential constituents of concern unless the source of the backfill can be determined and the source does not represent a potential environmental condition.

In order to address the concern associated with accessability issues within locked storage rooms and closets, MTA conducted an updated Site reconnaissance on January 5, 2011. The results of this reconnaissance were summarized in an addendum letter. A summary of this letter is provided below. A copy of the letter is included in Appendix D.

Phase I Environmental Site Assessment Addendum Letter, Eden Park Apartment Complex, 569 W. San Jose Avenue, Fresno, CA, prepared January 7, 2011

In order to address this issue, MTA revisited the Eden Park Apartment Complex on January 5, 2011. MTA was escorted by Mr. Ron Conte (property manager).

- Mr. Conte was able to unlock the storage rooms and closets located throughout the Site. MTA investigated each of these areas. No drums or containers used to store hazardous materials and/or petroleum products were observed within any of the closets or storage areas. Nor was any evidence of staining, leakage, or odors associated with these items observed on the day of MTA's Site visit.

- MTA was also able to view several of the empty apartment units through open windows. No drums or containers used to store hazardous materials and/or petroleum products were observed within any of the observed units. Nor was any evidence of staining, leakage, or odors associated with these items observed on the day of MTA's Site visit. In addition, Mr. Conte stated that he had cleaned out all of the individual units within the complex, and that he had no knowledge of any hazardous materials and/or petroleum products being stored or removed from any of the units.

Because previously un-accessed areas were able to be observed on the day of MTA's Site visit, and because no evidence of storage, spillage, staining, or odors associated with hazardous materials and/or petroleum products was observed on the day of our Site visit, MTA recommends no further investigation into this item at this time.

4.6.2 Additional Investigations:

In addition, in order to address concerns associated with the on-Site dry well system, the potential for environmentally persistent pesticides, and back filled soils within the former swimming pool, MTA collected soil samples within these areas and analyzed them for potential constituents of concern in December of 2010. The results of this sampling are summarized below. A copy of the analytical data, dated December 17, 2010 through January 4, 2011, is included in Appendix D.

Soil Sampling Within the Dry Well System

- In order to address concerns associated with impacted soils in the dry well system, MTA drilled three (3) soil borings in the area of the dry well system. Locations of these borings are depicted on the Site Plan Map (drawing 2) in Appendix A. Soil samples were collected at depths of 9 feet, 10 feet, 13 feet, 15 feet, 20 feet, and 25 feet below ground surface (bgs). The samples were then analyzed for metals, semi-volatile organics, volatile organics, Total Petroleum Hydrocarbons as Diesel (TPH-d), and motor oil (mo).

- Detectable concentrations of metals; including Arsenic (2.0 milligrams per kilogram mg/kg)), Barium (34-54 mg/kg), Cadmium (2.0 mg/kg), Chromium (3.29.2 mg/kg), Cobalt (1.3-2.9 mg/kg), Copper (3.8-19 mg/kg), Lead (3.6-230 mg/kg), Mercury (0.077-0.58 mg/kg), Nickel (4.0-230 mg/kg), Vanadium (11-22 mg/kg), and Zinc (42-130 mg/kg);Semi-Volatiles; TPH-d (53-220 mg/kg); and Motor Oil (100-510 mg/kg), were detected in soil samples collected within drilled soil borings. All sampled volatiles were reported to be non-detect.

- Detectable concentrations of metals are reported to be below the State of California's Total Threshold Limit Concentration (TTLCs). Detectable concentrations of semi-volatiles were reported to be below both the Department of Toxic Substance Control's (DTSC) California Human Health Screening Levels (CHHSLs) and the Regional Water Quality Control Board's (RWQCB) Environmental Screening Levels (ESLs) for Residential Land Use. Concentrations of TPH-d and Motor Oil are reported to be above the current ESLs for Residential Land Use.

However, depth of groundwater at the Site is reported to be approximately 120 feet below ground surface (bgs). Additional sampling, conducted at depth of 25 feet bgs was non-detect for both TPH-d and Motor Oil. In addition, field instrumentation (PID unit) indicated that TPH-d and Motor Oil were also non-detect to a depth of 35 feet bgs.

It is MTA's experience that the RWQCB generally considers 10 feet of non-detect soils within the vadose zone to be sufficient to warrant no further action. Therefore, the current potential impact to the Site from these soils being kept in place appears to be low. However, it is MTA's understanding that proposed development will require the removal of the on-Site dry well system and associated soils. Therefore, removal and disposal of these soils will likely require special disposal such as disposal at a properly licensed landfill.

Soil Sampling For Environmentally Persistent Pesticides

- In order to address concerns associated with the potential presence of environmentally persistent pesticides, MTA conducted soil sampling within the eastern portion of the Site. Four (4) samples were collected and analyzed using EPA Methods 6010B and 8081A. The approximate locations of collected samples are shown on the Site Plan (Drawing 2) in Appendix A.

All four (4) samples were either non-detect or considered background for the state of California. Therefore, the current potential impact to the Site from environmentally persistent pesticides currently appears low.

Swimming Pool Backfill Confirmation Sampling

- In order to address concerns associated with backfilled soils in the area of the former swimming pool, MTA conducted confirmation soil sampling and analysis within the area of the former swimming Pool. The approximate sample location is depicted on the Site Plan Map (Drawing 2) in Appendix A. This sample was analyzed for metals, PCBs, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and gasoline.

- Detectable concentrations of Barium (64 mg/kg), Chromium (15 mg/kg), Cobalt (4.7 mg/kg), Copper (13 mg/kg), Lead (10 mg/kg), Mercury (0.030 mg/kg), Nickel (9.1 mg/kg), Vanadium (32 mg/kg), and Zinc (31 mg/kg) were detected within the sample. However, these concentrations are reported to be background for the state of California. Sampling for VOCs, SVOCs, and gasoline were non-detect.

- PCBs were detected within the backfill confirmation sample at levels between 0.40 and 2.0 mg/kg. These concentrations are above the DTSC's California Human Health Screening Level (CHHSL) of 0.089 mg/kg.

As a result of soil sampling within the swimming pool back fill, it has been determined that these soils have been impacted with PCBs. It should be noted that PCBs detected in the back fill are not believed to have come from the subject Site. Instead, the PCB impacted soil is believed to have been imported from an unknown location.

4.7 Past Uses of the Property

The western portion of the Site was primarily vacant property with one elongated structure in the central area from at least 1937 to at least 1967. From at least 1973 to 2005, eight elongated buildings, believed to be apartment units, and a swimming pool, occupied this area. The eastern portion of the Site appears to have been used for agricultural purposes (row crop and orchard) and a rural residential area (including a residential structure and several out-buildings) from at least 1937 to at least 1987. On-Site structures associated with 525 W. San Jose Avenue existed on the Site until at least 2005.

4.8 Past Uses of Adjoining Property

San Jose Avenue has bordered the northern edge of the Site from at least 1937 to 2005, beyond which has been orchard, vacant property, and a residential area. Row crop and dry crop agriculture were observed south of the Site in the 1937 aerial photograph. A rural residential structure, row crop, and an orchard were observed south of the Site in the 1950 aerial photograph. Vacant property and an orchard are noted in aerial photographs from at least 1957 to 1961. Vacant property, a commercial area, and an apartment complex were noted in aerial photographs south of the Site from at least 1965 to 2005. Vacant property was noted east of the Site in 1937 and 1950 aerial photographs. A residential area is observed in aerial photographs from at least 1957 to 2005. An orchard was noted in aerial photographs west of the Site from at least 1937 to 1961. A shopping center and office complex were observed in aerial photographs west of the Site from at least 1973 to 2005.

5.0 RECORDS REVIEW

MTA contracted Environmental Data Resources, Inc.(EDR) to perform searches of available federal, state, and local database information systems for the purpose of identifying known recognized environmental conditions present on the Site and nearby properties which have the potential to adversely impact the Site being assessed in this study. Information regarding the list, record, and permit review findings is summarized in Table 1. The complete report furnished by EDR is included in Appendix C of the report.

TABLE 1
SUMMARY OF REGULATORY LISTS SEARCHED BY EDR AND RECORDS REVIEWED

Database	On-Site	Search Distance	< 1/8	1/8 - 1/4	1/4 - ½	½ - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		1	0	0	0	0	NR	0
Proposed NPL		1	0	0	0	0	NR	0
CERCLIS/ENVIROSTOR		0.5	0	0	0	NR	NR	0
CERC-NFRAP		0.25	0	0	NR	NR	NR	0
CORRACTS		1	0	0	0	0	NR	0
RCRIS-TSD		0.5	0	0	0	NR	NR	0
RCRIS Lg, Quan. Gen.		0.25	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.25	0	0	NR	NR	NR	0
ERNS		0	NR	NR	NR	NR	NR	0
STATE ASTM STANDARD								
AWP		1	0	0	0	0	NR	0
Cal-Sites (ENVIROSTOR)		1	0	0	0	0	NR	0
CHMIRS		0	NR	NR	NR	NR	NR	0
HIST Cortese		0.5	0	0	3	NR	NR	3
Notify 65		1	0	0	0	1	NR	1
Toxic Pits		1	0	0	0	0	NR	0
State Landfill		0.5	0	0	0	NR	NR	0
WMUDS/SWAT		0.5	0	0	0	NR	NR	0
LUST		0.5	0	0	4	NR	NR	6
CA Bond Exp. Plan		1	0	0	0	0	NR	0
UST		0.25	0	0	NR	NR	NR	1
VCP		0.5	0	0	0	NR	NR	0
INDIAN USTS		0.25	0	0	NR	NR	NR	0
INDIAN LUST		0.5	0	0	0	NR	NR	2
CA FID UST		0.25	0	0	NR	NR	NR	0
HIST UST		0.25	0	0	NR	NR	NR	4

NR = Not Requested (Beyond Search Distance)

5.1 Facilities Identified in the Regulatory Lists and Record Review

The information regarding the following facilities was obtained from the EDR report. Requests to review files for the Site and adjacent properties were also submitted to the Fresno County Environmental Health Department (FCEHD), the Regional Water Quality Control Board (RWQCB), and the Department of Toxic Substance Control (DTSC).

On-Site

There are no reported releases, spills, or violations reported for the on-Site addresses of 525, or 569 W. San Jose Avenue. However, items discovered during MTA's investigation are discussed below.

525 W. San Jose Avenue

Soil sampling was also conducted in the area formerly occupied by 525 W. San Jose Avenue, within an area believed to contain a back filled swimming pool. A detailed summary of this sampling is presented in Section 4.6.2. However, according to the results, elevated concentrations of PCBs were detected at levels between 0.40 and 2.0 mg/kg. These concentrations are above the DTSC's California Human Health Screening Level (CHHSL) of 0.089 mg/kg. As a result of soil sampling within the swimming pool back fill, it has been determined that these soils have been impacted with PCBs.

569 W. San Jose Avenue

According to information obtained from the FCEHD, inspection for the swimming pool, located at 569 W. San Jose Avenue, was conducted by the FCEHD on September 9, 1997. According to the inspector's report, the on-Site maintenance person inquired about possibly draining backwash water into an existing on-Site "dry" well. This "dry" well is believed to be associated with the reported "dry" well system observed in the southern and eastern portion of the Eden Park Apartment Complex (569 W. San Jose Avenue). Additional investigation into this system was conducted by MTA in December of 2010. Soil sampling results are further discussed in Section 4.6.2. The current potential impact to the Site from these soils being kept in place appears to be low. However, it is MTA's understanding that proposed development will require the removal of the on-Site dry well system and associated soils. Therefore, removal and disposal of these soils will likely require special disposal such as disposal at a properly licensed landfill.

Off-Site

David Wasemiller, located at 588 W. San Jose Avenue, approximately 275 feet west of the Site, appears on the HAZNET database due to its status as a hazardous materials and/or generation facility. According to information obtained from the EDR report, approximately 0.84 tons of building materials reported to contain asbestos-containing waste was disposed of through a hazardous materials waste disposal company. There are no reported incidents, releases, or violations associated with the removal of this material. Therefore, the current potential impact to the Site appears low.

Penwalt Corporation, located at 516 W. Shaw Avenue, approximately 1,300 feet south of the Site, appears on the SLIC database due to its status as a former cleanup facility. According to information obtained from the EDR report and RWQCB, the incident was discovered on November 25, 2011. The incident is reported as having been under investigation. However, according to the EDR report and RWQCB, investigation has been completed, and the case has been closed. Due to the distance of this facility from the subject Site, because the facility is believed to be located hydrologically cross-gradient to the Site, and because the incident is reported as having been closed, the current potential impact to the Site appears low. However, if a release from this facility were to impact the Site, the responsible party would typically be responsible for cleanup.

Arco # 697/Shams Srrokh Mossanen, located at 420 W. Shaw Avenue, approximately 1,400 feet south/southeast of the Site appears on the LUST and HIST Cortese databases due to a leaking underground storage tank incident. According to the EDR report, the released material was gasoline and was discovered on November 1, 1987. According to the RWQCB, this release impacted groundwater. Remedial activity was conducted at this facility from 1987 to 1993. The release received closure by the FCEHD on June 29, 1993. Because the incident has reportedly received closure and is believed to be located hydrologically cross-gradient from the Site, the current potential impact to the Site from this release appears to be low. However, if a release from this facility were to impact the Site, the responsible party would typically be responsible for cleanup.

Unocal #5938/TOSCO/HB Union, located at 384 W. Shaw Avenue, approximately 1,485 feet south/southeast of the Site, appears on the LUST and HIST Cortese databases due to a leaking underground storage tank incident. According to the EDR report, the released material was reported as gasoline and was discovered on September 1, 1990. According to the RWQCB, the incident was reportedly limited to the soil. The method of remedial activity was not reported. However, according to the RWQCB, the incident received closure on December 12, 1990. Because the incident has reportedly received closure and is believed to be located hydrologically cross-gradient from the Site, the current potential impact to the Site from this release appears to be low. However, if a release from this facility were to impact the Site, the responsible party would typically be responsible for cleanup.

Marshal's Mobil, located at 385 W. Shaw Avenue, approximately 1,500 feet south/southeast of the Site, appears on the LUST and Cortese databases due to a leaking underground storage tank incident. According to the EDR report, the released material was reported as gasoline and was discovered on January 1, 1988. According to the RWQCB, the incident was reportedly limited to the soil. The method of remedial activity was not reported. However, according to the RWQCB, the incident received closure on October 21, 1988. Because the incident has reportedly received closure and is believed to be located hydrologically cross-gradient from the Site, the current potential impact to the Site from this release appears to be low. However, if a release from this facility were to impact the Site, the responsible party would typically be responsible for cleanup.

Fig Garden Village, located at 5082 N. Palm Avenue, approximately 2,100 feet west/southwest of the Site, appears on the SLIC database due to its status as anc open investigation facility. According to information obtained from the EDR report and the RWQCB, the facility was historically operated as a dry cleaning facility. Investigation at this facility in 1997 detectable concentrations of PCE, TCE,

and cDCE, were detected in soil and groundwater at the facility. Remedial activity at this facility has been ongoing since that time. The most recent investigation was conducted by ARCADIS Infrastructure, Environment, Buildings (ARCADIS) in July of 2010 (Annual 2010 Groundwater Monitoring Report, dated July 15, 2010). The investigation included the monitoring of groundwater at the facility. According to ARCADIS, the facility has been divided into northern, central, and southern areas. Groundwater monitoring results in these areas revealed that PCE and TCE were below their respective State of California Maximum Contaminant Levels (MCLs). However, detectable concentrations of cDCE (3.5-23 micrograms per liter ug/l)) were detected in the central and southern areas. As a result of these findings, ARCADIS recommended that annual monitoring be continued. Due to the reported distance of this facility to the Site, and because it is believed to be located hydrologically downgradient to the Site, the current potential impact to the Site appears low. However, it should be noted that this is an open investigation facility. If a release from this facility were to impact the Site, the responsible party would typically be responsible for cleanup.

Based upon the status, distance, and/or direction of groundwater flow, the remaining facilities listed in the EDR report are not considered to currently pose a significant environmental concern to the Site.

5.2 Institutional and Engineering Controls/Land Use Limitations/Environmental Liens

Information regarding institutional and engineering controls was obtained from the EDR report, interviews with property owners, and MTA's Site reconnaissance. Institutional and engineering controls can indicate the current and/or historical presence of recognized environmental conditions that required remedial activity at the Site.

- No institutional and/or engineering controls were observed on the day of MTA's Site reconnaissance. No evidence of on-Site land use limitations, or environmental liens was discovered at the time of MTA's Site Reconnaissance.

6.0 SUMMARY OF FINDINGS

The findings of the Phase I are summarized in the following sections:

6.1 On-Site

The western portion of the Site was primarily vacant property with one elongated structure in the central area from at least 1937 to at least 1967. From at least 1973 to 2005, eight elongated buildings, believed to be apartment units, and a swimming pool occupied this area. The eastern portion of the Site appears to have been used for agricultural purposes (row crop and orchard) and a rural residential area (including a residential structure and several out-buildings) from at least 1937 to at least 1987. The western portion of the Site is currently occupied by a vacant apartment building complex (Eden Park Apartments). The eastern portion is currently vacant property.

MTA's previous investigation noted an on-Site "dry" well system observed in the southern and eastern portion of the Eden Park Apartment Complex (569 W. San Jose Avenue). Additional investigation into this system was conducted by MTA in December of 2010. Soil sampling results are further discussed in Section 4.6.2.

MTA's previous investigation noted that undocumented fill material was used to back fill a former swimming pool. In order to address this concern, MTA conducted confirmation soil sampling and analysis within the area of the former swimming Pool in December of 2010. PCBs were detected within the backfill confirmation sample at levels between 0.40 and 2.0 mg/kg. These concentrations are above the DTSC's California Human Health Screening Level (CHHSL) of 0.089 mg/kg.

An asbestos survey for the Eden Park Apartments was conducted by Krazan and Associates, Inc. The results were documented in a report dated November 1, 2008. According to the survey, 307 samples were collected throughout the apartment complex and were analyzed for the presence of asbestos. Items containing at least 1% asbestos included "Sprayed-on" acoustic tiling, 12 inch by 12 inch square floor tile and associated mastic, flooring mastic, and roof mastic. These items were noted throughout the complex.

MTA's previous investigation noted that the eastern portion of the Site had historically been used for agricultural purposes, and that environmentally persistent pesticides had been applied to the Site. In order to address concerns associated with the potential presence of environmentally persistent pesticides, MTA conducted soil sampling within the eastern portion of the Site in December of 2010. Soil sampling results are further discussed in Section 4.6.2. However, all samples were either non-detect or considered background for the state of California. Therefore, the current potential impact to the Site from environmentally persistent pesticides currently appears low.

MTA's previous investigation noted that access to storage rooms and closets. In order to address this concern MTA revisited the Eden Park Apartment Complex on January 5, 2011. MTA was escorted by Mr. Ron Conte (property manager). Mr. Conte was able to unlock the storage rooms and closets located throughout the Site. MTA investigated each of these areas. MTA was also able to view these areas on the day of the Phase I update Site reconnaissance (June 23, 2011). Because previously un-accessed areas were able to be observed on the day of MTA's Site visit, and because no evidence of storage, spillage, staining, or odors associated with hazardous materials and/or petroleum products was observed on the day of our Site visit, MTA recommends no further investigation into this item.

Pad-mounted transformers were located near the southeastern corner of building 557 and the northeastern corner of building 593, respectively. The transformers are operated and maintained by Pacific Gas and Electric (PG &E). These two transformers appeared to be in good working order and no visual evidence of staining, leakage, odors, or stressed vegetation was observed on and/or around either transformer. Therefore, the current potential impact to the Site from the transformer appears low.

One pole-mounted transformer was noted near the northern edge of the central portion of the Site. This transformer is also operated and maintained by PG & E. The transformer appeared to be in good condition, and no visual evidence of staining, leakage, odors, or stressed vegetation was observed. Therefore, the current potential impact to the Site appears low.

Miscellaneous debris, including pieces of lumber and small light posts were observed throughout the interior of the Eden Park apartment complex. No evidence of staining, leakage, or odors was associated with these items on the day of MTA's Site reconnaissance.

According to information obtained from the City of Fresno Planning Department, the Eden Park apartment complex (569 W. San Jose Avenue) was connected to the City system in 1991. Prior to this connection, the complex used septic systems. According to Mr. Lee Brand (Westco Equities), the septic tanks associated with 569 W. San Jose Avenue were removed sometime in the early 1990's. Mr. Brand was unaware of the exact number of septic tanks associated with 569 W. San Jose Avenue. However, he believed that there were several septic tanks associated with this address. The exact locations of these former tanks are not known. However, it is possible that these tanks were located near the on-Site apartment buildings.

According to information obtained from the City of Fresno Planning Department, one septic tank associated with 525 W. San Jose Avenue was demolished in 2007. However, the removal of the associated leach fields was not reported.

6.2 Off-Site

San Jose Avenue has bordered the northern edge of the Site from at least 1937 to 2005, beyond which has been orchard, vacant property, and a residential area. Row crop and dry crop agriculture were observed south of the Site in the 1937 aerial photograph. A rural residential structure, row crop, and an orchard were observed south of the Site in the 1950 aerial photograph. Vacant property and an orchard are noted in aerial photographs from at least 1957 to 1961. Vacant property, a commercial area, and an apartment complex were noted in aerial photographs south of the Site from at least 1965 to 2005. Vacant property was noted east of the Site in 1937 and 1950 aerial photographs. A residential area is observed in aerial photographs from at least 1957 to 2005. An orchard was noted in aerial photographs west of the Site from at least 1937 to 1961. A shopping center and office complex were observed in aerial photographs west of the Site from at least 1973 to 2005.

David Wasemiller, located at 588 W. San Jose Avenue, approximately 275 feet west of the Site, appears on the HAZNET database due to its status as a hazardous materials and/or generation facility.

Penwalt Corporation, located at 516 W. Shaw Avenue, approximately 1,300 feet south of the Site, appears on the SLIC database due to its status as a former cleanup facility.

Arco # 697/Shams Srrokh Mossanen, located at 420 W. Shaw Avenue, approximately 1,400 feet south/southeast of the Site appears on the LUST and HIST Cortese databases due to a leaking underground storage tank incident.

Unocal #5938/TOSCO/HB Union, located at 384 W. Shaw Avenue, approximately 1,485 feet south/southeast of the Site, appears on the LUST and HIST Cortese databases due to a leaking underground storage tank incident.

Marshal's Mobil, located at 385 W. Shaw Avenue, approximately 1,500 feet south/southeast of the Site, appears on the LUST and Cortese databases due to a leaking underground storage tank incident.

Fig Garden Village, located at 5082 N. Palm Avenue, approximately 2,100 feet west/southwest of the Site, appears on the SLIC database due to its status as anc open investigation facility.

Detailed summaries of these off-Site facilities are presented in Section 5.1.

6.3 Data Gaps

Data gaps are described as a lack of or inability to obtain information required by the standards and practices listed in ASTM E 1527-05, despite good faith efforts by the environmental professional or prospective landowner.

- No data gaps were encountered during the preparation of this report.

7.0 CONCLUSIONS AND RECOMMENDATIONS

On behalf of Scott A. Mommer Consulting, Inc. MTA pe rformed a Phase I Environmental Assessment Update in conformance with the scope and limitations of ASTM Practice E 1527 for the Eden Park Apartments (569 W. San Jose Avenue) and vacant property associated with 525 W. San Jose Avenue), in the City and County of Fresno, California. The Phase I was performed during June of 2011. This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the Site, except for the following:

ON-SITE RECOGNIZED ENVIRONMENTAL CONDITION

- MTA's previous investigation noted that undocumented fill material was used to fill in a former swimming pool associated with 525 W. San Jose Avenue. In order to address this concern, MTA conducted additional investigation, including confirmation soil sampling and analysis, within the area of the former swimming Pool in December of 2010. PCBs were detected within the confirmation samples at levels between 0.40 and 2.0 mg/kg. PCB concentrations within this soil are not believed to be related to an incident or release at the Site, and are instead believed to have been brought on-Site via the undocumented fill. However, reported concentrations are above the DTSC's California Human Health Screening Level (CHHSL) of 0.089 mg/kg. Therefore, MTA recommends that further investigation, including the proper removal and disposal of impacted soils and confirmation sampling, be conducted within the area of the back fill.

In addition to the above Recognized Environmental Condition, the following potential environmental concerns were noted during this Phase I Environmental Assessment Update:

On-Site

- MTA's previous investigation noted an on-Site "dry" well system, observed in the southern and eastern portion of the Eden Park Apartment Complex (569 W. San Jose Avenue). In order to address this concern, additional investigation, including soil sampling and analysis, was conducted by MTA in December of 2010. Soil sampling results are further discussed in Section 4.6.2. Concentrations of TPH-d (53-220 mg/kg) and Motor Oil (100-510 mg/kg) were reported to be above the current Environmental Screening Levels (ESLs) for Residential Land Use. However, depth of groundwater at the Site is reported to be approximately 120 feet below ground surface (bgs). In addition, soil sampling conducted at a depth of 25 feet bgs was non-detect for both TPH-d and Motor Oil. Field instrumentation (PID unit) also indicated that TPH-d and Motor Oil were non-detect to a depth of 35 feet bgs. It is MTA's experience that the RWQCB generally considers 10 feet of non-detect soils within the vadose zone to be sufficient to warrant no further action. Therefore, the current potential impact to the Site from these soils being kept in place appears to be low.

  However, it is MTA's understanding that proposed development will require the removal of the on-Site "dry" well system and associated soils. Therefore, removal and disposal of these soils will likely require special disposal, such as disposal at a properly licensed landfill. MTA recommends that the "dry" well system, all associated components, and soils located within the "dry" well system, be removed and disposed of in accordance with all applicable local, state, and federal guidelines. If any evidence of staining, leakage, or odors are observed during removal, the signatories of this report should be notified.

