TO: **James L. App, City Manager**

FROM: **Robert A. Lata, Community Development Director**

SUBJECT: **Request To Remove Two Oak Trees – PD 02-016, South Vine Street**

DATE: **July 5, 2005**

Needs: For the City Council to consider a request to remove two oak trees; a 32-inch diameter valley oak (tree #8) and a 25 inch diameter Blue Oak (tree #9) to accommodate pavement widening on South Vine Street.

Facts:

1. South Valley Developers received approval of PD 02-016, an application to develop a 130 room hotel, from the Planning Commission on May 27, 2003. A time extension for this approval will come before the Planning Commission on July 12, 2005.

2. As a condition of approval of the Planned Development, all oak trees on the project site are to be protected and preserved unless tree removals are specifically authorized by the City Council.

3. The oak trees proposed for removal are within the existing right-of-way of South Vine Street. The trees conflict with the City's plans for widening South Vine Street in accordance with City Westside Standard A-12.

4. The Public Works Department has applied for grant funding to complete bikeways on South Vine Street from 1st Street to Highway 46 West. The pavement widening along the frontage of the South Valley Developers' hotel project is an integral component of the proposed bikeway project.

5. An arborist report prepared by Carolyn Leach, dated 3-18-03 and subsequent letter dated 5-6-05 (both attached) describe the trees as "infested with decay" and unable to survive the widening of South Vine Street.

Analysis And Conclusion:

The oak trees proposed for removal are in conflict with the City's plans for improvements on South Vine Street. Based on the Arborist Report indicating that the trees are not in good health, and their location with respect to planned road improvements, it would appear prudent to allow the removal of these trees.

The developer of the property will be required to mitigate the impact of removal of these trees by planting trees of a total equivalent diameter of 14 inches (seven two-inch trees for example).

Policy Reference: Paso Robles Municipal Code Section 10.01

Fiscal Impact: None.

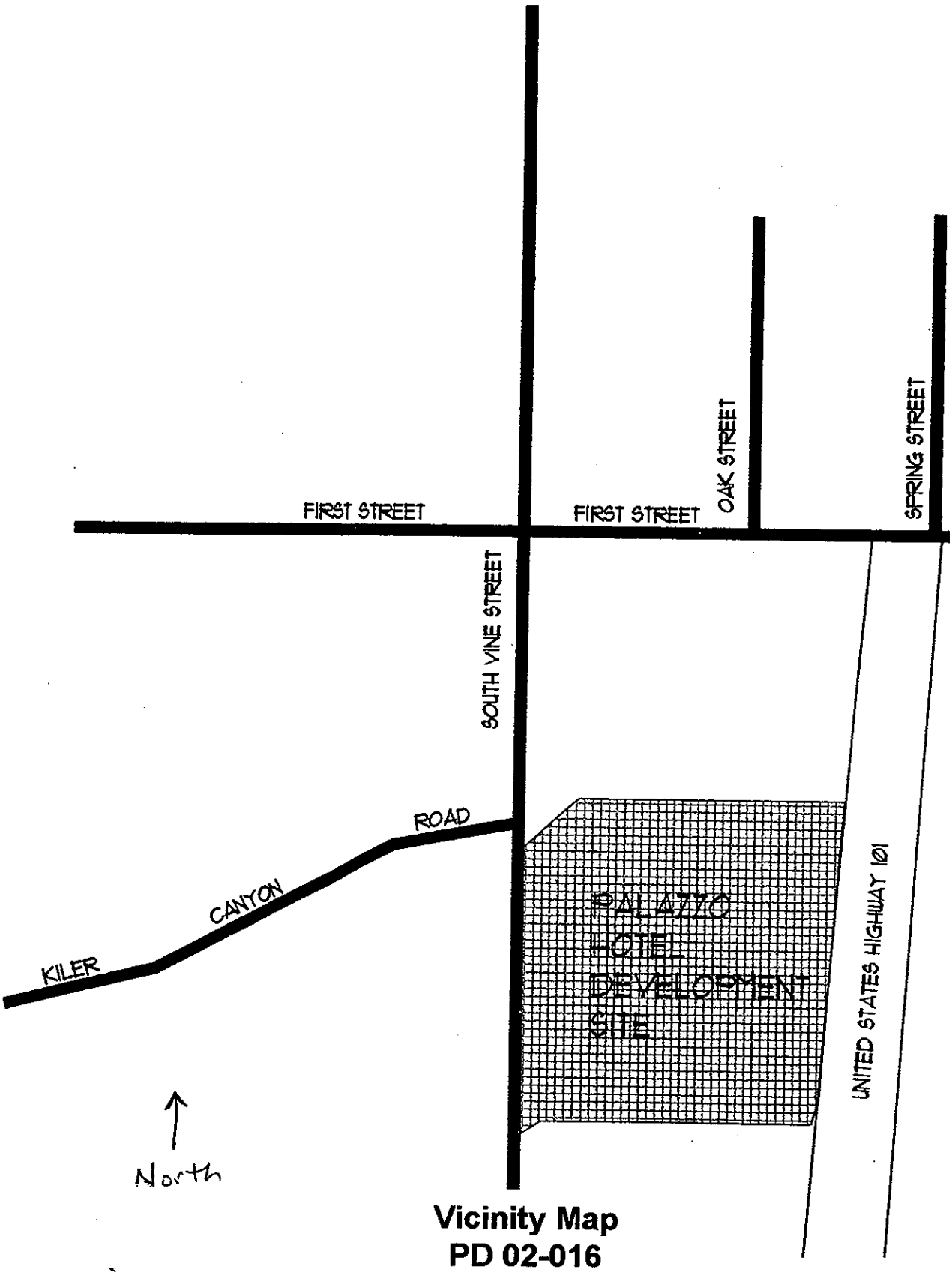
Options:

