NOT YET APPROVED

ORDINANCE NO. _____

ORDINANCE OF THE COUNCIL OF THE CITY OF PALO ALTO ADDING A NEW CHAPTER 18.66 TO THE PALO ALTO MUNICIPAL CODE TO ADOPT REGULATIONS ESTABLISHING A CALIFORNIA AVENUE PEDESTRIAN TRANSIT-ORIENTED DEVELOPMENT COMBINING DISTRICT

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Findings and Declarations. The City Council finds and declares as follows:

(a) That in December 2000, the City Council approved a work plan for the Zoning Ordinance Update involving the preparation of a new Title 18 (Zoning Code) of the Palo Alto Municipal Code (PAMC), including the update of existing land use chapters and processes as well as the preparation of chapters for new and revised land uses;

(b) The 1998-2010 Palo Alto Comprehensive Plan includes several programs and policies related to transit-oriented residential development. The Zoning Ordinance Update was initiated in part to accomplish these programs and policies.

(c) The last comprehensive update of the Palo Alto Zoning Code took place in 1978. Provisions for pedestrian and transit-oriented development were not included in the zoning provisions in that update.

SECTION 2. Chapter 18.66 of Title 18 [Zoning] of the Palo Alto Municipal Code is hereby added to read as follows:

//

//

//

//

//

//

Chapter 18.66
PEDESTRIAN AND TRANSIT ORIENTED DEVELOPMENT COMBINING DISTRICT

Sections:

18.66.010 Purposes

(a) California Avenue Pedestrian and Transit Oriented Combining District

The California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District is intended to allow higher density residential dwellings on commercial, industrial and multi-family parcels within a walkable distance of the California Avenue Caltrain station, while protecting low density residential parcels and parcels with historical resources that may also be located in or adjacent to this area. The combining district is intended to foster densities and facilities that:

(1) support use of public transportation;

(2) encourage a variety of housing types, commercial retail and limited office uses;

(3) encourage project design that achieves an overall context-based development for the PTOD overlay area;

(4) require streetscape design elements that are attractive pedestrians and bicyclists;

(5) increase connectivity to surrounding existing and planned pedestrian and bicycle facilities; and

(6) implement the City's Housing Element and Comprehensive Plan.

(b) [Reserved]

18.66.020 Applicability

(a) The California Avenue Pedestrian and Transit Oriented Development Combining District (PTOD) may be combined with any R-1, CC(2), CN, GM, PF, RM30, or RM40 district or combination of such districts within the designated California Avenue PTOD boundary (Exhibit A, reflected on the City's Zoning Map), consistent with the provisions of Chapter 18.08 and Chapter 18.98. Where so combined, the regulations established by this Chapter shall apply in lieu of the provisions established by the underlying CC(2), CN, GM, RM30, and/or RM40 zoning district(s). Compliance with the provisions of Chapter 18.46 Retail Shopping (R) and Chapter 18.47 Pedestrian Shopping (P) combining districts shall also be required where such combining districts are applicable.

(b) [Reserved]

(c) A Pedestrian and Transit Oriented Development Combining District may be applied to a parcel through rezoning of the site, within the specified boundaries of the District, as shown on the City's approved zoning maps, pursuant to the provisions and process outlined in Section 18.66.060 of this Chapter and Chapter 18.98 of the Zoning Ordinance.

18.66.030 Land Uses

(a) The following land uses shall be permitted in the California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District, subject to limitations outlined in Sections 18.66.040 and 18.66.050.

//

//

//

//

//

//

Table 1 - Land Uses

Land Uses	PTOD – California Avenue	PTOD – University Avenue [Reserved]
Multiple-family residential housing	P	
Mixed-use development, where residential and non-residential uses are combined	P See Section 18.66.030(b) below for specific uses	
Live/Work Units	CUP Subject to limitations of Sec. 18.66.040(b)	
Hotel	P Subject to limitations of Sec. 18.66.040(c)	
(P) = Permitted Use; (CUP) = Conditional Use, Use Permit Required		

(b) Mixed Use development, where residential and non-residential uses are combined, may include two or more of the following uses:

(1) Multi-family residential
(2) Non-residential uses, limited to:
  (A) Retail and personal services
  (B) Eating and drinking services
  (C) Other non-residential uses allowed except on the ground floor where an (R) overlay exists:
    (i) Offices;
    (ii) General business services;
    (iii) Business and trade schools;
    (iv) Private education facilities;
    (v) Day care center;
    (vi) Community center;
    (vii) Commercial recreation;
    (viii) Convalescent facility; and
    (ix) Research and development, limited to sites where the underlying zoning district is GM and involving the use and storage of hazardous materials in quantities less than the exempt quantities allowed by Title 15 of the Municipal Code (section 105.8 of the Uniform Fire Code).

(c) Prohibited uses in the California Avenue PTOD:

(1) Single-family and two-family uses;

(2) Manufacturing, processing, warehousing and distribution; and

(3) Research and development where hazardous materials are used or stored in excess of quantities less than the exempt quantities allowed by Title 15 of the Municipal Code (section 105.8 of the Uniform Fire Code)

(d) All land uses must be reviewed and approved by the Planning and Transportation Commission and City Council at the time of rezoning to PTOD.

18.66.040 Pedestrian and Transit Oriented Development (PTOD) Combining District Regulations

(a) Properties in the PTOD combining district are subject to the following regulations:

Table 2
Development Standards

Standards[1]	PTOD – California Ave	PTOD – Downtown Not Adopted At this Time
Max Dwelling Units:	40 DU/AC[2]	
Max FAR:		
100% Residential FAR	1.0:1[2]	
Mixed Use FAR	1.25:1[2,3]	
Mixed Use Non-Residential FAR Cap	Total: 0.35[4] Office and research and development uses: 0.25 FAR	
Hotels	2.0	
Height:	40 feet[2]	
Open Space		
Minimum area required	5 or fewer units: 200 s.f. per unit 6 or more units: 100 s.f. per unit	

Standards[1]	PTOD – California Ave	PTOD – Downtown Not Adopted At this Time
Minimum dimensions	Private open space: 6 feet Common open space: 12 feet	
Parking:	Rates established by use, per Section 18.83.050	
Parking Adjustments:	See Section 18.66.040 (d)	
Setbacks and daylight plane requirements for properties adjacent to R-1 and R-2 zones:		
Setbacks	On portion of site that abuts: 1. Interior side yard: 6 feet 2. Rear yard: 20 feet	
Daylight Plane	On portion of site that abuts: 1. Interior side yard: a. Initial height at interior side lot line: 10 feet b. Angle (degrees): 45 2. Rear yard: a. Initial height at rear setback line: 16 feet b. Angle (Degrees): 45	
Setbacks and daylight and daylight plane requirements for properties adjacent to Caltrain Right-of-Way:		
Setbacks	On portion of site that abuts Caltrain right-of-way: 5 feet (landscaped)	
Daylight Plane	On portion of site that abuts Caltrain right-of-way: a. Initial height at property line w/Caltrain right-of-way: 16 feet b. Angle (Degrees): 45	

[1] Non-residential development that is not consistent with the mixed-use limitations set forth above, with the exception of Hotels, must be developed per the underlying zoning district regulations.

[2] See Section 18.66.040(e) for Below Market Rate (BMR) bonus provisions.

[3] The residential component of the mixed use may not exceed 1.0:1.

[4] The non-residential component of a mixed use project shall not exceed 50% of the total square-footage of the project.

(b) **Live/Work Units**

(1) A live/work unit, for the purposes of this chapter, is defined as a rental or ownership unit comprised of both living space and work area, with the living space occupying a minimum of 60% of the total gross floor area of the unit, and such that the resident of the living space is the owner/operator of the work area.

(2) The work area shall be located on the ground level, oriented to the street and provide for at least one external entrance/exit separate from the living space. The work area may be used for office, retail, personal services, or handcrafted goods (unless otherwise limited by this Chapter), but shall not be used for restaurants or cafes or for any business involving the storage or use of hazardous materials in excess of the quantities allowed by Title 15 of the Municipal Code (Section 105.8 of the Fire Code).

(3) The maximum number of employees who do not reside within the unit is two (2).

(4) The signage shall not exceed the requirements of the City of Palo Alto Municipal Code and shall require approval and recommendation by the architectural review process prior to approval by the Director.

(5) The parking requirements shall include a maximum total of two spaces for the residential unit, plus one space per 200 square feet for the gross square footage of the work area, less one space from the total (to reflect the overlap of the resident and one employee).

(6) The live/work units are subject to the development standards of the PTOD zone outlined in Table 2 for a 100% residential development, except that the maximum non-residential FAR is limited to 0.40.

(7) The maximum size of a live/work unit shall be limited to 2,500 square feet.

(8) The design of street frontage of a live/work unit shall be consistent with the context-based criteria outlined for street frontage in Section 18.66.050 below.

(9) A live/work unit may be converted to an entirely residential unit where residential use on the ground floor is not otherwise prohibited.

(c) **Hotels**

(1) Hotels for the purpose of this section are defined as hotels, motels, or other lodging for which City of Palo Alto transient occupancy tax is collected.

(2) Hotels may be constructed to a maximum FAR of 2.0 and a maximum height of 50 feet.
(3) All hotels are subject to the context-based design criteria outlined in Section 18.66.050 below.

(d) **Parking Adjustments:** Adjustments to the required parking standards may be allowed with the Director's approval pursuant to the provisions outlined in Section 18.83.120, with the following additional allowances and requirements:

(1) For multi-family residential or mixed use projects on sites rezoned to the PTOD combining district, the Director may waive a portion of or all guest parking requirements, and may waive any requirement to provide a landscape reserve for parking, subject to the following conditions:

(A) The project includes a minimum of 4 residential units;
(B) The average residential unit size is 1,250 square feet or less; and
(C) Not more than one parking space per residential unit shall be assigned or secured, such that other required parking spaces are available to other residents and guests.

(2) Projects providing more than 50% of the project residential units at low or very-low income housing rates may further reduce parking requirements by an additional 20%.

(3) In no case, however, shall total parking requirements for the site be reduced by greater than 30% from the standard requirements, or by greater than 40% for an affordable housing project consistent with (2) above, or by more than 50% if housing for the elderly is proposed pursuant to Section 18.83.120(d) of the Zoning Ordinance.

(4) For any request for parking adjustments, the project applicant shall indicate parking and traffic demand measures to be implemented to reduce parking need and trip generation. Measures may include, but are not limited to: limiting "assigned" parking to one space per residential unit, providing for Caltrain and/or other transit passes, or other measures to encourage transit use or to reduce parking needs. The program shall be proposed to the satisfaction of the Director,

shall include proposed performance targets for parking and/or trip reduction, and shall designate a single entity (property owner, homeowners association, etc.) to implement the proposed measures. Monitoring reports shall be submitted to the Director not later than two (2) years after building occupancy and again not later than five (5) years after building occupancy, noting the effectiveness of the proposed measures as compared to the initial performance targets and suggestions for modifications if necessary to enhance parking and/or trip reductions.

(e) **Density, FAR, and Height Bonus Provisions**

The following provisions are intended to allow for increased density, FAR, height, and other development bonuses upon construction of additional below market rate (BMR) housing units. The bonus allowances shall be allowed subject to the following limitations:

(1) Bonuses are only applicable where below market rate (BMR) units are provided in excess of those required by Palo Alto's BMR program as stated in Program H-36 of the Housing Element adopted on December 2, 2002. Key elements of Program H-36 include:

(A) Five (5) or more units: Minimum 15% of units must be BMR units;
(B) Five (5) or more acres being developed: Minimum 20% of units must be BMR units; and
(C) BMR units shall meet the affordability and other requirements of Program H-36 and the City's BMR Program policies and procedures.

(2) The following BMR bonuses shall be considered and may be approved upon rezoning to the PTOD district:

(A) Density Increase: Density may be increased above the maximum base density allowed (40 units per acre), such that at least 1 additional BMR unit is provided for every 3 additional market rate units constructed. The resultant density may not exceed (50 units per acre). Density shall be calculated based on the gross area of the site prior to development.
(B) FAR Increase: For projects with a residential density greater than 30 units per acre, the allowable residential FAR may be increased. The

FAR increase shall be equivalent to 0.05 for each additional 5% (in excess of the City requirements) of the total number of units that are proposed as BMR units, but may not exceed 50% of the residential FAR prior to the bonus, and may not exceed a total FAR of (1.5).

(C) Height Increase: For projects with a residential density greater than 30 units per acre, the allowable project height may be increased. The height increase shall be equivalent to one (1) foot above the maximum for each additional 5% (in excess of the City requirements) of the total number of units that are proposed as BMR units, but may not exceed a maximum height (50 feet).

(D) Other incentives for development of BMR units, such as reduced setbacks and reduced open space, may be approved where at least 25% of the total units constructed are BMR units and subject to approval by the Architectural Review Board.

(3) The provisions of this section are intended to address the density bonus requirements of State Law within the PTOD District, and the maximum bonus density, FAR, and height may not be further exceeded.

18.66.050 Pedestrian and Transit Oriented Development (PTOD) Combining District Context-Based Design Criteria

(a) **Contextual and Compatibility Criteria**

Development in a Pedestrian and Transit Oriented Development Combining District shall be responsive to its context and compatible with adjacent development, and shall promote the establishment of a pedestrian and transit oriented neighborhood.

(1) Context

(A) Context as used in this section is intended to indicate relationships between the site's development to adjacent street types, surrounding land uses, and on-site or nearby natural features, such as creeks or trees. Effective transitions to these adjacent uses and features are strongly reinforced by Comprehensive Plan policies.

(B) The word "context" should not be construed as a desire to replicate existing surroundings, but rather to provide appropriate transitions to those surroundings. "Context" is also not specific to architectural style or design, though in some instances relationships may be reinforced by an architectural response.

(2) Compatibility

(A) Compatibility is achieved when the apparent scale and mass of new buildings is consistent with the intent of achieving a pedestrian and transit oriented neighborhood, and when new construction shares general characteristics and establishes design linkages with the overall pattern of buildings so that the visual unity of the street is maintained.

(B) Compatibility goals may be accomplished through various means, including but not limited to:

(i) the siting, scale, massing, and materials;
(ii) the rhythmic pattern of the street established by the general width of the buildings and the spacing between them;
(iii) the pattern of roof lines and projections;
(iv) the sizes, proportions, and orientations of windows, bays, and doorways;
(v) the location and treatment of entryways;
(vi) the shadow patterns from massing and decorative features; and
(vii) the treatment of landscaping

//

//

//

//

//

//

//

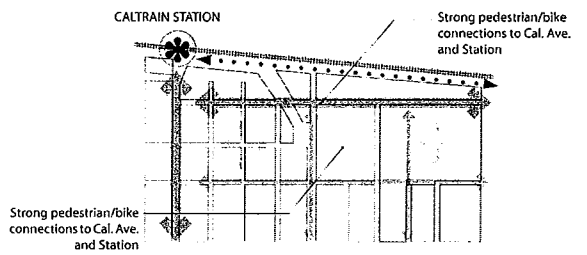
//

(b) **Context-Based Design Considerations and Findings**

In addition to the findings for Architectural Review contained in Section 18.76.020(d) of the Zoning Ordinance, the following additional findings are applicable in the California Avenue Pedestrian and Transit Oriented Development Combining District, as further illustrated on the accompanying diagrams:

(1) Pedestrian and Bicycle Environment

The design of new projects shall promote pedestrian walkability, a bicycle friendly environment, and connectivity through design elements such as:

A. Connectivity for pedestrians and cyclists with external and internal (if any) streets, pathways, or bike facilities (Figure 1-1); B. Pathways and streets that present a clear hierarchy and connectivity pattern both within a project and to adjacent sidewalks;	 (Figure 1-1)

//

//

//

//

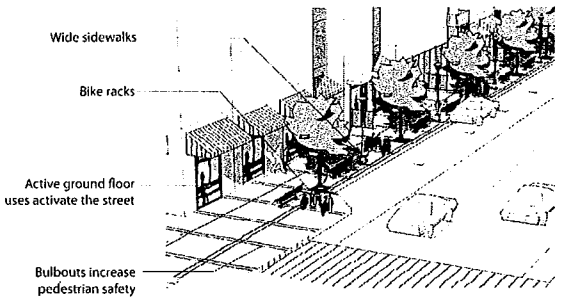
//

//

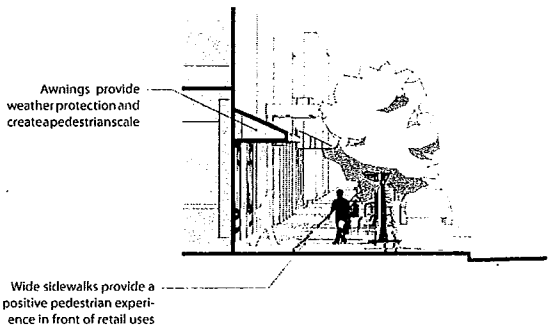
//

//

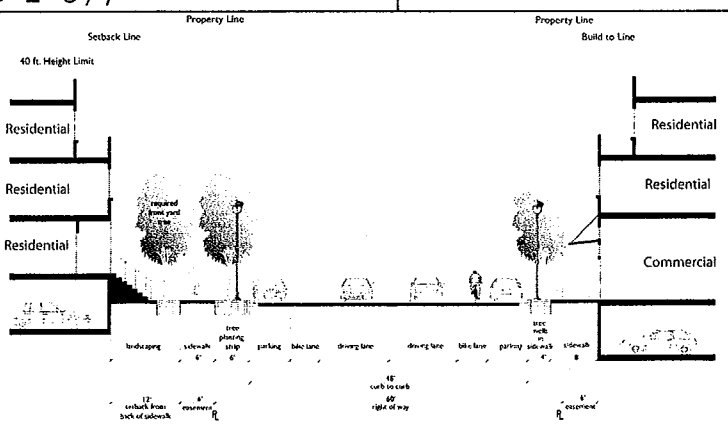
C. Wide sidewalks (built as easements beyond the property line if needed, but not to the detriment of existing or future bike lanes) along Park Boulevard to reinforce the street as a primary pedestrian and bicycle linkage to the multimodal station;
D. Bicycle amenities that contribute to the area's bicycle environment and safety needs, such as bike racks, storage or parking, or dedicated bike lanes or paths (Figure 1-2);
E. Ground floor uses that are appealing to pedestrians through well-designed visibility and access (Figure 1-2);
F. On primary pedestrian routes such as Park Boulevard and California Ave., climate and weather protection where possible, such as covered waiting areas, building projections and colonnades, and awnings (Figure 1-3);



(Figure 1-2)

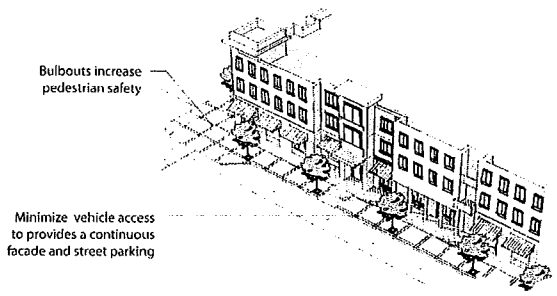


(Figure 1-3)



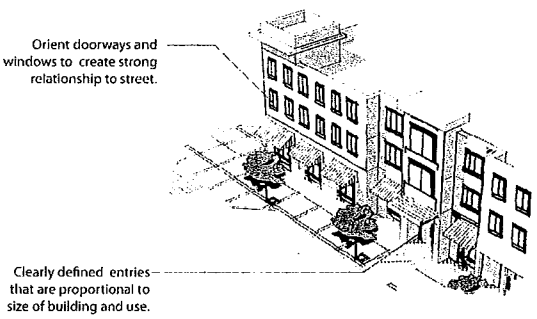
Easements along Park Boulevard will allow for wider sidewalks in front of commercial storefronts and a double row of street trees in front of residential projects. Upper floors of buildings should be set back to scale down massing along the street.