- An asbestos survey for the Eden Park Apartments was conducted by Krazan and Associates, Inc. The results were documented in a report dated November 1, 2008. According to the survey, 307 samples were collected throughout the apartment complex and were analyzed for the presence of asbestos. Items containing at least 1% asbestos included "Sprayed-on" acoustic tiling, 12 inch by 12 inch square floor tile and associated mastic, flooring mastic, and roof mastic. These items were noted throughout the complex. It is recommended that the conclusions made by Krazan and Associates be implemented and the applicable regulations regarding the assessment, abatement, removal and disposal of asbestos containing materials be followed. Due to the reported age of the apartment buildings, the client may also wish to conduct a survey for other hazardous building materials such as lead-based paints, PCB-containing light ballasts, and mercury-containing thermostats.

- The Site address 569 W. San Jose Avenue is believed to be connected to City of Fresno sewer and water. According to information obtained from the City of Fresno Planning Department, 569 W. San Jose Avenue was connected to the city sewer system in 1991. Prior to this connection, the Eden Park Apartment complex used septic systems. According to Mr. Lee Brand (Westco Equities), the septic tanks associated with 569 W. San Jose Avenue were

removed sometime in the early 1990's. Mr. Brand was unaware of the exact number of septic tanks. However, he believed that there were at least several. The exact location of these former tanks is not known. However, it is possible that they were located near the on-Site apartment buildings. MTA recommends that further investigation into the location of these tanks be conducted. The tanks and associated components (including leach lines and/or fields) should then be removed and disposed of in accordance with local, state, and federal guidelines. If any evidence of staining, leakage, or odors, associated with hazardous materials and/or petroleum products are noted during this removal, our firm should be notified.

- According to information obtained from the City of Fresno Planning Department, one septic tank associated with 525 W. San Jose Avenue was demolished in 2007. However, the closure of associated leach fields was not reported. It is recommended that the location of this leach field be located and closed in accordance with local, state, and federal guidelines. If any evidence of staining, leakage, or odors, associated with hazardous materials and/or petroleum products are noted during closure, the signatories of this report should be notified.

Off-Site

- **Fig Garden Village**, located at 5082 N. Palm Avenue, approximately 2,100 feet west/southwest of the Site, appears on the SLIC database due to its status as anc open investigation facility. According to information obtained from the EDR report and the RWQCB, the facility was historically operated as a dry cleaning facility. Investigation at this facility in 1997 detectable concentrations of PCE, TCE, and cDCE, were detected in soil and groundwater at the facility. Remedial activity at this facility has been ongoing since that time. The most recent investigation was conducted by ARCADIS Infrastructure, Environment, Buildings (ARCADIS) in July of 2010 (Annual 2010 Groundwater Monitoring Report, dated July 15, 2010). The investigation included the monitoring of groundwater at the facility. According to ARCADIS, the facility has been divided into northern, central, and southern areas. Groundwater monitoring results in these areas revealed that PCE and TCE were below their respective State of California Maximum Contaminant Levels (MCLs). However, detectable concentrations of cDCE (3.5-23 micrograms per liter ug/l)) were detected in the central and southern areas. As a result of these findings, ARCADIS recommended that annual monitoring be continued. Due to the reported distance of this facility to the Site, and because it is believed to be located hydrologically downgradient to the Site, the current potential impact to the Site appears low. However, it should be noted that this is an open investigation facility. If a release from this facility were to impact the Site, the responsible party would typically be responsible for cleanup.

8.0 CLOSING

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Site. Any exceptions to, or deletions from, this practice are described in the following paragraph.

The material content of this report is intended to be consistent with a standard of practice as defined by ASTM practice E 1527-05. However, the report format differs in style, arrangement, and presentation of material facts from the format described by ASTM.

We appreciate the opportunity to be of service to you on this project. If you have questions regarding this report, please feel free to contact us at (800) 268-7021.

Sincerely,
MOORE TWINING ASSOCIATES, INC.
Environmental Services Division

Phil Marquez

Philip M Marquez
Phase I Supervisor/Environmental Professional

" I declare that, to the best of my knowledge and belief, I meet the definition of Environmental Professional. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

9.0 REFERENCES

American Society for Testing and Materials, 2005, *ASTM Standards on Environmental Site Assessments for Commercial Real Estate*, 2nd ed., E 1527-05, Philadelphia, Pennsylvania.

Krazan & Associates, *Asbestos Survey Eden Park Apartments, 569 W. San Jose Avenue, Fresno, CA*, Project # 014-08232, November 1, 2008.

Moore Twining Associates, Inc., Draft Phase I Environmental Site Assessment, Proposed Fig Garden Mixed-Use Development, Near The Southwest Corner of San Jose Avenue And Maroa Avenue, dated March 16, 2009.

Munger, Averill H., Ed. 1994. *Munger Map Book, California-Alaska Oil and Gas Fields*. Munger: Los Angeles, California.

United States Geological Survey, 1965 photorevised 1981, Fresno North, California Quadrangle, 7.5 Minute Series Topographic Map.

John Wiley and Sons, Incorporated, 1976, *Geology of California*, Robert Norris and Robert W. Webb.

10.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Moore Twining Associates, Inc. Phase I Environmental Site Assessment staff is composed of a group of environmental professionals that perform Environmental Site Assessments on a routine basis. The Phase I staff is managed and supervised by individuals who conduct, prepare, oversee, and/or review Environmental Site Assessments on a daily basis. Qualification profiles for these individuals are provided in the following section.

Philip M. Marquez
Supervisor - Phase I Environmental Site Assessments

Mr. Marquez has ten years of experience conducting Phase I environmental site assessments and natural resource monitoring including biological resources and wetlands. Mr. Marquez has conducted environmental site assessments for a number of different project types including canning facilities, pesticide production facilities, shopping centers, commercial properties, gas stations, hospitals, school sites, and agricultural sites.

APPENDIX G

NOISE ASSESSMENT

ENVIRONMENTAL NOISE ASSESSMENT

FIG GARDEN FINANCIAL CENTER PHASE IV
FRESNO, CALIFORNIA

BBA Report 09-001A

PREPARED FOR

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PREPARED BY

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DECEMBER 7, 2011

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BBA
BROWN • BUNTIN
ASSOCIATES, INC.

1. INTRODUCTION

1.1 Project Description and Location:

The proposed Fig Garden Financial Center Phase IV (project) office building would be located on the south side of West San Jose Avenue between Maroa and Palm Avenues within the City of Fresno. The project would consist of a four-story 104,593 square foot office building to be constructed on a 4.9-acre site currently occupied by one single-family home and a vacant 44-unit apartment complex. The project site location is shown by Figure 1.

The project site is surrounded by single- and multi-family homes to the north, single-family homes to the east, multi-family apartments to the south and an existing Fig Garden Financial Center office building to the west. Although the project is located within the City of Fresno, the residential areas to the east and south of the project site are located within an unincorporated area of Fresno County.

1.2 Environmental Noise Assessment:

This environmental noise assessment has been prepared by Brown-Buntin Associates, Inc. (BBA) to determine if significant noise impacts would be expected to occur as a result of the project, and to describe mitigation measures for noise if significant impacts are determined.

Appendix A provides a description of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported are in A-weighted decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a high degree of correlation with human annoyance and health effects.

2. REGULATORY SETTING

The California Environmental Quality Act (CEQA) requires that significant environmental impacts be identified for proposed development projects, and that such impacts be eliminated or mitigated to the extent feasible. A significant effect from noise may exist if a project would:

- Result in 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,
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project,
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, or
- Result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels.

3. THRESHOLDS OF SIGNIFICANCE

3.1 Local Noise Level Standards:

3.1.1 City of Fresno Noise Element

The primary objective of the City of Fresno Noise Element of the General Plan[1] is to protect the citizens of the city from the harmful and annoying effects of exposure to excessive noise. The noise element establishes noise compatibility standards for transportation and stationary noise sources. Public roadways, railroads and aircraft are considered transportation noise sources. Noise sources *not* related to transportation are considered to be stationary noise sources. This would include mechanical equipment and vehicle movements that do not occur on a public roadway. The following policies of the noise element specifically pertain to the project:

Policy H-1-a: New noise-sensitive land uses impacted by existing or projected future transportation noise sources shall include mitigation measures so that resulting noise levels do not exceed the standards shown in Table I.

TABLE I

MAXIMUM ALLOWABLE NOISE EXPOSURE
TRANSPORTATION NOISE SOURCES

Noise-Sensitive Land Use[4]	Outdoor Activity Areas[1] DNL, dB	Interior Spaces	
		DNL, dB	L_{eq} dB[2]
Residential	60[3]	45	---
Transient Lodging	60[3]	45	---
Hospitals, Nursing Homes	60[3]	45	---
Theaters, Auditoriums, Music Halls	---	---	35
Churches, Meeting Halls	60[3]	---	45
Office Buildings	---	---	45
Schools, Libraries, Museums	---	---	45

[1]Where the location of outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2]As determined for a typical worst-case hour during periods of use.

[3]Noise levels up to 65 dB DNL adjacent to the Burlington Northern Santa Fe and Union Pacific mainline tracks may be allowed by the project approving authority when it is determined that it is not possible to achieve 60 dB DNL in outdoor activity areas using a practical application of the best-available noise reduction technology, and when all feasible exterior noise reduction measures have been proposed.

[4]The Planning and Development Director, on a case-by-case basis, may designate land uses other than those shown in this table to be noise-sensitive, and may require appropriate noise mitigation measures.

Source: Table 8 of the City of Fresno Noise Element.

Policy H-1-b: For purposes of city analyses of noise impacts, and for determining appropriate noise mitigation, a significant increase in noise levels is assumed if the project results in any of the following conditions:

- the existing ambient noise level is less than 60 dB DNL and the project will cause the ambient noise level to increase by 5 dB or more.
- the existing ambient noise level is 60-65 dB DNL and the project will cause the ambient noise level to increase by 3 dB or more.
- the existing ambient noise level is greater than 65 dB DNL and the project will cause the ambient noise level to increase by 1.5 dB or more.

Policy H-1-c: The city shall review new public and private development proposals to determine conformance with the policies of the noise element.

Policy H-1-l: Noise created by proposed new stationary noise sources or existing stationary noise sources that undergo modifications that may increase noise levels shall be mitigated so as not to exceed the standards shown in Table II at noise-sensitive land uses.

TABLE II

MAXIMUM ALLOWABLE NOISE EXPOSURE[1]
STATIONARY NOISE SOURCES

	Daytime (7:00 a.m.-10:00 p.m.)	**Nighttime (10:00 p.m.-7:00 a.m.)**
Hourly Equivalent Sound Level (L_{eq}), dBA	50	45
Maximum Sound Level (L_{max}), dBA	70	65

[1]As determined at outdoor activity areas. Where the location of outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use. When ambient noise levels equal or exceed the levels in this table, mitigation shall only be required to limit noise to the ambient plus five (5) dB.

Source: Table 9 of the City of Fresno Noise Element.

3.1.2 City of Fresno Noise Ordinance

The City of Fresno Municipal Code (Noise Ordinance)[2] prohibits excessive noise from sources not preempted from local control by existing federal or state noise regulations. This would include mechanical equipment and vehicles not operated on a public roadway (referred to as stationary sources in the noise element). A potential violation of the noise ordinance would exist if the existing ambient noise level would be exceeded by five (5) dBA due to an existing or proposed use. The existing ambient noise level may be measured, but in no case may it be presumed to be lower than specified by the ordinance.

Table III summarizes the noise level standards of the city's noise ordinance as they are applied at residential and commercial properties. *The noise element standards are more restrictive than the noise ordinance standards, and have therefore been used to determine noise mitigation requirements for the Fig Garden Financial Center Phase IV project.*

TABLE III

CITY OF FRESNO NOISE ORDINANCE STANDARDS
RESIDENTIAL AND COMMERCIAL PROPERTIES

Time	Presumed Lowest Ambient Level, dBA[1]	Allowable increase, dBA
Residential Receivers		
10:00 p.m.-7:00 a.m.	50	+5
7:00 p.m.-10:00 p.m.	55	+5
7:00 a.m.-7:00 p.m.	60	+5
Commercial Receivers		
10:00 p.m.-7:00 a.m.	60	+5
7:00 a.m.-10:00 p.m.	65	+5

[1] Assumed by BBA to be defined by the L_{eq} noise metric for consistency with the noise element standards.

Source: City of Fresno Municipal Code, Section 9-2701(a)

3.1.3 Fresno County Noise Element

The Fresno County Noise Element establishes a land use compatibility criterion of 60 dB DNL for exterior noise levels in outdoor activity areas of residential developments. Outdoor activity areas generally include backyards of single-family residences and individual patios or decks of multi-family developments. The county's 60 dB DNL standard is consistent with the city's noise element although the county's standard is applicable to both transportation and stationary noise sources. In instances where it is not possible to achieve 60 dB DNL after a practical application of the best available noise reduction technology, the county will allow an exterior noise exposure of up to 65 dB DNL. The intent of the exterior noise level requirement is to provide an acceptable noise environment for outdoor activities and recreation.

Although not expressly stated in the county's noise element, it is assumed that the county also requires that interior noise levels attributable to exterior noise sources not exceed 45 dB DNL. An interior noise level standard of 45 dB DNL is consistent with earlier versions of the county's noise element, the U.S. Department of Housing and Urban Development (HUD) noise standards and the California Noise Insulation Standards. The intent of the interior noise level standard is to provide an acceptable noise environment for indoor communication and sleep.

3.1.4 Fresno County Noise Ordinance

Chapter 8.40 of the Fresno County Ordinance Code (noise ordinance) applies to noise sources that are not pre-empted from local control by existing state or federal regulations. Pre-empted noise sources include traffic on public roadways, railroad operations and aircraft in flight.

The county's noise ordinance addresses the statistical distribution of noise over time and allows for progressively shorter periods of exposure to levels of increasing loudness. Table IV summarizes the exterior noise level standards of the ordinance. The standards are to be adjusted by -5 dB if the noise source of concern consists primarily of speech or music. The ordinance is to be applied during any one-hour time period of the day or night and the standards are 5 dB more restrictive during the nighttime hours of 10:00 p.m. to 7:00 a.m.

TABLE IV

EXTERIOR NOISE LEVEL STANDARDS, DBA
FRESNO COUNTY NOISE ORDINANCE

Category	Cumulative # Min/Hr. (L_n)[1]	Daytime (7 am-10 pm)	Nighttime (10 pm-7 am)
1	30 (L_{50})	50	45
2	15 (L_{25})	55	50
3	5 ($L_{8.3}$)	60	55
4	1 ($L_{1.7}$)	65	60
5	0 (L_{max})	70	65

[1]In layman's terms, the noise level standards shown may not be exceeded for more than the specified number of minutes within any one-hour time period. The L_n value shown in parenthesis indicates the percent of the time during an hour that a particular noise level may not be exceeded. For example, the L_{50} represents 50% of the hour, or 30 minutes.

Source: Fresno County Ordinance Code

3.1.5 Construction Noise and Vibration

Noise due to construction activities is generally considered to be less than significant if the construction activity is temporary, use of heavy equipment and noisy activities is limited to daytime hours, pile driving or surface blasting would not occur, and all industry-standard noise abatement measures are implemented for noise-producing equipment. These general parameters acknowledge that people are not as likely to be annoyed by activities that are perceived as being necessary for normal commerce, so long as the inconveniences due to noise are of relatively short duration and all practical measures are being implemented to reduce the impacts of noise-producing activities.

Neither the city nor the county noise element specifically limits hours during which construction may occur. However, it is a common practice to limit hours of construction activity to minimize construction noise impacts at nearby residential receptors during the early morning and late evening hours, and on weekends and holidays. Although not specifically stated in the city or

county noise elements, it is also a standard requirement for many jurisdictions that all construction equipment be properly maintained and muffled to minimize noise generation at the source.

Neither the city nor the county has regulations that define acceptable levels of vibration. One reference suggesting vibration standards is the Federal Transit Administration (FTA) publication concerning noise and vibration impact assessment from transit activities[3]. Although the FTA guidelines are to be applied to transit activities, they may be reasonably applied to the assessment of the potential for annoyance or structural damage resulting from other activities. To prevent vibration annoyance in residences, a vibration velocity level of 80 VdB or less is suggested when there are fewer than 70 vibration events per day. A level of 100 VdB or less is suggested by the FTA guidelines to prevent damage to fragile buildings.

4. EXISTING CONDTIONS

The predominant existing noise sources affecting the project site and surrounding area include vehicular traffic on local roadways, ventilation equipment associated with underground parking garages at the existing Fig Garden Financial Center office building to the west and aircraft over-flights associated with the Fresno-Yosemite International Airport (FAT). The project site is not directly affected by parking lot activities or other sources of noise associated with the Fig Garden Shopping Center located to the south due to distance and acoustic shielding provided by existing intervening office and apartment buildings.

4.1 Ambient Noise Level Measurements:

Existing ambient noise levels were measured at two locations within or near the project site on May 12, 2010. Noise monitoring equipment consisted of a Larson-Davis Laboratories Model LDL 820 sound level analyzer equipped with a Bruel & Kjaer (B&K) Type 4176 ½″ microphone. The microphone was located on a tripod at approximately five (5) feet above the ground. The noise monitoring equipment was calibrated with a B&K Type 4230 acoustical calibrator to ensure the accuracy of the measurements. The equipment complies with applicable specifications of the American National Standards Institute (ANSI) for Type 1 sound measurement systems.

The locations of the ambient noise monitoring sites are noted on Figure 1. The first site was located near the northeast corner of the proposed office building site, approximately 50 feet from the center of West San Jose Avenue. The site is predominantly affected by noise from vehicular traffic on West San Jose Avenue, residential maintenance activities on nearby properties, birds in nearby trees and occasional aircraft over-flights. Distant train horns are also occasionally audible. Measured noise levels ranged from 40-74 dBA with an energy average (L_{eq}) of 52.4 dBA.

The second site was located west of the intersection of West San Jose Avenue and North Colonial Avenue, approximately 50 feet from the center of the intersection. The site is exposed to noise from the same sources identified above plus noise from ventilation fans associated with

the underground parking garage at the existing Fig Garden Financial Center office building to the west. Measured noise levels ranged from 47-75 dBA with an energy average (L_{eq}) of 57.2 dBA.

4.2 Existing Traffic Noise Exposure:

Existing traffic noise levels within and near the project site were modeled using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model[4] and traffic data obtained from the Traffic Impact Study prepared for the project by TPG Consulting, Inc. (August 2011)[5].

The FHWA Model is an analytical method utilized by many state and local agencies, including Caltrans, for highway traffic noise prediction. The FHWA Model is based upon reference energy emission levels for automobiles, medium trucks (2 axles) and heavy trucks (3 or more axles), with consideration given to vehicles volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model was developed to predict hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within ±1.5 dB. To predict DNL values, it is necessary to determine the hourly distribution of traffic for a typical day and adjust the traffic volume input data to yield an equivalent hourly traffic volume. The FHWA Model assumes a clear view of traffic with no shielding at the receiver location.

Existing traffic volumes on West San Jose Avenue adjacent to the proposed office building site are very low. Peak hour traffic volumes on the section of West San Jose Avenue adjacent to the site were not specifically addressed in the above-referenced traffic impact study. The annual average daily traffic volume was therefore estimated by BBA based upon data for Colonial Avenue. Colonial Avenue connects to West San Jose Avenue just west of the site. Using the FHWA Model and an estimated AADT of 500, the predicted DNL at 50 feet from the center of the roadway is less than 50 dB. This is well below the City's 60 dB DNL standard for residential uses exposed to transportation noise sources.

4.3 Stationary Noise Sources:

The existing Fig Garden Financial Center office building located to the west of the project site has ventilation fans for an underground parking garage. There are fans located near the southwest and northwest corners of the project site. The fans were found to produce noise levels in the range of 60-66 dBA, depending upon direction from the fan outlet grills, at a distance of 50 feet.

4.4 Aircraft Noise Exposure:

The project site is located approximately 4.5 miles northwest of the Fresno-Yosemite International Airport (FAT). The site is just south of the extended centerlines of the airport runways, and is therefore subject to aircraft over-flights. Aircraft typically depart to the northwest over the site, but aircraft arrivals occur over the site when required by wind conditions or other factors. Aircraft arrivals were observed during the project site visit and noise measurements on May 12, 2010. Noise levels from individual arrivals by commuter propeller

and regional jet aircraft were in the range of 55-65 dBA. Noise levels from departing jet aircraft, especially California Air National Guard CANG) jet aircraft, would be expected to be higher.

According to the public information office at the 144th Fighter Wing of the CANG[6], the number of CANG aircraft operations at FAT has been slightly higher than normal in recent months due to new flight crew training requirements. CANG operations are expected to return to normal over the next few months. Also, it is possible that the F-16 aircraft now operated by the CANG may be replaced in 2-3 years by F-15 aircraft. The CANG is in the process of preparing an EIR/EIS for the possible aircraft conversion project. Currently, the project site is located well outside the annual average 60 dB CNEL contours for existing or projected future aircraft operations at FAT[7].

4.5 High Speed Rail Noise Exposure:

According to the recently released Draft Environmental Impact Report and Statement (August 9, 2011)[8] for the Merced-Fresno section of the proposed California High Speed Rail (HSR) project, the proposed alignment of the HSR line would follow the existing Union Pacific Railroad (UPRR) line in the area of Shaw Avenue. This is more than three miles from the project site. Since the HSR line would be at grade in this area, and noise would be attenuated due to distance from the source and other factors by at least 50 dB, noise or vibration from the HSR line would not be significant at the project site.

5. PROJECT-RELATED NOISE IMPACTS

The Fig Garden Financial Center Phase IV project could cause noise levels to increase within the project site and in areas near the project site. The proposed office building is considered a noise-sensitive land use by the policies of the city's noise element. There are also noise-sensitive uses located adjacent to and near the project site. Such uses include the existing single-family homes to the east of the project site and on the north side of West San Jose Avenue, the existing multi-family apartment units to the south of the project site and the existing office building to the west. Additionally, residential uses are located at various locations along major roadways near the project site that could experience project-related increases in traffic.

5.1 On-Site Transportation Noise Source Impacts (Not significant with mitigation):

Noise levels from existing or future traffic on West San Jose Avenue or aircraft operations at FAT would not exceed 60 dB DNL exterior to the proposed office building. Assuming that the peak hour L_{eq} for combined traffic and aircraft noise sources would not exceed 65 dBA (a worst-case assessment), compliance with the city's 45 dBA hourly L_{eq} interior standard for office uses (Policy H-1-a) would require a minimum exterior-to-interior noise level reduction (NLR) of 20 dB (65-45=20). Since standard commercial office building construction will provide a minimum of 25 dB of NLR, the project will comply with city's interior noise level standard for office buildings provided windows and doors are closed.

Mitigation of On-site Transportation Noise Source Impacts

Mitigation of on-site noise exposure from transportation sources may be achieved by requiring that air conditioning or some other form of mechanical ventilation will be provided for all indoor office spaces.

5.2 On-Site Stationary Noise Source Impacts (Not significant with mitigation):

The city's noise element (Policies H-1a and H-1-l) pertain to outdoor activity areas and interior spaces. The proposed commercial office building will not have outdoor activity areas, so the applicable standard is an interior hourly L_{eq} of 45 dBA. Compliance would require that noise levels from exterior on-site stationary noise sources (fans, other mechanical equipment and vehicle movements within the site) not exceed an hourly L_{eq} of 70 dBA at the building facade, and that standard commercial office building construction (minimum NLR of 25 dB) be utilized. Assuming that noise levels from on-site stationary noise sources will have to be mitigated so as not to exceed applicable standards within nearby (off-site) residential areas, the project will achieve an acceptable interior noise level.

Mitigation of On-site Stationary Noise Source Impacts

Mitigation of on-site noise exposure from stationary sources may be achieved by requiring that air conditioning or some other form of mechanical ventilation will be provided for all indoor office spaces.

5.3 Off-Site Transportation Noise Source Impacts (Not significant):

The project could result in an increase in traffic on some roadways in the project area. The potential for significant increases in traffic noise exposure at off-site noise-sensitive uses was analyzed using the above-referenced traffic impact study and the FHWA Model. Traffic noise modeling assumptions are summarized in Appendix B. Since the noise-sensitive uses of concern are residential uses, traffic noise exposure was calculated using the DNL metric.

Traffic noise levels were calculated at typical residential setbacks for selected roadways in the project area for existing and future (2030) conditions. Calculated DNL values with and without the project were compared to determine if the project would cause traffic noise levels to exceed the city/county 60 dB DNL exterior standard (Policy H-1-a) or result in a significant noise level increase (Policy H-1-b). Existing noise barriers or other noise mitigation features were not accounted for in the calculations since the analysis is intended to demonstrate the *relative change* in traffic noise exposure that could occur as a result of the project.

Table V summarizes the findings of the off-site traffic noise analysis. Shown by the table are existing and future (2030) traffic noise levels at typical residential setbacks near intersections analyzed by the TPG Traffic Impact Study. Typical residential setbacks were determined by reference to aerial photographs of the area and field observations by BBA staff. A typical residential setback of 50 feet from the center of the roadway was assumed for all roadways to provide a worst-case assessment of traffic noise exposure. Many existing homes in the project

area are located at greater distances from the roadway or are acoustically shielded from roadway traffic noise by intervening buildings or sound walls.

Table V shows that cumulative (2030 with project) traffic exposure along the roadways analyzed could increase by up to 1.0 dB as a result of the project. Such increases are not considered significant as defined by the noise element. Additionally, the project would not cause traffic noise levels to exceed the city/county 60 dB DNL standard along any of the roadway segments analyzed.