a.. Adopt Resolution No. 05-xx approving the request to remove two oak trees in the South Vine Street right-of-way predicated on the facts that the trees are in direct conflict with planned improvements to South Vine Street and that both trees are not in good health; and requiring the developer of the adjacent property to mitigate the loss of the trees by planting a replacement ratio of trees equivalent to 14-inches in diameter (seven two-inch trees, for example) to be planted in locations that are appropriate for the species of tree as determined by a horticulture professional.

b. Amend, modify, or reject the above option.

Attachments:

1. Vicinity Map
2. Arborist Letter and Report
3. Location Map
4. Photo: Trees within right of way
5. Resolution



Vicinity Map
PD 02-016
South Valley Developers, Inc

Carolyn B. Leach Consulting, LLC
444 Blume Street, Nipomo, CA 93444
(805) 929-9020
Registered Consulting Arborist #368, A.S.C.A.
W.C.I.S.A. Certified Arborist #727
Calif. Lic. Pest Control Advisor #AAO2862

May 6, 2005

Mr. Scott Schilling
South Valley Developers
16060 Caputo Drive, Suite 160
Morgan Hill, CA 95037

RE: Palazzo Paso, P.D. #02-016
Tree Report Addendum #1

Dear Mr. Schilling:

At your request, I have reviewed the work you plan along the Vine Street frontage of this project. I visited the project site on May 3, 2005.

If you recall, my Tree Preservation Report of March 18, 2003 indicated the importance of reducing the proposed width of Vine Street in order to allow the appropriate tree protection. This was the most important mitigation for trees #8 and 9.

You have indicated that the City is currently holding with the plans to widen Vine Street. The City wants the new edge of the street, along with the curb and gutter, to be located as shown on the original site plans I reviewed in February of 2003. That puts the back of the curb within three feet of tree #9 and within five feet of tree #8. Therefore, the anticipated root loss, including allowances for compaction and working space, will be 50% for tree #9 and 45% for tree #8. Canopy loss will be about half for each tree.