(Figure 1-4)

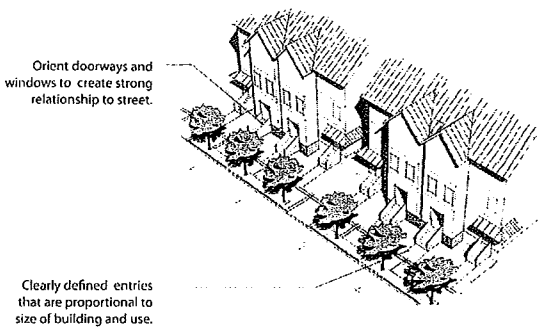
G. Streetscape or pedestrian amenities that contribute to the area's streetscape environment such as street trees, bulb-outs, benches, landscape elements, and public art (Figures 1-4 and 1-5); and H. Vehicle access from alleys or sidestreets where they exist, with pedestrian access from the public street.	 (Figure 1-5)

(2) Street Building Facades

Street facades shall be designed to provide a strong relationship with the sidewalks and the street(s), to create an environment that supports and encourages pedestrian activity through design elements such as:

A. Facade articulation reflecting the rhythm of nearby commercial and residential areas such as California Avenue; B. Placement and orientation of doorways, windows, and landscape elements to create strong, direct relationships with the street (Figures 2-1 and 2-2); C. Facades that include projecting eaves and overhangs, porches, and other architectural elements that provide human scale and help break up building mass (Figures 2-1 and 2-2);	 (Figure 2-1)

D. Entries and windows that face onto the street (Figures 2-1 and 2-2);
E. Entries that are clearly defined features of front facades, and that have a scale that is in proportion to the size of the building and number of units being accessed; larger buildings should have a more prominent building entrance, while maintaining a pedestrian scale (Figures 2-1 and 2-2); and
F. Residential units and storefronts that have a presence on the street and are not walled-off or oriented exclusively inward.

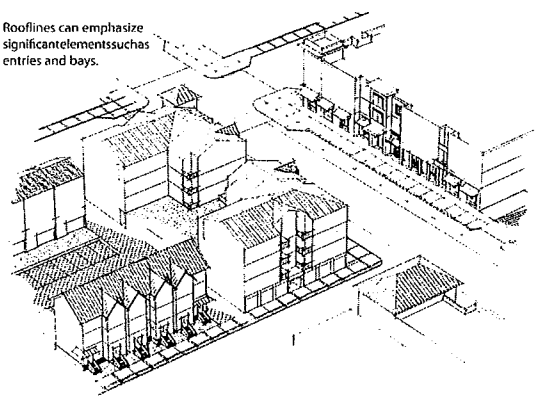


(Figure 2-2)

(3) Massing and Articulation

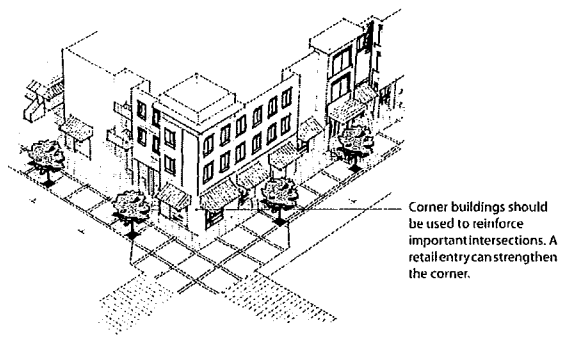
Buildings shall be designed to minimize massing and provide for articulation and design variety through elements such as:

A. Buildings that include pedestrian-scaled detail, articulation and craftsmanship of the façade (Figure 3-1);
B. Rooflines that emphasize and accentuate significant elements of the building such as entries, bays, and balconies (Figure 3-1);

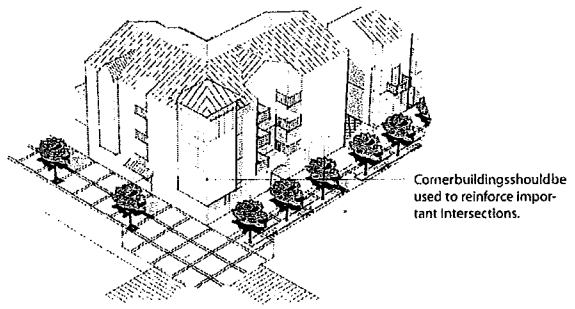


(Figure 3-1)

C. Corner buildings that incorporate special features to reinforce important intersections and create buildings of unique architectural merit and varied styles (Figures 3-2 and 3-3);



(Figure 3-2)



(Figure 3-3)

//

//

//

//

//

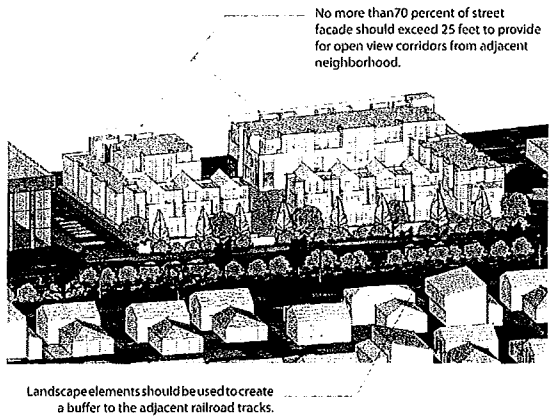
//

//

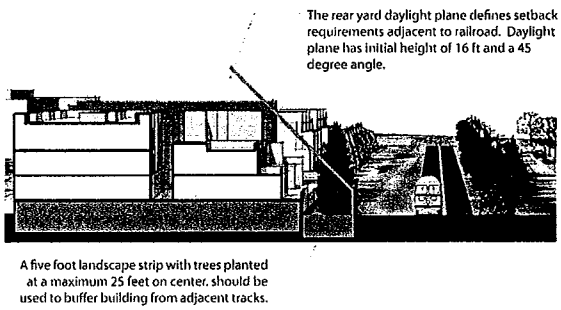
//

//

D. Design with articulation, setbacks, and materials that minimize massing, break down the scale of buildings, and provide visual interest from the train and neighborhood east of the tracks;
E. Limiting facades such that no more than seventy percent (70%), and no more than 100 continuous linear feet of the street façade exceeds a height of 25 feet (Figure 3-4);
F. Landscape elements to buffer the rear of the lot and the railroad tracks, with trees spaced at a maximum of 25 feet on center and combined with other landscape elements such as fencing, hedges or shrubs (Figure 3-4);
G. Application of daylight plane requirements for R-1 and R-2 adjacencies to property boundaries adjacent to the railroad right-of-way (Figure 3-5); and
H. Maintaining view corridors from Colorado Avenue and El Dorado Avenue west to the hills.



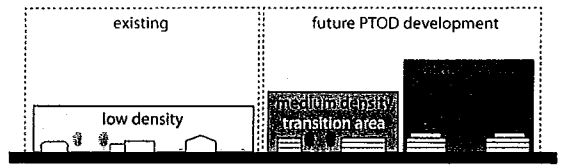
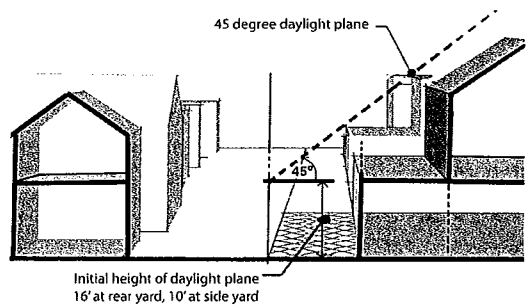
(Figure 3-4

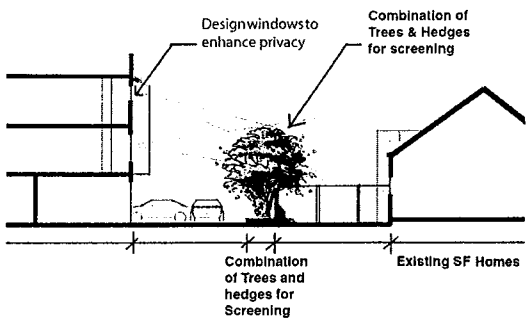


(Figure 3-5

(4) Low-Density Residential Transitions

Where new projects are built adjacent to existing lower-scale residential development, care shall be taken to respect the scale and privacy of adjacent properties through:

A. Transitions of development intensity from higher density development building types to building types that are compatible with the lower intensity surrounding uses (Figure 4-1);	 (Figure 4-1)
B. Massing and orientation of buildings that respect and mirror the massing of neighboring structures by stepping back upper stories to transition to smaller scale buildings, including setbacks and daylight planes that match adjacent R-1 and R-2 zone requirements (Figure 4-2); C. Respecting privacy of neighboring structures, with windows and upper floor balconies positioned so they minimize views into neighboring properties (Figure 4-3);	 (Figure 4-2)

D. Minimizing sight lines into and from neighboring properties (Figure 4-3); E. Limiting sun and shade impacts on adjacent properties; F. Providing pedestrian paseos and mews to create separation between uses; G. Design with articulation, varied setbacks, and materials that minimize sound reflection to neighboring properties adjacent to the railroad.	 (Figure 4-3)

//

//

//

//

//

//

//

//

//

//

//

//

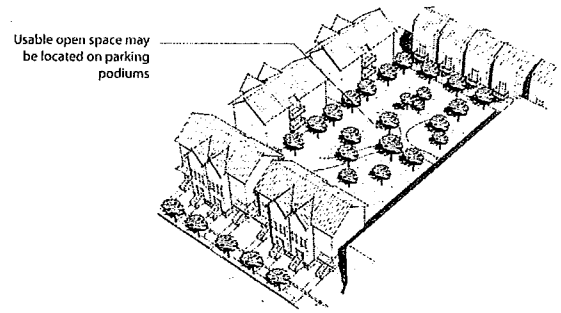
//

//

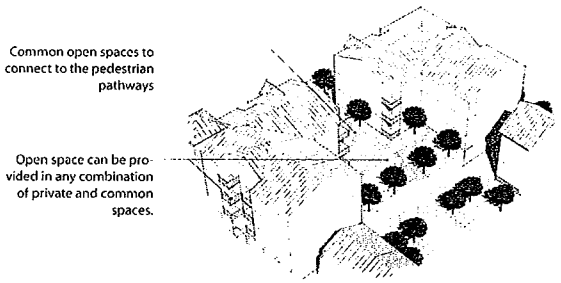
(5) Project Open Space

Private and public open space shall be provided so that it is usable for the residents, visitors, and/or employees of a site.

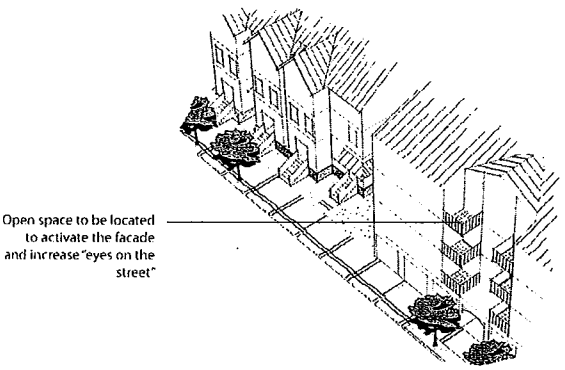
A. The type and design of the usable private open space shall be appropriate to the character of the building(s), and shall consider dimensions, solar access, wind protection, views, and privacy;
B. Open space should be sited and designed to accommodate different activities, groups and active and passive uses, and should be located convenient to the users (e.g., residents, employees, or public);
C. Common open spaces should connect to the pedestrian pathways and existing natural amenities of the site and its surroundings (Figure 5-2);
D. Usable open space may be any combination of private and common spaces;
E. Usable open space does not need to be located on the ground (Figure 5-1);
F. Open space should be located to activate the street façade and increase "eyes on the street" when possible (Figure 5-3);
G. Both private and common open space areas should be buffered from noise where feasible; and
H. Parking may not be counted as open space.



(Figure 5-1)



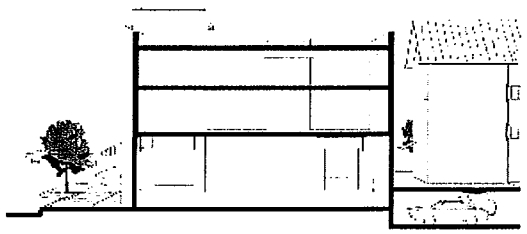
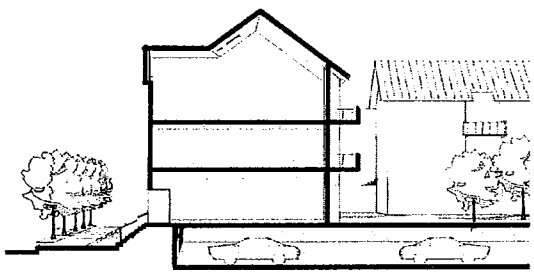
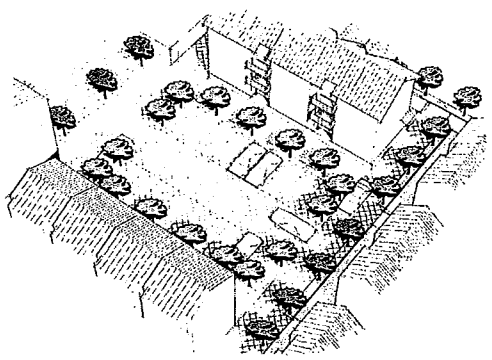
(Figure 5-2)



(Figure 5-3)

(6) Parking Design

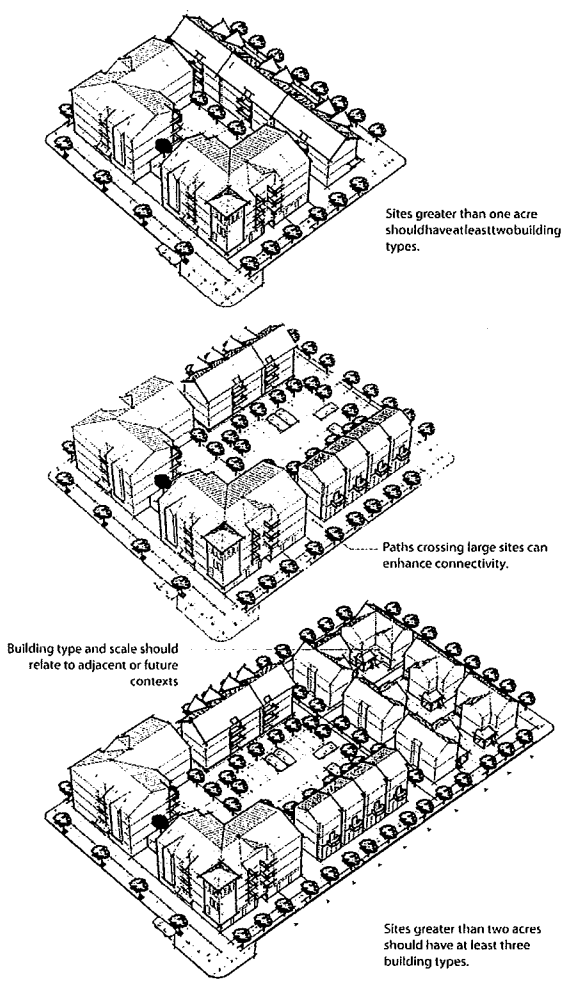
Parking needs shall be accommodated but shall not be allowed to overwhelm the character of the project or detract from the pedestrian environment, such that:

A. Parking is located behind buildings, below grade or, where those options are not feasible, screened by landscaping, low walls, etc.; B. Structured parking is fronted or wrapped with habitable uses when possible (Figure 6-1); C. Parking that is semi-depressed is screened with architectural elements that enhance the streetscape such as stoops, balcony overhangs, and/or art (Figure 6-2);	 Parking should be wrapped by habitable uses when possible. (Figure 6-1)  Semi-depressed parking can be used to raise residential uses to provide privacy and opportunities for stoops and porches. (Figure 6-2)
D. Landscaping such as trees, shrubs, vines or groundcover is incorporated into surface parking lots (Figure 6-3); and E. Street parking is utilized for visitor or customer parking and is designed in a manner to enhance traffic calming on the street.	 Landscaping should be incorporated into any surface parking lots. (Figure 6-3)

(7) Large (multi-acre) Sites

Large (in excess of one acre) sites shall be designed so that street, block, and building patterns are consistent with those of the surrounding neighborhood, and such that:

A. New development of large sites maintains and enhances connectivity with a hierarchy of public streets, private streets, walks and bike paths (integrated with the Palo Alto Bicycle Master Plan, when applicable);
B. The diversity of building types increases with increased lot size (e.g., <1 acre = minimum 1 housing type; 1-2 acres = minimum 2 housing types; greater than 2 acres = minimum 3 housing types) (Figure 7-1); and
C. Where a site includes more than one housing type, each housing type should respond to its immediate context in terms of scale, massing, and design (e.g., lower density building types facing or adjacent to existing single-family residences) (Figure 7-1).

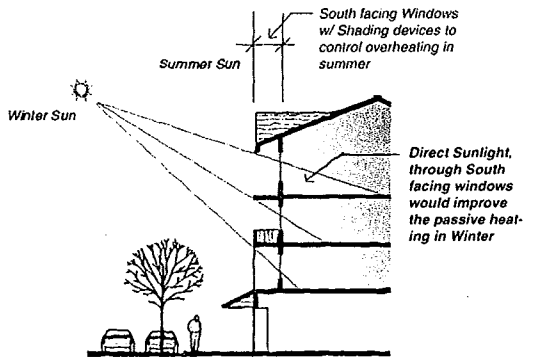


(Figure 7-1)

(8) Sustainability and Green Building Design

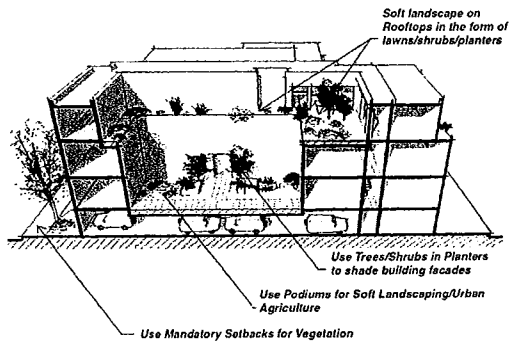
Project design and materials to achieve sustainability and green building design should be incorporated into the project. Green building design considers the environment during design and construction. Green building design aims for compatibility with the local environment: to protect, respect and benefit from it. In general, sustainable buildings are energy efficient, water conserving, durable and nontoxic, with high-quality spaces and high recycled content materials. The following considerations should be included in site and building design:

A. Optimize building orientation for heat gain, shading, daylighting, and natural ventilation (Figure 8-1);
B. Design landscaping to create comfortable micro-climates and reduce heat island effects (Figure 8-2);
C. Design for easy pedestrian, bicycle, and transit access;
D. Maximize onsite stormwater management through landscaping and permeable pavement (Figure 8-3);
E. Use sustainable building materials.
F. Design lighting, plumbing and equipment for efficient energy use;
G. Create healthy indoor environments;



Use of Shading Devices to Control Solar loads in Summer and gain Passive heat in Winter

(Figure 8-1)

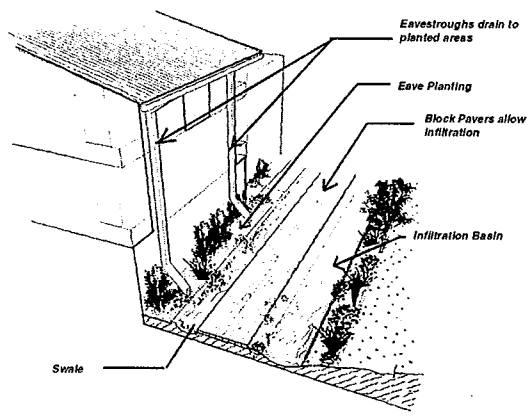


'Urban Agriculture' and rooftop/balcony gardens

(Figure 8-2)

H. Use creativity and innovation to build more sustainable environments. One example is establishing gardens with edible fruits, vegetables or other plants to satisfy a portion of project open space requirements (Figure 8-2); and

I. Provide protection for creeks and riparian vegetation and integrate stormwater management measures and open space to minimize water quality and erosion impacts to the creek environment.