TABLE V

SUMMARY OF CUMULATIVE (2030) TRAFFIC NOISE IMPACTS
FIG GARDEN FINANCIAL CENTER PHASE IV PROJECT

Roadway	Roadway Segment	DNL (dB) @ Typical Residential Setback[1]				
		Existing	2030 No Project	2030 Project	Change[2]	Significant?
Palm Avenue	n/o Barstow Ave	69.9	71.0	71.0	-0-	No
	s/o Barstow Ave	70.1	70.7	70.8	+0.1	No
	n/o San Jose Ave	69.9	70.5	70.6	+0.1	No
	s/o San Jose Ave	69.7	70.4	70.6	+0.2	No
	n/o Shaw Ave	69.6	70.4	70.6	+0.2	No
	s/o Shaw Ave	68.1	69.4	69.5	+0.1	No
	n/o Gettysburg Ave	67.3	69.0	69.1	+0.1	No
Barstow Avenue	w/o Palm Ave	65.4	65.9	65.9	-0-	No
	e/o Palm Ave	65.0	65.8	65.8	-0-	No
San Jose Avenue	e/o Palm Ave	61.9	58.9	59.9	+1.0	No
Shaw Avenue	w/o Palm Ave	71.6	72.2	72.2	-0-	No
	e/o Palm Ave	72.0	72.6	72.6	-0-	No
Gettysburg Avenue	w/o Palm Ave	56.6	60.8	60.9	+0.1	No
	e/o Palm Ave	57.2	60.1	60.1	-0-	No

[1]A typical residential setback was assumed to be 50 feet from the center of the roadway.
[2] Reported changes determined by subtracting 2030 No Project noise levels from 2030 Project noise levels.

Source: Brown-Buntin Associates, Inc.

5.4 Off-Site Stationary Noise Source Impacts (Not significant with mitigation):

Noise from ventilation fans associated with the underground parking garage for the proposed office building and vehicle movements within the project site have the potential to exceed applicable city or county standards, depending upon project design. Typical maximum noise levels from mechanical ventilation systems are in the range of 60-70 dBA at a distance of 50 feet. Low-speed vehicle movements within a driveway or parking lot typically produce noise levels in the range of 60 to 65 dBA at a distance of 40 feet. Noise sources in parking lots that are not related to vehicle movements may include voices, stereo systems, honking horns and the opening and closing of car doors and trunk lids.

The precise location and configuration of ventilation equipment associated with the underground parking garage were unknown to BBA at the time this analysis was prepared. Vehicle access to the underground parking garage would be located on the east side of the office building. Vehicles would utilize driveways to be located on the north and south sides of the building to access the surface parking lot on the east side of the building and the entrance to the underground parking garage. Vehicles would pass as close as about 40 feet from the closest noise-sensitive uses to the south and 120 feet from the closest noise-sensitive uses to the north of the project site. The project design includes a six (6) foot high block wall around the north, east and south perimeters of the project site.

As previously noted, noise-sensitive receptors to the south and east of the project site are located in an unincorporated area of Fresno County. Noise-sensitive receptors to the north of the project site are located within the City of Fresno. The county's noise element applies a DNL standard of 60 dB to stationary noise sources, whereas the city's noise element applies hourly L_{eq} and L_{max} standards to stationary noise sources. The city's noise element standards for stationary noise sources are summarized in Table II.

The county's noise *ordinance* addresses the statistical distribution of noise over time as summarized in Table IV. The county's hourly L_{50} and L_{max} standards are comparable to the hourly L_{eq} and L_{max} standards of the city's noise element as described above. As previously noted, the city's noise element is more restrictive than its noise ordinance with regard to stationary noise sources.

The above-referenced six-foot high block wall around the site perimeter would be expected to reduce noise from vehicle movements within the parking lot and driveways by a minimum of 5 dB. This will be sufficient to achieve compliance the daytime and/or nighttime hourly L_{50} standards of the county's noise *ordinance* and the 60 dB DNL standard of the county's noise *element* at all noise-sensitive receptors within the unincorporated area of the county. Noise from vehicle movements within the site would also not be expected to exceed the hourly L_{eq} standards of the city's noise element to the north of the project site.

With respect to maximum noise levels, on-site vehicle movements would be expected to produce L_{max} values in the range of 55-60 dBA at the closest residential receptors to the south of the project site after acoustic shielding from the proposed perimeter block wall is taken into consideration. Such levels would not exceed the 65 dBA nighttime or 70 dBA daytime L_{max} standards of the county's noise ordinance. Maximum noise levels from on-site vehicle movements would also comply with applicable city standards at the closest residential receptors to the north of the site.

Mitigation of Off-site Stationary Noise Source Impacts

Ventilation systems and other mechanical equipment should be designed so that their noise levels do not exceed an hourly L_{eq} of 45 dBA at the closest off-site noise-sensitive uses. As noted previously, the hourly L_{eq} descriptor used by the city is comparable to the hourly L_{50} descriptor used by the county. Mitigation measures may include shielding of proposed fan inlet/outlet openings or other acoustical design features to reduce noise at the source.

5.5 Off-Site Construction Noise and Vibration (Not significant with mitigation):

During construction of the proposed office building, noise from construction activities could potentially impact noise-sensitive land uses in the immediate area. Activities associated with construction would generate noise levels at 50 feet as indicated by Table VI. Most of the heavy equipment that produces the highest noise levels would only be used for demolition of existing structures, project grading and excavation or during utility construction.

Vibration from demolition and/or construction activities could occasionally be perceptible at the closest sensitive land uses. The primary vibratory sources during demolition or construction within the project area would likely be large bulldozers or excavators and loaded trucks. Typical bulldozer or loaded truck activities generate an approximate vibration level of 86-87 VdB at a distance of 25 feet. Typically, vibration levels must exceed 80 VdB before annoyance occurs or 100 VdB before building damage occurs.

TABLE VI

TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Maximum Level, dB (50 Ft.)
Backhoe	78
Concrete Saw	90
Crane	81
Excavator	81
Front End Loader	79
Jackhammer	89
Paver	77
Pneumatic Tools	85
Bulldozer	82

Source: FHWA[9]

Mitigation of Off-site Construction Noise and Vibration Impacts

Construction noise or vibration are not usually considered to be significant impacts if construction occurring near noise-sensitive land uses is limited to the daytime hours, extraordinary noise-producing activities (e.g., pile driving) are not anticipated, and construction equipment is adequately maintained and muffled. Construction activities should not be allowed between the hours of 10:00 p.m. and 7:00 a.m.

6. SOURCES CONSULTED

1. City of Fresno, Noise Element of the 2025 General Plan, February 1, 2002.

2. City of Fresno, Municipal Code, Section 9-2701 (a).

3. U.S. Department of Transportation, Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, April 1995.

4. Federal Highway Administration, Traffic Noise Model, Version 2.5, April 14, 2004.

5. TPG Consulting, Inc., *Villas at Fig Garden Traffic Impact Analysis Report*, April 2010.

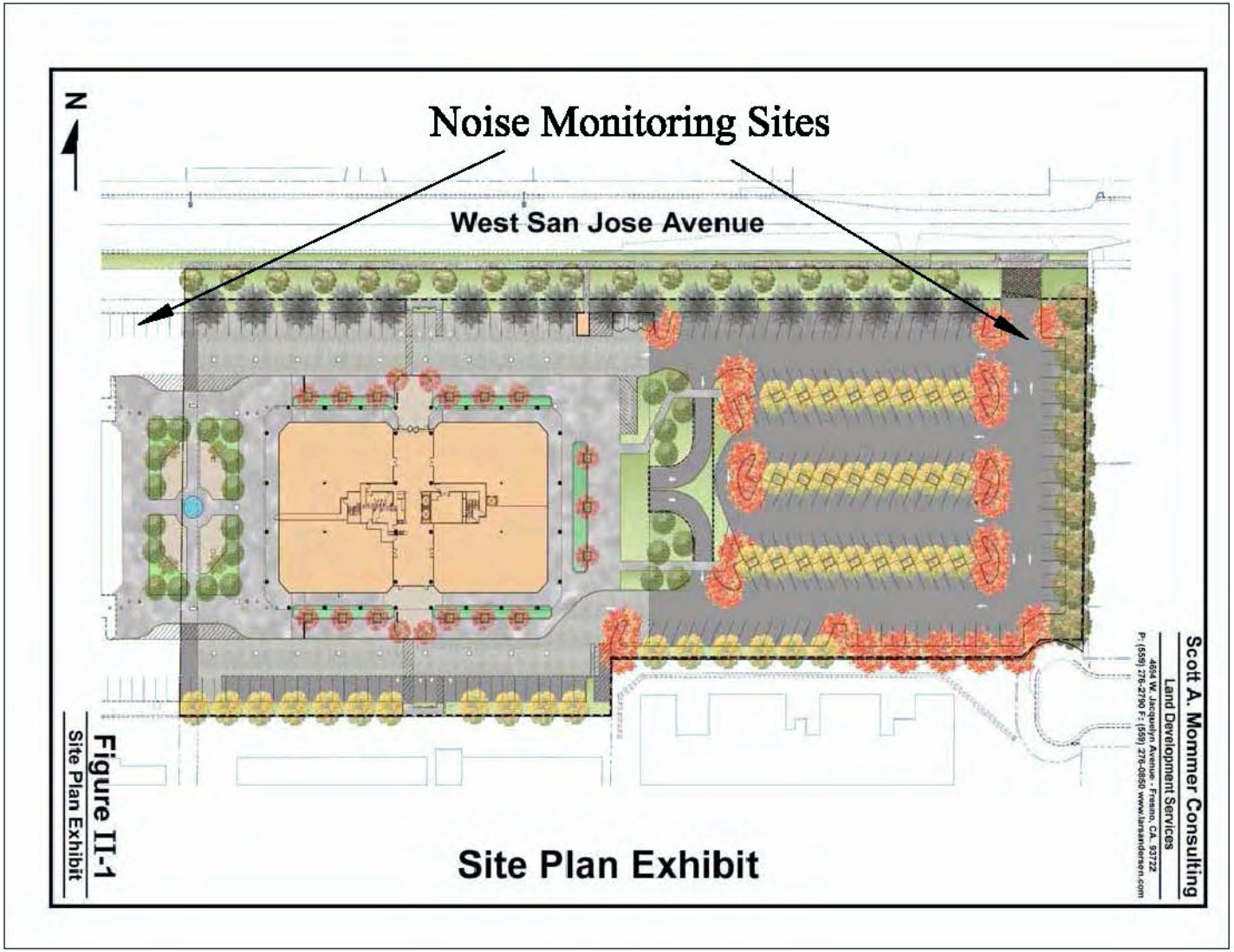
6. Public Information Office, 144th Fighter Wing, California Air National Guard, telephone conversation, August 29, 2011.

7. City of Fresno, *FAR Part 150 Noise Exposure Maps for Fresno-Yosemite International Airport*.

8. California High Speed Rail Authority, *Draft Environmental Impact Report and Statement for Merced-Fresno Section*, August 9, 2011.

9. Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, January 2006.

Figure 1: Project Site Plan and Noise Monitoring Sites



APPENDIX A

ACOUSTICAL TERMINOLOGY

AMBIENT NOISE LEVEL: The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

CNEL: Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

DECIBEL, dB: A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

DNL/L_{dn}: Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

L_{eq}: Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.

NOTE: The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while L_{eq} represents the average noise exposure for a shorter time period, typically one hour.

L_{max}: The maximum noise level recorded during a noise event.

L_n: The sound level exceeded "n" percent of the time during a sample interval (L_{90}, L_{50}, L_{10}, etc.). For example, L_{10} equals the level exceeded 10 percent of the time.

A-2

ACOUSTICAL TERMINOLOGY

NOISE EXPOSURE CONTOURS: Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

NOISE LEVEL REDUCTION (NLR): The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of Anoise level reduction@ combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

SEL or SENEL: Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SOUND LEVEL: The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

SOUND TRANSMISSION CLASS (STC): The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

APPENDIX B

TRAFFIC NOISE MODELING ASSUMPTIONS

Brown Buntin Associates, Inc Appendix B-1
FHWA-RD-77-108
Calculation Sheets
August 30, 2011

Project #:	09-001A	**Contour Levels (dB)**	55	60	65	70	
Description:	Fig Garden Financial Center Phase IV-Existing plus Project						
Ldn/Cnel:	Ldn						
Site Type:	Soft						

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	Truck % Med	Truck % Hvy	Speed mph	Dist ft	Offset dB
1	Palm Avenue	n/o Barstow Ave	25150	90		10	3	2	40	50	
2	Palm Avenue	s/o Barstow Ave	26330	90		10	3	2	40	50	
3	Palm Avenue	n/o San Jose Ave	25170	90		10	3	2	40	50	
4	Palm Avenue	s/o San Jose Ave	23910	90		10	3	2	40	50	
5	Palm Avenue	n/o Shaw Ave	23460	90		10	3	2	40	50	
6	Palm Avenue	s/o Shaw Ave	16650	90		10	3	2	40	50	
7	Palm Avenue	n/o Gettysburg Ave	13750	90		10	3	2	40	50	
8	Barstow Avenue	w/o Palm Ave	14580	90		10	2	1	35	50	
9	Barstow Avenue	e/o Palm Ave	13380	90		10	2	1	35	50	
10	San Jose Avenue	e/o Palm Ave	13680	90		10	2	1	25	50	
11	Shaw Avenue	w/o Palm Ave	36650	90		10	3	2	40	50	
12	Shaw Avenue	e/o Palm Ave	40200	90		10	3	2	40	50	
13	Gettysburg Aven	w/o Palm Ave	2740	90		10	2	1	30	50	
14	Gettysburg Aven	e/o Palm Ave	3160	90		10	2	1	30	50	
15	San Jose Avenue	at Site	430	90		10	2	1	25	50	

Brown Buntin Associates, Inc Appendix B-2
FHWA-RD-77-108
Calculation Sheets
August 30, 2011

Project #:	09-001A	**Contour Levels (dB)**	55	60	65	70	
Description:	Fig Garden Financial Center Phase IV-2030 No Project						
Ldn/Cnel:	Ldn						
Site Type:	Soft						

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	Truck % Med	Truck % Hvy	Speed mph	Dist ft	Offset dB
1	Palm Avenue	n/o Barstow Ave	31890	90		10	3	2	40	50	
2	Palm Avenue	s/o Barstow Ave	29860	90		10	3	2	40	50	
3	Palm Avenue	n/o San Jose Ave	28970	90		10	3	2	40	50	
4	Palm Avenue	s/o San Jose Ave	28030	90		10	3	2	40	50	
5	Palm Avenue	n/o Shaw Ave	28070	90		10	3	2	40	50	
6	Palm Avenue	s/o Shaw Ave	22140	90		10	3	2	40	50	
7	Palm Avenue	n/o Gettysburg Ave	20180	90		10	3	2	40	50	
8	Barstow Avenue	w/o Palm Ave	16590	90		10	2	1	35	50	
9	Barstow Avenue	e/o Palm Ave	16080	90		10	2	1	35	50	
10	San Jose Avenue	e/o Palm Ave	6880	90		10	2	1	25	50	
11	Shaw Avenue	w/o Palm Ave	42360	90		10	3	2	40	50	
12	Shaw Avenue	e/o Palm Ave	46290	90		10	3	2	40	50	
13	Gettysburg Aven	w/o Palm Ave	7290	90		10	2	1	30	50	
14	Gettysburg Aven	e/o Palm Ave	6140	90		10	2	1	30	50	
15	San Jose Avenue	at Site	510	90		10	2	1	25	50	

Brown Buntin Associates, Inc Appendix B-3
FHWA-RD-77-108
Calculation Sheets
August 30, 2011

Project #:	09-001A	**Contour Levels (dB)**	55	60	65	70	
Description:	Fig Garden Financial Center Phase IV-2030 Project						
Ldn/Cnel:	Ldn						
Site Type:	Soft						

				Day	Eve	Night	Truck %		Speed	Dist	Offset
Segment	**Roadway Name**	**Segment Description**	**ADT**	**%**	**%**	**%**	**Med**	**Hvy**	**mph**	**ft**	**dB**
1	Palm Avenue	n/o Barstow Ave	32320	90		10	3	2	40	50	
2	Palm Avenue	s/o Barstow Ave	30540	90		10	3	2	40	50	
3	Palm Avenue	n/o San Jose Ave	29650	90		10	3	2	40	50	
4	Palm Avenue	s/o San Jose Ave	29010	90		10	3	2	40	50	
5	Palm Avenue	n/o Shaw Ave	29020	90		10	3	2	40	50	
6	Palm Avenue	s/o Shaw Ave	22700	90		10	3	2	40	50	
7	Palm Avenue	n/o Gettysburg Ave	20640	90		10	3	2	40	50	
8	Barstow Avenue	w/o Palm Ave	16700	90		10	2	1	35	50	
9	Barstow Avenue	e/o Palm Ave	16220	90		10	2	1	35	50	
10	San Jose Avenue	e/o Palm Ave	8540	90		10	2	1	25	50	
11	Shaw Avenue	w/o Palm Ave	42640	90		10	3	2	40	50	
12	Shaw Avenue	e/o Palm Ave	46880	90		10	3	2	40	50	
13	Gettysburg Aven	w/o Palm Ave	7310	90		10	2	1	30	50	
14	Gettysburg Aven	e/o Palm Ave	6150	90		10	2	1	30	50	
	San Jose Avenue	at Site	510	90			2	1	25	50	

APPENDIX H

TRAFFIC IMPACT STUDY

TRAFFIC IMPACT STUDY

FOR THE

FIG GARDEN FINANCIAL CENTER PHASE IV

Fresno, California

January 2012

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This Traffic Impact Study has been prepared under the direction of Walter V. Hutcheson. Walter V. Hutcheson attests to the technical information contained therein and has judged the qualifications of recommendations, conclusions, and decisions are based on City of Fresno guidelines, general engineering standards, and California/Federal laws.

This report and the data contained herein have been prepared expressly for the purposes of this project. The use of this data, the conclusions contained in the report or the information provided herein by individuals or agencies is done so at their sole discretion and at their own responsibility. Publication of this document does not warrant the use of the data, the conclusions or the information for any purpose other than that described within this report.

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TRAFFIC IMPACT STUDY
FOR THE
FIG GARDEN FINANCIAL CENTER
PHASE IV

CHAPTER 1 – INTRODUCTION

This Traffic Impact Study (TIS) was prepared to assess the traffic impacts due to the proposed Fig Garden Financial Center Phase IV (Project), which will be located on the south side of West San Jose Avenue between Maroa and Palm Avenues in the City of Fresno. The approximately 3.96 acre site is currently occupied by a vacant, single-level apartment complex with 44 units. The proposed Project will be comprised of a four-story 104,593 square foot (sf) office building. This study evaluates the impacts of the proposed development on adjacent segment and intersection operations and provides an assessment of the Project driveways and on-site circulation. Figure 1-1 shows the Project location.

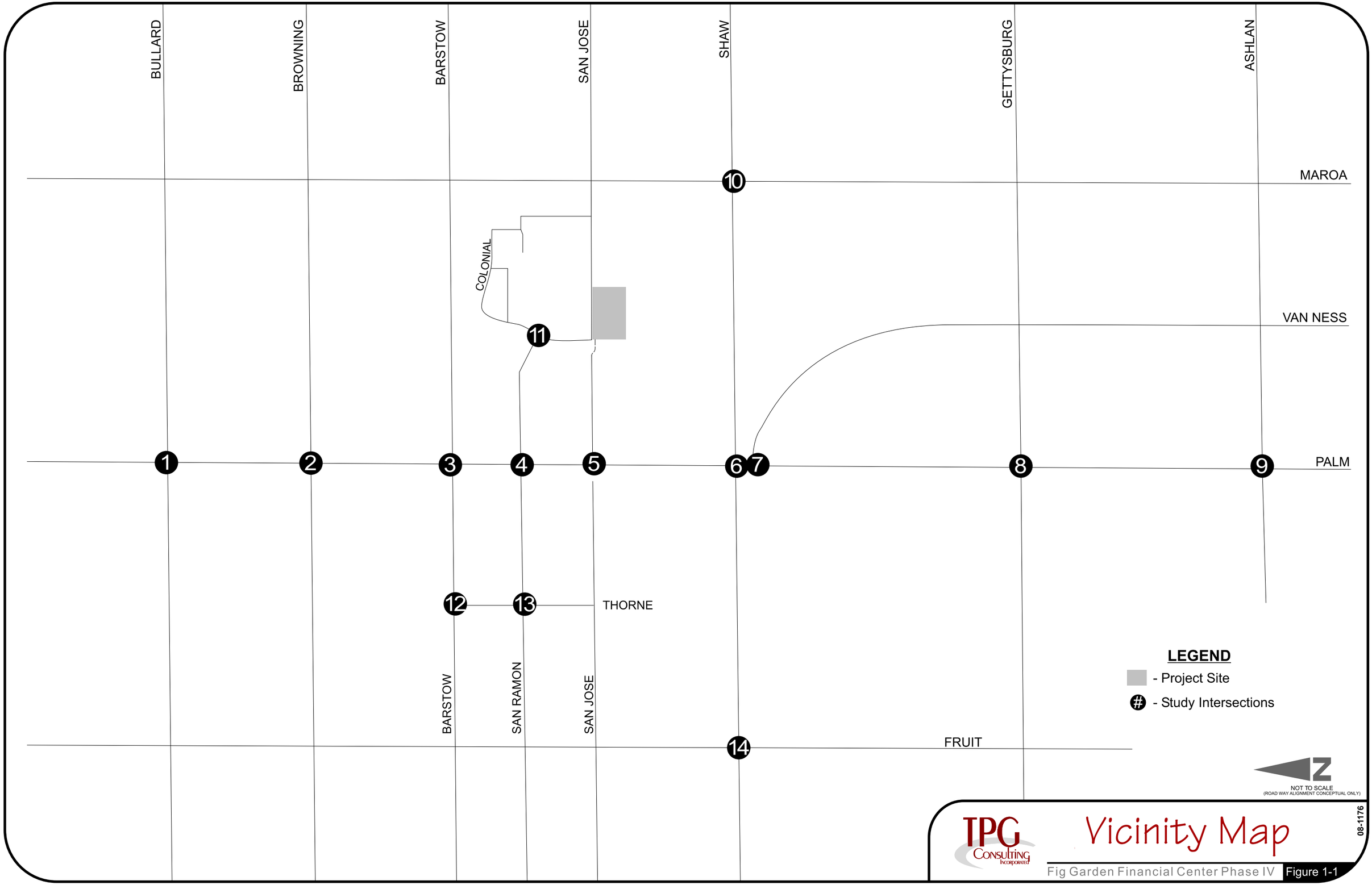
The Project study area for the analysis of traffic impacts extends from Bullard Avenue (north) to Ashlan Avenue (south) and from Fruit Avenue (west) to Maroa Avenue (east). This report analyzes fourteen (14) intersections and eleven (11) segments for two (2) time periods (weekday AM and PM peak hours). Unsignalized and signalized intersection levels of service (LOS) were calculated using *Synchro 7.0* software, which is an industry standard and is recognized for use in the City of Fresno. The *Synchro 7.0* software is based on the *2000 Highway Capacity Manual (HCM 2000)* methodology, which is also an industry standard. Segment levels of service were calculated using the unadjusted *2007 Florida Tables*. Signal warrants were prepared using the *California Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*. The analysis methodology used in this report is included in Appendix A.

Queue lengths for the movements at the study intersections were also calculated based on the LOS calculations. The signalized intersection queue lengths are not calculated using the *HCM 2000* methodology. Therefore the queue length calculations for the signalized study intersections are calculated using *Synchro 7.0* methodologies and are included in Appendix B.

To analyze the traffic impacts resulting from the build out of the Project, the following five (5) scenarios were evaluated:

- Existing (2011) Traffic Conditions
- Existing Plus the Project Traffic Conditions
- Existing Plus Approved Projects Plus the Project
- 2030 No Project Traffic Conditions
- 2030 Plus the Project Traffic Conditions

Growth increments developed from the Council of Fresno County Governments (COFCG) Fresno County Traffic Model (Model) were used to develop the 2030 No Project volumes. The model years used to develop the 2030 No Project growth increments were 2008 and 2030.



TPG Consulting Incorporated

Vicinity Map

Fig Garden Financial Center Phase IV | Figure 1-1

08-1176

CHAPTER 2 – EXECUTIVE SUMMARY

The Fig Garden Financial Center Phase IV trip generation was developed using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, which is the recommended methodology in the City of Fresno. Table 2-1 shows the Project trip generation used in this analysis.

TABLE 2-1:
FIG GARDEN FINANCIAL CENTER PHASE IV TRIP GENERATION DATA

		AM			PM		
Land Use	**Daily**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
General Office Building	**1,381**	**171**	**23**	**194**	**33**	**163**	**196**

2.1 Thresholds of Significance

2.1.1 Level of Service Standards

City of Fresno

According to the City of Fresno's Traffic Impact Study Guidelines:

> *"All City intersections and roadway segments shall operate at a LOS D or better under the near-term conditions, unless a finding of overriding consideration was adopted in the General Plan MEIR. Under long-term conditions (Year 2030 Conditions) all City intersections and roadway segments shall operate at a LOS D or better, except for the roadway segments adopted in the General Plan MEIR to operate at LOS E or F."*[1]

The City's General Plan MEIR identifies four (4) study area roadway segments that have been adopted to operate below the LOS D policy, as follows:

- Bullard Avenue – Marks to Fresno – LOS F
- Barstow Avenue – Palm to Blackstone – LOS F
- Shaw Avenue – Brawley to SR 168 – LOS F
- Ashlan Avenue – Fruit to Maple – LOS F

Since the General Plan MEIR found the above roadway segments were projected to operate below the LOS D standard, a finding of overriding considerations was made for those segments. The potential improvements required for those segments to operate at LOS D were determined to be infeasible by the Master EIR, therefore all City of Fresno study segments shown above will be evaluated against the LOS F policy. The remaining study locations within the City of Fresno will be evaluated against the LOS D policy.