Clearly, this amount of impact is far greater than a tree can tolerate. Cutting roots within eight feet of a trunk will sever the principal roots that hold the tree upright. There will greatly increase the likelihood of the trees falling over. This is the most imminent concern. Additionally, long term problems will arise, including loss of vigor, increased susceptibility to attack from insects and diseases, and reduced ability to fight off wood decay – leading to compromised structural integrity. This last issue is a grave concern for tree #8, which has already

become infested with decay in its main structural limbs. This decay has caused a large (15" dia.) limb to break. Many of the other large limbs are infested with decay. The impact from additional root and canopy loss will cause the decay to get the upper hand in this tree, further increasing the risk for persons or property near the tree.

I highly recommend removal of trees #8 and 9 if Vine Street will be widened.

My suggestion is to mitigate the removal of these two trees by planting several mature boxed oak trees within the landscape area next to Vine Street. My view is that you should plant four 36" boxed oaks for the loss of tree #8 and three 36" boxed trees for the loss of tree #9. Since tree #8 is a larger tree, it should be replaced with one additional tree. Total mitigation is re-planting seven 36" boxed trees.

Please let me know if you have any further questions in this matter.

Sincerely,

Carolyn Leach

Carolyn Leach
Registered Consulting Arborist #368

C: Darren Nash

Tree Preservation Report

For

Palazzo Paso Robles
P.D. #02-016

Vine Street at First Street
Paso Robles, CA

March 18, 2003

By

Carolyn Leach Consulting, L.L.C.
444 Blume Street, Nipomo, CA 93444
(805) 929-9020

Carolyn Leach
Signed

3/18/03
Dated

1. Introduction

My work on this project involves review of the proposed construction around existing site trees, anticipating construction impacts, and evaluating whether those impacts will be tolerable to the trees. I have worked with the developers and the engineer to alter the initial layout of certain site features in order to reduce the impacts. This revised plan results in acceptable impacts to five native oaks. Two of the oaks, located closest to Vine Street, will sustain impacts above normally tolerable limits.

In this report, I present protection requirements that should be followed during construction.

2. Project Description

This project consists of a hotel development, with adjacent paved areas, swimming pool, retaining walls and parking lot. The plan reviewed for this report is the Preliminary Grading Plan, by EDA Design Professionals, dated 3/18/03. This plan is incorporated into this report by reference.

The site slopes from the northwest corner down to the northeast corner, where the site drains onto the adjacent property and onward to a culvert under the freeway.

The site vegetation is open grassland along the upper, flatter portions of the site. A few native oak trees are scattered across the site. Along the north and eastern portions of the property, many non-native trees have established themselves.

3. Native Tree Description

I visited the site on 2/18/03 and 3/7/03 to view the native oak trees, documenting their size and condition.

Seven native oak trees are found here, two valley oaks (*Quercus lobata*), and five blue oaks (*Quercus douglasii*). Their locations can be found on the conceptual grading plan from EDA. The trees have been assigned sequential numbering, beginning with tree #5, for ease in identification. Individual information on tree vigor and structural characteristics can be found on Table A of this report. This Table also establishes what the Critical Root Zone (CRZ) for each tree will be.

In general, the trees are in good condition and normal health. Trees #10 and 11 have been previously affected by installation of a gas line six feet away from their

trunks. Trees #5 and 6 have been affected by the nearby non-native trees, which are competing for soil moisture and sunlight with the native oaks.

4. Non-Native Tree Description

Hundreds of non-native trees inhabit this site. The most prevalent specie is Tree-of-Heaven (*Ailanthus altissima*), a native of China. This tree reproduces easily from either seed or root suckering. Considered a noxious weed by many, it is aggressive in how it spreads. When it invades native habitats, it often out-competes the native plants, causing the natives to weaken or die out.

These trees may be freely removed outside any oak tree CRZ area. Within the CRZ, this report shall be followed in removing the Tree-of-Heaven.

Another non-native tree on the site is English walnut (*Juglans regia*). These trees were likely planted as part of a farming operation many years ago.

5. Project Impacts

Construction affects trees in many ways, the most obvious being by placing roadways and buildings close to the trees. Site grading often causes injury because of soil being removed or added around a tree's roots. Underground work, such as trenching for utilities, can damage roots of nearby trees. Any type of soil compaction also injures tree roots. Pruning of branches is often required to obtain clearance for structures, vehicles, or pedestrians. Changes in drainage patterns and soil moisture can affect trees.