Minimize Stormwater Runoff to Impermeable areas

(Figure 8-3

(c) **[Reserved] Diagrams to be Added**

(d) **Historic Preservation**

Historic resources review, as required in Chapter 16.49 of Title 16 of the Municipal Code, is required for alterations or modifications to any structure designated on the City's Historic Inventory as a Category 1 or Category 2 historic structure as defined in Section 16.49.020 of the Municipal Code or any contributing structure located within a locally designated historic district. The Category 1 or Category 2 designation process for becoming a historic structure is contained in Chapter 16.49 of Title 16 of the Municipal Code.

(e) **Performance Standards**

All development subject to the PTOD District requirements must also comply with the performance standards outlined in Chapter 18.64 (Additional Site Development and Design Regulations for Commercial and Industrial Districts), pertaining to noise, lighting, visual, and access impacts.

18.66.060 Review Process

Rezoning and review of a site to a Pedestrian and Transit Oriented Development (PTOD) Combining District shall be made pursuant to the following procedures:

(a) Application to apply the PTOD overlay district may be made by an owner of record of any property located or partially located within the PTOD boundary, or may be initiated by vote of the Planning and Transportation Commission or City Council;

(b) Applications for rezoning shall be made and reviewed in accordance with Chapter 18.98 (Amendments to Zoning Map and Zoning Regulations), including Section 18.98.020 regarding Changes in District Boundaries. Planning and Transportation Commission review and City Council approval shall establish limits on allowable or required uses (e.g., the types and appropriate mix of uses, including revenue-generating uses) and intensity (e.g., density, floor area ratio, height, site coverage) of development. The specified limitations shall be part of the rezoning and shall be recorded as property restrictions enforceable by the City of Palo Alto. Revisions to these restrictions requires rezoning through the same process, except that the Director of Planning and Community Environment may determine that a revision is minor and does not materially alter the City Council's restrictions or intent regarding land use and intensity. As used in this subsection, the term "minor" means a change that is of little visual significance, does not materially alter the appearance of previously approved improvements, is not proposed to change the use of the land in question, and does not alter the character of the structure involved. If the cumulative effect of multiple minor changes would result in a major change, a new application for approval of a Pedestrian and Transit Oriented Development is required and shall be reviewed by the Architectural Review Board, Planning and Transportation Commission, and/or City Council, as determined by the Director. Submittal requirements for the PTOD Combining District may be supplemented as determined by the Director of Planning and Community Environment;

(c) Applications for amendments to the Comprehensive Plan to designate a site consistent with Transit Oriented Residential Development shall be made and reviewed pursuant to the provisions of Chapter 19.04.080 (Amendments to Comprehensive Plan); and

(d) Upon approval of rezoning of a property to Pedestrian Transit Oriented Development (PTOD) Combining District, the project plans shall be submitted as a Major Architectural Review to the Architectural Review Board, who shall review the project for compliance with the Architectural Review criteria specified in Section 18.76 of the Zoning Code, as well as Section 18.66.050 of this Chapter. A single preliminary review by the ARB may be allowed in advance of rezoning approval if plans are submitted and reviewed prior to Planning Commission consideration of the rezoning request.

18.66.070 Non-conforming Uses and Non-complying Facilities

Owners of sites with existing legal non-conforming uses and non-complying facilities within the PTOD boundary may request the application of the PTOD Combining District to the site through the rezoning process referenced in Section 18.66.060 above. In applying the PTOD combining district, the use and/or facility would then be subject to the PTOD overlay standards.

//

//

//

//

//

//

//

//

//

//

//

//

NOT YET APPROVED

SECTION 3. This ordinance shall be effective 30 days after the date of its adoption. Notwithstanding any other provision of this ordinance or the Palo Alto Municipal Code, all applications submitted prior to the effective date of this ordinance shall be subject to the PAMC Title 18 Zoning Regulations in effect on the date the application is received by the City.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

NOT PARTICIPATING:

ATTEST:

_____
City Clerk

_____
Mayor

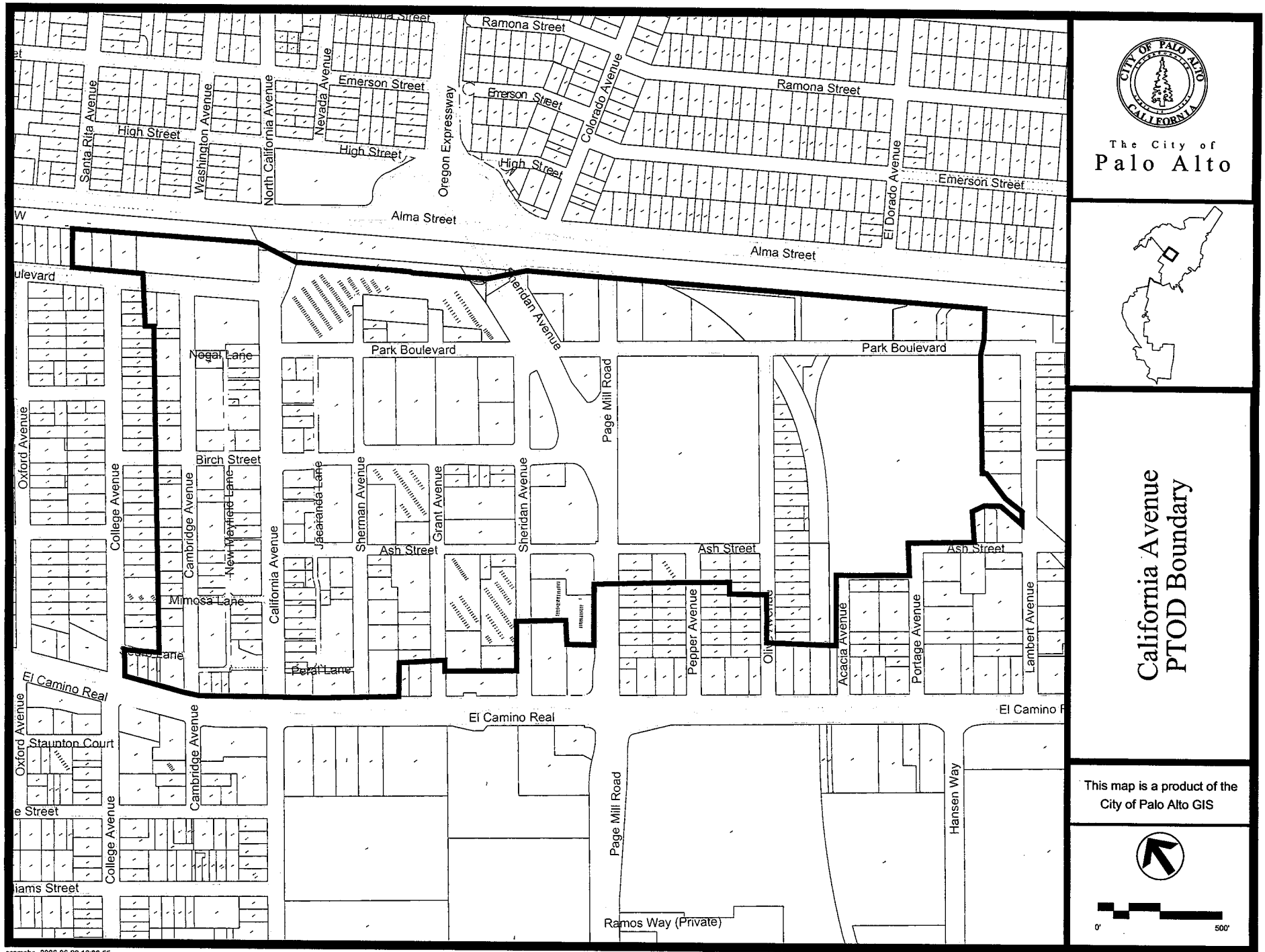
APPROVED AS TO FORM:

APPROVED:

_____
Senior Deputy City Attorney

_____
City Manager

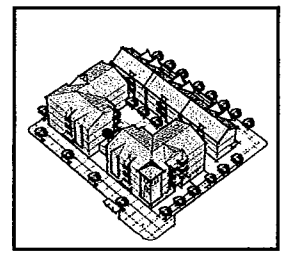
_____
Director of Planning &
Community Environment

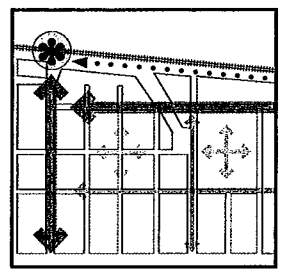


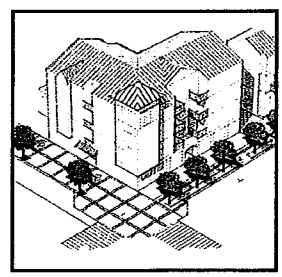
ccampbe, 2006-06-29 16:36:55
(\\cc-maps\gisS\gis\admin\Personal\ccampbe.mdb)

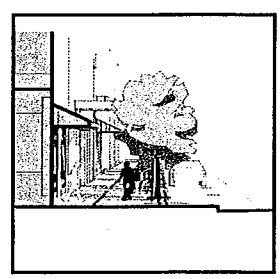
Context-Based Design Criteria

Palo Alto: Pedestrian and Transit Oriented Development Overlay Zone for California Avenue Caltrain Station









DRAFT
05/10/06

Context-Based Design Criteria- California Avenue PTOD

The diagrams below outline appropriate transitions between a project site and adjacent residential or commercial uses, roadway frontages or environmental features. The proximity of development to other uses can create varied, lively neighborhoods, but for the relationships to have a positive impact transitions between different building scales need to be carefully considered and designed.

1. Pedestrian and Bicycle Environment

The design of new projects shall promote pedestrian walkability, a bicycle friendly environment, and connectivity through design elements such as:

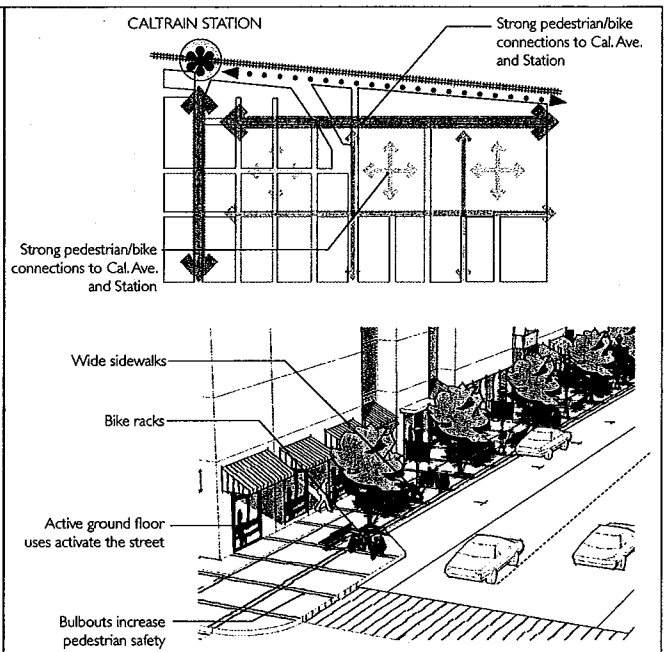
a. **Connectivity for pedestrians and cyclists with external and internal (if any) streets, pathways, or bike facilities;**

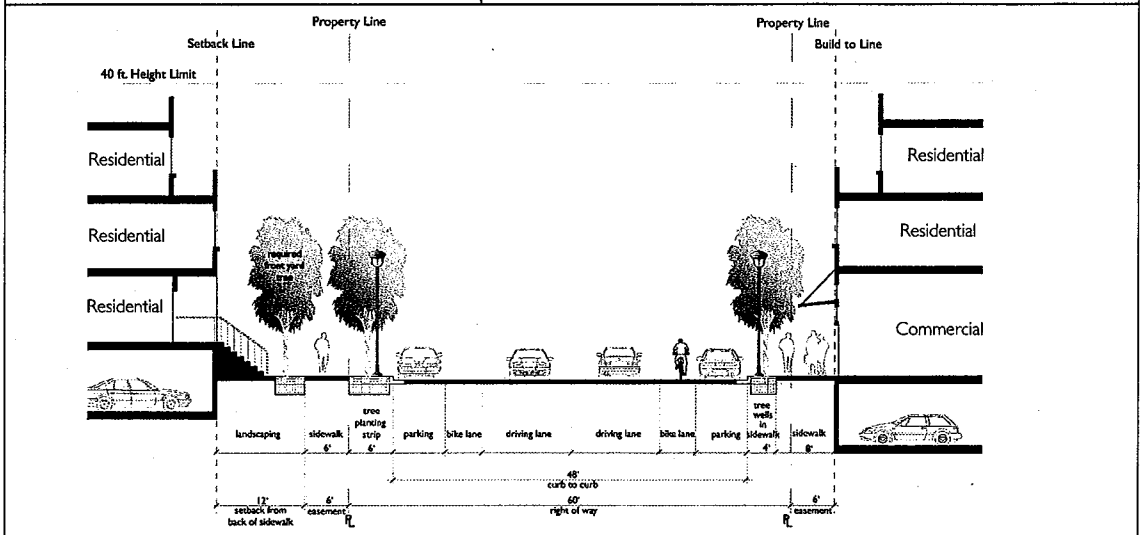
b. **Pathways and streets that present a clear hierarchy and connectivity pattern both within a project and to adjacent sidewalks;**

c. **Wide sidewalks (built as easements beyond the property line if needed, but not to the detriment of existing or future bike lanes) along Park Boulevard to reinforce the street as a primary pedestrian and bicycle linkage to the multimodal station;**

d. **Bicycle amenities that contribute to the area's bicycle environment and safety needs, such as bike racks, storage or parking, or dedicated bike lanes or paths.**

e. **Ground floor uses that are appealing to pedestrians through well-designed visibility and access;**



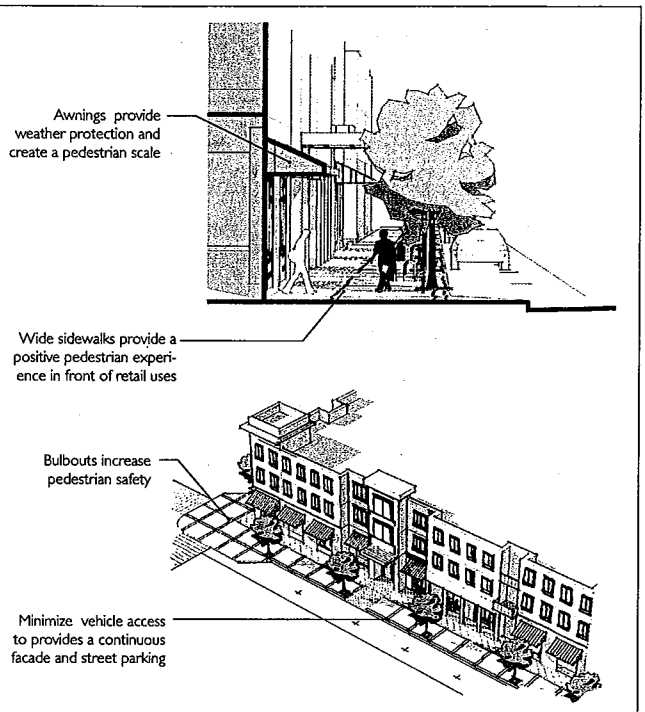


Easements along Park Boulevard will allow for wider sidewalks in front of commercial storefronts and a double row of street trees in front of residential projects. Upper floors of buildings should be set back to scale down massing along the street.

f. On primary pedestrian routes such as Park Boulevard and California Ave., climate and weather protection where possible, such as covered waiting areas, building projections and colonnades, and awnings;

g. Streetscape or pedestrian amenities that contribute to the area's streetscape environment such as street trees, bulb-outs, benches, landscape elements, and public art; and

h. Vehicle access from alleys or sidestreets where they exist, with pedestrian access from the public street.



2. Street Building Facades

Street facades shall be designed to provide a strong relationship with the sidewalks and the street(s), to create an environment that supports and encourages pedestrian activity through design elements such as:

a. Facade articulation reflecting the rhythm of nearby commercial and residential areas such as California Avenue;

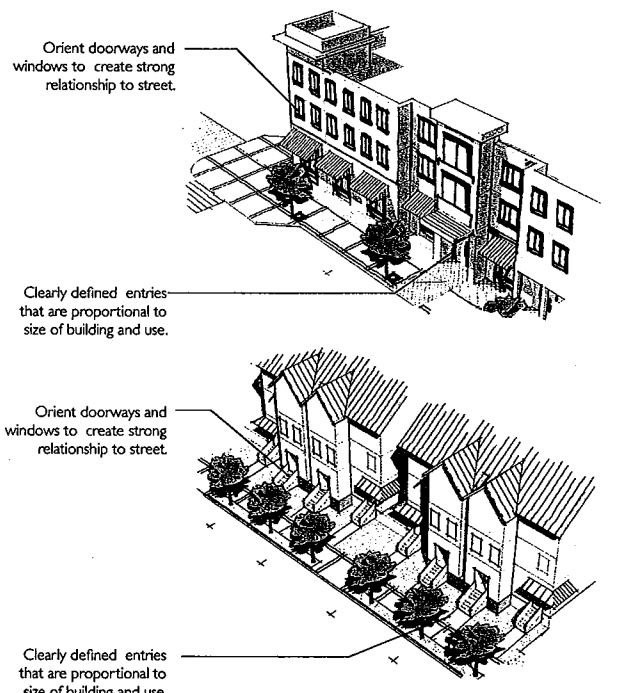
b. Placement and orientation of doorways, windows, and landscape elements to create strong, direct relationships with the street;

c. Facades that include projecting eaves and overhangs, porches, and other architectural elements that provide human scale and help break up building mass;

d. Entries and windows that face onto the street;

e. Entries that are clearly defined features of front facades, and that have a scale that is in proportion to the size and type of the building and number of units being accessed; larger buildings should have a more prominent building entrance, while maintaining a pedestrian scale; and

f. Residential units and storefronts that have a presence on the street and are not walled-off or oriented exclusively inward.



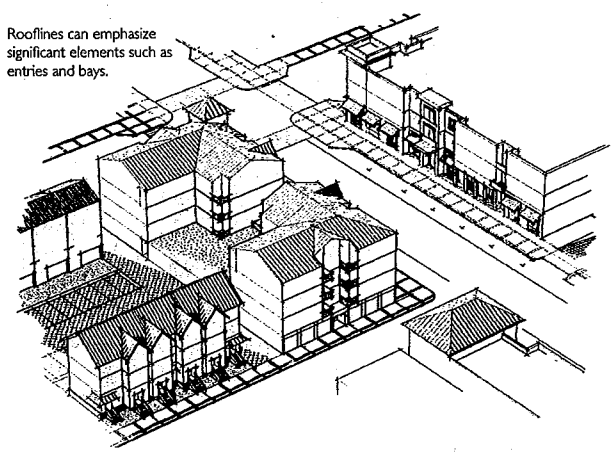
DRAFT
05/10/06

3. Massing and Articulation

Buildings shall be designed to minimize massing and provide for articulation and design variety through elements such as:

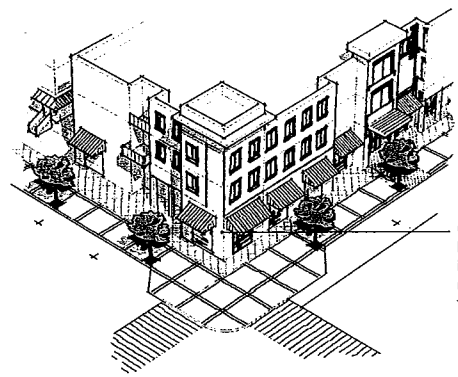
a. Buildings that include pedestrian-scaled detail, articulation and craftsmanship of the façade;

b. Rooflines that emphasize and accentuate significant elements of the building such as entries, bays, and balconies;

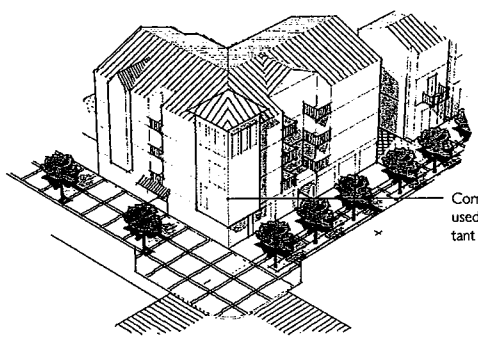


Buildings should provide pedestrian-scaled detail, articulation and craftmanship of the facade.

c. Corner buildings that incorporate special features to reinforce important intersections and create buildings of unique architectural merit and varied styles.