County of Fresno

According to the Fresno County General Plan Circulation Element:

> *"The County shall plan and design its roadway system in a manner that strives to meet level of service (LOS) D on urban roadways within the spheres of influence of the cities of Fresno and Clovis and LOS C on all other roadways in the County."*[2]

[1] *City of Fresno Traffic Impact Study Guidelines*, City of Fresno, February 2009, Page 3.
[2] *County of Fresno 2000 General Plan*, The County of Fresno, August 2010 , Page 2-99.

The County's General Plan EIR identifies that Ashlan Avenue, east and west of Palm Avenue, is currently operating and projected to operate at LOS F under all scenarios. No improvements (widening to four lanes) are considered feasible for this segment of Ashlan Avenue. As such, the County has adopted an overriding consideration for this segment. Therefore, the intersection of Ashlan Avenue at Palm Avenue will be evaluated against the City's adopted LOS standard (LOS D).

All study intersections and segments were evaluated according to the appropriate adopted LOS standard based on the controlling agency's policies. Table 2-2 shows the adopted LOS policy for each study location.

2.1.2 Significant Impact Threshold

According to the City of Fresno Traffic Impact Study Guidelines[3]:

> *"For study intersections, the impact is considered significant if the addition of the traffic generated from the proposed project results in any one of the following:*
>
> 1. *Triggers an intersection operating at acceptable LOS to operate at unacceptable levels of service*
> 2. *Triggers an intersection operating at unacceptable LOS (LOS E) to operate at LOS F*
> 3. *Increases the average delay for a study intersection that is already operating at unacceptable LOS"*

After each study intersection has been evaluated against the LOS policy, those locations found to be deficient were compared to the above policies to determine the level of significance of the potential impacts.

For study segments with an adopted LOS F standard, the significance criteria for Project-related impacts are identified in the General Plan MEIR as follows:

> *Development projects that are consistent with plans and policies but that could affect conditions on major street segments predicted by the General Plan EIR traffic analysis to perform at an ADT LOS "F" shall not cause further substantial degradation of conditions on those segments before 2025 without completing a traffic and transportation evaluation. This evaluation will be used to determine appropriate project-specific design measures or street/transportation improvements that will contribute to achieving and maintaining a LOS equivalent to that anticipated in the General Plan. Further substantial degradation is defined as an increase in the peak hour vehicle/capacity (v/c) ratio of 0.15 or greater for roadway segments whose v/c ratio is estimated to be 1.00 or higher in 2025 by the General Plan EIR.*[4]

The v/c increase (0.15) criteria was applied to determine what, if any, significant project-related impacts occur for all study locations with Master EIR adopted LOS F standards and which are projected to operate at LOS F. As shown below, none of the study segments meet this criteria.

It had been previously understood that the General Plan MEIR's adoption of an alternative LOS for specified impacted segments of the major street network encompassed the adoption of the alternative LOS standard for intersections along the identified segment (MEIR at page V-B16-17). The City of

[3] *City of Fresno Traffic Impact Study Guidelines*, City of Fresno, February 2009, Page 10.
[4] *Draft Master Environmental Impact Report for the 2025 General Plan*, City of Fresno, May 2002, Page V-B17

Fresno Public Works Department has recently stated that it does not believe the General Plan MEIR made such a finding with respect to the intersections along those impacted segments, and that the MEIR's adoption of an alternative LOS for impacted roadway networks relates solely to the roadway segments.

This traffic study finds that many of the intersections along the impacted roadway network will operate at less than the LOS D standard, without the Project. That circumstance reflects an existing cumulative significant impact under the existing General Plan. Therefore, in evaluating the impacts of the Project to intersections along the impacted segments, this EIR takes the approach that the incremental effects of the Project are cumulatively considerable (and thereby a significant cumulative impact), only if one of two criteria exists:

1. *Triggers an intersection operating at unacceptable LOS (LOS E) to operate at LOS F.*
2. *Increases the average delay **by five or more seconds** for a study intersection that is already operating at unacceptable LOS.*[5]

The change in the second criteria from the City of Fresno's published Traffic Impact Study Guidelines to include the addition of the 5 second criteria is consistent with the standards adopted by the City in its certification of the Fresno El Paseo Environmental Impact Report (SCH #2008011003). This criterion was also used in the recently published EIR for the Fresno Southeast Walmart Expansion Project (SCH #2007091064)[6]. This criteria, although not included in the City of Fresno's TIS Guidelines or the General Plan MEIR, is commonplace in many jurisdictions including: The Cities of Bakersfield and Folsom and in the County of Sonoma (among many other jurisdictions).

2.2 Level of Service Analysis

Table 2-2 shows the levels of service (LOS) for the study segments and intersections for the various scenarios. Segments, intersections (signalized) or movements (unsignalized) currently operating below or projected to operate below the appropriate adopted level of service standard are shown in bold in Table 2-2. The signalized intersection levels of service shown in Table 2-2 are representative of the whole intersection. As shown in Table 2-2, the following locations, by scenario, are projected to operate below the appropriate City of Fresno or County of Fresno's adopted level of service standards:

2.2.1 Cumulative Analysis

The following segments and intersections were predicted to operate below the City of Fresno's appropriate LOS standards.

2030 Without the Project

Segments

- Barstow Avenue – Palm Avenue to Fruit Avenue – PM peak hour

Intersections

- Bullard Avenue at Palm Avenue – PM peak hour
- Barstow Avenue at Palm Avenue – PM peak hour
- Shaw Avenue at Maroa Avenue – PM peak hour

[5] *Recirculated Draft Fresno El Paseo Environmental Impact Report*, City of Fresno, August 2010, page 5.13-14.
[6] *Fresno Southeast Walmart Expansion Project*, City of Fresno, December 2010, page 157.

TABLE 2-2:
WEEKDAY LEVELS OF SERVICE SUMMARY FOR THE STUDY SEGMENTS AND INTERSECTIONS

Segment	LOS Standard	Existing LOS AM/PM	Existing Plus the Project LOS AM/PM	Existing Plus Approved Project Plus the Project[1] LOS PM	2030 No Project LOS AM/PM	2030 Plus the Project LOS AM/PM
Shaw Avenue – Palm Avenue to Fruit Avenue	F	C/C	C/C	C	C/D	C/D
Shaw Avenue – Maroa Avenue to Palm Avenue	F	C/C	C/C	C	C/D	C/D
Palm Avenue – Bullard Avenue to Barstow Avenue	D	C/C	C/C	C	C/D	C/D
Palm Avenue – Barstow Avenue to San Ramon Avenue	D	C/C	C/C	D	C/D	C/D
Palm Avenue – San Ramon Avenue to San Jose Avenue	D	C/C	C/C	D	C/D	C/D
Palm Avenue – San Jose Avenue to Shaw Avenue	D	C/C	C/C	C	C/D	C/D
Palm Avenue – Shaw Avenue to Gettysburg	D	C/C	C/C	C	C/C	C/C
San Jose Avenue – Colonial Avenue to Maroa Avenue	D	C/C	C/C	C	C/C	C/C
San Ramon Avenue – Palm Avenue to Fruit Avenue	D	C/C	C/C	C	C/C	C/C
Barstow Avenue – Palm Avenue to Fruit Avenue	D	C/D	C/D	D	D/**F**	D/**F**
Thorne Avenue – Barstow Avenue to San Ramon Avenue	D	C/C	C/C	C	C/C	C/C

Intersection	LOS Standard	LOS AM/PM	Delay[2] AM/PM	LOS AM/PM	Delay[2] PM	LOS PM	Delay[2] PM	LOS AM/PM	Delay[2] AM/PM	LOS AM/PM	Delay[2] AM/PM
Bullard Avenue at Palm Avenue	D	C/D	34.2/38.8	D/D	35.4/39.6	D	51.1	D/F	49.0/100.3	D/F	51.3/102.8
Browning Avenue at Palm Avenue	D	B/A	14.6/8.7	B/B	14.8/8.8	B	14.3	B/C	16.6/22.8	B/C	16.9/23.0
Barstow Avenue at Palm Avenue	D	C/C	20.6/29.9	C/C	21.1/31.2	D	54.1	C/F	33.3/81.1	C/F	34.8/84.5
San Ramon Avenue at Palm Avenue											
• NB Left	D	B/B	10.7/10.0	B/A	11.1/9.9	B	10.5	A/B	9.6/11.9	A/B	9.8/12.1
• SB Left		A/B	9.4/10.9	A/B	9.4/11.3	B	12..4	A/B	9.1/14.0	A/B	9.1/14.7
• EB Approach		B/B	13.6/14.9	B/B	13.6/14.4	B	13.1	B/C	11.7/15.9	B/C	11.7/16.4
• WB Approach		C/B	20.0/15.0	C/B	19.2/15.0	B	14.5	C/C	15.1/17.1	B/C	14.5/18.1
San Jose Avenue at Palm Avenue	D	A/B	10.0/15.9	B/B	12.5/18.0	B	19.5	A/B	9.1/16.1	B/B	10.6/17.9
Shaw Avenue at Palm Avenue	D	D/D	37.2/39.2	D/D	38.3/42.1	D	49.2	C/C	29.7/32.9	C/C	27.4/35.0
Van Ness Avenue at Palm Avenue	D										
• WB Right		B/B	11.8/11.1	B/B	12.0/11.2	B	11.4	B/B	10.8/10.9	B/B	11.0/11.0
Gettysburg Avenue at Palm Avenue	D	A/A	7.1/6.4	A/A	7.1/6.3	A	6.3	B/A	10.3/9.9	B/B	10.3/10.1
Ashlan Avenue at Palm Avenue	D	B/B	14.6/19.1	B/B	15.0/19.4	C	20.9	B/C	16.8/28.9	B/C	16.8/29.2
Barstow Avenue at Thorne Avenue								C/C	26.8/24.3	C/C	26.9/23.9
• WB Left	D	A/A	9.3/8.5	A/A	9.3/8.5	A	9.0				
• NB Approach		D/B	33.6/14.2	D/B	34.6/14.4	C	18.6				
San Ramon Avenue at Thorne Avenue											
• EB Approach	D	B/A	10.9/9.8	B/A	10.9/9.8	B	10.1	B/A	10.3/9.6	B/B	10.3/9.6
• WB Approach		B/A	10.5/9.8	B/A	10.5/9.8	A	10.0	A/A	10.0/9.7	A/B	10.0/9.7
• NB Approach		A/A	0.0/0.5	A/A	0.0/0.5	A	0.5	A/A	0.0/0.4	A/A	0.0/0.4
• SB Approach		A/A	4.9/1.4	A/A	4.9/1.4	A	2.0	A/A	4.8/1.9	A/A	4.8/1.9
Shaw Avenue at Fruit Avenue	D	B/B	13.6/14.4	B/B	13.6/14.8	B	14.9	B/B	15.8/17.5	B/B	14.7/17.2
Shaw Avenue at Maroa Avenue	D	B/B	13.3/19.5	B/B	13.4/19.6	C	22.0	B/E	19.4/75.1	B/E	17.2/72.2
San Ramon Avenue at Colonial Avenue											
• NB Left-Through	D	A/A	5.5/3.7	A/A	5.6/3.7	A	3.7	A/A	5.8/3.8	A/A	5.9/3.8
• EB Approach		A/A	8.8/8.9	A/A	8.8/8.9	A	8.9	A/A	8.8/8.9	A/A	8.8/8.9

[1] *No AM peak hour Approved Project traffic – only PM peak hour analyzed*
[2] *delay in seconds per vehicle*
NB = northbound *SB = southbound* *EB = eastbound* *WB = westbound*

2030 Plus the Fig Garden Project

Segments

- Barstow Avenue – Palm Avenue to Fruit Avenue – PM peak hour

Intersections

- Bullard Avenue at Palm Avenue – PM peak hour
- Barstow Avenue at Palm Avenue – PM peak hour
- Shaw Avenue at Maroa Avenue – PM peak hour

2.2.2 Fig Garden Project-Specific Analysis

After determination of the cumulative analysis identified in the LOS analysis, the significance criteria were applied to determine what, if any, impacts are project-related. Based on the City's significant impact threshold, none of the study locations that are projected to operate below the appropriate adopted LOS standard are significantly impacted by the Project. For locations with an LOS F standard that are projected to operate at LOS F in the 2030 without the Project and in the 2030 Plus the Fig Garden Project scenarios, the overall intersection delay increase was analyzed to determine what, if any, significant project-related impacts occur. The results of the delay comparison are as follows:

Intersections

- Bullard Avenue at Palm Avenue – increase in average delay = 2.8 < the 5 sec threshold
  - 2030 No Project PM Delay: = 100.3
  - 2030 Plus the Project: PM Delay: = 102.8
- Barstow Avenue at Palm Avenue – increase in average delay = 3.4 < the 5 sec threshold
  - 2030 No Project: PM Delay: = 81.1
  - 2030 Plus the Project: PM Delay: = 84.5
- Shaw Avenue at Maroa Avenue – decrease in average delay = 2.9 < 5 the sec threshold
  - 2030 No Project: PM Delay = 75.1
  - 2030 Plus the Project: PM Delay = 72.2

As shown above, all average delay changes associated with the Project are projected to be below the 5 second increase threshold of significance. There are no significant impacts as a result of the development of the Fig Garden Financial Center Phase IV Project.

2.3 Roadway Improvements

2.3.1 City of Fresno

Potentially recommended improvements (such as addition of through and turn lanes, changes in signal phasing, movement restriction, etc.) have been evaluated against the established criteria presented in the City of Fresno's TIS Guidelines, as follows:

> *"For all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any). All mitigations should be reviewed in the field to make sure that they can be accommodated. If they cannot be*

> *accommodated or are not feasible please advise in the TIS so that the applicant and the City of Fresno are aware of right-of-way issues in advance."*[7]

As shown above, the Project does not create any project-specific significant impacts to the analysis roadways. Therefore, the Project will pay the City's Fresno Major Street Improvement (FMSI) and Traffic Signal Mitigation Impact (TSMI) fees to mitigate its contribution to the cumulative impacts.

2.3.2 County of Fresno

This is consistent for all County controlled locations (Browning Avenue, Van Ness Blvd, and Ashlan Avenue at their intersections with Palm Avenue) with the County's General Plan policies, as follows:

> *Draft General Plan Implementation Program TR-A.B states that the County would require new development within an unincorporated area of a city sphere of influence to pay the traffic impact fees of that city. It would be the responsibility of the cities to develop and maintain their roadway capital improvement programs and adequate funding mechanisms to maintain their adopted level of service programs for the entire sphere of influence.*[8]

2.3.3 Planned City Improvements

Based on the City of Fresno's current TSMI project list, three improvements included in the TSMI apply to the study locations. These improvements will be constructed using TSMI funds, which the Project will pay into. These improvements are as follows:

- Shaw Avenue at Palm Avenue
  - Widening to dual left-turn lanes on all four legs
    - Dual left-turn lanes are already located on the southbound approach
    - Separate right-turn lanes are already located on the westbound and southbound approaches

This improvement is currently ranked number 2 on the Fiscal Year 2011 (FY11) Priority List for Intersection Traffic Flow Improvements. The left-turn lanes and separate right-turn lanes are assumed to be in place for the 2030 No Project and 2030 Project scenarios.

- Barstow Avenue at Palm Avenue
  - Installation of left-turn signals with dedicated phases

This improvement is currently ranked number 12 on the FY11 Priority List for Warranted Left Turn Signals. The left-turn signals are assumed to be in place for the 2030 No Project and 2030 Project scenarios.

- Barstow Avenue at Thorne Avenue
  - Installation a traffic signal

This improvement is currently ranked number 14 on the FY11 Priority List for New Traffic Signal Installations. This traffic signal is warranted based on the school crossing signal warrant. As shown in the signal warrant analysis included in this report, the peak hour traffic signal warrant is not currently met or projected to be met in the future conditions. This traffic signal is assumed to be in place for the 2030 No Project and 2030 Project scenarios.

[7] *City of Fresno Traffic Impact Study Guidelines*, City of Fresno, February 2009, Page 11.
[8] *County of Fresno General Plan Update Draft Environmental Impact Report*, County of Fresno, February 2000, page 4.4-31

In addition to the improvements planned in the TSMI, additional improvements are also planned in the City of Fresno's Intelligent Transportation Systems (ITS) Program. Phase 4 of the City's ongoing traffic signal synchronization program will be to synchronize all traffic signals on Shaw Avenue from SR 99 to SR 41 (fiber) and Bullard Avenue from Marks Avenue to Willow Avenue (wireless). These improvements are programmed for some time between 2011 and 2015. Therefore, the study intersections located on these corridors have been analyzed as coordinated for the 2030 No Project and 2030 Project scenarios.

2.3.4 Cumulative Improvements

Potential improvements have been prepared for all study locations projected to operate below the appropriate adopted LOS standard. The feasibility of each of the proposed improvements is then addressed. Based on the identified right-of-way constraints, 2025 General Plan designations, on-street parking needs, existing and planned bicycle facilities, and City practices and policies, improvements are not feasible at these locations. Therefore the cumulative conditions are considered significant and unavoidable because no feasible mitigation measures are available.

2030 Without the Project

Segments

- Barstow Avenue – Palm Avenue to Fruit Avenue
  - No improvements recommended

This segment of Barstow Avenue is currently constructed to two (2) lanes with a continuous two-way left-turn lane. This is the buildout configuration for this roadway adopted in the General Plan. Further widening of Barstow Avenue would conflict with the adopted General Plan and *Bicycle, Pedestrian and Trails Master Plan* policies. If the segment was widened to four lanes, then the segment is projected to operate at LOS C in both the 2030 No Project and 2030 Plus the Project scenarios. Widening of this roadway segment would require removal of the current on-street parking on both sides of Barstow Avenue. On-street parking is needed for the residential development fronting Barstow Avenue on both sides of the street. On-street parking is also needed on the north side of the roadway for the adjacent schools. Additional right-of-way cannot be feasibly obtained for widening due to the level of residential development and the adjacent school buildings.

Intersections

- Bullard Avenue at Palm Avenue
  - No improvements recommended

All approaches to this intersection currently have separate left-turn lanes and two through lanes. Separate right-turn lanes are available on the westbound and southbound approaches. Adjacent development is located in very close proximity to the roadways on the northwest, southwest, and southeast corners, prohibiting widening on those approaches. In addition, the on-street parking located on Bullard Avenue is needed for the adjacent residential development and would likely need to be removed to accommodate widening at the intersection. The addition of through lanes and/or right-turn lanes is not feasible.

- Barstow Avenue at Palm Avenue
  - No improvements recommended

The Barstow Avenue approaches to this intersection currently have separate left-turn lanes, one through lane, and a separate right–turn lane. Palm Avenue approaches have separate left-turn lanes and two through lanes with shared right-turn lanes. See above for discussion of the roadway configuration for Barstow Avenue. Adjacent development is located in very close proximity to the

roadways on the southwest, southeast, and northeast corners, prohibiting widening on those approaches. In addition, the on-street parking located on Bullard Avenue is needed for the adjacent residential development and would likely need to be removed to accommodate widening at the intersection. The same would be required of the existing on-street bicycle lanes on Barstow Avenue. The intersection is already planned for installation of protected left-turn phasing, which is the most feasible improvement for the intersection. The addition of through lanes and/or right-turn lanes is not feasible.

- Shaw Avenue at Maroa Avenue
  - No improvements recommended

The Maroa Avenue approaches to this intersection currently have separate left-turn lanes, one through lane, and a separate right–turn lane. Shaw Avenue approaches have separate left-turn lanes and three through lanes with shared right-turn lanes. Adjacent development is located in very close proximity to the roadways on all four corners, prohibiting widening on those approaches. In addition, Maroa Avenue, south of Shaw Avenue, is constructed as a two-lane roadway with undeveloped frontages. The acquisition of additional right-of-way and removal of trees and structures would be required to extend the four-lane Maroa section to the south. The addition of right-turn lanes on Shaw Avenue or additional through lanes on Maroa Avenue are not feasible.

2.4 Project Mitigations

As previously discussed, the Fig Garden Financial Center Phase IV Project will pay the City of Fresno's TSMI and FMSI fees based on the currently adopted fee schedule at the time the Project's building permit is obtained. As requested by Caltrans in its response to the Notice of Preparation and at the Scoping meeting conducted with Caltrans on July 28, 2011, Chapter 3 of this report details the Project trips anticipated to access nearby freeway interchanges. It should also be noted that the Project is also subject to payment of the Fresno County Regional Transportation Mitigation Fee (RTMF). The RTMF is currently $1.03 per square foot for Commercial/Office/Service uses. These fees are based on the *Fresno-Madera Freeway Interchange Deficiency Study* and intended to provide mitigation for impacts to Caltrans facilities. Based on the analysis detailed in Chapter 3, the payment of the RTMF fees will provide complete mitigation for the Project's cumulative impact to State Facilities identified in Chapter 3.

CHAPTER 3 – PROJECT INFORMATION

The proposed Fig Garden Financial Center Phase IV will be located on the south side of West San Jose Avenue between Maroa and Palm Avenues in the City of Fresno. The approximately 3.96 acre site is currently occupied by a vacant, single-level apartment complex with 44 units. The proposed Project will be comprised of a four-story 104,593 square foot (sf) office building. This study evaluates the impacts of the proposed development on adjacent segment and intersection operations and provides an assessment of the Project driveways and on-site circulation. Figure 1 shows the Project location.

3.1 Project Site Use

According to the ITE *Trip Generation* manual[9], the uses analyzed in this report are defined as follows:

- "*A **General Office Building*** house multiple tenants; it is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building or buildings may contain a mixture of tenants including professional services, insurance companies, investment brokers and tenant services, such as a bank or savings and loan institution, a restaurant or cafeteria and service retail facilities."

The trip generation and trip distribution data used in the various Project analyses are described and quantified below. A copy of the site plan is shown in Figure 3-1.

3.2 Project Site Access and Circulation Analysis

Typical driveway throat length and queuing analyses are not prepared since the Project trips will all travel through existing commercial driveways (office building and/or Fig Garden Shopping Center) via cross access easements prior to reaching the City street system.

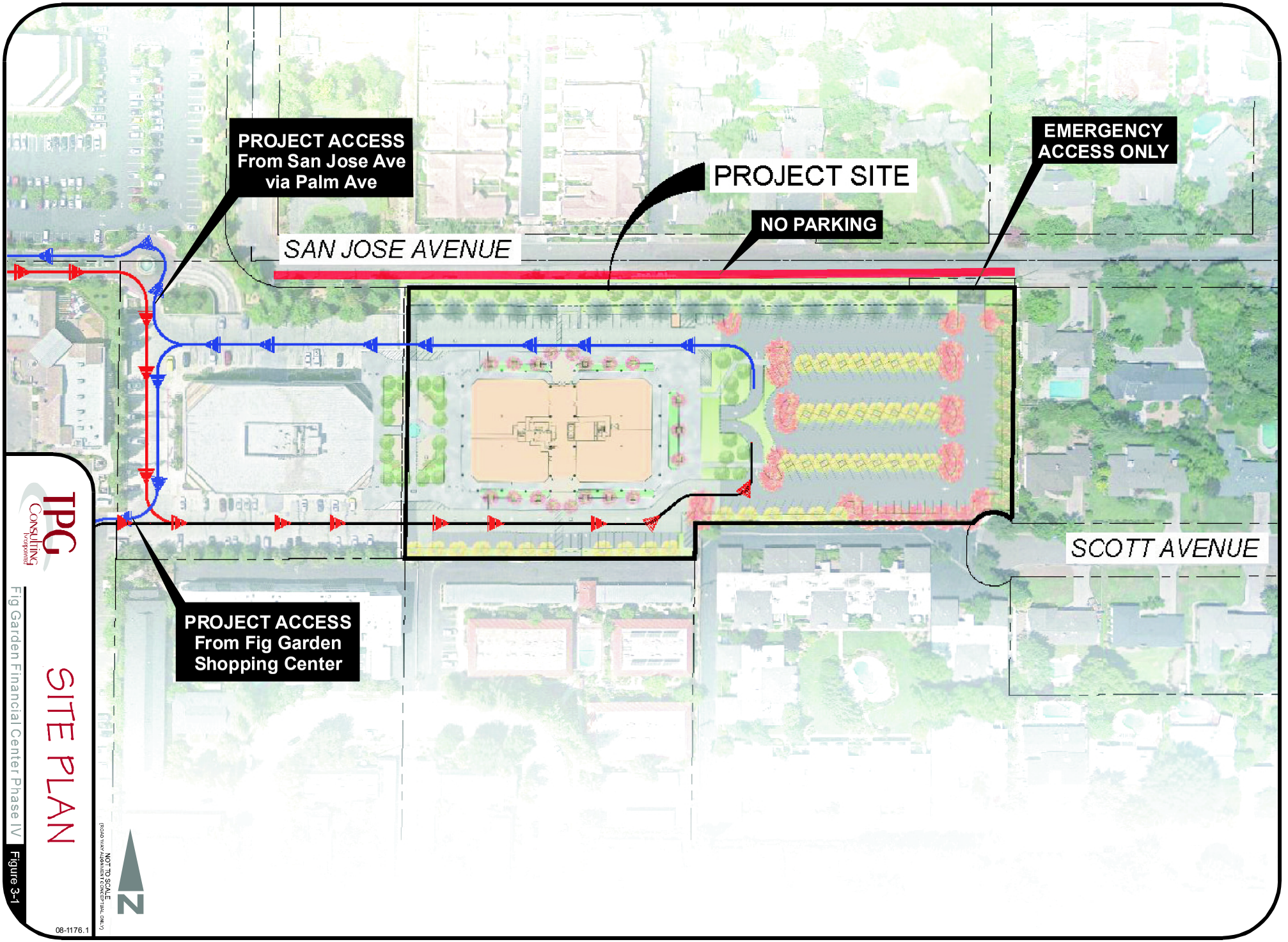
3.2.1 Existing Site Access

The vacant apartments accessed San Jose Avenue, east of Colonial Avenue, via a single driveway on the eastern side of the Project site. The trip generation for the apartments is shown below in Table 3-3. When they were occupied, the apartments functioned as a stand-alone residential development, with no vehicle access to the Fig Garden Shopping or Financial Centers. All apartment trips traveled to/from San Jose Avenue via the surrounding local residential streets.