The key issues for this project are: where are roots found, how much injury is tolerable, and what will be done to control the amount of injury to the trees?

The largest tree roots, known as buttress roots, are located closest to the trunk, within the first eight to ten feet. They are critical for maintaining stability. Beyond the buttress roots are the conducting roots and fine roots. On oaks growing in dry, hot climates, roots are easily found well beyond the canopy edge.

Root impacts increase the closer to the trunk that the construction work occurs. Younger, healthier trees are more able to tolerate significant impacts than older, less vigorous trees. It is widely accepted that healthy trees are able to tolerate the loss of about **25% of their canopy and 30% loss of their root system.**

The city has established a critical root zone formula that protects tree roots. This formula is based on trunk diameter. For this project, the CRZ generally falls at the canopy edge. To determine the affect of the impacts, I have calculated the

percent of CRZ impact, and allowed a credit where additional roots can be protected. The amount of pruning was assessed in the field, based on proximity of improvements. These figures are shown below:

Tree #	% Root Impacts	% Canopy Impacts
5	none	none
6	none	none
7	19%	none
8	46%	40%
9	44%	50%
10	10% (w/bridge)	15%
11	16% (w/bridge)	none

The chart above shows tolerable impacts to trees #5, 6, 7, 10 and 11. The impacts to trees #8 and 9 are beyond normally tolerable amounts.

6. Impacts to Each Tree:

- Tree #5: A three-foot tall retaining wall is planned for just outside the CRZ. No grade changes are planned within the CRZ. No roots or canopy are expected to be impacted by this project. To improve the health of this tree, remover the Tree-of-Heaven within 100 feet of this tree, using hand methods within the CRZ and mechanical methods outside the CRZ.

- Tree #6: No grade changes are planned within the CRZ. No roots or canopy are expected to be impacted by this project. To improve the health of this tree, remover the Tree-of-Heaven within 100 feet of this tree.

- Tree #7: The parking area around this tree is planned from four to six feet below existing elevations. The retaining wall will need a significant footing to hold the weight of the soil, so the actual impact will be three to four feet more feet behind the wall. At my requested, one parking space has been removed along the west side of this tree. With that change, the root impact can be expected to be 19% of the CRZ. Other recommendations are:

    1. Limit grading to no more than four feet behind the wall
    2. Design the wall footing with as small of a "heel" as possible.
    3. Push the retaining walls as far away from the tree as possible, for example, omit the lower planter area on the north side of the tree, and push the wall four to five feet away.

4. Extend the CRZ into the corners of the planter, adding 80 square feet of protected area.

- Tree #8: Previous impacts to the CRZ of this tree include the existing road and gas pipeline, involving 8% of the CRZ. Widening Vine Street will add 23% more root loss to the CRZ. This clearly is the biggest impact to the tree, causing nearly half of its root system to be paved over and virtually non-functioning. Additionally, the curb and gutter installation could injure some of the large buttress roots, increasing the chance of future root and trunk decay. Another impact is the new sidewalk. With this plan, 10% more roots will be affected. If it is bridged then no additional impact will occur. Aside from these "public improvements", retaining walls are proposed on the east side of the tree, impacting about 5% of the CRZ. The total impacts to roots with this plan, are 46%, and to canopy, 40%, unless the street is narrowed. Mitigation is suggested below.

  1. Extend the protective fencing on the north and south sides of the tree to enclose an additional 1,200 square feet of protected area (600 sq. ft. each end)
  2. Build the sidewalk of pervious materials, such as interlocking pavers, (on non-compacted base), stepping-stones, or decomposed granite, without changing existing grades. Or build the walk on a raised deck type of platform, bridging over the CRZ area, and maintaining existing grades and soil density.
  3. Retainer wall footings are to have the smallest "heel" feasible, to limit the back cut behind the wall.
  4. Narrow Vine Street if feasible. This can reduce the impacts to levels the tree can tolerate, for both root and canopy impacts. If this alternative is not followed, the tree has a much smaller likelihood of thriving.