Corner buildings should be used to reinforce important intersections. A retail entry can strengthen the corner.



Corner buildings should be used to reinforce important intersections.

DRAFT
05/10/06

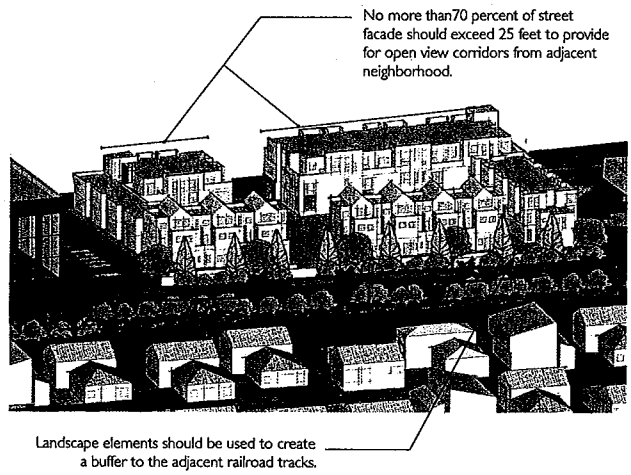
d. Design with articulation, setbacks, and materials that minimize massing, break down the scale of buildings, and provide visual interest from the train and neighborhood east of the tracks;

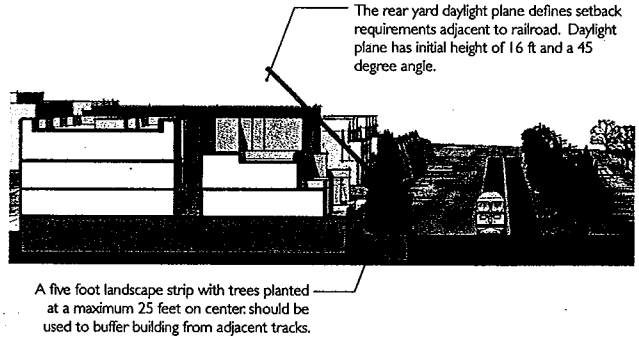
e. Limiting facades such that no more than seventy percent (70%), and no more than 100 continuous linear feet of the street façade exceeds a height of 25 feet;

f. Landscape elements to buffer the rear of the lot and the railroad tracks, with trees spaced at a maximum of 25 feet on center and combined with other landscape elements such as fencing, hedges or shrubs;

g. Application of daylight plane requirements for R-1 and R-2 adjacencies to property boundaries adjacent to the railroad right-of-way; and

h. Maintaining view corridors from Colorado Avenue and El Dorado Avenue west to the hills.



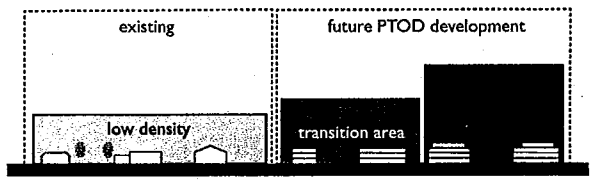


DRAFT
05/10/06

4. Low-Density Residential Transitions

Where new projects are built adjacent to existing lower-scale residential development, care shall be taken to respect the scale and privacy of adjacent properties through:

a. Transitions of development intensity from higher density development building types to building types that are compatible with the lower intensity surrounding uses,



b. Massing and orientation of buildings that respect and mirror the massing of neighboring structures by stepping back upper stories to transition to smaller scale buildings, including setbacks and daylight planes that match adjacent R-1 and R-2 zone requirements;

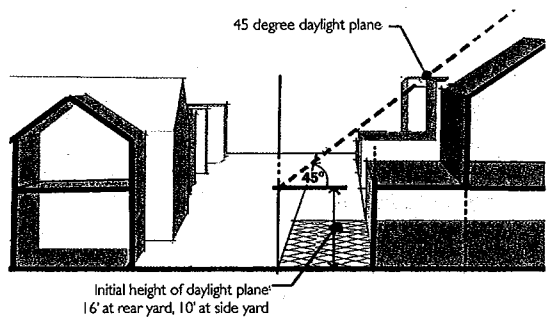
c. Respecting privacy of neighboring structures, with windows and upper floor balconies positioned so they minimize views into neighboring properties;

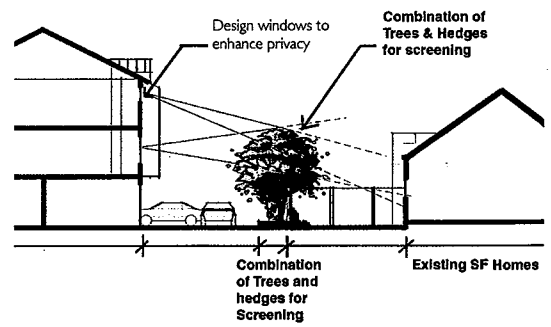
d. Minimizing sight lines into and from neighboring properties;

e. Limiting sun and shade impacts on adjacent properties;

f. Providing pedestrian paseos and mews to create separation between uses; and

g. Design with articulation, varied setbacks, and materials that minimize sound reflection to neighboring properties adjacent to the railroad.





DRAFT
05/10/06

5. Project Open Space

Private and public open space shall be provided so that it is usable for the residents, visitors, and/or employees of a site.

a. The type and design of the usable private open space shall be appropriate to the character of the building(s), and shall consider dimensions, solar access, wind protection, views, and privacy;

b. Open space should be sited and designed to accommodate different activities, groups, active and passive uses, and should be located convenient to the users (e.g., residents, employees, or public);

c. Common open spaces should connect to the pedestrian pathways and existing natural amenities of the site and its surroundings;

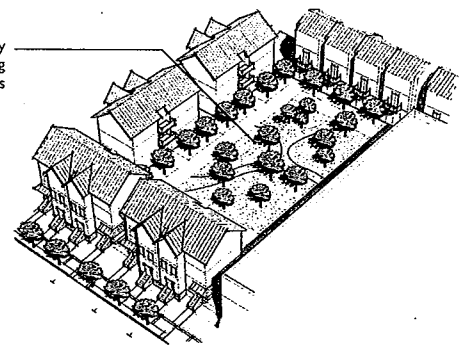
d. Usable open space may be any combination of private and common spaces;

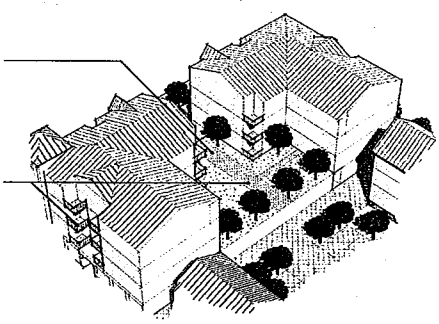
e. Usable open space does not need to be located on the ground;

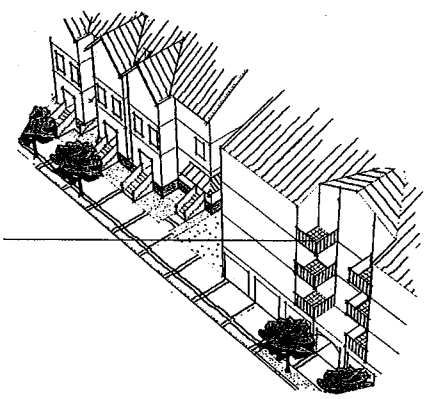
f. Open space should be located to activate the street façade and increase "eyes on the street" when possible;

g. Both private and common open space areas should be buffered from noise where feasible; and

h. Parking may not be counted as open space.







DRAFT
05/10/06

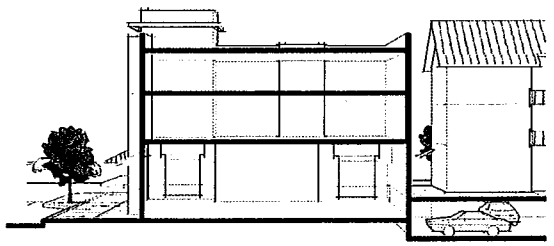
6. Parking Design

Parking needs shall be accommodated but shall not be allowed to overwhelm the character of the project or detract from the pedestrian environment, such that:

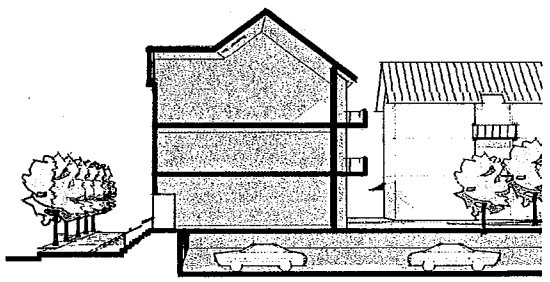
a. Parking is located behind buildings, below grade or, where those options are not feasible, screened by landscaping, low walls, etc.;

b. Structured parking is fronted or wrapped with habitable uses when possible;

c. Parking that is semi-depressed is screened with architectural elements that enhance the streetscape such as stoops, balcony overhangs, and/or art;



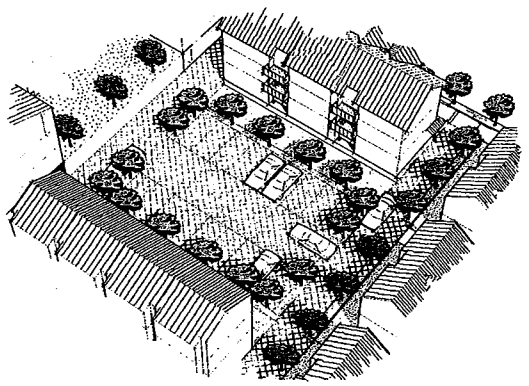
Parking should be wrapped by habitable uses when possible.



Semi-depressed parking can be used to raise residential uses to provide privacy and opportunities for stoops and porches.

d. Landscaping such as trees, shrubs, vines or groundcover is incorporated into surface parking lots;

e. Street parking is utilized for visitor or customer parking and is designed in a manner to enhance traffic calming on the street.



Landscaping should be incorporated into any surface parking lots.

DRAFT
05/10/06

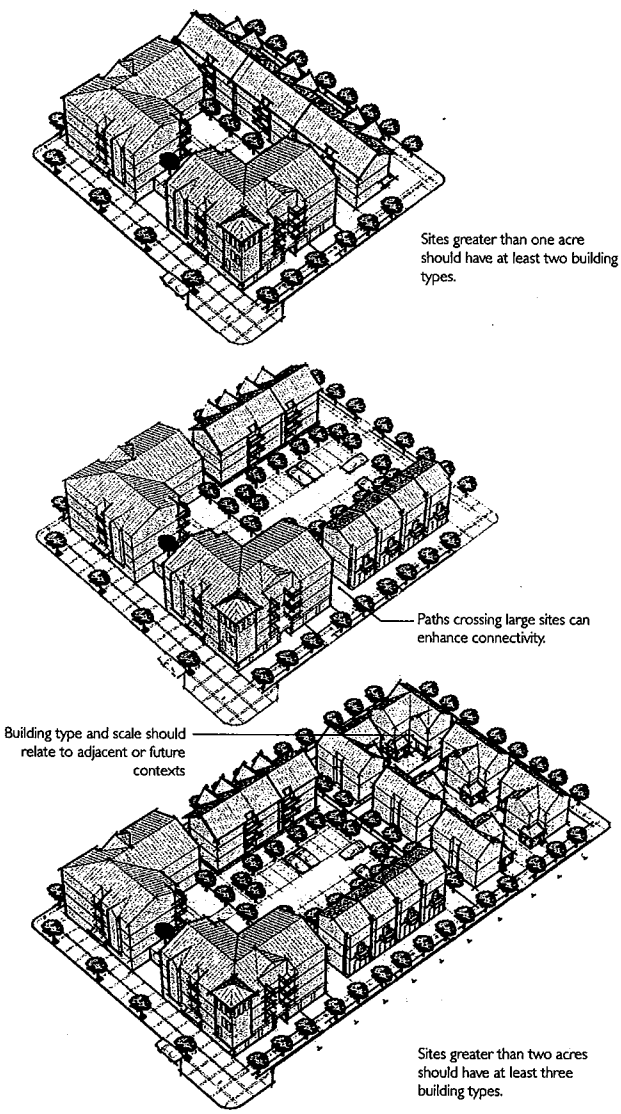
7. Large (multi-acre) Sites

Large (in excess of one acre) sites shall be designed so that street, block, and building patterns are consistent with those of the surrounding neighborhood, and such that:

a. New development of large sites maintains and enhances connectivity with a hierarchy of public streets, private streets, walks and bike paths (integrated with Palo Alto's Bicycle Master Plan, when applicable);

b. The diversity of building types increases with increased lot size (e.g., <1 acre = minimum 1 housing type; 1-2 acres = minimum 2 housing types; greater than 2 acres = minimum 3 housing types).

c. Where a site includes more than one housing type, each housing type should respond to its immediate context in terms of scale, massing, and design (e.g., Village Residential building types facing or adjacent to existing single-family residences).



DRAFT
05/10/06

8. Sustainability and Green Building Design

Project design and materials to achieve sustainability and green building design should be incorporated into the project. Green building design considers the environment during design and construction. Green building design aims for compatibility with the local environment: to protect, respect and benefit from it. In general, sustainable buildings are energy efficient, water conserving, durable and nontoxic, with high-quality spaces and high recycled content materials. The following considerations should be included in site and building design:

a. Optimize building orientation for heat gain, shading, daylighting, and natural ventilation.

b. Design landscaping to create comfortable micro-climates and reduce heat island effects.

c. Design for easy pedestrian, bicycle, and transit access.

d. Maximize onsite stormwater management through landscaping and permeable pavement.

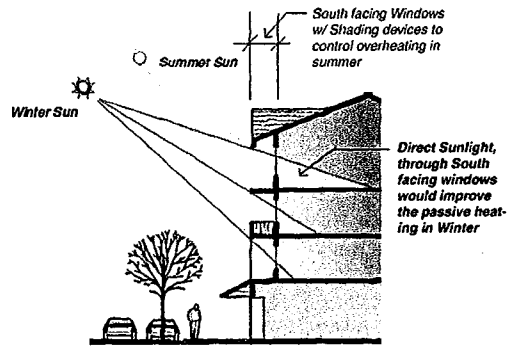
e. Use sustainable building materials.

f. Design lighting, plumbing, and equipment for efficient energy use.

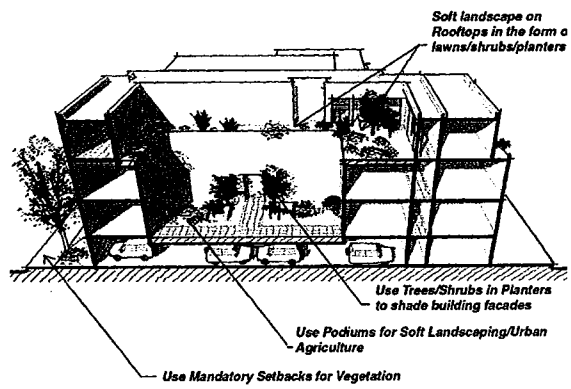
g. Create healthy indoor environments.

h. Use creativity and innovation to build more sustainable environments, One example is establishing gardens with edible fruits, vegetables or other plants to satisfy a portion of project open space requirements.

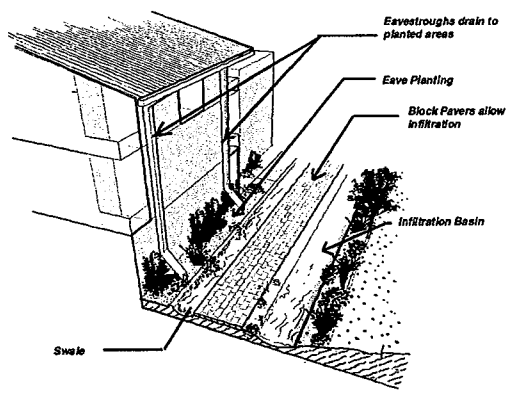
i. Provide protection for creeks and riparian vegetation and integrate stormwater management measures and open space to minimize water quality and erosion impacts to the creek environment.



Use of Shading Devices to Control Solar loads in Summer and gain Passive heat in Winter



'Urban Agriculture' and rooftop/balcony gardens

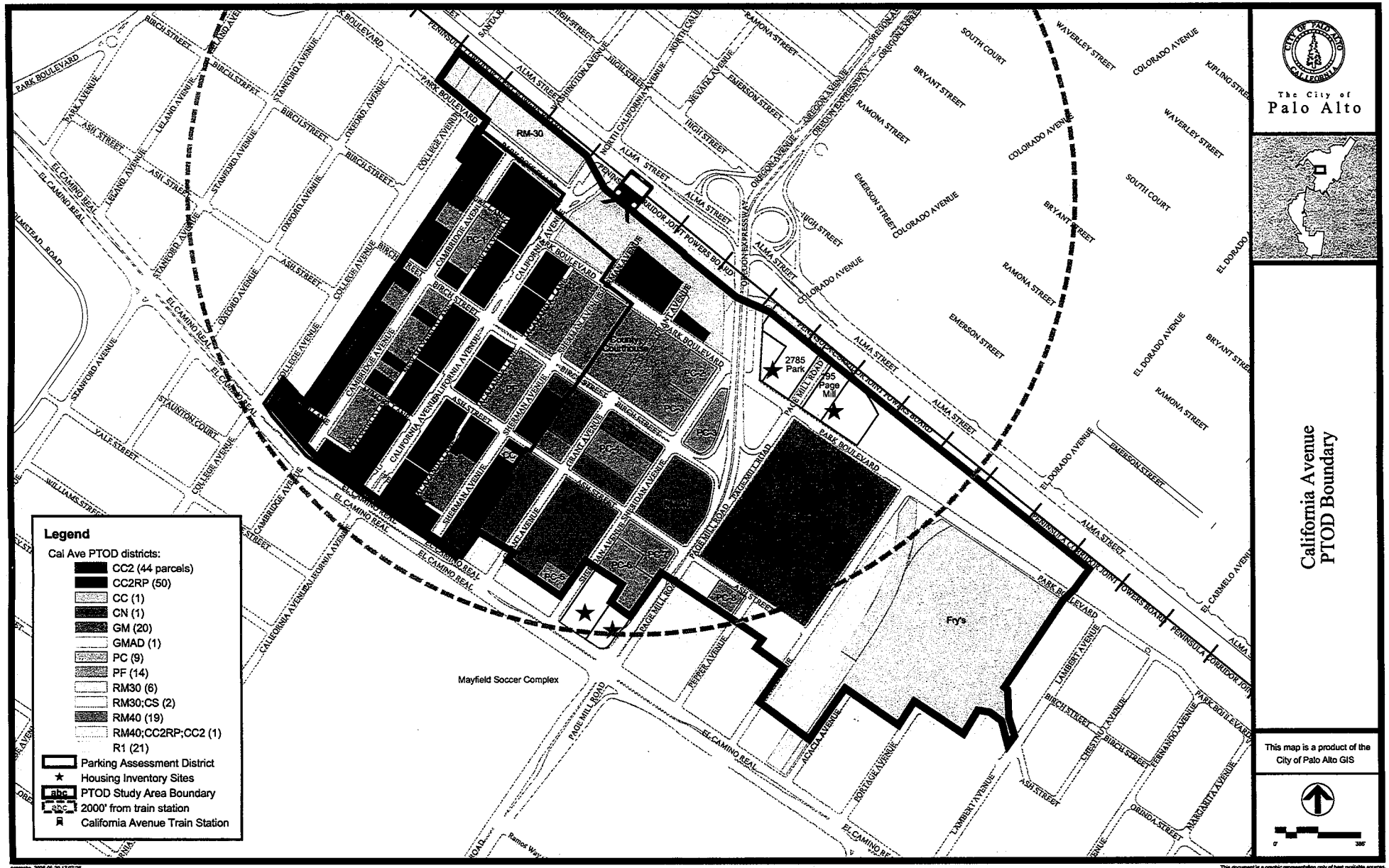


Minimize Stormwater Runoff to Impermeable areas

DRAFT
05/10/06

DRAFT
05/10/06

ATTACHMENT C



PLANNING DIVISION

STAFF REPORT

TO: PLANNING & TRANSPORTATION COMMISSION

FROM: Curtis Williams, Contract Planner **DEPARTMENT:** Planning & Community Environment

DATE: May 10, 2006

SUBJECT: Zoning Ordinance Update – Review and Recommendation Regarding Adoption of New Chapter 18.66 (Pedestrian and Transit Oriented Development Combining District) of the Zoning Ordinance Pertaining to the California Avenue Area

RECOMMENDATION

Staff recommends that the Planning and Transportation Commission (PTC) recommend to the City Council adoption of the attached ordinance (Attachment A) establishing Chapter 18.66 of the Zoning Ordinance to create a Pedestrian and Transit Oriented Development (PTOD) Combining District in the vicinity of the California Avenue Caltrain station.