3.2.2 Proposed Site Access

The proposed Project will remove vehicular trips from the local streets in the residential neighborhood to the north by moving the access point. All Project-related vehicle trips will access the Project through the existing parking lot for the office building west of the Project site. Vehicles may only access the Project through the Fig Garden Shopping Center or via the San Jose Avenue at Palm Avenue intersection. The Project's parking area will have no direct vehicular access to the City street system. Specifically, **NO** access will be allowed directly onto San Jose Avenue (in the residential area). The main access to the City street system is via that portion of San Jose Avenue in the vicinity of the Financial Center at the northwest corner of the adjacent office building parking lot. The southwest corner of the adjacent office building parking lot also has open access to the Fig Garden Shopping Center. Vehicular access is shown in Figure 3-1.

[9] *Trip Generation*, 8th edition, Volume 2, ITE, 2008, pages 326, 482


PROJECT ACCESS
From San Jose Ave
via Palm Ave
PROJECT SITE
EMERGENCY
ACCESS ONLY
NO PARKING
SAN JOSE AVENUE
SCOTT AVENUE
PROJECT ACCESS
From Fig Garden
Shopping Center
TPG
CONSULTING
SITE PLAN
Fig Garden Financial Center Phase IV
Figure 3-1
08-1176.1
NOT TO SCALE
(ROAD WAY ALIGNMENT CONCEPTUAL ONLY)
N

In addition to the restricted access from the Project site to San Jose Avenue, the curb on San Jose Avenue along the Project's north frontage will be restricted from Project parking by means of a red curb. This is intended to prohibit Project traffic from parking on the street and walking into the office building. As shown below in Figures 3-2 and 3-3, the Project's trip distribution is expected to add no more than 1 vehicle to the neighboring residential streets during either of the peak hour time periods. This represents approximately 0.5% of the total Project trips. These additional trips are not using the residential streets as a by-pass to the surrounding collectors and arterials; rather they are anticipated to originate within the residential areas (by the COFCG traffic model). Therefore, any new trips along these roadways will likely be made by residents of the area.

3.2.3 Pedestrian Access

Pedestrian access to the Project site is provided via entrances on the north and south sides of the Project building. Sidewalks are available on San Jose Avenue, Colonial Avenue, and San Ramon Avenue. Pedestrian access to/from the Fig Garden Shopping and Financial Centers is available through the adjacent office building parking lot, similar to the vehicular access. Sidewalks and pedestrian amenities are available within the centers. The project at the present time is not proposing direct pedestrian access from the residential neighborhood located to the north of the proposed project site.

3.2.4 Emergency Access

Emergency vehicle access to the project site is available via three (3) separate routes. These routes include; through the Fig Garden Shopping Center, San Jose Avenue (west – Palm Avenue entrance to Financial Center), and San Jose Avenue (east – residential area) via a fire access gate. The fire access gate will be closed and locked, prohibiting access for non-emergency vehicles.

3.3 Fig Garden Financial Center Phase IV Trip Generation

3.3.1 Project Trip Generation

The Project trips were developed using the ITE *Trip Generation* manual and the corresponding software.[10] It should be noted that the trip generation information prepared from the use of the manual or software is raw data to be used as a basis for further evaluation by the traffic impact study preparer. Table 3-1 lists the daily, AM and PM peak of the street average rates and the directional distribution used in this Project assessment. The ITE fitted curve equations were used to calculate the trip generation. This was done using the methodology included in the ITE *Trip Generation Handbook*.

TABLE 3-1:
ITE TRIP GENERATION DATA
AVERAGE RATE AND DIRECTIONAL DISTRIBUTION DATA

Land Use	Period	Equation	Directional Distribution (%)	
			Enter	Exit
General Office Building (ITE Land Use 710)	Daily	ln(T) = 0.77ln(X) + 3.65	50	50
	AM Peak of Street	ln(T) = 0.8ln(X) + 1.55	88	12
	PM Peak of Street	T = 1.12ln(X) + 78.81	17	83

T = number of trips *X = thousand square feet of gross leasable area*

The rates shown in Table 3-1 are based on the building's square footage as the independent variable. Table 3-2 shows the projected number of daily, AM and PM peak hour trips that would be generated by the Project based on the equations and distributional data shown in Table 3-1.

[10] *Trip Generation* (software), Version 6, Microtrans, 2008.

TABLE 3-2:
PROJECT TRIP GENERATION DATA

Land Use	Size	Daily	AM			PM		
			Enter	Exit	Total	Enter	Exit	Total
General Office Building	104,593 sf	1,381	171	23	194	33	163	196

3.3.2 Trip Capture

The City of Fresno typically does not allow the use of vehicle capture in traffic impact analysis for land use projects. However, given the proximity of the Fig Garden Shopping Center and the Fig Garden Financial Center and other office buildings, some trip capture is expected between the Project and these uses. Since the Project has access to these uses without entering the City street system, captured trips are projected to remain "on-site."

The COFCG traffic model accounts for the captured trips based on the distribution of trips between the proposed Project and the Fig Garden Shopping Center. The Model determines the trip types to and from specific uses and distributes them to compatible land uses. For instance, Home-to-Work trips will be distributed from residential land uses to commercial, industrial, etc. land uses based on average trip lengths calculated by COFCG.

The number of Project vehicle trips "captured" within the Fig Garden Shopping Center represents nearly 2% of the Project's vehicle trip generation. This percentage is consistent with the Retail-Office capture percentages shown in the ITE *Trip Generation Handbook* (2-4% for midday, PM peak hour and daily). Therefore, captured trip reductions were not calculated for the project using the ITE methodology, but were still accounted for by the model based on the compatibility and proximity of the land uses. As such, the mixed-use nature of the Project area is accounted for in a methodology acceptable to the City of Fresno.

3.4 Project Trip Distribution

Trip distribution for the Fig Garden Financial Center Phase IV Project trips was based on Model generated trip distribution data. Basically the Model determines the locations that the residents of the Project are likely to travel to and from. The Model then estimates the roadways that these residents would likely use to travel to/from the site, and calculates the number of Model generated vehicle trips projected to occur on each roadway. This roadway trip data is then converted to match the trip generation data developed for the Project. Per *Traffic Impact Analysis for Site Development*, use of a Model is one of the most commonly accepted methods for estimating trip distribution.[11] As stated previously, the Project trip distribution data was prepared using the 2030 Model.

Figures 3-2 (Existing) and 3-3 (2030) show the Project trip distribution percentages and segment and intersection assignment for the Existing Plus the Project and 2030 Plus the Project scenarios, respectively.

3.5 Interchange Trip Distribution

Per Caltrans' request, the project trips were also traced out to adjacent interchanges. Table 3-3 shows the requested interchanges and the number of Project Trips projected to utilize each one.

[11] *Traffic Impact Analysis for Site Development*, An ITE Proposed Recommended Practice, ITE, 2006, page 45.

TABLE 3-3:
FIG GARDEN FINANCIAL CENTER PHASE IV INTERCHANGE TRIP DISTRIBUTION

Interchange	Existing AM/PM	2030 AM/PM
Bullard Avenue at SR 41	3/5	11/8
Shaw Avenue at SR 41	40/38	33/32
Ashlan Avenue at SR 41	2/2	4/2
Shaw Avenue at SR 99	4/3	9/9

Caltrans, in its response to the Notice of Preparation, also requested the inclusion of the proportionate share percentages. Using the above 2030 Project trips, the Approved Project trips, and the 2011 and 2030 COFCG models, proportionate share percentages were calculated at each of the interchanges using the following formula from the Caltrans *Guide for the Preparation of Traffic Impact Studies*:

$$P = \frac{T}{T_B - T_E}$$

Where:
P = The equitable share for the proposed project's traffic impact.
T = The vehicle trips generated by the project during the peak hour of adjacent State highway facility invehicles per hour, vph.
T_B = The forecasted traffic volume on an impacted State highway facility at the time of general plan build-out (e.g., 20 year model or the furthest future model date feasible), vph.
T_E = The traffic volume existing on the impacted State highway facility plus other approved projects that will generate traffic that has yet to be constructed/opened, vph.

Table 3-4 shows the proportionate share volumes and percentages.

TABLE 3-4:
PROPORTIONATE SHARE PERCENTAGES

Intersections	Project Trips AM/PM	Existing[1] AM/PM	2030 Plus the Project[1] AM/PM	Proportionate Share % AM/PM
Bullard Avenue at SR 41	11/8	4,252/4,516	5,649/6,118	**0.8**/0.5
Shaw Avenue at SR 41	33/32	5,413/5,972	5,944/6,458	6.2/**6.6**
Ashlan Avenue at SR 41	4/2	3,961/4,343	4,395/4,707	**0.9**/0.5
Shaw Avenue at SR 99	9/9	3,976/4,394	6,314/6,802	**0.4**/0.4

[1] *Includes the Approved Project trips*

BULLARD
BROWNING
BARSTOW
SAN JOSE
SHAW
GETTYSBURG
ASHLAN
MAROA
VAN NESS
PALM
THORNE
FRUIT
COLONIAL
SAN RAMON
WHOLE FOOD DRIVEWAY
46 (7)
2 (0)
(45) 6
(2) 0
1 (0)
8 (59)
(12) 61
(0) 1
VAN NESS
32 (7)
(31) 4
25 (4)
24 (4)
(19) 3
(2) 11
(47) 6
9 (2)
1 (7)
3 (25)
0 (2)
5 (35)
0 (1)
13 (3)
2 (12)
5 (35)
1 (12)
8 (59)
11 (83)
70 (14)
24 (4)
1 (4)
2 (15)
6 (2)
26 (5)
30 (6)
27 (6)
(4) 22
(0) 4
(6) 35
(0) 2
(6) 37
(3) 11
(12) 63
(38) 5
(24) 3
(16) 2
(4) 18
(1) 5
(29) 3
(25) 3
(2) 0
(0) 2
1 (12)
(3) 11
(0) 1
2 (17)
1 (3)
4 (1)
(3) 18

LEGEND

AM (PM) Peak Hour Volumes

- Signal
- Stop Sign

NOT TO SCALE
(ROAD WAY ALIGNMENT CONCEPTUAL ONLY)

TPG Consulting Incorporated

TRIP DISTRIBUTION PEAK HOUR TRAFFIC VOLUMES
Project Trips

Fig Garden Financial Center Phase IV | Figure 3-2

08-1176.1

BULLARD
BROWNING
BARSTOW
SAN JOSE
SHAW
GETTYSBURG
ASHLAN
MAROA
VAN NESS
PALM
THORNE
FRUIT
COLONIAL
SAN RAMON
WHOLE FOOD DRIVEWAY
PALM
VAN NESS
39 (6)
6 (1)
(35) 5
(4) 1
1 (0)
8 (55)
0 (1)
(12) 56
(0) 1
39 (8)
(40) 4
23 (4)
22 (3)
(21) 3
(2) 13
(40) 6
14 (3)
1 (8)
3 (23)
0 (1)
4 (35)
0 (2)
10 (3)
2 (11)
5 (35)
2 (9)
8 (56)
11 (84)
75 (14)
22 (3)
1 (5)
2 (16)
8 (2)
31 (6)
35 (7)
33 (6)
(3) 18
(0) 2
(6) 34
(0) 2
(7) 36
(10) 2
(12) 58
(32) 5
(32) 3
(18) 2
(4) 20
(1) 5
(1) 0
(36) 4
(2) 0
(2) 11
(34) 4
(1) 0
(0) 1
2 (10)
(2) 11
(0) 1
3 (20)
0 (3)
3 (1)
(4) 22

LEGEND

AM (PM) Peak Hour Volumes

Signal

Stop Sign

NOT TO SCALE
(ROAD WAY ALIGNMENT CONCEPTUAL ONLY)

TPG Consulting Incorporated

TRIP DISTRIBUTION PEAK HOUR TRAFFIC VOLUMES 2030 Project Trips

Fig Garden Financial Center Phase IV | Figure 3-3

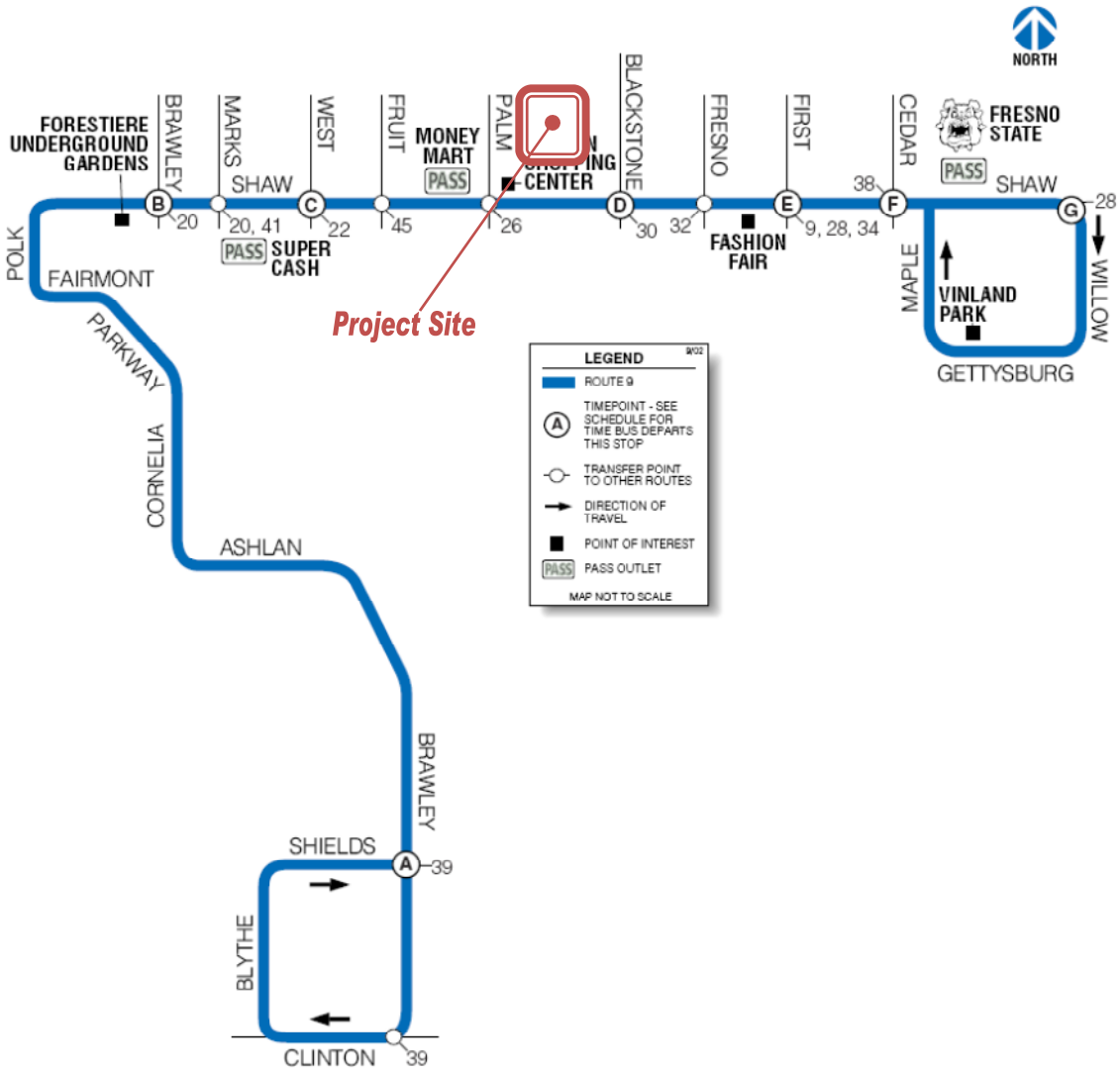
08-1176

Caltrans, in its response to the Notice of Preparation, incorporated by reference a letter of August 25, 2009 concerning development of the proposed site, wherein it specifically stated that its requested analysis was limited to Project trip traces and calculation of proportional share percentages (detailed above), and that no technical analysis, including a level of service analysis, was requested. Based on that Caltrans request, and consistent with the proportionate share determinations detailed above, no Project specific impact to the service levels of the Caltrans facilities is evident. . The Project is subject to payment of the Fresno County Regional Transportation Mitigation Fee (RTMF). The RTMF is currently $1.03 per square foot for Commercial/Office/Service uses. These fees are based on the *Fresno-Madera Freeway Interchange Deficiency Study* and intended to provide mitigation for impacts to Caltrans facilities. Based on the above analysis, the payment of the RTMF fees will provide complete mitigation for the Project's cumulative impact to the above State Facilities.

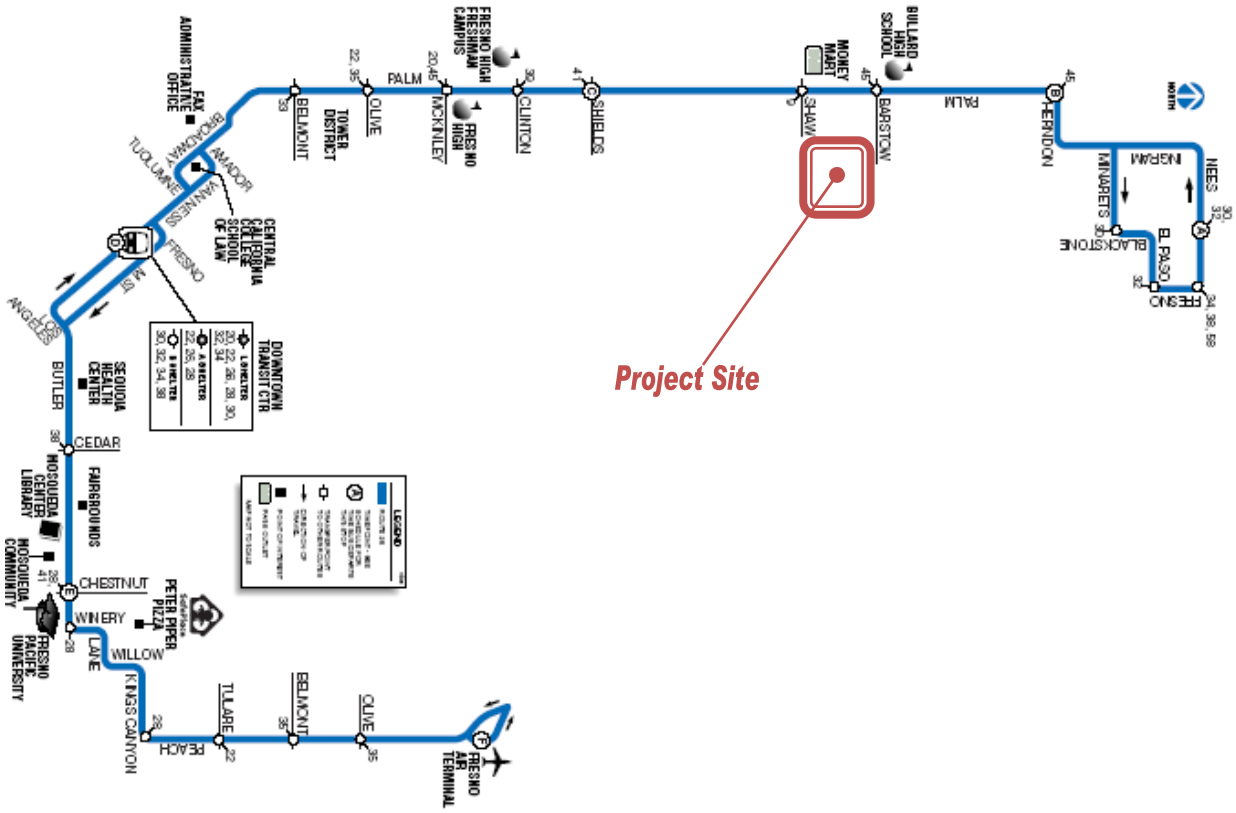
CHAPTER 4 – EXISTING CONDITIONS

4.1 Transit

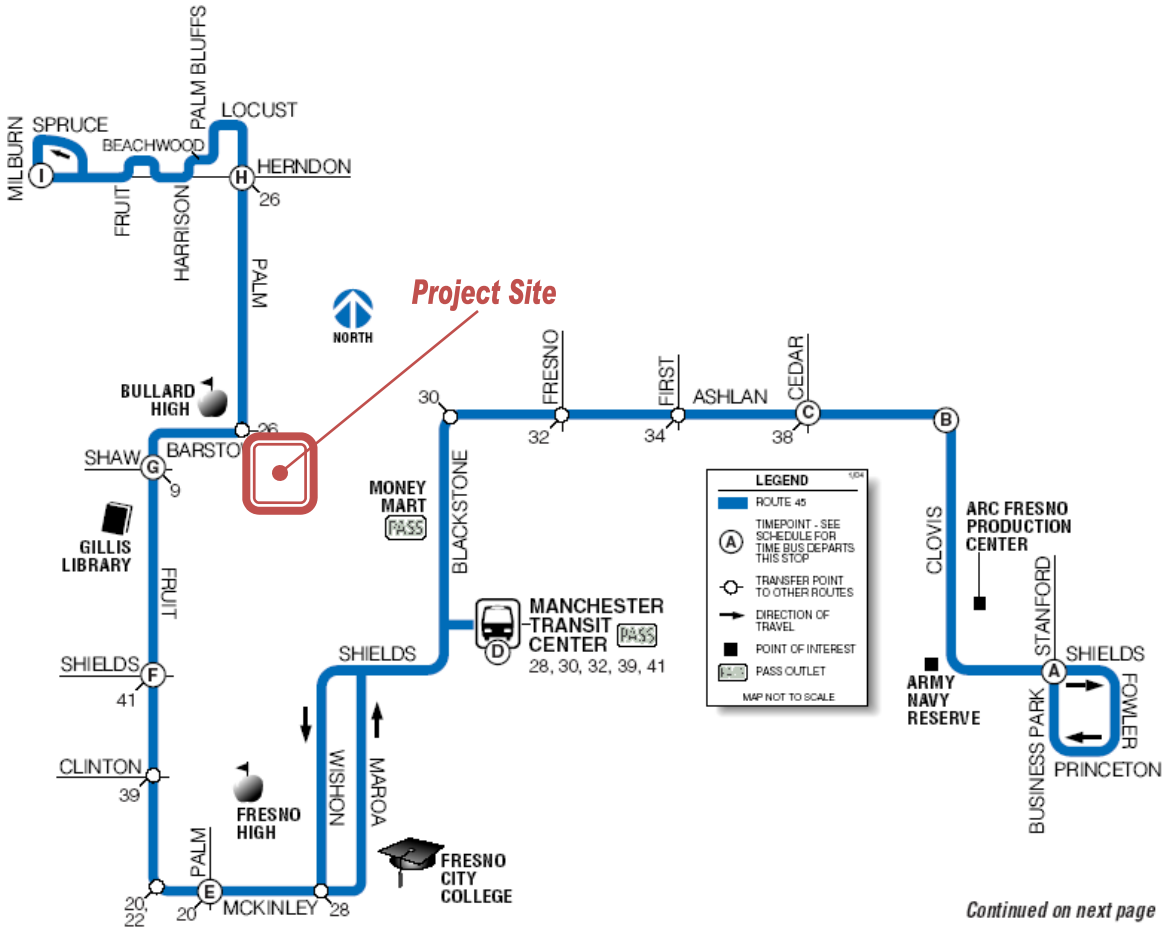
Currently, the Fresno Area Express (FAX) operates three (3) transit routes in the study area. **Route 9**, Shaw Avenue Crosstown, operates along Shaw Avenue in the study area with stops near the intersections of Shaw Avenue at Palm Avenue, and Shaw Avenue at Fruit Avenue. The route runs from approximately 5:40 AM to 10:30 PM weekdays and from approximately 6:45 AM to 7:30 PM weekends with 30 minute headways.



Route 26, North Palm/Peach Avenue operates along Palm Avenue in the study area with a stop near the intersection of Palm Avenue at Shaw Avenue, and Palm Avenue at Barstow Avenue. The route runs from approximately 6:00 AM to 10:30 PM weekdays and from approximately 7:15 AM to 7:30 PM weekends with 30 minute headways.



Route 45, Ashlan Crosstown, operates along Fruit Avenue and Palm Avenue with stops near the intersections of Fruit Avenue and Shaw Avenue, and Barstow Avenue and Palm Avenue. The route runs from approximately 6:00 AM to 9:15 PM weekdays and from approximately 9:30 Am to 6:30 PM weekends with one hour headways.



4.2 Bicycle Facilities

Currently, bicycle lanes exist along the following locations:

- Browning Avenue at Palm Avenue – west leg
- San Jose Avenue at Palm Avenue – north leg, south leg
- Palm Avenue at Barstow Avenue – south leg, east leg, west leg
- Palm Avenue at Bullard Avenue – north leg, west leg, east leg
- Palm Avenue at Shaw Avenue – north leg
- San Ramon Avenue at Palm Avenue – north leg, south leg
- Barstow Avenue at Thorne Avenue – east leg, west leg

According to the *2010 Fresno Bicycle, Pedestrian, and Trails Master Plan* and the *City of Fresno Circulation Element* bike lanes are planned along Palm, Shaw, Fruit and Maroa Avenues in the study area. Bicycle lanes provide for a striped lane for one-way travel on a street or highway. The Project is not anticipated to make changes to the existing bicycle facilities in the study area.