- Tree #9: Previous impacts to the CRZ of this tree include the existing road and gas pipeline, involving 14% of the CRZ. Widening Vine Street will add 30% more root loss to the CRZ. This clearly is the biggest impact to the tree, causing fully half of its root system to be paved over and virtually non-functioning. Additionally, the curb and gutter installation (less than two feet away from the trunk, if the survey is accurate) will injure the large buttress roots, increasing the chance of the tree falling over. The new sidewalk is problematic for this tree, as the plan shows it built upon a graded bank below this tree. This will affect another 22% of the roots. It needs to be bridged or deleted. With the following mitigation, the impacts to this tree are still too high, unless the street is narrowed. The city should

consider whether to change the public improvements or simply remove this tree.

1. Extend the protective fencing to meet with the fencing for tree #8, adding 400 square feet of added root protection.
2. Build the sidewalk on a raised bridge platform throughout the CRZ of trees #9 and 10, maintaining existing grades and soil density.
3. Narrow Vine Street if feasible. This can reduce the impacts to levels the tree can tolerate, for both root and canopy impacts. If this alternative is not followed, the tree has a much smaller likelihood of thriving.

- Tree #10: Vine Street widening, the new driveway and the sidewalk will impact the CRZ of this tree. Grade changes are proposed that will dramatically affect this tree, filling in soil directly around the trunk. Again, the sidewalk needs to be bridged or deleted to accommodate this tree. If the sidewalk is bridged, the total root area affected will be 10%. If the sidewalk is not bridged, then the tree will die. Clearly, changes are needed around this tree.

  1. Build the sidewalk on a raise bridge platform throughout the CRZ of trees #9 and 10, maintaining existing grades and soil density.
  2. Limit grading for the street and driveway to no more than four feet wide from the back of curb, throughout the turning radius of the driveway. Extend the retaining wall if feasible to support the change of grade.
  3. If the existing gas line that runs between this tree and tree #10 is to be moved, it shall be abandoned in place without digging it up.

- Tree #11: The retaining wall to the east and south of this tree will affect the root area. It is up to five feet tall, and will require a significant footing. At my request, one parking space has been deleted to the south of the tree. By limiting the wall footing size and amount of excavation behind the wall, the impacts to the roots are now 16%. If the sidewalk is bridged, no additional root impacts will occur. If it is built as shown on this plan, an additional 20% of the CRZ is impacted.

  1. Build the sidewalk on a raise bridge platform throughout the CRZ of trees #9, 10, and 11 maintaining existing grades and soil density.
  2. Retainer wall footings are to have the smallest "heel" feasible.
  3. Limit the back cut to no more than four feet behind the wall.
  4. Eliminate the cut bank in the southwest quadrant of the CRZ.

6. Protection Requirements:

- Any changes in the grading plan referenced in this report will need my review to ensure this report is still valid.
- Project manager shall be responsible for instructing workers about tree protection goals, implementing protection of root zones, and installing and maintaining protective fencing.
- Protective fencing is required, between all construction activities and native trees. Their locations will be established prior to construction commencing, by my direction and approval.
- The fences shall be five-foot tall orange plastic, with steel t-posts posts sunk into the ground, eight feet apart. The fencing shall be installed prior to any site disturbance or construction, and shall remain in place until all construction is complete.
- No grading, trenching, materials storage, soil storage, debris, or site disturbance shall occur within the protected area. No concrete, plaster, or paint washout shall be allowed within the tree protection zone. Under no circumstance shall lack of space be used as reason to remove protective fencing.
- Weather proof signs shall be permanently posted, on the fences every 50 feet, with the following information:

Tree protection zone
No personnel, equipment, materials, and vehicles are allowed
Do not move or remove this fence
Name and phone of Project Manager

- Any field conditions or changes, which adversely affect the site trees, shall be reviewed by the Arborist prior to performing the work. Additional mitigation may be needed.
- Tree pruning shall be done by a qualified ISA certified arborist or ISA tree worker. A.N.S.I. A-300 and Z-133 standards for tree care shall be used at all times.
- If living roots two inches in diameter or more are encountered during trenching or excavation, they shall be cleanly cut by the contractor, with a sharp handsaw, to remove the frayed end. Do not paint the cut ends of roots. Keep the roots moist by covering the excavation edge with plastic sheeting (or burlap, wetted daily). Backfill the excavation as soon as possible.
- Abandon all unused existing underground lines where legally allowed, rather that digging them out.