Alternative Recommendations

Staff has outlined two alternative options to the staff recommendation for the Commission's consideration, allowing for different levels of intensity and scope, if desired:

1. Lesser Intensity Option A:
   - Reduce allowable density to a maximum of 30 units per acre (rather than 40)
   - Delete BMR bonus provisions, allowing applicants to request bonuses pursuant to State law
   - Further restrict allowable office FAR to 0.20 or limit the maximum square footage of office space allowable on a site

2. Limited Boundary Option B:
   - All or part of Option A modifications
   - Delete the Fry's site, Olive Ave. residential, and GM sites south of Olive Avenue from the PTOD boundaries

A brief discussion of each alternative is included later in the staff report.

BACKGROUND

The City of Palo Alto Comprehensive Plan Programs L-11 and L-14 direct the City to develop standards and criteria for Transit Oriented Residential Development. This zoning would provide for higher density residential uses in the University Avenue/Downtown and California Avenue commercial centers within a walkable distance (a 2,000 foot radius is specified) of the City's two multi-modal transit stations. Some of the components of this program include net densities of up to 50 units per acre and performance standards to ensure that projects contribute to the street environment and encourage use of alternative modes of transportation. Design standards should be prepared to minimize potential negative impacts and to assure that housing is compatible with the California Avenue commercial center. Relevant Housing Element policies direct that increased housing density be allowed immediately surrounding commercial areas and particularly near transit centers, and that parking requirements be modified to allow higher densities in appropriate areas.

Other Comprehensive Plan policies focus on the California Avenue area specifically, including maintaining the scale, character and function of the California Avenue business district (Policy L-28), improving the transition between the California-Cambridge area and the single family neighborhood of Evergreen Park (Policy L-30), and developing the Cal-Ventura area as a well-designed mixed use district with diverse land uses, two- to three-story buildings, and a network of pedestrian oriented streets providing links to California Avenue. An extensive list of relevant Comprehensive Plan policies and programs is included as Attachment L. Several other Comprehensive Plan policies relate generally to protecting neighborhood character throughout the city.

Housing Constraints and Opportunity Sites

On October 11, 2005, the City Council reviewed and adopted revisions to the Office, Research and Manufacturing Districts of the Zoning Ordinance, and amended the proposed ordinance to prohibit all residential uses (including mixed use) in the General Manufacturing (GM) district. The Council discussion recognized that there were some GM-zoned areas in close proximity to the California Avenue Caltrain station that may be appropriate for multi-family residential development, but Council members indicated they would prefer to address that potential when the Pedestrian and Transit Oriented Development (PTOD) zoning is addressed. At the time of rezoning to PTOD, appropriate safeguards such as parking management and trip reduction measures can be considered in conjunction with land use procedures.

The Housing Element identifies three housing opportunity sites within the California Avenue study area, including two in the GM zone. There are project applications pending for those sites, requesting residential use. In the longer term, the Fry's site may eventually be redeveloped as residential or mixed use and staff has been approached by owners of properties surrounding Fry's regarding redevelopment of their sites, primarily for residential use. Staff believes that these projects and future requests are better addressed by developing the PTOD zoning as soon as possible since these projects will impact the character and direction of this area well into the future.

Prior Planning and Transportation Commission Review

On November 9, 2005, the PTC conducted a study session to consider the overall approach to a PTOD district, including the boundaries, the process for applying the zoning, and preliminary

standards for development. On November 30, 2005, the Design and Environment Working Group discussed the approach and proposed context-based design criteria. On December 1, 2005, the Architectural Review Board (ARB) considered the same material and focused its discussion on development standards and context-based design criteria. On December 7, 2005, the PTC and ARB conducted a joint study session to review the proposed land uses, development standards, and context-based criteria. On December 14, 2005 the PTC held a public hearing to review the draft ordinance and directed staff to modify some provisions of the ordinance and to provide additional information. The PTC considered the ordinance again on January 11, 2006, and heard concerns from community members about impacts to specific neighborhoods, as well as concerns about citywide impacts on schools and parks. The PTC continued the item to allow staff time to meet with potentially affected residents and to provide further information in response to the community questions.

Community Outreach

Staff has conducted four community meetings to discuss the proposed PTOD zoning changes to interested neighborhoods or business representatives. Those presentations included a general community meeting in the Council Chambers on February 27, and meetings with the Emerson Street neighborhood (March 7), Palo Alto Central homeowners and area residents (March 30), and the Ventura neighborhood (April 5). Summaries of comments from the meetings are included in Attachment L.

Some of the common themes heard at the meetings included: a) density and height relative to existing development in the area, b) transition impacts to residents east of Alma Street, including massing, noise, and lighting; c) transition impacts of massing and uses on the Ventura neighborhood, particularly if Fry's were to redevelop; d) visual impacts of taller buildings on Park Blvd., potentially creating a tunnel effect; e) traffic generation and parking, f) traffic safety at certain intersections, g) the extent of office development allowed, especially on the Fry's site, h) potential change to the Fry's site; i) impacts on schools, j) impacts on parks, and k) displacement of revenue-generating uses. Each of these issues is addressed in the remainder of the report and in some cases revisions to the ordinance and/or the context-based design criteria have been incorporated.

DISCUSSION

Staff has prepared a draft California Avenue PTOD Ordinance (Chapter 18.66) based on comments and direction from previous PTC and ARB meetings and from the more recent public outreach effort. A redlined (underlined/strikeout) copy of Chapter 18.66 is included in Attachment C, reflecting changes made since the PTC review on January 11.

Summary of Ordinance Revisions from the January 11, 2005 PTC Meeting

The following substantive modifications to the draft ordinance outline changes since the January 11 PTC meeting and are reflected in Attachments A (ordinance) and B (context-based design criteria diagrams).

- Table 2 (Development Standards) has been revised to add setback and daylight plane requirements for properties adjacent the Caltrain right-of-way, requiring a stepping back away from the tracks and a landscape buffer.

- The maximum density, height, and FAR are listed in Table 2, with a footnote to Section 18.66.040(e) regarding below-market rate (BMR) housing bonuses (bonus density, height, and FAR are no longer shown on the table).
- The Context Based Design Criteria (Section 18.66.050(b)(3)(D)-(H)) text and diagrams also reflect this requirement, as well as provisions for breaking up long walls and protecting view corridors from Colorado and El Dorado Ave. Criteria 4(g) is added to suggest design techniques to minimize noise reflection.
- Office and research and development uses are further limited to an FAR of 0.25 in mixed use developments. Total non-residential FAR remains at 0.35, allowing for additional retail or services.
- Allowances for parking adjustments (Section 18.66.040(d)) are revised to reduce the maximum cumulative reduction to 30% (rather than 40%), except for senior housing projects, where up to 50% reduction (from existing residential parking rates) could be allowed (note: staff has recently been using parking rates for senior adult residential facilities from ITE's Parking Generation Manual in parking studies and expects to add those to the ZOU parking requirements, which may eliminate this adjustment).
- Allowances for parking adjustments are also revised to require the applicant to provide measures for traffic and parking demand management, such as limiting "assigned" parking or providing for transit passes, etc. In addition, the program would require reporting after 2 and 5 years regarding the effectiveness of the measures to reduce trips and parking needs, in order to provide local data on these techniques to guide continuing and future TDM programs.
- The Context Based Design Criteria (Section 18.66.040(b)(4)(A)) for transitions of development intensity has been illustrated on a diagram to better reflect the intent of such transitions.
- The Context Based Design Criteria (Section 18.66.040(b)(1)) for streetscape design has been illustrated on a diagram for Park Blvd. to identify the desired relationships between the travel lanes, bicycle lanes, sidewalks, and building setbacks. The diagram also indicates how upper floors of buildings must be set back to break up massing along the street.
- Language is added to the Review Process Section 18.66.060(b) to define the term "minor" relative to changes made to an approved PTOD project, which may be approved by the Director. The language is identical to existing language for Director approval of minor changes to Architectural Review permits, and precludes changes of "use" from being considered as "minor" changes.
- References to Village Residential housing types were deleted, since that designation does not yet exist.

The alternatives presented in the staff report provide further options for revisions to the scope or intensity of the PTOD provisions.

Purposes and Benefits of PTOD

The Comprehensive Plan outlines the basic intent and parameters of a Transit Oriented Residential zone, intended to generate residential densities that support substantial use of public transportation and especially the use of Caltrain. The Comprehensive Plan, however, does not identify additional benefits of such a zone, such as its integration with pedestrian and bicycle

accommodations and with mixed uses that are necessary to successfully support such a zone. In many cases, it is the pedestrian accessibility and mixed use nature of a transit area that reduce the need for vehicle trips (see Planning magazine article by Nelson/Nygaard 2005, summarized in Attachment I). Staff has therefore reformulated the Transit Oriented Residential land use into a Pedestrian and Transit Oriented Development overlay and believes that such a district in the California Avenue area would have the following key benefits:

1. Support the use of public transportation and other non-vehicular transportation modes;
2. Encourage mixed use (mix of housing types, retail, and limited office uses) to reduce the need for vehicle trips and parking;
3. Provide streetscape design that is attractive to pedestrians and bicyclists;
4. Support the economic vitality of California Avenue and nearby businesses; and
5. Implement the City's Housing Element.

Existing PTOD Area Development Intensity

Existing zoning in the proposed California Avenue PTOD area is comprised primarily of RM (multi-family residential, mostly RM-40 units per acre), CC(2) (community commercial), and GM (General Manufacturing) zoning, with isolated pockets of other commercial zoning and several Planned Community (PC) sites, most of which are for multiple family residential or mixed use. Attachment G outlines the zoning standards in these commercial and residential zone districts and compares those to the standards proposed for the PTOD district standards in Table 2. Attachment H summarizes the density and height of existing multi-family residential projects in the vicinity.

The standards proposed for the PTOD are generally consistent with those existing in other zones and for existing development (especially RM-40, which is prevalent), with the added flexibility that 1) residential uses would be allowed in the GM zones, 2) mixed use would be allowed throughout, and 3) a hotel could be considered, if a PTOD zoning was deemed appropriate by the PTC and Council. The PTOD zoning is not likely to be used extensively in the California Avenue CC(2) area, as that zoning already provides for similar uses and heights, and a greater FAR than the PTOD.

Also, in conjunction with rezoning to the PTOD district, the highly discretionary review process will allow the PTC and City Council to determine the appropriate use and intensity of each site. The potential application of the PTOD zoning to the Fry's site is discussed in a later section.

PTOD Area Boundaries

The proposed boundaries of the California Avenue PTOD district are shown in Attachment D. This map differs in a few key respects from the 2,000-foot radius around the train station, as specified in the Comprehensive Plan, by excluding most R-1 areas and some frontage on El Camino Real, and by adding the Fry's site and nearby GM parcels. The map and boundaries have not been modified from the January 11 meeting. The process for amending the boundary would require modifying the PTOD Chapter of the Zoning Ordinance.

Transitions to Adjacent Residential Areas

A key concern of residents living within or adjacent to the California Avenue PTOD area is the transition from the higher density zoning proposed to their low density neighborhood. While the

proposed intensity of development in most cases does not materially differ from the zoning now existing, staff recognizes that there are better ways to address those transitions than exist in current zoning. Section 18.66.050 of the proposed ordinance provides for "context-based design criteria," intended to specify both in text and diagrams how buildings should relate to adjacent residential areas and streets, and assuring a more pedestrian- and bicycle-friendly design. In particular, the following provisions are made for transitions to adjacent low-density (R-1 and R-2) residential uses:

- Ventura neighborhood: The boundaries of the PTOD are drawn to provide a buffer of existing uses (currently commercial and light industrial) between the residential area and the Fry's site. The context-based design criteria further requires transitions in intensity (Section 18.66.050(b)(4)(A)) and illustrates the concept in the accompanying diagram. These provisions would be used by the PTC, Council and ARB in considering the uses and intensity across the Fry's site to emphasize that transition.
- Palo Alto Central: Uses and densities proposed for the PTOD are generally consistent with the Palo Alto Central and neighboring multi-family residential uses. Additional provisions in the context-based design criteria do, however, outline the relationship of buildings to the street, especially Park Blvd., to step back above two stories and to accommodate trees and wider sidewalks to provide for a more attractive transition along the street.
- College Avenue (north of PTOD): The boundary for the PTOD has been drawn to exclude a row of multi-family (generally RM-30) zoning on the south side of College Avenue to buffer the PTOD from the lower-density residential area to the north. Also, as indicated previously, it is unlikely that the PTOD will have a substantial effect on the areas zoned CC(2) along Cambridge and California Avenues.
- Pepper Avenue (west of PTOD): The PTOD boundary has been drawn to exclude the R-1 areas along Pepper Avenue and portions of Page Mill Road and Olive Avenue. The context-based design criteria and the ordinance standards require that adjacent sites, if developed under PTOD standards, must mimic the R-1 setback and daylight plane on any abutting lot line. The few lots adjacent to these homes are fairly small and narrow and would likely only accommodate relatively smaller structures, such as a "village residential" style use or small mixed use, with the setback and daylight plane constraints.
- Alma/Emerson Street: The draft ordinance and context-based design criteria have been revised to provide for 1) a daylight plane for properties along the railroad tracks, 2) a minimum 5-foot landscaped setback from the railroad right-of-way, 3) requirements to break up the massing and height of the buildings so that no more than 70% of the length of the buildings and no building length greater than 100 feet may exceed 25 feet in height, and 4) view corridor protection from Colorado and El Dorado Avenues. Building techniques (materials, varied setbacks, and articulation) to lessen noise reflection impacts are also suggested.

Staff believes that transition issues are now adequately addressed in the standards and criteria as proposed.

Train Noise Reflection

A related transition issue of concern to the Alma/Emerson Street residents is the extent to which new buildings along the railroad track may result in train noise being reflected into their neighborhood, increasing the already high noise levels. Staff commissioned a study by the ZOU environmental consultant (EIP Associates) to measure and analyze this potential noise source (Attachment J). The consultant measured noise levels at points adjacent to or in front of the Palo Alto Central buildings and at points where no buildings exist, both between the building (or vacant lot) and the tracks and across (on the east side of) Alma Street. Measurements were taken at different times of the day and evening. The consultant concluded that:

1. There is no perceptible difference in noise levels between measurements in locations with noise-reflecting surfaces (walls) and those without (vacant parcels).
2. The potential for reflected noise impacts would likely become a concern only if building walls were long, high, flat, non energy-absorptive and continuous, if the road or track were long and straight, and if there were no air/ground absorption and path interruption effects.
3. At peak noise periods (generally traffic peak periods), vehicular noise along Alma was considerably more of a factor for noise levels than the trains.
4. Techniques to assure that noise reflection is not an issue include articulation of buildings and/or angling of buildings or windows other than parallel to the tracks, use of absorptive materials, and avoiding sustained flat surfaces over 100 feet in length.

Staff believes that the ordinance provisions for articulation of buildings and for use of non-absorptive materials address these concerns and will benefit adjacent property owners and PTOD building residents.

Traffic and Transportation Issues

A number of traffic and transportation issues have been raised by the public at Commission or community meetings, including the implications of the PTOD district on pedestrian and bicycle facilities, parking, Caltrain ridership, trip generation, and traffic congestion and safety.

- Pedestrian Facilities: The California Avenue PTOD overlay will require upgrading pedestrian facilities throughout the district and particularly along Park Blvd. Context-based design criteria (Section 18.66.050(b)(1)) provide for connectivity for pedestrians (and bicyclists) between streets, paths, and bicycle routes or facilities and wide sidewalks are also specified. Streetscape requirements include ground floor uses that are appealing to pedestrians, weather protection, and street trees, benches, landscape elements, and public art.

- Bicycle Facilities: Many of the same criteria that benefit pedestrians will provide for safer and more integrated bicycle facilities, including improved bike lanes along Park Blvd. The City plans, later in 2006, to begin implementation of a planned bike boulevard on Park Boulevard between Lambert Avenue and West Meadow Drive. There is presently a continuous north-south bike route that extends from Sand Hill Road through the PTOD area to Lambert Avenue. To the south of West Meadow Drive, the bike boulevard will be provided along Wilkie Way, where there is an existing crossing of

Adobe Creek at the street's southerly end. Implementation of the bike boulevard will involve installation of signage and painting of pavement markings, and redesigning the half closure located on Park Boulevard south of Lambert Avenue in order to make it more accessible for cyclists. In the interest of reducing vehicular traffic speeds and enhancing good safety conditions, additional traffic calming devices could potentially be established on the bike boulevard. Staff advises retaining the bike route on Park Boulevard without the need for constructing a north-south bike path along the west side of the Caltrain tracks. Location of bike routes along lively city streets is preferable to increase the cyclists' sense of personal security.

- Parking: Some area residents have expressed concern about the potential for parking overflow into neighborhoods, on the streets, or into existing residential parking garages. While there is documentation (see Attachment I for summary of reports and articles) that vehicles per household near the City's transit stations are the lowest in the city, and that trip and parking reductions for development with mixed use or near transit stations is generally recommended by traffic professionals, the PTOD ordinance presents a conservative approach to parking.

  The proposed PTOD parking requirements do not reduce the standard parking requirements that apply throughout the City. Allowable parking reductions for mixed use, senior housing, and transportation and parking alternatives, etc. (Section 18.83.120 of the current code) are available as they are elsewhere in the City, but the PTOD ordinance ties some of those reductions to either smaller unit sizes and/or parking or transportation demand management programs to reduce parking needs. Also, requirements are included to periodically (after 2 years and after 5 years) report on the effectiveness of these parking or transportation demand management programs. This will allow the City to begin to develop some relevant data on the effectiveness of these measures without modifying current parking criteria.