4.3 Pedestrian Facilities

Currently, sidewalks exist on all legs of the study locations except at the following locations:

- Bullard Avenue
  - North and South sides – east and west of Palm Avenue
- Browning Avenue
  - North and South sides – east and west of Palm Avenue
- Barstow Avenue
  - South side – Fruit Avenue to Palm Avenue
- San Ramon Avenue
  - North and South sides – Fruit Avenue to Colonial Avenue
- San Jose Avenue
  - North and South sides – Palm Avenue to eastern terminus (office building driveway)
  - North and South sides – eastern Project boundary to Maroa Avenue
- Gettysburg Avenue
  - North side – east and west of Palm Avenue
  - South side – east of Palm Avenue
- Ashlan Avenue
  - North side – west of Palm Avenue
- Palm Avenue
  - East and West sides – Bullard Avenue to San Madele Avenue
  - East side – San Ramon Avenue to Fig Garden Middle driveway
  - West side – San Jose Avenue to Shaw Avenue
  - West side – Alamos Avenue to Gettysburg Avenue
  - East side – Santa Ana Avenue to Gettysburg Avenue
- Thorne Avenue
  - East and West sides – Barstow Avenue to San Jose Avenue
- Colonial Avenue
  - West side – north terminus to San Jose Avenue
- Maroa Avenue
  - East and West sides – south of Shaw Avenue

The project is not anticipated to make any changes to study area pedestrian facilities other than to construct sidewalk along the Project frontage on San Jose Avenue. The project at the present time is not proposing direct pedestrian access from the residential neighborhood located to the north of the proposed project site.

4.4 Roadways

Table 4-1 describes the Existing street system in the study area including the street classification, number of lanes, and the posted speed limits.

TABLE 4-1:
DESCRIPTION OF EXISTING STREET SYSTEM

Street	Classification	No. of Lanes (2-dir)	Posted Speed Limit (mph)
Bullard Avenue	Arterial	4	40
Browning Avenue	Local	2	35[1]
Barstow Avenue	Collector	2	35[1]
San Ramon Avenue	Local	2	NPS
San Jose Avenue	Local	2	NPS
Shaw Avenue	Arterial	6	40
Van Ness Blvd	Local	2	25
Gettysburg Avenue	Collector	2	30
Ashlan Avenue	Arterial	2	30[1]
Fruit Avenue	Collector	2	40[1]
Thorne Avenue	Local	2	NPS
Palm Avenue	Arterial	4	40[1]
Colonial Avenue	Local	2	NPS
Maroa Avenue	Collector	4	35

[1] *posted 25 mph school zone for portions of the study segments*
NPS = *no posted speed limit; residential or business district subject to 25 mph speed limit based on California Vehicle Code*

Table 4-2 lists the study intersections and their associated intersection control.

TABLE 4-2:
EXISTING INTERSECTION CONTROL

Intersection	Signalized/Unsignalized	Type
Bullard Avenue at Palm Avenue	Signalized	AU
Browning Avenue at Palm Avenue	Signalized	AU
Barstow Avenue at Palm Avenue	Signalized	AU
San Ramon Avenue at Palm Avenue	Unsignalized	TWSC
San Jose Avenue at Palm Avenue	Signalized	AU
Shaw Avenue at Palm Avenue	Signalized	AU
Van Ness Blvd at Palm Avenue	Unsignalized	TWSC
Gettysburg Avenue at Palm Avenue	Signalized	AU
Ashlan Avenue at Palm Avenue	Signalized	AU
Barstow Avenue at Thorne Avenue	Unsignalized	TWSC
San Ramon Avenue at Thorne Avenue	Unsignalized	TWSC
Shaw Avenue at Fruit Avenue	Signalized	AU
Shaw Avenue at Maroa Avenue	Signalized	AU
San Ramon Avenue at Colonial Avenue	Unsignalized	No Control

AU = actuated uncoordinated *TWSC = two-way stop-control*

4.5 Freeways

Level of service analysis was not prepared for the closest freeways and ramp intersections (SR 41 and 99) due to the size and location of the Project in relation to those facilities. The City of Fresno and Caltrans have agreed that for smaller development, not immediately adjacent to freeways, the level of analysis for Caltrans facilities within Fresno will be limited to Project trip traces through adjacent interchanges and calculation of the Project's proportionate fair shares. In addition, Caltrans in its response to the Notice of Preparation incorporated by reference a letter of August 25, 2009 concerning development of the proposed site, wherein it specifically stated that its requested analysis was limited to Project trip traces and calculation of proportional share percentages, and that no technical analysis, including a level of service analysis, was requested. The calculations requested by Caltrans can be found in Tables 3-3 and 3-4.

4.6 Level of Service

The Existing segment and intersection lane configurations and intersection controls and segment and intersection peak hour traffic volumes are shown on Figure 4-1. Using the lane configurations and volumes shown on Figure 4-1, the segments and intersections were analyzed for Existing levels of service. Table 4-3 shows the Existing levels of service for the study segments and intersections respectively. The signalized intersection levels of service shown in Table 4-3 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown in Table 4-3. The Existing conditions traffic counts are included in Appendix C. The Existing intersection levels of service calculations are included in Appendix D.

BULLARD
BROWNING
BARSTOW
SAN JOSE
SHAW
GETTYSBURG
ASHLAN
MAROA
VAN NESS
PALM
FRUIT
THORNE
COLONIAL
SAN RAMON
95 (68)
406 (770)
136 (109)
99 (123)
528 (764)
133 (144)
29 (28)
41 (24)
55 (15)
18 (22)
605 (1090)
65 (56)
92 (149)
264 (390)
69 (92)
93 (195)
551 (961)
51 (111)
25 (241)
21 (171)
62 (26)
715 (922)
31 (109)
140 (157)
1085 (1575)
188 (256)
50 (65)
510 (505)
101 (127)
47 (109)
1223 (1771)
14 (57)
34 (21)
179 (201)
77 (120)
(72) 103
(242) 136
(85) 157
(162) 113
(1487) 1461
(74) 14
33 (35)
86 (114)
17 (39)
21 (16)
591 (530)
25 (41)
54 (39)
333 (687)
27 (77)
74 (82)
461 (547)
21 (47)
(88) 71
(665) 513
(162) 36
(171) 144
(544) 657
(95) 123
(18) 26
(895) 669
(52) 77
(28) 126
(14) 51
(29) 186
(101) 113
(754) 696
(84) 174
(36) 56
(334) 297
(61) 106
(217) 254
(677) 639
(275) 233
(518) 323
(154) 109
(257) 245
(1389) 1353
(48) 53
(44) 24
(678) 385
(18) 24
(18) 44
(62) 93
(18) 71
(76) 50
(495) 329
(53) 25
(32) 53
(658) 502
(36) 20
6 (9)
3 (1)
6 (2)
8 (21)
658 (1197)
20 (75)
PALM
(12) 9
(877) 825
(35) 37
(11) 12
(0) 2
(11) 62
SAN RAMON
3 (9)
9 (9)
(6) 7
(5) 9
(15) 5
(25) 9
42 (35)
VAN NESS
8 (5)
619 (662)
PALM
(822) 564
540 (608)
44 (22)
BARSTOW
36 (35)
19 (5)
THORNE
(396) 474
(11) 10
6 (2)
11 (28)
7 (6)
4 (4)
21 (22)
0 (2)
(2) 35
(8) 18
(1) 2
(6) 3
(9) 22
(1) 3
BARSTOW
SAN RAMON
SAN JOSE
35 (28)
1226 (1564)
35 (78)
59 (69)
192 (201)
49 (59)
(75) 65
(186) 130
(74) 134
(67) 98
(1380) 1527
(32) 31

LEGEND

AM (PM) Peak Hour Volumes

Signal

Stop Sign

NOT TO SCALE
(ROAD WAY ALIGNMENT CONCEPTUAL ONLY)

TPG Consulting Incorporated

LANE CONFIGURATIONS AND PEAK HOUR TRAFFIC VOLUMES

Existing

Fig Garden Financial Center Phase IV | Figure 4-1

08-1176

TABLE 4-3:
EXISTING CONDITIONS ANALYSIS LEVELS OF SERVICE

Segment	AM Peak Hour LOS		PM Peak Hour LOS	
Shaw Avenue – Palm Avenue to Fruit Avenue	C		C	
Shaw Avenue – Maroa Avenue to Palm Avenue	C		C	
Palm Avenue – Bullard Avenue to Barstow Avenue	C		C	
Palm Avenue – Barstow Avenue to San Ramon Avenue	C		C	
Palm Avenue – San Ramon Avenue to San Jose Avenue	C		C	
Palm Avenue – San Jose Avenue to Shaw Avenue	C		C	
Palm Avenue – Shaw Avenue to Gettysburg	C		C	
San Jose Avenue – Colonial Avenue to Maroa Avenue	C		C	
San Ramon Avenue – Palm Avenue to Fruit Avenue	C		C	
Barstow Avenue – Palm Avenue to Fruit Avenue	C		D	
Thorne Avenue – Barstow Avenue to San Ramon Avenue	C		C	
Intersection	**LOS**	**Delay[1]**	**LOS**	**Delay[1]**
Bullard Avenue at Palm Avenue	C	34.2	D	38.8
Browning Avenue at Palm Avenue	B	14.6	A	8.7
Barstow Avenue at Palm Avenue	C	20.6	C	29.9
San Ramon Avenue at Palm Avenue				
• NB Left	B	10.7	B	10.0
• SB Left	A	9.4	B	10.9
• EB Approach	B	13.6	B	14.9
• WB Approach	C	20.0	B	15.0
San Jose Avenue at Palm Avenue	A	10.0	B	15.9
Shaw Avenue at Palm Avenue	D	37.2	D	39.2
Van Ness Boulevard at Palm Avenue				
• WB Right	B	11.8	B	11.1
Gettysburg Avenue at Palm Avenue	A	7.1	A	6.4
Ashlan Avenue at Palm Avenue	B	14.6	B	19.1
Barstow Avenue at Thorne Avenue				
• WB Left	A	9.3	A	8.5
• NB Approach	D	33.6	B	14.2
San Ramon Avenue at Thorne Avenue				
• EB Left-Through-Right	B	10.9	A	9.8
• WB Left-Through-Right	B	10.5	A	9.8
• NB Approach	A	0.0	A	0.5
• SB Approach	A	4.9	A	1.4
Shaw Avenue at Fruit Avenue	B	13.6	B	14.4
Shaw Avenue at Maroa Avenue	B	13.3	B	19.5
San Ramon Avenue at Colonial Avenue				
• NB Left-Through	A	5.5	A	3.7
• EB Approach	A	8.8	A	8.9

[1] *delay in seconds per vehicle*
SB = southbound *NB = northbound* *EB = eastbound* *WB = westbound*

As shown in Table 4-3, all the study segments and intersections are currently operating at or above the appropriate adopted level or service standard in the Existing conditions scenario. Therefore, there are no existing LOS impacts at the study locations.

4.7 Signal Warrants

Peak hour traffic signal warrants (Warrant 3, part B) were also prepared for the five (5) unsignalized intersections. Based on the peak hour traffic signal warrants, the warrant is not currently met at any of the unsignalized intersections in the Existing conditions scenario. These warrant analyses are limited to the peak hour volume warrant (Warrant 3, part B) only and other conditions may exist which meet other traffic signal warrants. Copies of the warrant analyses are included in Appendix E.

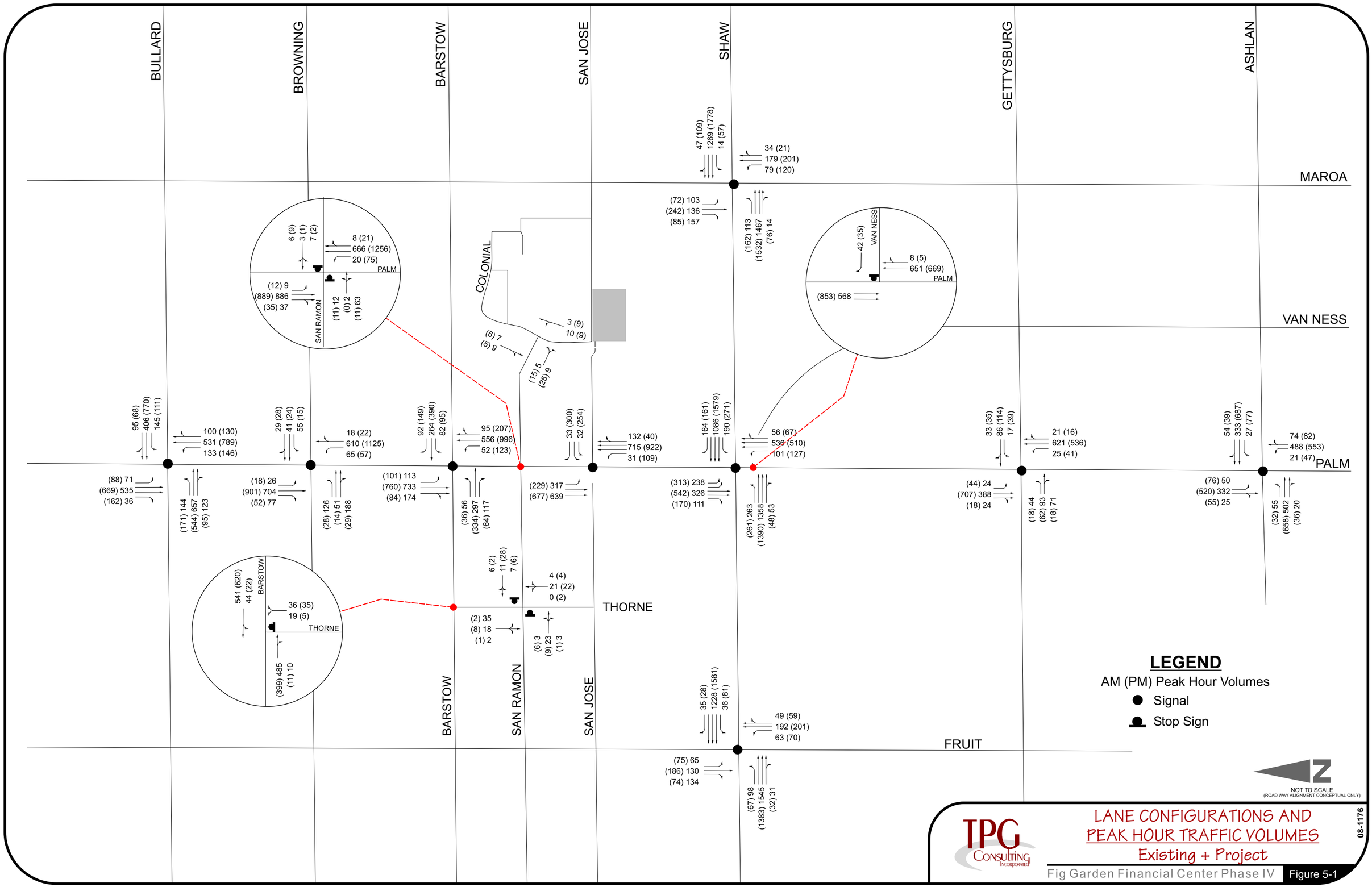
4.8 Accident Analysis

The accident analysis for the study intersections is included in Appendix F.

CHAPTER 5 – EXISTING PLUS THE PROJECT CONDITIONS

5.1 Level of Service

The Existing Plus the Fig Garden Financial Center Phase IV Project segment and intersection lane configurations and intersection controls and segment and intersection peak hour traffic volumes are shown on Figure 5-1. Using the lane configurations and volumes shown on Figure 5-1, the segments and intersections were analyzed for Existing Plus the Project levels of service. Table 5-1 shows the Existing Plus the Project levels of service for the study segments and intersections respectively. The signalized intersection levels of service shown in Table 5-1 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown in Table 5-1. The Existing Plus the Project intersection levels of service calculations are included in Appendix G.



TPG Consulting Incorporated

LANE CONFIGURATIONS AND PEAK HOUR TRAFFIC VOLUMES

Existing + Project

Fig Garden Financial Center Phase IV | Figure 5-1

08-1176

TABLE 5-1:
EXISTING PLUS THE PROJECT CONDITIONS ANALYSIS LEVELS OF SERVICE

	AM Peak Hour		PM Peak Hour	
Segment	**LOS**		**LOS**	
Shaw Avenue – Palm Avenue to Fruit Avenue	C		C	
Shaw Avenue – Maroa Avenue to Palm Avenue	C		C	
Palm Avenue – Bullard Avenue to Barstow Avenue	C		C	
Palm Avenue – Barstow Avenue to San Ramon Avenue	C		C	
Palm Avenue – San Ramon Avenue to San Jose Avenue	C		C	
Palm Avenue – San Jose Avenue to Shaw Avenue	C		C	
Palm Avenue – Shaw Avenue to Gettysburg	C		C	
San Jose Avenue – Colonial Avenue to Maroa Avenue	C		C	
San Ramon Avenue – Palm Avenue to Fruit Avenue	C		C	
Barstow Avenue – Palm Avenue to Fruit Avenue	C		D	
Thorne Avenue – Barstow Avenue to San Ramon Avenue	C		C	
Intersection	**LOS**	**Delay[1]**	**LOS**	**Delay[1]**
Bullard Avenue at Palm Avenue	D	35.4	D	39.6
Browning Avenue at Palm Avenue	B	14.8	B	8.8
Barstow Avenue at Palm Avenue	C	21.1	C	31.2
San Ramon Avenue at Palm Avenue				
• NB Left	B	11.1	A	9.9
• SB Left	A	9.4	B	11.3
• EB Approach	B	13.6	B	14.4
• WB Approach	C	19.2	B	15.0
San Jose Avenue at Palm Avenue	B	12.5	B	18.0
Shaw Avenue at Palm Avenue	D	38.3	D	42.1
Van Ness Boulevard at Palm Avenue				
• WB Right	B	12.0	B	11.2
Gettysburg Avenue at Palm Avenue	A	7.1	A	6.3
Ashlan Avenue at Palm Avenue	B	15.0	B	19.4
Barstow Avenue at Thorne Avenue				
• WB Left	A	9.3	A	8.5
• NB Approach	D	34.6	B	14.4
San Ramon Avenue at Thorne Avenue				
• EB Left-Through-Right	B	10.9	A	9.8
• WB Left-Through-Right	B	10.5	A	9.8
• NB Approach	A	0.0	A	0.5
• SB Approach	A	4.9	A	1.4
Shaw Avenue at Fruit Avenue	B	13.6	B	14.8
Shaw Avenue at Maroa Avenue	B	13.4	B	19.6
San Ramon Avenue at Colonial Avenue				
• NB Left-Through	A	5.6	A	3.7
• EB Approach	A	8.8	A	8.9

[1] *delay in seconds per vehicle*
SB = southbound *NB = northbound* *EB = eastbound* *WB = westbound*

As shown in Table 5-1, all the study segments and intersections are projected to operate at or above the appropriate adopted level or service standard in the Existing Plus the Project conditions scenario. Therefore, there are no LOS impacts caused by the Project in the near-term conditions at the study locations.

5.2 Signal Warrants

Peak hour traffic signal warrants (Warrant 3, part B) were also prepared for the five (5) unsignalized intersections. Based on the peak hour traffic signal warrants, the warrant is not projected to be met at any of the unsignalized intersections in the Existing Plus the Project conditions scenario. These warrant analyses are limited to the peak hour volume warrant (Warrant 3, part B) only and other conditions may exist which meet other traffic signal warrants.

CHAPTER 6 – EXISTING PLUS APPROVED PROJECTS PLUS THE PROJECT CONDITIONS

For purposes of this TIS, the Approved Projects that were added to the Existing Plus the Project scenario was based upon including the Bullard High School Improvement Project detailed in *Traffic Impact Study for the Bullard High School Improvement Project*, URS Corporation, December 2009 (the "Bullard High Improvement Project"), as the sole Approved Project that was relevant for this cumulative impact analysis. This analysis also relied upon the trip distribution for the Bullard High School Improvement Project that was detailed in that traffic study. According to the *Traffic Impact Study for the Bullard High School Improvement Project* the Approved Project is only projected to increase PM peak hour trips. Therefore only the PM peak hour time period is analyzed for this scenario.

The trip generation and trip distributions for the Bullard High Improvement Project, as reported by the *Traffic Impact Study for the Bullard High School Improvement Project* are detailed in Tables 6-1 and 6-2.

TABLE 6-1:
BHS LARGE EVENT TRIP GENERATION

Athletic Event (3,000) Spectator Attendance)	Daily Trips Event Parking [1]	7-9 AM Peak Hour Trips [2]			4-6 PM Peak Hour Trips		
		Enter	Exit	Total	Enter	Exit	Total
Offsite [3]	458	n/a	n/a	n/a	229	229	458
Onsite [4]	1,362	n/a	n/a	n/a	485	485	970

Source: Traffic Impact Study for the Bullard High School Improvement Project, Table 4.2
[1] Represents event and parking capacity driven roundtrips only.
[2] No high attendance event anticipated in the morning.
[3] 50 percent pre-event occupancy
[4] 30 percent pre-event occupancy

TABLE 6-1:
BHS TRIP DISTRIBUTION

Direction	Percentage
North of BHS	19%
East of BHS	12%
East of BHS and SR 41	10%
South of BHS	28%
West of BHS	31%

Source: Traffic Impact Study for the Bullard High School Improvement Project, Section 4.2.2.

6.1 Level of Service

The Existing Plus Approved Projects Plus the Project segment and intersection lane configurations and intersection controls and segment and intersection peak hour traffic volumes are shown on Figure 6-1. Using the lane configurations and volumes shown on Figure 6-1, the segments and intersections were analyzed for Existing Plus Approved Projects Plus the Project levels of service. Table 6-3 shows the Existing Plus Approved Projects Plus the Project levels of service for the study segments and intersections respectively. The signalized intersection levels of service shown in Table 6-3 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown in Table 6-3. The Existing Plus Approved Projects Plus the Project intersection levels of service calculations are included in Appendix H.

BULLARD
BROWNING
BARSTOW
SAN JOSE
SHAW
GETTYSBURG
ASHLAN
MAROA
VAN NESS
PALM
FRUIT
THORNE
COLONIAL
SAN RAMON
PALM
VAN NESS
BARSTOW
THORNE
95 (68)
406 (772)
145 (198)
100 (219)
531 (824)
133 (169)
(88) 71
(704) 535
(163) 36
(172) 144
(546) 657
(118) 127
29 (28)
41 (67)
55 (25)
18 (31)
610 (1207)
65 (156)
(18) 26
(982) 704
(115) 77
(93) 126
(56) 51
(128) 188
92 (160)
264 (426)
82 (95)
95 (207)
556 (1126)
52 (187)
(111) 113
(891) 733
(138) 174
(90) 56
(369) 297
(128) 117
33 (300)
32 (254)
132 (40)
715 (1116)
31 (109)
(229) 317
(872) 639
164 (272)
1086 (1587)
190 (271)
56 (67)
536 (558)
101 (129)
(425) 238
(590) 326
(205) 111
(296) 263
(1398) 1358
(50) 53
33 (38)
86 (114)
17 (39)
21 (16)
621 (581)
25 (41)
(47) 24
(753) 388
(19) 24
(20) 44
(62) 93
(18) 71
54 (42)
333 (687)
27 (77)
74 (82)
488 (589)
21 (47)
(81) 50
(553) 332
(59) 25
(34) 55
(658) 502
(36) 20
47 (109)
1269 (1874)
14 (57)
34 (21)
179 (201)
79 (127)
(72) 103
(242) 136
(90) 157
(172) 113
(1625) 1467
(81) 14
6 (9)
3 (1)
7 (2)
8 (21)
666 (1450)
20 (75)
(12) 9
(1084) 886
(35) 37
(11) 12
(0) 2
(11) 63
42 (35)
8 (5)
651 (719)
(903) 568
3 (9)
10 (9)
(6) 7
(5) 9
(15) 5
(25) 9
6 (5)
11 (28)
7 (6)
4 (4)
21 (25)
0 (2)
(5) 35
(11) 18
(3) 2
(8) 3
(9) 23
(1) 3
541 (749)
44 (30)
36 (43)
19 (5)
(528) 485
(11) 10
35 (29)
1228 (1619)
36 (83)
63 (72)
192 (201)
49 (59)
(77) 65
(186) 130
(74) 134
(67) 98
(1420) 1545
(32) 31

LEGEND

AM (PM) Peak Hour Volumes

Signal

Stop Sign

NOT TO SCALE
(ROAD WAY ALIGNMENT CONCEPTUAL ONLY)

TPG Consulting Incorporated

LANE CONFIGURATIONS AND PEAK HOUR TRAFFIC VOLUMES

Existing + Approved Projects + Project

Fig Garden Financial Center Phase IV | Figure 6-1

08-1176

TABLE 6-3:
EXISTING PLUS APPROVED PROJECTS PLUS THE PROJECT CONDITIONS ANALYSIS LEVELS OF SERVICE

Segment	PM Peak Hour LOS	
Shaw Avenue – Palm Avenue to Fruit Avenue	C	
Shaw Avenue – Maroa Avenue to Palm Avenue	C	
Palm Avenue – Bullard Avenue to Barstow Avenue	C	
Palm Avenue – Barstow Avenue to San Ramon Avenue	D	
Palm Avenue – San Ramon Avenue to San Jose Avenue	D	
Palm Avenue – San Jose Avenue to Shaw Avenue	C	
Palm Avenue – Shaw Avenue to Gettysburg	C	
San Jose Avenue – Colonial Avenue to Maroa Avenue	C	
San Ramon Avenue – Palm Avenue to Fruit Avenue	C	
Barstow Avenue – Palm Avenue to Fruit Avenue	D	
Thorne Avenue – Barstow Avenue to San Ramon Avenue	C	
Intersection	**LOS**	**Delay**[1]
Bullard Avenue at Palm Avenue	D	51.1
Browning Avenue at Palm Avenue	B	14.3
Barstow Avenue at Palm Avenue	D	54.1
San Ramon Avenue at Palm Avenue		
• NB Left	B	10.5
• SB Left	B	12..4
• EB Approach	B	13.1
• WB Approach	B	14.5
San Jose Avenue at Palm Avenue	B	19.5
Shaw Avenue at Palm Avenue	D	49.2
Van Ness Boulevard at Palm Avenue		
• WB Right	B	11.4
Gettysburg Avenue at Palm Avenue	A	6.3
Ashlan Avenue at Palm Avenue	C	20.9
Barstow Avenue at Thorne Avenue		
• WB Left	A	9.0
• NB Approach	C	18.6
San Ramon Avenue at Thorne Avenue		
• EB Left-Through-Right	B	10.1
• WB Left-Through-Right	A	10.0
• NB Approach	A	0.5
• SB Approach	A	2.0
Shaw Avenue at Fruit Avenue	B	14.9
Shaw Avenue at Maroa Avenue	C	22.0
San Ramon Avenue at Colonial Avenue		
• NB Left-Through	A	3.7
• EB Approach	A	8.9

[1] *delay in seconds per vehicle*
SB = southbound *NB = northbound* *EB = eastbound* *WB = westbound*

As shown in Table 6-3, all the study segments and intersections are projected to operate at or above the appropriate adopted level or service standard in the Existing Plus Approved Projects Plus the Project conditions scenario. Therefore, there are no LOS impacts caused by the Project, in addition to the Approved Projects, in the near-term conditions at the study locations.