7. Limiting Conditions:

Any changes that have the potential of affecting the native trees at this project will be subject to my review and approval before construction commences.

All trees should be aerially inspected and pruned to remove dead wood, broken limbs, and hazardous conditions. Future inspections and pruning maintenance, at least every three years, is recommended for all trees on this site.

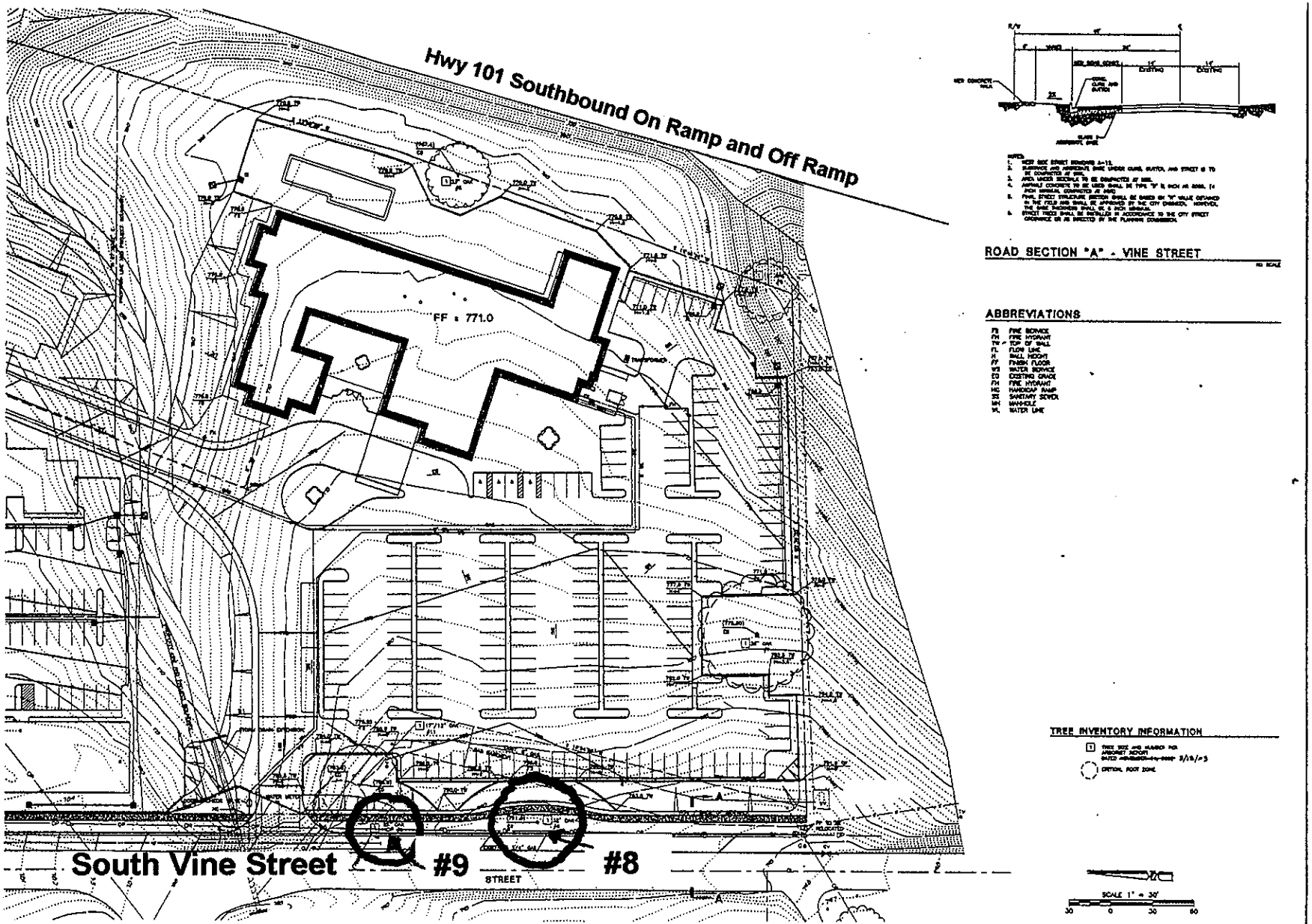
Information in this report covers only the trees examined and reflects the conditions of the trees at the time of inspection. There is no warranty, either express or implied, that the subject trees will not develop problems or deficiencies in the future. Sources of information used in this report are accepted as standard resources, however, the author cannot guarantee the accuracy of information provided by others. Possession of this report or a copy thereof does not imply the right of publication or use for any purpose by an other than the person to whom it is addressed, without the prior written consent of the consultant. Loss or alteration of this report invalidates the entire report. The inspection is limited to visual examination of tree location, as viewed from the ground, without dissection, excavation, probing or coring. No review of tree structural conditions or hazard potential has been provided.