- Caltrain ridership: Staff has discussed the proposal for the PTOD district with Caltrain and how it relates to ongoing service at the California Avenue transit station. Caltrain has expressed support for the development of transit-oriented development around existing train stations, and identifies pedestrian or transit-oriented land use as important to the agency's short and long term goals. According to Caltrain's last annual boarding survey in February 2005, the California Avenue station averaged 839 daily rides, giving it a rank of 11th out of 34 total stations. It is expected that service reductions at the California Avenue station due to implementation of the Baby Bullet service will show reduced ridership numbers in the next annual survey. Despite these reductions, there are no current plans or indication from Caltrain that they are planning to further reduce service at the California Avenue station. In fact, improvements are planned to provide that two trains may stop at the station at one time (not currently possible given the existing track and platform configuration) and to add safety improvements for crossing from one side of the tracks to the other. Staff believes that moving forward with the PTOD is a proactive measure demonstrating to Caltrain that Palo Alto wants continuing service at the California Avenue station, and shows support for the Caltrain objective of promoting transit oriented land uses near transit stations.

- Trip generation: Potential trip generation or changes in traffic patterns in the PTOD area could occur from the increased residential density on GM-zoned sites or from the conversion of large sites like Fry's or Agilent to residential or mixed use. The nature of residential trips, however, is generally less impacting at peak hours than office or research and development uses on the same site. For example, on a one-acre site, at 40 units (apartments or condominiums) per acre vs. a 0.5 FAR for a non-residential development (currently allowed by GM zoning), peak hour traffic is estimated as shown below:

Land Use	AM Peak Hour Trips[1]	PM Peak Hour Trips[1]
Condominiums and Apartments	17.6 – 20.5	20.8 – 24.8
Office and Research and Development	27.0 – 33.8	23.5 – 32.5

[1] ITE Trip Generation Manual, 7th Edition.

For mixed use development, the totals would probably fall in the higher end of the range, but would be dependent on the extent of each use, and retail uses would not typically contribute significantly to the peak hour traffic. On the other hand, mixed use development can result in trip reductions that would offset other increases (see documents and articles summarized in Attachment I). The specifics of traffic patterns (when inbound and outbound trips occur) would also affect traffic levels at particular intersections, but are site and project specific. A traffic study would be required for any project in the PTOD to assess these various impacts prior to project review and approval. On sites such as Fry's or Agilent, a traffic study would be especially critical to determine and justify the appropriate land use or mix of uses. Additionally, for any project that requests parking reductions due to proximity to transit or mixed use would be required to present a transportation demand management (TDM) program outlining measures to reduce trips, and to follow up with reports not later than 2 and 5 years after occupancy to assess the effectiveness of the measures. This will allow the City to begin to develop some relevant data on the effectiveness of these measures without modifying current parking or traffic criteria.

- Traffic congestion and safety: Area residents expressed concern regarding existing traffic congestion, particularly at Park Blvd. at Page Mill/Oregon Expressway, and the queuing onto Park Blvd. The City's traffic engineer has indicated that a left turn lane on northbound Park Blvd. will be required when substantial new development occurs in that vicinity, so that cars waiting for a through movement will not be backed up from cars waiting to turn onto the ramp. Signalization at the Park Blvd. and Page Mill Road intersection will also be required to assure safe movements from Page Mill Road at those developments across or onto Park Blvd. Safety issues associated with pedestrian access across Page Mill/Oregon Expressway (across the ramps) and in the vicinity were also voiced by residents. There are, however, multiple pedestrian routes that avoid the ramps.

Improved crosswalks and pedestrian signals are likely to be required along and across Park Blvd., to enhance the other pedestrian design features on that street. With regard to the pedestrian access to the train station, pedestrians could use the sidewalks provided on both sides of Park Boulevard and Page Mill Road, then walk along the frontage road abutting the Caltrain tracks until they reach the station. The City will require new development at the Park Boulevard housing opportunity sites (195 Page Mill and 2785 Park Blvd.) to provide for sidewalks on the west side of the frontage road and the south side of Sheridan Avenue. Also, the City and the Valley Transportation Authority plan to upgrade pedestrian undercrossings of the railroad tracks for pedestrian safety.

In addition, traffic calming devices along Park Blvd. and in neighborhoods to the north and south of the PTOD area are proposed to remain. Further improvements to enhance traffic calming will be evaluated with the implementation of the bike boulevard project.

Parks

Attendees at the community meetings and PTC hearings have expressed concern about park facilities and open space to serve the new residential population in the PTOD area. The PTOD zoning will require private and common open space (courtyards, balconies, etc.) for residents, but generally not for the public. On large sites of more than a few acres, the City may require area to be set aside for public parkland, but otherwise imposes park impact fees to fund future acquisition of parkland and improvements to parks. The City is also in the process of considering adoption of a Quimby Act park dedication requirement or fee to address parkland needs. There is one small park within the PTOD area, and several small parks exist within walking distance of the PTOD area. In addition, the Mayfield soccer complex is under construction within walking distance of the area. Stanford University 's facilities and open space are also nearby. The need for playfields or tot lots to serve proposed residential units in the PTOD is uncertain, and is dependent on the resultant demographics for such apartment and condominium units. However, because each project will be required to have open space provisions such as a courtyard or green, a quality living environment will be ensured.

Schools

The new housing in the PTOD area could incrementally increase demand on area schools. The degree of impact is uncertain, however, because a) much of the area already allows housing, and b) the types of housing proposed (generally apartments and condominiums) typically generate a lower level of students, based on Palo Alto Unified School District student generation projections. Additionally, new development must pay school impact fees to help offset costs of school construction, and the increased property taxes will help provide additional operating revenues for the school district. The Palo Alto Unified School District has indicated to staff that there is sufficient capacity districtwide for the additional students from PTOD development, however, attendance at the nearest school may not be available. The City intends to continue to coordinate with the District in its study of school capacity and impacts.

Development Potential

The Environmental Review section at the end of this staff report summarizes the development potential for the California Avenue PTOD area through 2010, as outlined in the Addendum to the Comprehensive Plan EIR (Attachment K). The key questions posed by the public in meetings and hearings have been 1) how many housing units could be constructed in the area, 2) what is

the potential for office development in the area, 3) what level of development would occur on the Fry's site, and 4) can the existing revenue-generating uses (retail, auto dealers, Fry's) be excluded to retain those uses?

- Multifamily Units: The Comprehensive Plan and the Housing Element Update projections assume that a total of 444 new multifamily units could be constructed in the Cal-Ventura subarea through 2010, though the only development to date has been the 81 units of senior housing at the Sunrise Assisted Living site. The Addendum to the EIR projects another 67-72 units above that total in the 2010 timeframe due to the use of the PTOD combining district. The Comprehensive Plan update will look further at the buildout potential in the area. The Fry's site is discussed below.

- Office Use: The PTOD would permit mixed use, if approved by the PTC and Council, allowing a maximum 0.35 FAR for non-residential uses. This FAR is less than the 0.5 FAR allowed in the GM district and is considerably less than the FARs allowed in the CC(2) district that surrounds California Avenue. Due to the concern about office uses, the proposed ordinance has been revised to limit office uses to a 0.25 FAR maximum (of the total 0.35 FAR). Office uses are not allowed on the ground floor on most sites on California Avenue and on sites one block in either direction. Staff believes that the further restriction on office FAR and the discretion for the PTC and the Council to determine the appropriate uses will adequately limit office uses.

- Fry's Electronics Site: The existing Fry's Electronics retail site is designated as Multifamily Residential in the Comprehensive Plan and is zoned RM-30. The property is amortized to allow the existing retail/office/warehouse use only until 2019. Redevelopment of the site was not included within the timeframe of the 1998-2010 Comprehensive Plan and EIR, based on the amortization date. The application of the PTOD overlay and related design criteria to the site would allow flexibility to consider redevelopment of this site as a mixed-use project so that preliminary planning could begin to occur. The site would require discretionary review (zone change) by the PTC and City Council to set the allowable uses and density/FAR, and would require full environmental review (likely an EIR) for that large a site. This review would include evaluation of the appropriateness and extent of the non-residential use proposed, including the type of use (retail, office, etc.).

  The Fry's site is an integral part of the PTOD, anchoring the southern portion of the area, to help facilitate pedestrian and bicycle movements to California Avenue and the Caltrain station. Redevelopment of the site also holds potential for incorporating additional parkland or open space into the area. Staff and the ZOU urban design consultants have developed scenarios of potential development on the Fry's site. The site is about 12.6 acres in size and contains approximately 250,000 square feet of office/retail/warehouse uses. Based on a gross 12.6 acres at 40 units/acre and a 0.35 non-residential FAR, the site could theoretically accommodate approximately 190,000 square feet of non-residential use and 390 multifamily units.

This scale of development, however, is not likely to occur because the requirements for streets and other improvements would reduce the net acreage available for development, and because other PTOD goals, such as providing a variety of housing types, may dictate a different mix of uses on such a large site. Van Meter Williams Pollock (VMWP), the ZOU urban design consultant, has developed some calculations for a more realistic potential development scenario. VMWP looked at the Fry's site allowing for a street network and a mix of housing types, which would result in a total development potential of:

- Residential: 380 units
- Non-Residential: 87,500 square feet

VMWP noted at the December 14, 2005 PTC meeting that a more typical mixed use development would include a non-residential component in the 5% to 10% range of the overall floor area. Without a Fry's or other commercial anchor, neighborhood-serving uses might therefore be closer to 30,000 to 45,000 sf of non-residential area. This amount of commercial area in this location would augment residential needs, but would not compete with the core California Avenue commercial area.

Staff has included in the context-based design criteria (Section 18.66.050(b)(4)) of the ordinance requirements that development intensity transition from higher density building types to lower density building types closer to residential neighborhoods. A diagram has been added to stress this principle, and the site should become less intense as it progresses south towards the Ventura neighborhood. The design criteria (subsection 7) also outline requirements that larger sites provide for multiple housing types, again anticipating a more compatible townhome or small-lot residential product at the southern edge of the site.

- Revenue Generating Uses: Most retail uses in the PTOD area are on California Avenue or the nearby streets zoned CC(2) with Retail (R) and Pedestrian (P) overlays. These overlays restrict ground floor uses in these areas to retail uses, so there is not an incentive to replace them with office or residential uses. The PTOD ordinance provides the City with complete discretion as to whether to allow conversion of retail sites elsewhere in the district, as well as what uses to require. There is one auto dealership on Park Blvd. (Stanford European), which has an Auto Dealership (AD) overlay. Another dealership at 3290 Park Blvd. (Park Avenue Motors), has an AD overlay, but is just outside the PTOD boundaries. The potential to use the PTOD zoning may provide more flexibility for redevelopment of the 3290 Park Blvd. site, but is only one of many factors that would enter into that decision. Staff believes that retention of the auto dealers should be addressed with a more proactive economic development approach, not by further restricting use of the site. Nevertheless, if the Commission desires, the PTOD could exclude any site with an Auto Dealership (AD) overlay. The Fry's site is discussed above, and staff believes that the PTOD is an appropriate mechanism to provide the flexibility to retain Fry's or other revenue-generating uses.

Housing Opportunity Sites
The two Housing Opportunity sites (195 Page Mill Road and 2785 Park Boulevard) within the California Avenue PTOD GM zoned area are not on this agenda. If the applicants desire, the rezoning requests will subsequently come to the Commission for initiation of rezoning to PTOD before scheduling Commission consideration and recommendation to the City Council. The 195 Page Mill Road project applicant is exploring avenues other than the PTOD for consideration of that project.

ALTERNATIVES

Alternative approaches to the proposed PTOD ordinance were presented to staff at prior PTC hearings or community meetings. Staff has outlined two options below, with a brief discussion of each:

1. Lesser Intensity Option A:
    - Reduce allowable density to a maximum of 30 units per acre (rather than 40)
    - Delete BMR bonus provisions, allowing applicants to request bonuses pursuant to State law
    - Further restrict allowable office FAR to 0.20 or limit the maximum square footage of office space allowable on a site

2. Limited Boundary Option B:
    - All or part of Option A modifications
    - Delete the Fry's site, Olive Ave. residential, and GM sites south of Olive Avenue from the PTOD boundaries

Option A would limit the potential number of units and amount of office space that could be constructed in the PTOD (and potential traffic, parks, and school impacts), but would result in lesser densities than most of the existing residential developments in the area. It would not facilitate provision of more BMR units, and would put the City at risk of an even greater density being required under State law. Reduced office space allowances may minimize the feasibility of mixed use.

Option B would allow for further consideration of the Fry's site in subsequent planning for the area, likely through the Comprehensive Plan Update. This option would, however, remove an important component of the PTOD, anchoring the southern end of the area. This alternative would also prevent the site owners from looking ahead at potential scenarios to redevelop the site, well in advance of the amortization date.

Portions of these options or other revisions may be considered individually or in combination to create other alternatives as well.

ENVIRONMENTAL REVIEW

Staff has reviewed the potential for additional (or decreased) development potential in the Addendum to the Comprehensive Plan EIR (Attachment K). The Addendum compares potential housing units and non-residential floor area through 2010 to the assumed development projections of the Comprehensive Plan EIR and the 2002 Housing Element EIR Addendum. The

total estimated development in the Cal-Ventura subarea under the EIR analyses included an increase of 309 residential units and 102,000 square feet of non-residential space. The Housing Element Amendment included development of Housing Inventory site parcels totaling 135 additional units within the California Avenue PTOD combining district. The net additional change projected through 2010 if the PTOD district is adopted would be an increase of 67–72 residential units and a decrease of 200 to 15,000 square feet of non-residential space (the range is dependent on whether mixed use or residential developments occur). This would be in addition to the 444 residential units already projected in the Comprehensive Plan EIR and Housing Amendment (309 + 135 = 444). Staff notes that, despite the projections in those documents, no new residential units have yet been constructed in the study area, other than the Sunrise Assisted Living Facility project.

Staff does not expect the PTOD overlay to be used on all, or even most, sites throughout the zone and, because the PTOD combining district is not applied to specific lots except through subsequent rezoning, the Addendum concludes that the impact of the action will not be significantly different from that anticipated by the Comprehensive Plan EIR and the Housing Element EIR Addendum. Each specific site request for rezoning will, however, need to undergo environmental analysis to comply with CEQA.

CONCLUSION AND NEXT STEPS:
Upon recommendation from the PTC, the draft ordinance will be presented to the City Council for review and adoption. The Council would likely hear this item in late June or July, 2006. The rezoning of the two Housing Opportunity Sites will return to the Commission (or will proceed separately under applicant requests) at a later date and then will be considered by the Council thereafter. Staff has deferred development of a Downtown PTOD until after the Zoning Ordinance Update is completed in order to expedite completion of the ZOU and to focus on mixed use requirements for downtown and commercial zones.

ATTACHMENTS:
A. Draft PTOD Ordinance
B. Context-Based Criteria with Diagrams
C. Red-lined Version of PTOD Chapter (Changes Since January 11, 2006)
D. Map of Cal-Ave PTOD Area
E. Flow Chart of PTOD Review Process
F. Frequently Asked Questions
G. Table Comparing Development Standards for Zone Districts and PTOD Standards
H. Table of Existing Multi-Family Development in Cal-Ave PTOD Area
I. Summary of PTOD Articles and Papers
J. Noise Report, prepared by EIP Associates, dated April 17, 2006
K. Addendum to Comprehensive Plan EIR
L. Summary Comments from Community Meetings (4)
M. PTOD Comprehensive Plan Policies and Programs
N. December 14, 2005 PTC Minutes
O. January 11, 2006 PTC Minutes
P. March 15, 2006 PTC Minutes

COURTESY COPIES:
City Council
Architectural Review Board
Historic Resources Board
Bruce Knoblock, Essex Property Trust
Harold Hohbach, Courthouse Plaza Company
Robert Wheatley
California Avenue Area Development Association
Chamber of Commerce
Elaine Johnson
Joy Ogawa
Suzanne Bayley, Emerson Street Neighborhood
Sherrie Furman, Midtown Residents Association
Terry Holzemer, Palo Alto Central Homeowners
Kate Rooney, Ventura Neighborhood Association

PREPARED BY: Curtis Williams, Contract Planner
Clare Campbell, Planner
Heba El-Guendy, Transportation Engineer

PLANNING MANAGER REVIEW: Julie Caporgno, Advance Planning Manager

DEPARTMENT/DIVISION HEAD APPROVAL: Andy Cox for
Steve Emslie, Director
Planning & Community Environment

NOT YET APPROVED

ORDINANCE NO. _____

ORDINANCE OF THE COUNCIL OF THE CITY OF PALO ALTO ADDING A NEW CHAPTER 18.66 TO THE PALO ALTO MUNICIPAL CODE TO ADOPT REGULATIONS ESTABLISHING A CALIFORNIA AVENUE PEDESTRIAN TRANSIT-ORIENTED DEVELOPMENT COMBINING DISTRICT

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Findings and Declarations. The City Council finds and declares as follows:

(a) That in December 2000, the City Council approved a work plan for the Zoning Ordinance Update involving the preparation of a new Title 18 (Zoning Code) of the Palo Alto Municipal Code (PAMC), including the update of existing land use chapters and processes as well as the preparation of chapters for new and revised land uses;

(b) The 1998-2010 Palo Alto Comprehensive Plan includes several programs and policies related to transit-oriented residential development. The Zoning Ordinance Update was initiated in part to accomplish these programs and policies.

(c) The last comprehensive update of the Palo Alto Zoning Code took place in 1978. Provisions for pedestrian and transit-oriented development were not included in the zoning provisions in that update.

SECTION 2. Chapter 18.66 of Title 18 [Zoning] of the Palo Alto Municipal Code is hereby added to read as follows:

//

//

//

//

//

//

Chapter 18.66
PEDESTRIAN AND TRANSIT ORIENTED DEVELOPMENT COMBINING DISTRICT

Sections:

18.66.010 Purposes

(a) California Avenue Pedestrian and Transit Oriented Combining District

The California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District is intended to allow higher density residential dwellings on commercial, industrial and multi-family parcels within a walkable distance of the California Avenue Caltrain station, while protecting low density residential parcels and parcels with historical resources that may also be located in or adjacent to this area. The combining district is intended to foster densities and facilities that:

(1) support use of public transportation;

(2) encourage a variety of housing types, commercial retail and limited office uses;

(3) encourage project design that achieves an overall context-based development for the PTOD overlay area;

(4) require streetscape design elements that are attractive pedestrians and bicyclists;

(5) increase connectivity to surrounding existing and planned pedestrian and bicycle facilities; and

(6) implement the City's Housing Element and Comprehensive Plan.

(b) [Reserved]

18.66.020 Applicability

(a) The California Avenue Pedestrian and Transit Oriented Development Combining District (PTOD) may be combined with any R-1, CC(2), CN, GM, PF, RM30, or RM40 district or combination of such districts within the designated California Avenue PTOD boundary (Exhibit A, reflected on the City's Zoning Map), consistent with the provisions of Chapter 18.08 and Chapter 18.98. Where so combined, the regulations established by this Chapter shall apply in lieu of the provisions established by the underlying CC(2), CN, GM, RM30, and/or RM40 zoning district(s). Compliance with the provisions of Chapter 18.46 Retail Shopping (R) and Chapter 18.47 Pedestrian Shopping (P) combining districts shall also be required where such combining districts are applicable.

(b) [Reserved]

(c) A Pedestrian and Transit Oriented Development Combining District may be applied to a parcel through rezoning of the site, within the specified boundaries of the District, as shown on the City's approved zoning maps, pursuant to the provisions and process outlined in Section 18.66.060 of this Chapter and Chapter 18.98 of the Zoning Ordinance.

18.66.030 Land Uses

(a) The following land uses shall be permitted in the California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District, subject to limitations outlined in Sections 18.66.040 and 18.66.050.