6.2 Signal Warrants

Peak hour traffic signal warrants (Warrant 3, part B) were also prepared for the five (5) unsignalized intersections. Based on the peak hour traffic signal warrants, the warrant is not projected to be met at any of the unsignalized intersections in the Existing Plus Approved Projects Plus the Project conditions scenario. These warrant analyses are limited to the peak hour volume warrant (Warrant 3, part B) only and other conditions may exist which meet other traffic signal warrants.

CHAPTER 7 – 2030 NO PROJECT CONDITIONS (WITHOUT THE PROJECT)

The 2030 No Project conditions scenario was prepared to address future conditions without the construction of the proposed Project. The 2030 No Project traffic volumes were developed using the Existing traffic counts, the trip distribution for the Bullard High School Improvement Project,[12] and the COFCG traffic model, as shown in Appendix I. The 2030 No Project scenario assumes no development of the Project site. The 2030 No Project scenario represents the cumulative traffic conditions without the Project. The 2030 No Project scenario also includes all City planned projects, including the following:

- Shaw Avenue at Palm Avenue
    - Widening to dual left-turn lanes on all four legs
        - Dual left-turn lanes are already located on the southbound approach
        - Separate right-turn lanes are already located on the westbound and southbound approaches

This improvement is currently ranked number 2 on the Fiscal Year 2011 (FY11) Priority List for Intersection Traffic Flow Improvements. The left-turn lanes and separate right-turn lanes are assumed to be in place for the 2030 No Project and 2030 Project scenarios.

- Barstow Avenue at Palm Avenue
    - Installation of left-turn signals with dedicated phases

This improvement is currently ranked number 12 on the FY11 Priority List for Warranted Left Turn Signals. The left-turn signals are assumed to be in place for the 2030 No Project and 2030 Project scenarios.

- Barstow Avenue at Thorne Avenue
    - Installation a traffic signal

This improvement is currently ranked number 14 on the FY11 Priority List for New Traffic Signal Installations. The traffic signal is assumed to be in place for the 2030 No Project and 2030 Project scenarios.

In addition to the improvements planned in the TSMI, additional improvements are also planned in the City of Fresno's Intelligent Transportation Systems (ITS) Program. Phase 4 of the City's ongoing traffic signal synchronization program will be to synchronize all traffic signals on Shaw Avenue from SR 99 to SR 41 (fiber) and Bullard Avenue from Marks Avenue to Willow Avenue (wireless). These improvements are programmed for some time between 2011 and 2015.

7.1 Level of Service

The 2030 No Project segment and intersection lane configurations and intersection controls and segment and intersection peak hour traffic volumes are shown on Figure 7-1. Using the lane configurations and volumes shown on Figure 7-1, the segments and intersections were analyzed for 2030 No Project levels of service. Table 7-1 shows the 2030 No Project levels of service for the study segments and intersections respectively. The signalized intersection levels of service shown in Table 7-1 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown in Table 7-1. The 2030 No Project intersection levels of service calculations are included in Appendix J.

[12] *Traffic Impact Study for the Bullard High School Improvement Project*, URS Corporation, December 2009.

BULLARD
BROWNING
BARSTOW
SAN JOSE
SHAW
GETTYSBURG
ASHLAN
MAROA
VAN NESS
PALM
FRUIT
THORNE
COLONIAL
SAN RAMON
PALM
VAN NESS
BARSTOW
THORNE
BARSTOW
SAN RAMON
SAN JOSE
121 (91)
579 (997)
195 (258)
142 (293)
667 (1024)
188 (205)
23 (23)
58 (74)
55 (25)
18 (31)
805 (1459)
153 (210)
158 (245)
345 (462)
69 (92)
93 (195)
698 (1266)
51 (175)
25 (241)
22 (201)
72 (29)
883 (1306)
41 (134)
144 (286)
1142 (1819)
346 (351)
110 (91)
699 (729)
141 (178)
86 (42)
148 (259)
36 (39)
25 (18)
796 (790)
25 (117)
54 (54)
400 (744)
27 (106)
74 (103)
591 (852)
160 (58)
(130) 107
(953) 771
(184) 53
(190) 153
(761) 799
(146) 148
(18) 26
(1276) 901
(170) 186
(174) 163
(69) 51
(215) 238
(146) 158
(1119) 800
(246) 307
(168) 129
(468) 414
(140) 121
(217) 254
(1133) 765
(452) 266
(798) 410
(221) 109
(321) 245
(1630) 1627
(67) 70
(83) 42
(960) 616
(81) 30
(62) 115
(173) 222
(37) 154
(97) 50
(790) 517
(67) 149
(43) 88
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34 (21)
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163 (235)
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7 (2)
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(18) 6
(30) 11
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42 (50)
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8 (7)
4 (4)
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(12) 22
(3) 2
(9) 3
(11) 26
(1) 3
52 (55)
1346 (1890)
35 (80)
59 (71)
248 (214)
49 (59)
(129) 114
(256) 169
(120) 293
(123) 192
(1658) 1762
(32) 31

LEGEND

AM (PM) Peak Hour Volumes

- Signal
- Stop Sign

NOT TO SCALE
(ROAD WAY ALIGNMENT CONCEPTUAL ONLY)

TPG Consulting Incorporated

LANE CONFIGURATIONS AND PEAK HOUR TRAFFIC VOLUMES 2030 No Project

Fig Garden Financial Center Phase IV | Figure 7-1

08-1176.1

TABLE 7-1:
2030 NO PROJECT (WITHOUT THE PROJECT) CONDITIONS ANALYSIS LEVELS OF SERVICE

	AM Peak Hour		PM Peak Hour	
Segment	**LOS**		**LOS**	
Shaw Avenue – Palm Avenue to Fruit Avenue	C		D	
Shaw Avenue – Maroa Avenue to Palm Avenue	C		D	
Palm Avenue – Bullard Avenue to Barstow Avenue	C		D	
Palm Avenue – Barstow Avenue to San Ramon Avenue	C		D	
Palm Avenue – San Ramon Avenue to San Jose Avenue	C		D	
Palm Avenue – San Jose Avenue to Shaw Avenue	C		D	
Palm Avenue – Shaw Avenue to Gettysburg	C		C	
San Jose Avenue – Colonial Avenue to Maroa Avenue	C		C	
San Ramon Avenue – Palm Avenue to Fruit Avenue	C		C	
Barstow Avenue – Palm Avenue to Fruit Avenue	D		**F**	
Thorne Avenue – Barstow Avenue to San Ramon Avenue	C		C	
Intersection	**LOS**	**Delay[1]**	**LOS**	**Delay[1]**
Bullard Avenue at Palm Avenue	D	49.0	**F**	**100.3**
Browning Avenue at Palm Avenue	B	16.6	C	22.8
Barstow Avenue at Palm Avenue	C	33.3	**F**	**81.1**
San Ramon Avenue at Palm Avenue				
• NB Left	A	9.6	B	11.9
• SB Left	A	9.1	B	14.0
• EB Approach	B	11.7	C	15.9
• WB Approach	C	15.1	C	17.1
San Jose Avenue at Palm Avenue	A	9.1	B	16.1
Shaw Avenue at Palm Avenue	C	29.7	C	32.9
Van Ness Boulevard at Palm Avenue				
• WB Right	B	10.8	B	10.9
Gettysburg Avenue at Palm Avenue	B	10.3	A	9.9
Ashlan Avenue at Palm Avenue	B	16.8	C	28.9
Barstow Avenue at Thorne Avenue	C	26.8	C	24.3
San Ramon Avenue at Thorne Avenue				
• EB Left-Through-Right	B	10.3	A	9.6
• WB Left-Through-Right	A	10.0	A	9.7
• NB Approach	A	0.0	A	0.4
• SB Approach	A	4.8	A	1.9
Shaw Avenue at Fruit Avenue	B	15.8	B	17.5
Shaw Avenue at Maroa Avenue	B	19.4	**E**	**75.1**
San Ramon Avenue at Colonial Avenue				
• NB Left-Through	A	5.8	A	3.8
• EB Approach	A	8.8	A	8.9

[1] *delay in seconds per vehicle*
SB = southbound *NB = northbound* *EB = eastbound* *WB = westbound*

Segments and intersections projected to operate below the adopted level of service standard are shown bolded in Table 7-1. As shown in Table 7-1, one (1) segment and three (3) intersections are projected to operate below the appropriate level of service standard in the 2030 No Project conditions scenario. All the remaining study segments and intersections are projected to operate at or above the appropriate adopted level or service standard in the 2030 No Project conditions scenario. Therefore, there is one cumulative LOS impact identified in the 2030 No Project (without the Project) conditions at the study locations.

7.2 Signal Warrants

Peak hour traffic signal warrants (Warrant 3, part B) were also prepared for the four (4) unsignalized intersections. Based on the peak hour traffic signal warrant, the unsignalized intersections are not projected to meet the warrant in the 2030 No Project conditions scenario. These warrant analyses are limited to the peak hour volume warrant (Warrant 3, part B) only and other conditions may exist which meet other traffic signal warrants.

CHAPTER 8 – 2030 PLUS THE PROJECT CONDITIONS

The 2030 Plus the Fig Garden Financial Center Phase IV Project conditions scenario was prepared to address future conditions with the construction of the Fig Garden Financial Center Phase IV. The 2030 Plus the Project traffic volumes were developed using the 2030 No Project traffic volumes and the Project traffic (as identified in Chapter 3). The 2030 Plus Project scenario represents the cumulative traffic conditions with the addition of the Fig Garden Financial Center Phase IV Project. All roadway improvements identified in the 2030 No Project (without the Project) scenario are also assumed to be in place for the 2030 Plus the Project scenario.

8.1 Level of Service

The 2030 Plus the Project segment and intersection lane configurations and intersection controls and segment and intersection peak hour traffic volumes are shown on Figure 8-1. Using the lane configurations and volumes shown on Figure 8-1, the segments and intersections were analyzed for 2030 Plus the Project levels of service. Table 8-1 shows the 2030 Plus the Project levels of service for the study segments and intersections respectively. The signalized intersection levels of service shown in Table 8-1 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown in Table 8-1. The 2030 Plus the Project intersection levels of service calculations are included in Appendix K.

BULLARD
BROWNING
BARSTOW
SAN JOSE
SHAW
GETTYSBURG
ASHLAN
MAROA
VAN NESS
PALM
FRUIT
THORNE
COLONIAL
SAN RAMON
PALM
VAN NESS
BARSTOW
THORNE
121 (91)
579 (997)
209 (261)
143 (301)
670 (1065)
188 (206)
23 (23)
58 (74)
55 (25)
18 (31)
809 (1494)
153 (212)
158 (245)
345 (462)
79 (95)
95 (206)
703 (1301)
53 (184)
33 (297)
33 (285)
147 (43)
883 (1306)
41 (134)
166 (289)
1143 (1824)
348 (367)
118 (93)
730 (735)
141 (178)
86 (42)
148 (259)
36 (39)
25 (18)
831 (797)
25 (117)
54 (54)
400 (744)
27 (106)
74 (103)
624 (858)
160 (58)
(130) 107
(956) 789
(184) 53
(190) 153
(761) 799
(146) 150
(18) 26
(1282) 935
(170) 186
(174) 163
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8 (2)
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807 (1599)
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(13) 76
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(7) 9
(5) 10
(18) 6
(30) 11
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8 (5)
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(1256) 831
752 (892)
52 (32)
42 (50)
24 (6)
(715) 686
(15) 13
7 (5)
13 (34)
8 (7)
4 (4)
26 (29)
0 (2)
(5) 42
(12) 22
(3) 2
(9) 3
(11) 27
(1) 3
52 (55)
1349 (1910)
35 (83)
62 (72)
248 (214)
49 (59)
(129) 114
(256) 169
(120) 293
(123) 192
(1662) 1784
(32) 31

LEGEND

AM (PM) Peak Hour Volumes

Signal

Stop Sign

NOT TO SCALE
(ROAD WAY ALIGNMENT CONCEPTUAL ONLY)

TPG Consulting Incorporated

LANE CONFIGURATIONS AND PEAK HOUR TRAFFIC VOLUMES 2030 + Project

Fig Garden Financial Center Phase IV | Figure 8-1

08-1176.1

TABLE 8-1:
2030 PLUS THE PROJECT CONDITIONS ANALYSIS LEVELS OF SERVICE

	AM Peak Hour		PM Peak Hour	
Segment	**LOS**		**LOS**	
Shaw Avenue – Palm Avenue to Fruit Avenue	C		D	
Shaw Avenue – Maroa Avenue to Palm Avenue	C		D	
Palm Avenue – Bullard Avenue to Barstow Avenue	C		D	
Palm Avenue – Barstow Avenue to San Ramon Avenue	C		D	
Palm Avenue – San Ramon Avenue to San Jose Avenue	C		D	
Palm Avenue – San Jose Avenue to Shaw Avenue	C		D	
Palm Avenue – Shaw Avenue to Gettysburg	C		C	
San Jose Avenue – Colonial Avenue to Maroa Avenue	C		C	
San Ramon Avenue – Palm Avenue to Fruit Avenue	C		C	
Barstow Avenue – Palm Avenue to Fruit Avenue	D		**F**	
Thorne Avenue – Barstow Avenue to San Ramon Avenue	C		C	
Intersection	**LOS**	**Delay[1]**	**LOS**	**Delay[1]**
Bullard Avenue at Palm Avenue	D	51.3	**F**	**102.8**
Browning Avenue at Palm Avenue	B	16.9	C	23.0
Barstow Avenue at Palm Avenue	C	34.8	**F**	**84.5**
San Ramon Avenue at Palm Avenue				
• NB Left	A	9.8	B	12.1
• SB Left	A	9.1	B	14.7
• EB Approach	B	11.7	C	16.4
• WB Approach	B	14.5	C	18.1
San Jose Avenue at Palm Avenue	B	10.6	B	17.9
Shaw Avenue at Palm Avenue	C	27.4	C	35.0
Van Ness Boulevard at Palm Avenue				
• WB Right	B	11.0	B	11.0
Gettysburg Avenue at Palm Avenue	B	10.3	B	10.1
Ashlan Avenue at Palm Avenue	B	16.8	C	29.2
Barstow Avenue at Thorne Avenue	C	26.9	C	23.9
San Ramon Avenue at Thorne Avenue				
• EB Left-Through-Right	B	10.3	B	9.6
• WB Left-Through-Right	A	10.0	B	9.7
• NB Approach	A	0.0	A	0.4
• SB Approach	A	4.8	A	1.9
Shaw Avenue at Fruit Avenue	B	14.7	B	17.2
Shaw Avenue at Maroa Avenue	B	17.2	**E**	**72.2**
San Ramon Avenue at Colonial Avenue				
• NB Left-Through	A	5.9	A	3.8
• EB Approach	A	8.8	A	8.9

[1] *delay in seconds per vehicle*
SB = southbound NB = northbound EB = eastbound WB = westbound

Segments and intersections projected to operate below the adopted level of service standard are shown bolded in Table 8-1. As shown in Table 8-1, one (1) segment and three (3) intersections are projected to operate below the appropriate level of service standard in the 2030 Plus the Project conditions scenario. All the remaining study segments and intersections are projected to operate at or above the appropriate adopted level or service standard in the 2030 Plus the Project conditions scenario. Therefore, there is one cumulative LOS impact which the Fig Garden Financial Center Phase IV Project contributes to in the 2030 Plus the Project conditions at the study locations.

8.2 Signal Warrants

Peak hour traffic signal warrants (Warrant 3, part B) were also prepared for the four (4) unsignalized intersections. Based on the peak hour traffic signal warrant, the unsignalized intersections are not projected to meet the warrant in the 2030 Plus the Project conditions scenario. These warrant analyses are limited to the peak hour volume warrant (Warrant 3, part B) only and other conditions may exist which meet other traffic signal warrants.

CHAPTER 9 – CONCLUSIONS AND RECOMMENDATIONS

9.1 Level of Service Analysis

As previously discussed, the following locations, by scenario, are projected to operate below the appropriate City of Fresno or County of Fresno's adopted level of service standards:

9.1.1 Cumulative Analysis

The following segments and intersections were predicted to operate below the City of Fresno's appropriate LOS standards.

2030 Without the Project

Segments

- Barstow Avenue – Palm Avenue to Fruit Avenue – PM peak hour

Intersections

- Bullard Avenue at Palm Avenue – PM peak hour
- Barstow Avenue at Palm Avenue – PM peak hour
- Shaw Avenue at Maroa Avenue – PM peak hour

2030 Plus the Fig Garden Project

Segments

- Barstow Avenue – Palm Avenue to Fruit Avenue – PM peak hour

Intersections

- Bullard Avenue at Palm Avenue – PM peak hour
- Barstow Avenue at Palm Avenue – PM peak hour
- Shaw Avenue at Maroa Avenue – PM peak hour

9.1.2 Fig Garden Project-Specific Analysis

After determination of the cumulative analysis identified in the LOS analysis, the significance criteria were applied to determine what, if any, impacts are project-related. Based on the City's significant impact threshold, none of the study locations that are projected to operate below the appropriate adopted LOS standard are significantly impacted by the Project. For locations with an LOS F standard that are projected to operate at LOS F in the 2030 without the Project and in the 2030 Plus the Fig Garden Project scenarios, the overall intersection delay increase was analyzed to determine what, if any, significant project-related impacts occur. The results of the delay comparison are as follows:

Intersections

- Bullard Avenue at Palm Avenue – increase in average delay = 2.8 < the 5 sec threshold
  - 2030 No Project PM Delay: = 100.3
  - 2030 Plus the Project: PM Delay: = 102.8
- Barstow Avenue at Palm Avenue – increase in average delay = 3.4 < the 5 sec threshold
  - 2030 No Project: PM Delay: = 81.1
  - 2030 Plus the Project: PM Delay: = 84.5

- Shaw Avenue at Maroa Avenue – decrease in average delay = 2.9 < 5 the sec threshold
  - 2030 No Project: PM Delay = 75.1
  - 2030 Plus the Project: PM Delay = 72.2

As shown above, all average delay changes associated with the Project are projected to be below the 5 second increase threshold of significance. There are no significant impacts as a result of the development of the Fig Garden Financial Center Phase IV Project.

9.2 Roadway Improvements

9.2.1 City of Fresno

Potentially recommended improvements (such as addition of through and turn lanes, changes in signal phasing, movement restriction, etc.) have been evaluated against the established criteria presented in the City of Fresno's TIS Guidelines, as follows:

> *"For all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any). All mitigations should be reviewed in the field to make sure that they can be accommodated. If they cannot be accommodated or are not feasible please advise in the TIS so that the applicant and the City of Fresno are aware of right-of-way issues in advance."*[13]

As shown above, the Project does not create any project-specific significant impacts to the analysis roadways. Therefore, the Project will pay the City's Fresno Major Street Improvement (FMSI) and Traffic Signal Mitigation Impact (TSMI) fees to mitigate its contribution to the cumulative impacts.

9.2.2 County of Fresno

This is consistent for all County controlled locations (Browning Avenue, Van Ness Blvd, and Ashlan Avenue at their intersections with Palm Avenue) with the County's General Plan policies, as follows:

> *Draft General Plan Implementation Program TR-A.B states that the County would require new development within an unincorporated area of a city sphere of influence to pay the traffic impact fees of that city. It would be the responsibility of the cities to develop and maintain their roadway capital improvement programs and adequate funding mechanisms to maintain their adopted level of service programs for the entire sphere of influence.*[14]

[13] *City of Fresno Traffic Impact Study Guidelines*, City of Fresno, February 2009, Page 11.
[14] *County of Fresno General Plan Update Draft Environmental Impact Report*, County of Fresno, February 2000, page 4.4-31

9.2.3 Planned City Improvements

Based on the City of Fresno's current TSMI project list, three improvements included in the TSMI apply to the study locations. These improvements will be constructed using TSMI funds, which the Project will pay into. These improvements are as follows:

- Shaw Avenue at Palm Avenue
    - Widening to dual left-turn lanes on all four legs
        - Dual left-turn lanes are already located on the southbound approach
        - Separate right-turn lanes are already located on the westbound and southbound approaches

This improvement is currently ranked number 2 on the Fiscal Year 2011 (FY11) Priority List for Intersection Traffic Flow Improvements. The left-turn lanes and separate right-turn lanes are assumed to be in place for the 2030 No Project and 2030 Project scenarios.

- Barstow Avenue at Palm Avenue
    - Installation of left-turn signals with dedicated phases

This improvement is currently ranked number 12 on the FY11 Priority List for Warranted Left Turn Signals. The left-turn signals are assumed to be in place for the 2030 No Project and 2030 Project scenarios.

- Barstow Avenue at Thorne Avenue
    - Installation a traffic signal

This improvement is currently ranked number 14 on the FY11 Priority List for New Traffic Signal Installations. This traffic signal is warranted based on the school crossing signal warrant. As shown in the signal warrant analysis included in this report, the peak hour traffic signal warrant is not currently met or projected to be met in the future conditions. This traffic signal is assumed to be in place for the 2030 No Project and 2030 Project scenarios.

In addition to the improvements planned in the TSMI, additional improvements are also planned in the City of Fresno's Intelligent Transportation Systems (ITS) Program. Phase 4 of the City's ongoing traffic signal synchronization program will be to synchronize all traffic signals on Shaw Avenue from SR 99 to SR 41 (fiber) and Bullard Avenue from Marks Avenue to Willow Avenue (wireless). These improvements are programmed for some time between 2011 and 2015. Therefore, the study intersections located on these corridors have been analyzed as coordinated for the 2030 No Project and 2030 Project scenarios.

9.2.4 Cumulative Improvements

Potential improvements have been prepared for all study locations projected to operate below the appropriate adopted LOS standard. The feasibility of each of the proposed improvements is then addressed. Based on the identified right-of-way constraints, 2025 General Plan designations, on-street parking needs, existing and planned bicycle facilities, and City practices and policies, improvements are not feasible at these locations. Therefore the cumulative conditions are considered significant and unavoidable because no feasible mitigation measures are available.

2030 Without the Project

Segments

- Barstow Avenue – Palm Avenue to Fruit Avenue
  - No improvements recommended

This segment of Barstow Avenue is currently constructed to two (2) lanes with a continuous two-way left-turn lane. This is the buildout configuration for this roadway adopted in the General Plan. Further widening of Barstow Avenue would conflict with the adopted General Plan and *Bicycle, Pedestrian and Trails Master Plan* policies. If the segment was widened to four lanes, then the segment is projected to operate at LOS C in both the 2030 No Project and 2030 Plus the Project scenarios. Widening of this roadway segment would require removal of the current on-street parking on both sides of Barstow Avenue. On-street parking is needed for the residential development fronting Barstow Avenue on both sides of the street. On-street parking is also needed on the north side of the roadway for the adjacent schools. Additional right-of-way cannot be feasibly obtained for widening due to the level of residential development and the adjacent school buildings.

Intersections

- Bullard Avenue at Palm Avenue
  - No improvements recommended

All approaches to this intersection currently have separate left-turn lanes and two through lanes. Separate right-turn lanes are available on the westbound and southbound approaches. Adjacent development is located in very close proximity to the roadways on the northwest, southwest, and southeast corners, prohibiting widening on those approaches. In addition, the on-street parking located on Bullard Avenue is needed for the adjacent residential development and would likely need to be removed to accommodate widening at the intersection. The addition of through lanes and/or right-turn lanes is not feasible.

- Barstow Avenue at Palm Avenue
  - No improvements recommended

The Barstow Avenue approaches to this intersection currently have separate left-turn lanes, one through lane, and a separate right–turn lane. Palm Avenue approaches have separate left-turn lanes and two through lanes with shared right-turn lanes. See above for discussion of the roadway configuration for Barstow Avenue. Adjacent development is located in very close proximity to the roadways on the southwest, southeast, and northeast corners, prohibiting widening on those approaches. In addition, the on-street parking located on Bullard Avenue is needed for the adjacent residential development and would likely need to be removed to accommodate widening at the intersection. The same would be required of the existing on-street bicycle lanes on Barstow Avenue. The intersection is already planned for installation of protected left-turn phasing, which is the most feasible improvement for the intersection. The addition of through lanes and/or right-turn lanes is not feasible.