Table A: Tree Data

Tree #	Specie	Size	CRZ	Vigor	Comments
5	QD	23" dbh	23 feet	M/E	No pruning needed for clearance. Only prune to remove deadwood. Remove nearby Tree-of-Heaven.
6	QD	19" dbh	19 feet	M	Remove nearby Tree-of-Heaven.
7	QL	38" dbh	38 feet	P	Recommend cabling. Limit pruning.
8	QL	32" dbh	32 feet	M	
9	QD	25" dbh	25 feet	M/E	
10	QD	19" dbh	19 feet	M/P	
11	QD	17/22" dbh	28 feet	M	

QA = Quercus agrifolia
QD = Quercus douglasii
QL = Quercus lobata

M/E = moderate to excellent vigor
M= moderate vigor
M/P= moderate to poor vigor
P = poor vigor



Planned Development PD 02-016
Request to Remove Two Oak Trees
To Accommodate Pavement Widening
on South Vine Street

Planned Development PD 02-016
Request to Remove Two Oak Trees
To Accommodate Pavement Widening on South Vine Street

RESOLUTION NO. 05-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES AUTHORIZING THE REMOVAL OF TWO OAK TREES ADJACENT TO PLANNED DEVELOPMENT PD02-016 (SOUTH VALLEY DEVELOPERS)

WHEREAS, the City has received an application submitted by South Valley Developers, to develop a 130 room hotel on South Vine Street which will result in the removal of two (2) oak trees (a 32 inch diameter valley oak and a 25-inch diameter blue oak) located within the right of way of South River Road; and

WHEREAS, the removal of the trees is in conjunction with Planned Development 02-016, an application to develop the property with a 130 room hotel; and

WHEREAS, the trees are located within the right of way and will need to be removed in order to accommodate the required improvements to South Vine Street; and

WHEREAS, Carolyn Leach has prepared an Arborist Report, dated March 18, 2003 and subsequent letter dated May 6, 2005, which recommends removal of the trees based on their health and the planned road improvements.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of El Paso de Robles does hereby:

1. Authorize the removal of two oak trees, a 32-inch valley oak and a 25-inch inch diameter blue oak, within the right of way of South Vine Street, adjacent to Planned Development PD02-016;

2. Require the applicant to plant replacement trees of a total equivalent diameter of 14 inches. The replacement trees shall be planted in a location that is appropriate for the species of tree as determined by a horticulture professional.

PASSED AND ADOPTED by the City Council of the City of El Paso de Robles this 5th day of July 2005 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Frank R. Mecham, Mayor

ATTEST:

_____
Sharilyn M. Ryan, Deputy City Clerk