Table 1 - Land Uses

Land Uses	PTOD – California Avenue	PTOD – University Avenue [Reserved]
Multiple-family residential housing	P	
Mixed-use development, where residential and non-	P	

residential uses are combined	See Section 18.66.030(b) below for specific uses	
Live/Work Units	CUP Subject to limitations of Sec. 18.66.040(b)	
Hotel	P Subject to limitations of Sec. 18.66.040(c)	
(P) = Permitted Use; (CUP) = Conditional Use, Use Permit Required		

(b) Mixed Use development, where residential and non-residential uses are combined, may include two or more of the following uses:

(1) Multi-family residential
(2) Non-residential uses, limited to:
  (A) Retail and personal services
  (B) Eating and drinking services
  (C) Other non-residential uses allowed except on the ground floor where an (R) overlay exists:
    (i) Offices;
    (ii) General business services;
    (iii) Business and trade schools;
    (iv) Private education facilities;
    (v) Day care center;
    (vi) Community center;
    (vii) Commercial recreation;
    (viii) Convalescent facility; and
    (ix) Research and development, limited to sites where the underlying zoning district is GM and involving the use and storage of hazardous materials in quantities less than the exempt quantities allowed by Title 15 of the Municipal Code (section 105.8 of the Uniform Fire Code).

(c) Prohibited uses in the California Avenue PTOD:

(1) Single-family and two-family uses;

(2) Manufacturing, processing, warehousing and distribution; and

(3) Research and development where hazardous materials are used or stored in excess of quantities less than the exempt quantities allowed by Title 15 of the Municipal Code (section 105.8 of the Uniform Fire Code);

(d) All land uses must be reviewed and approved by the Planning and Transportation Commission and City Council at the time of rezoning to PTOD.

18.66.040 Pedestrian and Transit Oriented Development (PTOD) Combining District Regulations

(a) Properties in the PTOD combining district are subject to the following regulations:

Table 2

Development Standards

Standards[1]	PTOD – California Ave	PTOD – Downtown Not Adopted At this Time
Max Dwelling Units:	40 DU/AC[2]	
Max FAR:		
100% Residential FAR	1.0:1[2]	
Mixed Use FAR	1.25:1[2,3]	
Mixed Use Non-Residential FAR Cap	Total: 0.35[4] Office and research and development uses: 0.25 FAR	
Hotels	2.0	
Height:	40 feet[2]	
Open Space		
Minimum area required	5 or fewer units: 200 s.f. per unit 6 or more units: 100 s.f. per unit	
Minimum dimensions	Private open space: 6 feet Common open space: 12 feet	
Parking:	Rates established by use, per Section 18.83.050	
Parking Adjustments:	See Section 18.66.040 (d)	

Setbacks and daylight plane requirements for properties adjacent to R-1 and R-2 zones:		
Setbacks	On portion of site that abuts: 1. Interior side yard: 6 feet/8 feet[5] 2. Rear yard: 20 feet	
Daylight Plane	On portion of site that abuts: 1. Interior side yard: a. Initial height at interior side lot line: 10 feet b. Angle (degrees): 45 2. Rear yard: a. Initial height at rear setback line: 16 feet b. Angle (Degrees): 45	
Setbacks and daylight and daylight plane requirements for properties adjacent to Caltrain Right-of-Way:		
Setbacks	On portion of site that abuts Caltrain right-of-way: 5 feet (landscaped)	
Daylight Plane	On portion of site that abuts Caltrain right-of-way: a. Initial height at property line w/Caltrain right-of-way: 16 feet b. Angle (Degrees): 45	

[1] Non-residential development that is not consistent with the mixed-use limitations set forth above, with the exception of Hotels, must be developed per the underlying zoning district regulations.

[2] See Section 18.66.040(e) for Below Market Rate (BMR) bonus provisions.

[3] The residential component of the mixed use may not exceed 1.0:1.

[4] The non-residential component of a mixed use project shall not exceed 50% of the total square-footage of the project.

[5] 8 foot interior side setback required in R-1 (7,000), (8,000), (10,000) or (20,000) zones,

(b) **Live/Work Units**

(1) A live/work unit, for the purposes of this chapter, is defined as a rental or ownership unit comprised of both living space and work area, with the living space occupying a minimum of 60% of the total gross floor area of the unit, and such that the resident of the living space is the owner/operator of the work area.

(2) The work area shall be located on the ground level, oriented to the street and provide for at least one external entrance/exit separate from the living space.

The work area may be used for office, retail, personal services, or handcrafted goods (unless otherwise limited by this Chapter), but shall not be used for restaurants or cafes or for any business involving the storage or use of hazardous materials in excess of the quantities allowed by Title 15 of the Municipal Code (Section 105.8 of the Fire Code).

(3) The maximum number of employees who do not reside within the unit is two (2).

(4) The signage shall not exceed the requirements of the City of Palo Alto Municipal Code and shall require approval and recommendation by the architectural review process prior to approval by the Director.

(5) The parking requirements shall include a maximum total of two spaces for the residential unit, plus one space per 200 square feet for the gross square footage of the work area, less one space from the total (to reflect the overlap of the resident and one employee).

(6) The live/work units are subject to the development standards of the PTOD zone outlined in Table 2 for a 100% residential development, except that the maximum non-residential FAR is limited to 0.40.

(7) The maximum size of a live/work unit shall be limited to 2,500 square feet.

(8) The design of street frontage of a live/work unit shall be consistent with the context-based criteria outlined for street frontage in Section 18.66.050 below.

(9) A live/work unit may be converted to an entirely residential unit where residential use on the ground floor is not otherwise prohibited.

(c) **Hotels**

(1) Hotels for the purpose of this section are defined as hotels, motels, or other lodging for which City of Palo Alto transient occupancy tax is collected.

(2) Hotels may be constructed to a maximum FAR of 2.0 and a maximum height of 50 feet.

(3) All hotels are subject to the context-based design criteria outlined in Section 18.66.050 below.

(d) **Parking Adjustments:** Adjustments to the required parking standards may be allowed with the Director's approval pursuant to the provisions outlined in Section 18.83.120, with the following additional allowances and requirements:

(1) For multi-family residential or mixed use projects on sites rezoned to the PTOD combining district, the Director may waive a portion of or all guest parking requirements, and may waive any requirement to provide a landscape reserve for parking, subject to the following conditions:

(A) The project includes a minimum of 4 residential units;
(B) The average residential unit size is 1,250 square feet or less; and
(C) Not more than one parking space per residential unit shall be assigned or secured, such that other required parking spaces are available to other residents and guests.

(2) Projects providing more than 50% of the project residential units at low or very-low income housing rates may further reduce parking requirements by an additional 20%.

(3) In no case, however, shall total parking requirements for the site be reduced by greater than 30% from the standard requirements, or by greater than 40% for an affordable housing project consistent with (2) above, or by more than 50% if housing for the elderly is proposed pursuant to Section 18.83.120(d) of the Zoning Ordinance.

(4) For any request for parking adjustments, the project applicant shall indicate parking and traffic demand measures to be implemented to reduce parking need and trip generation. Measures may include, but are not limited to: limiting "assigned" parking to one space per residential unit, providing for Caltrain and/or other transit passes, or other measures to encourage transit use or to reduce parking needs. The program shall be proposed to the satisfaction of the Director, shall include proposed performance targets for parking and/or trip reduction, and shall designate a single entity (property owner, homeowners association, etc.) to implement the proposed measures. Monitoring reports shall be submitted to the Director not later than two (2) years after building occupancy and again not later than five (5) years after building occupancy, noting the effectiveness of the proposed measures as compared to the initial performance targets and suggestions for

modifications if necessary to enhance parking and/or trip reductions.

(e) **Density, FAR, and Height Bonus Provisions**

The following provisions are intended to allow for increased density, FAR, height, and other development bonuses upon construction of additional below market rate (BMR) housing units. The bonus allowances shall be allowed subject to the following limitations:

(1) Bonuses are only applicable where below market rate (BMR) units are provided in excess of those required by Palo Alto's BMR program as stated in Program H-36 of the Housing Element adopted on December 2, 2002. Key elements of Program H-36 include:

(A) Five (5) or more units: Minimum 15% of units must be BMR units;
(B) Five (5) or more acres being developed: Minimum 20% of units must be BMR units; and
(C) BMR units shall meet the affordability and other requirements of Program H-36 and the City's BMR Program policies and procedures.

(2) Density Increase: Density may be increased above the maximum base density allowed (40 units per acre), such that at least 1 additional BMR unit is provided for every 3 additional market rate units constructed. The resultant density may not exceed (50 units per acre). Density shall be calculated based on the gross area of the site prior to development.

(3) FAR Increase: For projects with a residential density greater than 30 units per acre, the allowable residential FAR may be increased. The FAR increase shall be equivalent to 0.05 for each additional 5% (in excess of the City requirements) of the total number of units that are proposed as BMR units, but may not exceed 50% of the residential FAR prior to the bonus, and may not exceed a total FAR of (1.5).

(4) Height Increase: For projects with a residential density greater than 30 units per acre, the allowable project height may be increased. The height increase shall be equivalent to one (1) foot above the maximum for each additional 5% (in excess of the City requirements) of the total number of units that are

proposed as BMR units, but may not exceed a maximum height (50 feet).

(5) Other incentives for development of BMR units, such as reduced setbacks and reduced open space, may be approved where at least 25% of the total units constructed are BMR units and subject to approval by the Architectural Review Board.

(6) The provisions of this section are intended to address the density bonus requirements of State Law within the PTOD District, and the maximum bonus density, FAR, and height may not be further exceeded.

18.66.050 Pedestrian Transit Oriented Development (PTOD) Combining District Context-Based Design Criteria

(a) Contextual and Compatibility Criteria

Development in a Pedestrian Transit Oriented Development Combining District shall be responsive to its context and compatible with adjacent development, and shall promote the establishment of a pedestrian and transit oriented neighborhood.

(1) Context

(A) Context as used in this section is intended to indicate relationships between the site's development to adjacent street types, surrounding land uses, and on-site or nearby natural features, such as creeks or trees. Effective transitions to these adjacent uses and features are strongly reinforced by Comprehensive Plan policies.

(B) The word "context" should not be construed as a desire to replicate existing surroundings, but rather to provide appropriate transitions to those surroundings. "Context" is also not specific to architectural style or design, though in some instances relationships may be reinforced by an architectural response.

(2) Compatibility

(A) Compatibility is achieved when the apparent scale and mass of new buildings is consistent with the pattern of achieving a pedestrian and transit oriented neighborhood, and when new construction

shares general characteristics and establishes design linkages with the overall pattern of buildings so that the visual unity of the street is maintained.

(B) Compatibility goals may be accomplished through various means, including but not limited to:

(i) the siting, scale, massing, and materials;
(ii) the rhythmic pattern of the street established by the general width of the buildings and the spacing between them;
(iii) the pattern of roof lines and projections;
(iv) the sizes, proportions, and orientations of windows, bays, and doorways;
(v) the location and treatment of entryways;
(vi) the shadow patterns from massing and decorative features; and
(vii) the treatment of landscaping

(b) **Context-Based Design Considerations and Findings**

In addition to the findings for Architectural Review contained in Section 18.76.020(d) of the Zoning Ordinance, the following additional findings are applicable in the California Avenue Pedestrian and Transit Oriented Development Combining District, as further illustrated on the accompanying diagrams:

(1) Pedestrian and Bicycle Environment
The design of new projects shall promote pedestrian walkability, a bicycle friendly environment, and connectivity through design elements such as:

(A) Connectivity for pedestrians and cyclists with external and internal (if any) streets, pathways, or bike facilities;
(B) Pathways and streets that present a clear hierarchy and connectivity pattern both within a project and to adjacent sidewalks;
(C) Wide sidewalks (built as easements beyond the property line if needed), but not to the detriment of existing or future bike lanes) along Park Boulevard to reinforce the street as a primary pedestrian and bicycle linkage to the multimodal station;
(D) Bicycle amenities that contribute to the area's bicycle environment and safety needs, such as

bike racks, storage or parking, or dedicated bike lanes or paths;

(E) Ground floor uses that are appealing to pedestrians through well-designed visibility and access;

(F) On primary pedestrian routes such as Park Boulevard and California Ave., climate and weather protection where possible, such as covered waiting areas, building projections and colonnades, and awnings;

(G) Streetscape or pedestrian amenities that contribute to the area's streetscape environment such as street trees, bulb-outs, benches, landscape elements, and public art; and

(H) Vehicle access from alleys or sidestreets where they exist, with pedestrian access from the .public street.

(2) Street Building Facades

Street facades shall be designed to provide a strong relationship with the sidewalks and the street(s), to create an environment that supports and encourages pedestrian activity through design elements such as:

(A) Facade articulation reflecting the rhythm of nearby commercial and residential areas such as California Avenue;

(B) Placement and orientation of doorways, windows, and landscape elements to create strong, direct relationships with the street;

(C) Facades that include projecting eaves and overhangs, porches, and other architectural elements that provide human scale and help break up building mass;

(D) Entries and windows that face onto the street;

(E) Entries that are clearly defined features of front facades, and that have a scale that is in proportion to the size of the building and number of units being accessed; larger buildings should have a more prominent, centralized building entrance, while maintaining a pedestrian scale; and

(F) Residential units and storefronts that have a presence on the street and are not walled-off or oriented exclusively inward.

(3) Massing and Articulation

Buildings shall be designed to minimize massing and provide for articulation and design variety through elements such as:

(A) Buildings that include pedestrian-scaled detail, articulation and craftsmanship of the façade;
(B) Rooflines that emphasize and accentuate significant elements of the building such as entries, bays, and balconies; and
(C) Corner buildings that incorporate special features to reinforce important intersections and create buildings of unique architectural merit and varied styles.
(D) Design with articulation, setbacks, and materials that minimize massing, break down the scale of buildings, and provide visual interest from the train and neighborhood east of the tracks;
(E) Limiting facades such that no more than seventy percent (70%), and no more than 100 continuous linear feet of the street façade exceeds a height of 25 feet;
(F) Landscape elements to buffer the rear of the lot and the railroad tracks, with trees spaced at a maximum of 25 feet on center and combined with other landscape elements such as fencing, hedges or shrubs;
(G) Application of daylight plane requirements for R-1 and R-2 adjacencies to property boundaries adjacent to the railroad right-of-way; and
(H) Maintaining view corridors from Colorado Avenue and El Dorado Avenue west to the hills.

(4) Low-Density Residential Transitions

Where new projects are built adjacent to existing lower-scale residential development, care shall be taken to respect the scale and privacy of adjacent properties through:

(A) Transitions of development intensity from higher density development building types to building types that are compatible with the lower intensity surrounding uses;
(B) Massing and orientation of buildings that respect and mirror the massing of neighboring structures by stepping back upper stories to transition to smaller scale buildings, including

setbacks and daylight planes that match adjacent R-1 and R-2 zone requirements;

(C) Respecting privacy of neighboring structures, with windows and upper floor balconies positioned so they minimize views into neighboring properties;

(D) Minimizing sight lines into and from neighboring properties;

(E) Limiting sun and shade impacts on adjacent properties;

(F) Providing pedestrian paseos and mews to create separation between uses; and

(G) Design with articulation, varied setbacks, and materials that minimize sound reflection to neighboring properties adjacent to the railroad.

(5) Project Open Space

Private and public open space shall be provided so that it is usable for the residents, visitors, and/or employees of a site.

(A) The type and design of the usable private open space shall be appropriate to the character of the building(s), and shall consider dimensions, solar access, wind protection, views, and privacy;

(B) Open space should be sited and designed to accommodate different activities, groups and active and passive uses, and should be located convenient to the users (e.g., residents, employees, or public);

(C) Common open spaces should connect to the pedestrian pathways and existing natural amenities of the site and its surroundings;

(D) Usable open space may be any combination of private and common spaces;

(E) Usable open space does not need to be located on the ground;

(F) Open space should be located to activate the street façade and increase "eyes on the street" when possible;

(G) Both private and common open space areas should be buffered from noise where feasible; and

(H) Parking may not be counted as open space.

(6) Parking Design

Parking needs shall be accommodated but shall not be allowed to overwhelm the character of the project or detract from the pedestrian environment, such that:

(A) Parking is located behind buildings, below grade or, where those options are not feasible, screened by landscaping, low walls, etc.;
(B) Structured parking is fronted or wrapped with habitable uses when possible;
(C) Parking that is semi-depressed is screened with architectural elements that enhance the streetscape such as stoops, balcony overhangs, and/or art;
(D) Landscaping such as trees, shrubs, vines or groundcover is incorporated into surface parking lots; and
(E) Street parking is utilized for visitor or customer parking and is designed in a manner to enhance traffic calming on the street.

(7) Large (multi-acre) Sites

Large (in excess of one acre) sites shall be designed so that street, block, and building patterns are consistent with those of the surrounding neighborhood, and such that:

(A) New development of large sites maintains and enhances connectivity with a hierarchy of public streets, private streets, walks and bike paths (integrated with Palo Alto's Bicycle Master Plan, when applicable);
(B) The diversity of building types increases with increased lot size (e.g., <1 acre = minimum 1 housing type; 1-2 acres = minimum 2 housing types; greater than 2 acres = minimum 3 housing types); and
(C) Where a site includes more than one housing type, each housing type should respond to its immediate context in terms of scale, massing, and design (e.g., lower density building types facing or adjacent to existing single-family residences).

(8) Sustainability and Green Building Design

Project design and materials to achieve sustainability and green building design should be incorporated into the project. Green building design considers the environment during design and construction. Green

buildings design aims for compatibility with the local environment: to protect, respect and benefit from it. In general, sustainable buildings are energy efficient, water conserving, durable and nontoxic, with high-quality spaces and high recycled content materials. The following considerations should be included in site and building design:

(A) Optimize building orientation for heat gain, shading, daylighting, and natural ventilation;
(B) Design landscaping to create comfortable micro-climates and reduce heat island effects;
(C) Design for easy pedestrian, bicycle, and transit access;
(D) Maximize onsite stormwater management through landscaping and permeable pavement;
(E) Use sustainable building materials;
(F) Design lighting, plumbing and equipment for efficient energy use;
(G) Create healthy indoor environments;
(H) Use creativity and innovation to build more sustainable environments. One example is establishing gardens with edible fruits, vegetables or other plants to satisfy a portion of project open space requirements; and
(I) Provide protection for creeks and riparian vegetation and integrate stormwater management measures and open space to minimize water quality and erosion impacts to the creek environment.

(c) **[Reserved] Diagrams to be Added**

(d) **Performance Standards**

All development subject to the PTOD District requirements must also comply with the performance standards outlined in Chapter 18.64 (Additional Site Development and Design Regulations for Commercial and Industrial Districts), pertaining to noise, lighting, visual, and access impacts.

(e) **Historic Preservation**

Historic resources review, as required in Chapter 16.49 of Title 16 of the Municipal Code, is required for alterations or modifications to any structure designated on the City's Historic Inventory as a Category 1 or Category 2 historic structure as defined in Section 16.49.020 of the Municipal

Code or any contributing structure located within a locally designated historic district. The Category 1 or Category 2 designation process for becoming a historic structure is contained in Chapter 16.49 of Title 16 of the Municipal Code.