- Shaw Avenue at Maroa Avenue
  - No improvements recommended

The Maroa Avenue approaches to this intersection currently have separate left-turn lanes, one through lane, and a separate right–turn lane. Shaw Avenue approaches have separate left-turn lanes and three through lanes with shared right-turn lanes. Adjacent development is located in very close proximity to the roadways on all four corners, prohibiting widening on those approaches. In addition, Maroa Avenue, south of Shaw Avenue, is constructed as a two-lane roadway with undeveloped frontages.

The acquisition of additional right-of-way and removal of trees and structures would be required to extend the four-lane Maroa section to the south. The addition of right-turn lanes on Shaw Avenue or additional through lanes on Maroa Avenue are not feasible.

9.3 Project Mitigations

As previously discussed, the Fig Garden Financial Center Phase IV Project will pay the City of Fresno's TSMI and FMSI fees based on the currently adopted fee schedule at the time the Project's building permit is obtained. As requested by Caltrans in its response to the Notice of Preparation and at the Scoping meeting conducted with Caltrans on July 28, 2011, Chapter 3 of this report details the Project trips anticipated to access nearby freeway interchanges. It should also be noted that the Project is also subject to payment of the Fresno County Regional Transportation Mitigation Fee (RTMF). The RTMF is currently $1.03 per square foot for Commercial/Office/Service uses. These fees are based on the *Fresno-Madera Freeway Interchange Deficiency Study* and intended to provide mitigation for impacts to Caltrans facilities. Based on the analysis detailed in Chapter 3, the payment of the RTMF fees will provide complete mitigation for the Project's cumulative impact to State Facilities identified in Chapter 3.

APPENDIX I

INFRASTRUCTURE UTILITY REPORT

UTILITY INFRASTRUCTURE REPORT
&
PUBLIC IMPROVEMENTS

FIG GARDEN FINANCIAL CENTER PHASE IV
SEC WEST SAN JOSE AVENUE & NORTH COLONIAL AVENUE
FRESNO, CALIFORNIA

CUP-2011-088, GAP No. A-11-006,
R-07-77 & VTPM-2008-07

Project No. 08017.00
November 2011

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OVERVIEW

The project proponents propose to provide for Phase IV to the existing Fig Garden Financial Center (the "Financial Center") by incorporating a commercial office building on property immediately adjacent to the Financial Center (the "Site Addition"). The Site Addition is presently designated high to medium residential and is being rezoned to C-P. The Site Addition (comprising APNs 417-231-16, 417-231-17, 417-240-37and 417-240-03) are planned four-story office building of approximately 104,593 square feet of usable office space and an underground parking lot of 83,076 square feet.

The Site Addition is currently occupied by an existing apartment complex, vacant parcel which was recently cleared of a pre-existing single family residence and a parcel of a single family house. The Site Addition is bounded to the north by West San Jose Avenue, and a residential and single family apartment complex properties beyond; to the east by residential properties; to the south by an existing two-story multi-family apartment complex; and to the west by the existing four (4)-story Fig Garden Financial Center.

WATER INFRASTRUCTURE

The purpose of this section is to determine water demands, availability of water and any additional water supplies that might be necessary to serve the project.

Existing Water Main Facilities

The Project is entirely within a fluoridated water supply zone, served by the City of Fresno-Water Division. This water zone must have adequate water supply and distribution facilities to meet instantaneous peak water demands or pressure drops could occur in the Project vicinity. The Project proponents have been advised that long term water demands must also be consistent with the City's Urban Water Management Plan.

City of Fresno maintains all existing public water facilities in the Project vicinity and will provide the domestic supply and fire flow to serve the Project. City has an existing 6" steel water main located on the south side of west San Jose Avenue, an existing 6" steel water main located outside and parallel to the west property line of the project, within the existing five (5) feet wide water easement, and also has an existing 6" steel water main located inside and parallel to the east property line of the project with no existing easement in records. A fire flow test was conducted on November 19, 2008 at 9:15 am by Fire Department at existing Fire Hydrant #601, located within the project frontage at West San Jose Avenue, with static pressure of 45 PSI, residual of 30 PSI at 1,360 GPM and calculated available flow of 1,800 GPM at 20 PSI.

Domestic Water Demands of the Project

Water supply impacts of the Site Addition will be fully mitigated. Pre and post Project water demands have been developed. The difference between pre and post Project water demands reflects the water supply impacts of the Project. Both peak and average annual water demands must be considered. Unless fully mitigated, increases in peak water demand attributable to the Project could result in undesirable pressure drops in the surrounding water service area.

Water impacts of the Site Addition will be fully mitigated by retrofitting existing domestic and irrigation systems throughout the existing office complex at 5250, 5260 and 5200 North Palm Avenue, installation of water conserving fixtures throughout if necessary by the development of additional water supply facilities off the Project site. Water impacts were considered both for indoor (domestic) and outdoor (irrigation) uses. Estimates of peak and annual water demands have been prepared in reliance on historic water use records for the Project area and widely accepted water use standards.

Domestic (Indoor) Water Demand of the Proposed Site Addition

When completed, the Project will have a usable floor area of 104,593 square feet. The building will be equipped with water conserving fixtures including 1.6 gallon "low flow" toilets and low flow faucets. Water use studies frequently cited in developing water use estimates include: (1) 1999 study issued by the American Water Works Association, and (2) a 2003 study by the East Bay Municipal Utility District. Both of these rigorous studies compare indoor water use of existing homes with older plumbing to the same homes after retrofitting with the water conserving fixtures now required by the California Uniform Plumbing Code.

Water usable for the office building is presumed to be 9.2 AFY based on the existing office complex. Indoor water demand for the existing development (pre-Project) on the Site Addition is estimated to be 4 AC/F per year. Due to estimated head losses for the proposed four-story building, an onsite domestic booster pump will be necessary to maintain adequate water service pressure for upper floors.

Combined Indoor Water Demand of the Project

All one hundred and ten (110) 3.5 gallon per flush toilets in the Financial Center will be retrofitted with low flow systems to reduce water use to 1.6 gallons per flush. The indoor water supply impact of the completed Project is the difference between the historic indoor demand of the Site Addition and the estimated demand after completion of the Site Addition and the retrofit of existing toilets in the Financial Center.

Outdoor Water Demand of the Project

Development of the Site Addition will decrease outdoor water use as compared to the historic water uses on the 3.96 acres. There are 34,955 square feet of irrigable landscape proposed for the Site Addition compared to 85,377 square feet landscape in the existing Project site land uses.

Existing landscape is approximately 50 % greater than the proposed project. New water conserving irrigation systems and advanced "smart" controllers will be installed. The existing systems are out-dated, low efficient and prone to higher leakage rates. Furthermore, a review of historic irrigation meter data reveals that existing landscape has been irrigated at a rate between two and five times the evapotranspiration rate. A basic formula for calculating annual landscape water demand for the Site Addition is as follows:

MAWB = (ETO) (0.8) (LA) (0.62)

Where MAWB = Maximum allowable water budget expressed in gallons per year.

ETO = 45.1 inches/year reference evapotranspiration for Fresno.

0.8 = Allowable percentage of water budgeted for landscape per year.

LA = Landscape area requiring irrigation in square feet = 34,955 SF

0.62 = Conversion factor to calculate MAWB in gallons/year.

MAWB = (45.1) (0.8) (57,064 Ft^2) (0.62) = 807,444 gal/year = 2.6 acre-feet/year (AFY)

As discussed above, irrigation demand of the Site Addition will be reduced with this Project. Completion of the Project should also reduce historic peak demand for the City's water pressure zone serving the Project. Due to inefficient irrigation practices, historic landscape water use for the Financial Center is three to four times higher than required.

Water Demand Impacts

Total annual water demand for the Project is anticipated to be 11.8 acre feet per year as summarized in the attached Appendix A. Peak water demand of the Site Addition and the completed Project is not anticipated to increase. Water production and pressure records from the City of Fresno Utilities Department reveal that the highest peak water demands in the service area occur at 5 a.m. during the summer. This is clearly attributable to automated irrigation systems since, prior to 6 .am., indoor residential water demands are at a minimum. As discussed previously, irrigation demand is anticipated to decrease with the Project as compared to the existing pre Project irrigation demand. Consequently, it is not anticipated that the Project will have any adverse impact on peak demands in the service area.

Based on the calculation presented on Appendix "A", the estimated total water usage for the project AFY which is consistent with the Urban Water Management Plan (UWMP) allocations. The estimate total water usage accounts the following mitigation measures which will reduce the overall water demand of the Project.

1. Retro-fit all existing irrigation controllers with "Smart Controllers" (evaporation transpiration governed controllers). All new controllers in the Site Addition will be likewise equipped.

2. Retro-fit approximately 110 toilets to reduce water usage per flush from 3.5 gallons to 1.6 gallons. The calculations only account for a conservative 10% reduction of actual water consumption. According to a 2002 Retrofit Strategy Report prepared for HUD, attached in Appendix "A", Exhibit "5", the retrofit of toilets are anticipated to reduce water consumption by 10.77% or 6 gallons per capita a day. In order to comply with these mitigation measures, the retrofit of toilets and Smart Controllers shall be in place for the life of the project and are permanent. Proper equipment and construction methods will ensure the expected long term water savings will be achieved.

3. All new landscaping will conform to the State's new "Waterwise" standard. The State of California has adopted new landscape efficiency standards and the proposed office building project and associated landscape on the Site Addition will meet or exceed those requirements.

4. Irrigation controllers will be set to operate during off peak water demand periods.

Fire Flow Demand of the Project

Required Fire Flow for both building fire sprinklers and fire hydrants is 1500 GPM @ 20psi, according to Byron Beagles, Senior Fire Prevention Inspector with the Fresno Fire Department. Due to this required flow and available flow at the street system, a fire sprinkler pump is required. One (1) private fire hydrant and two (2) public fire hydrants are preliminary proposed for the project. Also, during a previous meeting with Neil Montgomery of the City of Fresno Water Division, he indicated that the existing 6" steel water main pipes that runs along outside the west property line up to water main junction to the south at North Wishon Avenue, at existing connection from West Shaw Avenue water main junction to next water main junction to the north at North Wishon Avenue alignment, and along inside the east property line of the project, will require replacement and/or size upgrade from 6" steel to 8" PVC water main pipes, due to the low water pressure within the water service zone area and due to the age of existing water main pipes.

Water Supply Improvements

The Project is located in a fluoridated water service zone which is isolated to maintain uniform and efficacious fluoride levels throughout the zone. The Project proponent could participate in one or more water projects, acceptable to the City, which generate additional water supply adequate to offset any and all increases in peak demand attributable to the Project should the City find this to be a factor. The balance of the new water supply will be available to supplement existing supply in the fluoridated water service area. The project also may not connect to the fluoridated system and use existing City water west of the site.

Water Distribution System Improvements

There will be an upsize and/or size upgrade of existing water main pipes adjacent to the project site due to low water pressure and substandard size. In addition, one (1) public fire hydrant is preliminary proposed along the frontage at West San Jose Avenue for service of proposed Fire Department Connection Assembly, and one (1) on-site public fire hydrant and one (1) on-site private fire hydrant with required looped 8" fire line are preliminary proposed for the project. Aside from these fire hydrants; the project will be required to provide an 8" fire service line with double detector check valve in vault and 4" domestic water service with backflow prevention assembly and 2" landscape irrigation service with backflow assembly. These services are planned to be installed at the northeast corner portion of the proposed building. The project will provide for the proposed water service facilities such as backflow prevention assemblies, fire department connection, post indicator valve, etc. near the public right-of-way.

Conclusion for Water Infrastructure

Based on the existing water main system, existing water flow and proposed four-story office building, both domestic water and fire pumps will be required to fully service the project, along with the three (3) new fire hydrants proposed and upsize of existing water main along west property line, from 6" to 8" water main.

WASTEWATER SYSTEM INFRASTRUCTURE

The purpose of this section is to identify and address sanitary sewerage issues and impacts, and determine the feasible solutions.

Existing Sanitary Sewer Facilities

City of Fresno maintains all the existing public sanitary sewer system and will provide the sewer service for the Project. City has an existing 8" Vitrified Clay (VCP) sewer main along West San Jose Avenue that flows from west to east, and also has an existing 8" VCP sewer main, located approximately mid-half section of the project property, which flows from south to west into the existing 8" sewer main at West San Jose Avenue. This existing 8" sewer main that runs into the project site, is only up to existing manhole to the adjacent property to the south, approximately 51 feet to the south property line of the project and it is servicing the existing apartment to the south.

Proposed Sanitary Sewer System

The project public sanitary sewer main to serve the proposed project is an onsite 8-inch main flowing north to West San Jose Avenue. The following sewer improvements shall be required prior to providing City sewer service to the project:

1. Dedicate a 20-foot wide sewer main easement for all onsite public sanitary sewer mains.

2. Engineered improvement plans prepared by a Registered Civil Engineer shall be submitted for Department of Public Utilities review and approvals for proposed additions to the City Sewer System.

3. All public sanitary sewer facilities shall be constructed in accordance with City Standards, specifications, and policies.

Conclusion for Sewer Infrastructure

The sewer service of proposed project can be gravity flow into the existing sewer system and no impact to existing City system should occur.

STORM DRAINAGE

The purpose of this section is to identify and address storm drainage issues and impacts, and determine the feasible solutions.

Existing Storm Drain Facilities

Fresno Metropolitan Flood Control District (FMFCD) is the jurisdiction agency for the drainage of the project site and the surrounding adjacent properties. FMFCD has an existing 24" storm drain line with curb inlet exist approximately at the middle portion of the project frontage at the south side of West San Jose Avenue which planned to collect the storm drainage flow of the majority (Approximately 86%) of the project drainage area. Also, there's an existing private maintained catch basin connected to an 18" storm drain lateral, located approximately 11 feet west and 30 feet south of the northwest corner of the project property at the adjacent Fig Garden Financial Center's parking lot. The remainder of drainage area of the project will sheet drain flow into the existing FMFCD storm drain system located on West San Jose Avenue and Nantucket Avenue intersection.

Estimated Storm Drain Discharge Flow for the Project

Based on the 2-year storm as required by FMFCD, Hydrology Pre-Development Plan, the preliminary total required peak-reducing maximum discharge flow of approximately 1.00 CFS.

Proposed Storm Drain Facilities

There will be no proposed new off-site storm drain line anticipated, aside from the required gravity storm drain lateral stub for the proposed building structures and on-site peak-reducing storm drain facility.

The proposed gravity storm drain stubs will be connected to the existing curb inlet located at West San Jose Avenue. Based on the preliminary calculated total peak-reducing maximum discharge flow of 1.28 CFS, a controlled outlet pipe should be sized accordingly based on 2-year pre-development discharge flow on each drainage tributary area. The collection drainage of building downspout, fire access drive and planters above ground level shall be directed to proposed peak-reducing facility before it will discharge to controlled storm drain outlets.

Also, a storm drain sump pump will be needed at the basement parking garage for the drainage of the proposed domestic water, fire pump room. This will discharge into the existing privately maintained catch basin, located at the adjacent Fig Garden Financial Center's parking lot.

Due to existing land use and existing FMFCD Master Plan drainage system, there will be a total required maximum peak-reducing discharge flow of 1.00 CFS based on the 2-year storm pre-development conditions, Hydrology Pre-Development Plan. Because of this controlled peak-reducing storm drain facility is required to mitigate the impacts of increase runoff due to change of land use from medium high density and medium low density residential to commercial land use, to eliminate the adverse impacts on the existing storm drain system. This peak- reducing storm drain facility can be detention pond and/or underground detention pipe system or combination of both which will be private maintained and located on-site.

Conclusion for Storm Drain Infrastructure

Storm drain discharge for the project site will be gravity controlled drain into the existing FMFCD curb inlet , located at west San Jose Avenue. The project will need a storm drain sump pump for the drainage of proposed domestic water and fire pump room at the basement parking garage that will drain into the existing privately maintained catch basin located at the adjacent Fig Garden Financial Center's parking lot. Also, a peak-reducing storm drain system is required to mitigate the impacts of increase runoff. Location and type of peak-reducing system should be evaluated and properly designed during preparation of final construction plans.

Also, FMFCD encourages, but does not require that roof drains be constructed such that they are directed onto and through a landscaped grassy swale area to filter out pollutants from roof runoff. Direct discharge connection of swimming backwash to storm drain is not permitted and should be directed onto and through a landscaped grassy swale area or approved equal.

Therefore, with the above there are none impacts to the FMFCD system.

ELECTRICITY, NATURAL GAS, TELEPHONE AND CATV INFRASTRUCTURE

The purpose of this section is to identify and address electricity, natural gas, telephone and CATV issues and impacts, and determine the feasible solutions.

Existing Dry Utility Facilities

PG&E maintained both existing electric and gas facilities along West San Jose Avenue, where the proposed electric and gas services of the project will connect service. PG&E has an existing overhead power lines that runs along the south side of West San Jose Avenue which along the project side. Also, PG&E has an existing 2" gas main along West San Jose Avenue, located approximately 11 feet north of centerline of West San Jose Avenue within the existing street asphalt paving.

AT&T maintained both existing telephone and CATV facilities along San Jose Avenue. Telephone line exists underground at the north side of West San Jose Avenue. These lines will be utilized to service the project site.

Electric, Gas, Telephone and CATV Demand for the Project

The following is the preliminary Dry Utility service demand for the project:

1. Electric – 2,500 AMP / 480V 3 Phase, 4 Wire, 100% Rate
2. Gas – 5 lbs., 200 CFH
3. Telephone – 2 of 4" Telephone Conduits 1500 Pairs
4. CATV – 2 of 2" CATV Conduits

Proposed Dry Utility Facilities

1. Electric
   The electric service for the project will be provided by Pacific Gas & Electric Company (PG&E) through extension of PG&E services of Rules 15 & 16.

2. Gas
   Proposed 2" gas service for the project will service from existing 2" gas main, located along west San Jose Avenue. Proposed number of gas meters will be determined and/or decided by both PG&E and mechanical consultant of the project during the final preparation of Construction Drawings.

3. Telephone and CATV
   The telephone and CATV services for the project will have service from the existing AT&T facilities along West San Jose Avenue. Two (2) of 4" conduits and two (2) of 2" conduits are preliminary requirements for telephone and CATV conduit stubs, respectively. These numbers of stubs of telephone and CATV services should be verified and/or decided by both AT&T and dry utility consultant of the project during the final preparation of the Construction Drawings.

Conclusion for Dry Utility Infrastructure

All required dry utility services for the project will obtain service from West San Jose Avenue and it was guaranteed by the respective utility companies that the project is feasible to provide utility service.

Therefore, there are no impacts on the dry utilities.

PUBLIC IMPROVEMENTS

Street Improvements

The project will be required to extend and construct the curb and gutter from the west half of the frontage to the east boundary line of the project, along W. San Jose Avenue with full width of AC paving from centerline plus a minimum of 16 feet wide AC paving on the north side street, measured from the centerline and necessary AC paving transition from the existing. The project will also require constructing a concrete sidewalk along the entire project frontage along San Jose Avenue along with the 26' wide fire/emergency driveway with emergency gate and street lights.

Water Improvements

Based on the existing water main system, existing water flow and proposed four-story office building, both domestic water and fire pumps will be required to fully service the project, along with the three (3) new fire hydrants proposed and upsize of existing water main along west property line, from 6" to 8" water main with required 20' wide water easement and upsize of existing water main along east property line, from 6" to 8" water main with require 20' wide water easement.

Sewer Improvements

Due to the proposed new four-story office building, the existing public 8" sanitary sewer main that runs from south to north into the project property, will need to be removed and replaced/with a PVC pipe with the required 20' wide sewer easement that will be dedicated to the City of Fresno, should the location be adjusted.

Storm Drain Improvements

There will be no proposed new off-site public storm drain line anticipated, aside from the required gravity storm drain lateral stub for the proposed building structures and on-site peak-reducing storm drain facility and pipe system.

Electric, Gas, Telephone and CATV Improvements

There will be no proposed or new off-site electric, natural gas, and/or telephone lines anticipated as the installation of new lines will occur inside the project site.

APPENDIX A

PRELIMINARY
WATER DEMAND CALCULATIONS

FIG GARDEN FINANCIAL CENTER PHASE IV
FRESNO, CALIFORNIA

Prepared for:

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FIG GARDEN FINANCIAL CENTER PHASE IV

Total Water Demand of Existing:

Interior	=	36.73* AFY
Landscaping	=	29.16* AFY
Total		**65.89* AFY**

* Data from Table A

Less 18% for Retro-Fit & Smart Controllers	<11.86> AFY
New Demand	54.03 AFY
Less 42 Units	<5.46>** AFY
Final Demand of Existing with Retro-Fitting	**48.57 AFY**

** Data in Table B

Total Savings on Water Demands of Existing Financial Center:

65.89 AFY
<48.57> AFY
17.32 AFY

Proposed Four-Story Demand:

Domestic:	11.5 AC Ft Yr**- <20% Water EFF>	=	9.2 AFY
Landscaping:	807,444 Gal/Yr	=	2.6 AFY
Total			**11.8 AFY**

Data is average of 5260 & 5200 N. Palm Avenue. (Table A)

Therefore:

Proposed Project of 11.8 AFY is less than the saving of retro-fitting the existing Financial Center of 17.32 AFY

Data of Existing Water Usage (Based on actual Water Billing Statements for subject properties):

TABLE A

Office/Commercial	Interior - af/yr	Irrigation - af/yr
5250 N. Palm & 749 W San Ramon	8.09	7.35
5260 N. Palm	11.84	
5200 N. Palm	11.34	9.03
749 San Ramon		7.35
5251 Colonial		5.42
Multi-Family		
563 or 557 San Jose Ave S/A	5.46	
Sub-Totals	36.73	29.16

Total Water Used - af/yr 65.89

TABLE B

Existing Multi-Family	
Total Water Used - af/yr	5.46
	5.46
Number of Units	42
Water Used - af/yr/unit	0.13

PERKINS DESIGN ASSOCIATES

SITE PLANNING
LANDSCAPE ARCHITECTURE
RESORT DESIGN

May 31, 2011

Fig Garden Financial Center Phase IV

Palm Ave. & W. San Jose Ave.
Fresno, CA

Preliminary Water Use Calculations

WATER EFFICIENT LANDSCAPE WORKSHEET

SECTION A. HYDROZONE INFORMATION TABLE

Hydrozone*	Zone or Valve	Irrigation Method**	Area (Sq. Ft.)	% of Landscape Area
MW	1	Spray	4895	14
MW	2	Spray	5650	16
HW	3	Spray	2810	8
HW	4	Spray	2405	7
MW	5	Spray	3550	10
MW	6	Drip	1370	4
MW	7	Drip	2770	8
MW	8	Drip	905	3
MW	9	Spray	2395	7
MW	10	Drip	1370	4
MW	11	Drip	3535	10
LW	12	Spray	3300	9
Total			34955	100%

** Hydrozone*
HW = High Water Use Plants
MW = Moderate Water Use Plants
LW = Low Water Use Plants

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SECTION B. WATER BUDGET CALCULATIONS

Section B1. Maximum Applied Water Allowance (MAWA)

Maximum Applied Water Allowance is calculated using this equation:

MAWA = (ETo) (0.62) [(0.7 x LA) + (0.3 x SLA)]

where:

MAWA = Maximum Applied Water Allowance (gallons per year)
ETo = Reference Evapotranspiration from Appendix A (inches per year)
0.7 = ET Adjustment Factor (ETAF)
LA = Landscaped Area includes Special Landscape Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
0.3 = the additional ET Adjustment Factor for Special Landscape Area (1.0 - 0.7 = 0.3)

Maximum Applied Water Allowance = 807,444 gallons per year

Show calculations.

MAWA = (53.3) (0.62) ((0.7 X 34,955) + (0.3 X 0) =

= (33.0) (24,468.5) + 0 =

= 807,444 Gallons

Effective Precipitation (Eppt)

If considering Effective Precipitation, use 25% of annual precipitation. Use the following equation to calculate Maximum Applied Water Allowance:

MAWA= (ETo – Eppt) (0.62) [(0.7 x LA) + (0.3 x SLA)]

Maximum Applied Water Allowance = _____N/A_____gallons per year

Show calculations.

N/A

Section B2. Estimated Total Water Use (ETWU)

The project's Estimated Total Water Use is calculated using the following formula:

$$ETWU = (ETo)(0.62)\left(\frac{PF\,xHA}{IE} + SLA\right)$$

where:

ETWU = Estimated total water use per year (gallons per year)
ETo = Reference Evapotranspiration (inches per year)
PF = Plant Factor from WUCOLS (see Definitions)
HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
SLA = Special Landscape Area (square feet)
0.62 = Conversion Factor (to gallons per square foot)
IE = Irrigation Efficiency (minimum 0.71)

Hydrozone Table for Calculating ETWU

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)	Area (HA) (square feet)	PF x HA (square feet)
1	Medium	0.5	4895	2447.5
2	Medium	0.5	5650	2825
3	Medium	0.8	2810	2248
4	Medium	0.8	2405	1924
5	Medium	0.5	3550	1775
6	Medium	0.5	1370	685
7	Medium	0.5	2770	1385
8	Medium	0.5	905	452.5
9	Medium	0.5	2395	1197.5
10	Medium	0.5	1370	685
11	Medium	0.5	3535	1767.5
12	Medium	0.3	3300	990
			Sum PF x HA	18,292

Estimated Total Water Use = 428,571 gallons

Show calculations.

ETWU = (53.3) (0.62) ((18,292 / 0.71) + 0)

= (33.0) (12,987 + 0)

= 428,571 Gallons

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