18.66.060 Review Process

Rezoning and review of a site to a Pedestrian and Transit Oriented Development (PTOD) Combining District shall be made pursuant to the following procedures:

(a) Application to apply the PTOD overlay district may be made by an owner of record of any property located or partially located within the PTOD boundary, or may be initiated by vote of the Planning and Transportation Commission or City Council;

(b) Applications for rezoning shall be made and reviewed in accordance with Chapter 18.98 (Amendments to Zoning Map and Zoning Regulations), including Section 18.98.020 regarding Changes in District Boundaries. Planning and Transportation Commission review and City Council approval shall establish limits on allowable or required uses and intensity (e.g., density, floor area ratio, height, site coverage) of development. The specified limitations shall be part of the rezoning and shall be recorded as property restrictions enforceable by the City of Palo Alto. Revisions to these restrictions requires rezoning through the same process, except that the Director of Planning and Community Environment may determine that a revision is minor and does not materially alter the City Council's restrictions or intent regarding land use and intensity. As used in this subsection, the term "minor" means a change that is of little visual significance, does not materially alter the appearance of previously approved improvements, is not proposed to change the use of the land in question, and does not alter the character of the structure involved. If the cumulative effect of multiple minor changes would result in a major change, a new application for approval of a Pedestrian and Transit Oriented Development is required and shall be reviewed by the Architectural Review Board, Planning and Transportation Commission, and/or City Council, as determined by the Director. Submittal requirements for the PTOD Combining District may be supplemented as determined by the Director of Planning and Community Environment;

(c) Applications for amendments to the Comprehensive Plan to designate a site consistent with Transit Oriented Residential Development shall be made and reviewed pursuant to the provisions of Chapter 19.04.080 (Amendments to Comprehensive Plan); and

(d) Upon approval of rezoning of a property to Pedestrian Transit Oriented Development (PTOD) Combining District, the project plans shall be submitted as a Major Architectural Review to the Architectural Review Board, who shall review the project for compliance with the Architectural Review criteria specified in Section 18.76 of the Zoning Code, as well as Section 18.66.050 of this Chapter. A single preliminary review by the ARB may be allowed in advance of rezoning approval if plans are submitted and reviewed prior to Planning Commission consideration of the rezoning request.

18.66.070 Non-conforming Uses and Non-complying Facilities

Owners of sites with existing legal non-conforming uses and non-complying facilities within the PTOD boundary may request the application of the PTOD Combining District to the site through the rezoning process referenced in Section 18.66.060 above. In applying the PTOD combining district, the use and/or facility would then be subject to the PTOD overlay standards.

SECTION 3. This ordinance shall be effective 30 days after the date of its adoption. Notwithstanding any other provision of this ordinance or the Palo Alto Municipal Code, all applications submitted prior to the effective date of this ordinance shall be subject to the PAMC Title 18 Zoning Regulations in effect on the date the application is received by the City.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

NOT YET APPROVED

ABSTENTIONS:

NOT PARTICIPATING:

ATTEST:

_____
City Clerk

_____
Mayor

APPROVED AS TO FORM:

APPROVED:

_____
Senior Deputy City Attorney

_____
City Manager

_____
Director of Planning &
Community Environment

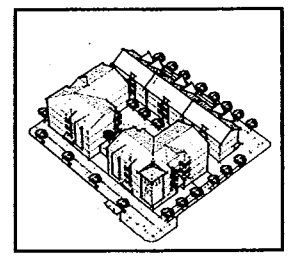
Exhibit A

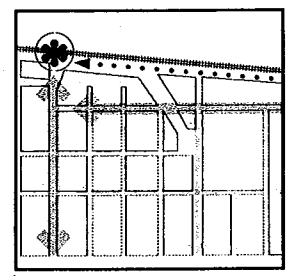
ccampbe, 2005-12-05 14:51:18
(\\cc-maps\gis$\gisladmin\Personal\ccampbe.mdb)

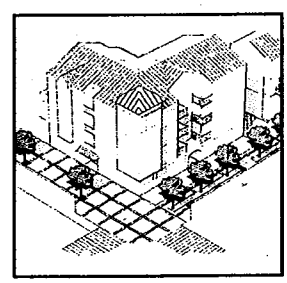
ATTACHMENT B

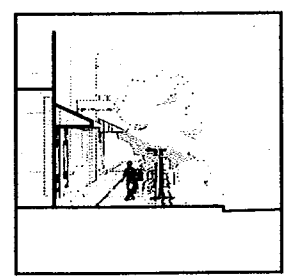
Context-Based Design Criteria

Palo Alto: Pedestrian and Transit Oriented Development Overlay Zone for California Avenue Caltrain Station









DRAFT
05/10/06

Context-Based Design Criteria- California Avenue PTOD

The diagrams below outline appropriate transitions between a project site and adjacent residential or commercial uses, roadway frontages or environmental features. The proximity of development to other uses can create varied, lively neighborhoods, but for the relationships to have a positive impact transitions between different building scales need to be carefully considered and designed.

1. Pedestrian and Bicycle Environment

The design of new projects shall promote pedestrian walkability, a bicycle friendly environment, and connectivity through design elements such as:

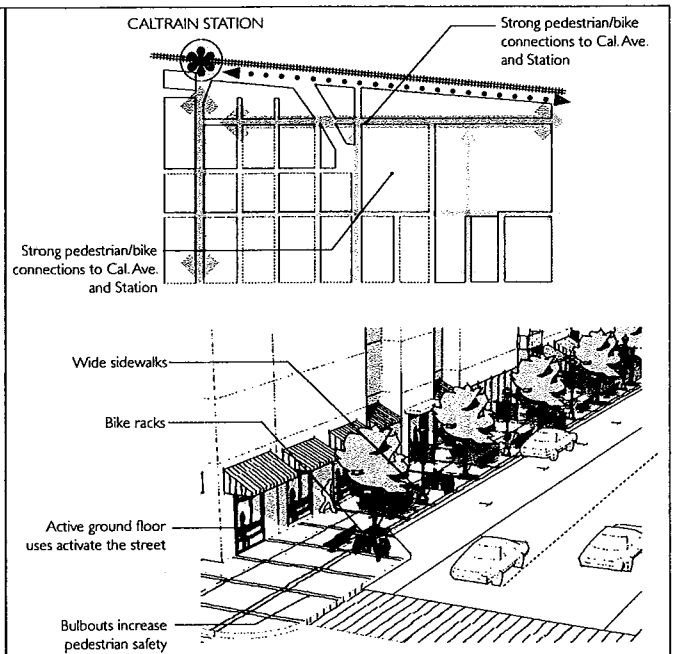
a. Connectivity for pedestrians and cyclists with external and internal (if any) streets, pathways, or bike facilities;

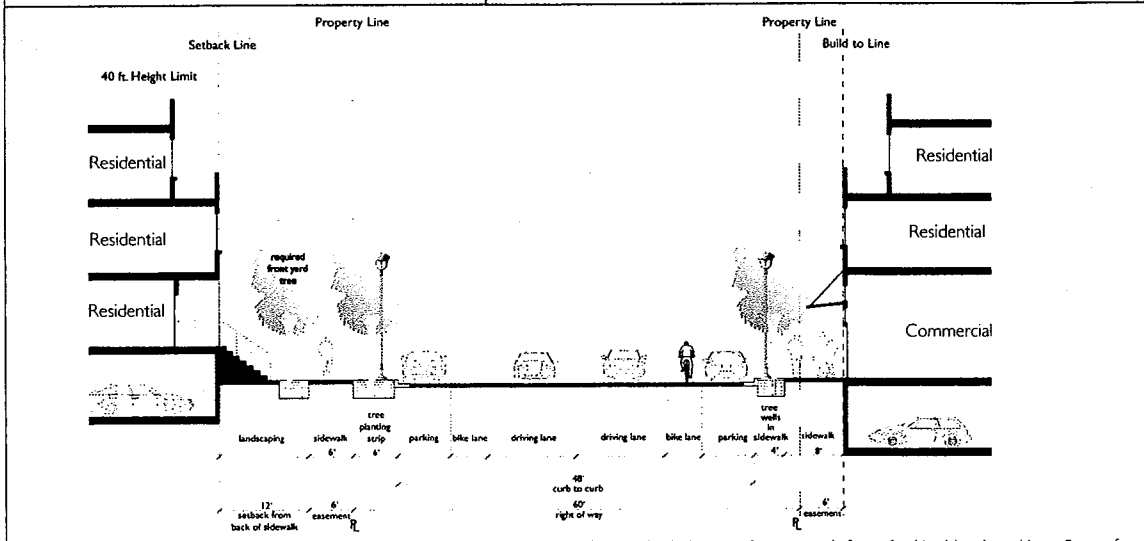
b. Pathways and streets that present a clear hierarchy and connectivity pattern both within a project and to adjacent sidewalks;

c. Wide sidewalks (built as easements beyond the property line if needed, but not to the detriment of existing or future bike lanes) along Park Boulevard to reinforce the street as a primary pedestrian and bicycle linkage to the multimodal station;

d. Bicycle amenities that contribute to the area's bicycle environment and safety needs, such as bike racks, storage or parking, or dedicated bike lanes or paths.

e. Ground floor uses that are appealing to pedestrians through well-designed visibility and access;



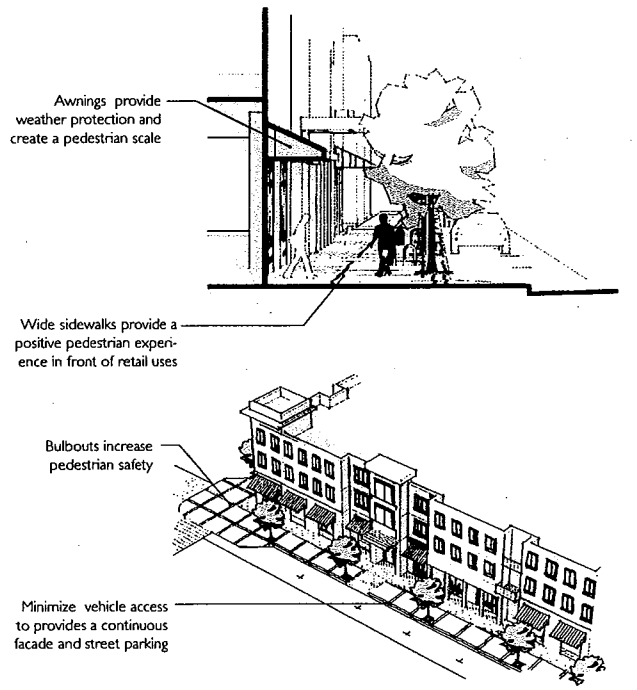


Easements along Park Boulevard will allow for wider sidewalks in front of commercial storefronts and a double row of street trees in front of residential projects. Upper floors of buildings should be set back to scale down massing along the street.

f. On primary pedestrian routes such as Park Boulevard and California Ave., climate and weather protection where possible, such as covered waiting areas, building projections and colonnades, and awnings;

g. Streetscape or pedestrian amenities that contribute to the area's streetscape environment such as street trees, bulb-outs, benches, landscape elements, and public art; and

h. Vehicle access from alleys or sidestreets where they exist, with pedestrian access from the public street.



2. Street Building Facades

Street facades shall be designed to provide a strong relationship with the sidewalks and the street(s), to create an environment that supports and encourages pedestrian activity through design elements such as:

a. Facade articulation reflecting the rhythm of nearby commercial and residential areas such as California Avenue;

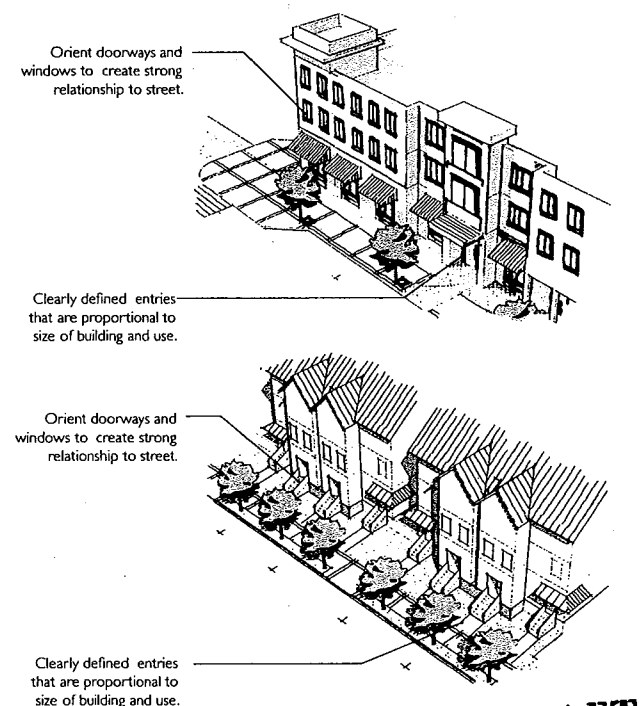
b. Placement and orientation of doorways, windows, and landscape elements to create strong, direct relationships with the street;

c. Facades that include projecting eaves and overhangs, porches, and other architectural elements that provide human scale and help break up building mass;

d. Entries and windows that face onto the street;

e. Entries that are clearly defined features of front facades, and that have a scale that is in proportion to the size and type of the building and number of units being accessed; larger buildings should have a more prominent building entrance, while maintaining a pedestrian scale; and

f. Residential units and storefronts that have a presence on the street and are not walled-off or oriented exclusively inward.



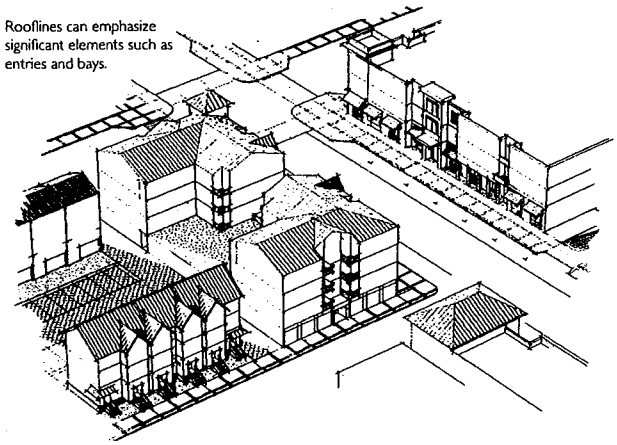
DRAFT
05/10/06

3. Massing and Articulation

Buildings shall be designed to minimize massing and provide for articulation and design variety through elements such as:

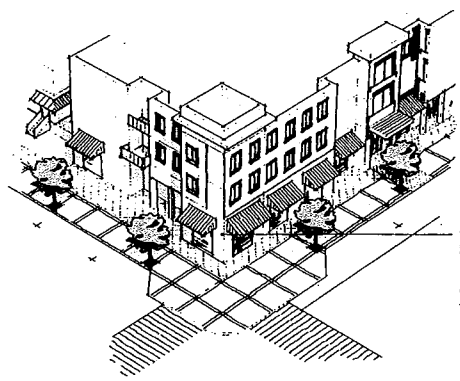
a. **Buildings that include pedestrian-scaled detail, articulation and craftsmanship of the façade;**

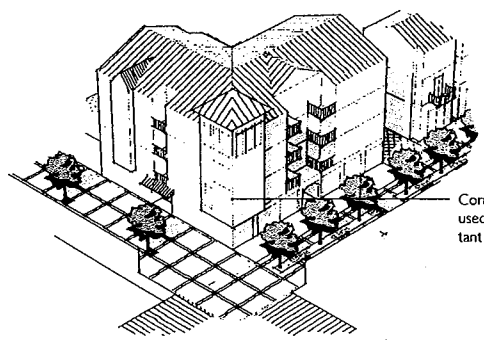
b. **Rooflines that emphasize and accentuate significant elements of the building such as entries, bays, and balconies;**



Buildings should provide pedestrian-scaled detail, articulation and craftmanship of the facade.

c. **Corner buildings that incorporate special features to reinforce important intersections and create buildings of unique architectural merit and varied styles.**





DRAFT
05/10/06

d. Design with articulation, setbacks, and materials that minimize massing, break down the scale of buildings, and provide visual interest from the train and neighborhood east of the tracks;

e. Limiting facades such that no more than seventy percent (70%), and no more than 100 continuous linear feet of the street façade exceeds a height of 25 feet;

f. Landscape elements to buffer the rear of the lot and the railroad tracks, with trees spaced at a maximum of 25 feet on center and combined with other landscape elements such as fencing, hedges or shrubs;

g. Application of daylight plane requirements for R-1 and R-2 adjacencies to property boundaries adjacent to the railroad right-of-way; and

h. Maintaining view corridors from Colorado Avenue and El Dorado Avenue west to the hills.

No more than70 percent of street facade should exceed 25 feet to provide for open view corridors from adjacent neighborhood.

Landscape elements should be used to create a buffer to the adjacent railroad tracks.

The rear yard daylight plane defines setback requirements adjacent to railroad. Daylight plane has initial height of 16 ft and a 45 degree angle.

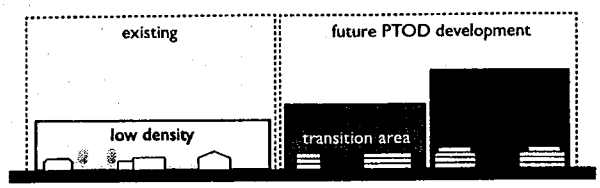
A five foot landscape strip with trees planted at a maximum 25 feet on center. should be used to buffer building from adjacent tracks.

DRAFT
05/10/06

4. Low-Density Residential Transitions

Where new projects are built adjacent to existing lower-scale residential development, care shall be taken to respect the scale and privacy of adjacent properties through:

a. Transitions of development intensity from higher density development building types to building types that are compatible with the lower intensity surrounding uses,



b. Massing and orientation of buildings that respect and mirror the massing of neighboring structures by stepping back upper stories to transition to smaller scale buildings, including setbacks and daylight planes that match adjacent R-1 and R-2 zone requirements;

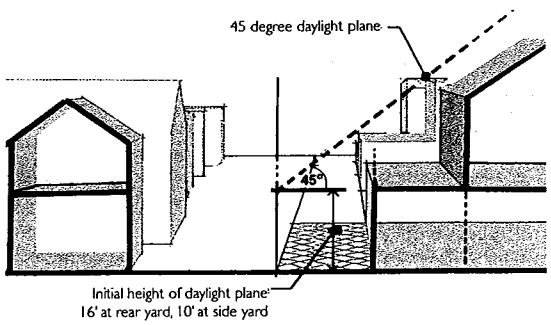
c. Respecting privacy of neighboring structures, with windows and upper floor balconies positioned so they minimize views into neighboring properties;

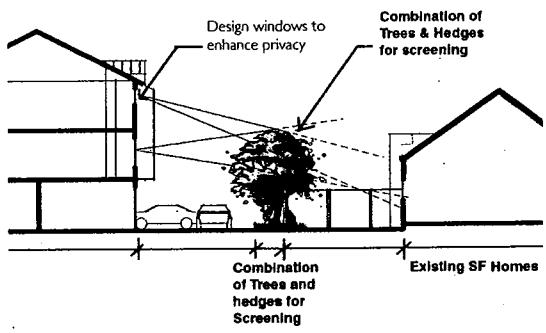
d. Minimizing sight lines into and from neighboring properties;

e. Limiting sun and shade impacts on adjacent properties;

f. Providing pedestrian paseos and mews to create separation between uses; and

g. Design with articulation, varied setbacks, and materials that minimize sound reflection to neighboring properties adjacent to the railroad.





DRAFT
05/10/06

5. Project Open Space

Private and public open space shall be provided so that it is usable for the residents, visitors, and/or employees of a site.

a. The type and design of the usable private open space shall be appropriate to the character of the building(s), and shall consider dimensions, solar access, wind protection, views, and privacy;

b. Open space should be sited and designed to accommodate different activities, groups, active and passive uses, and should be located convenient to the users (e.g., residents, employees, or public);

c. Common open spaces should connect to the pedestrian pathways and existing natural amenities of the site and its surroundings;

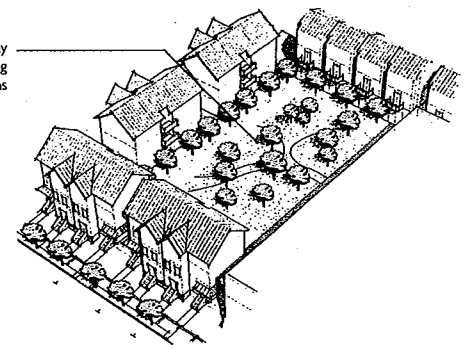
d. Usable open space may be any combination of private and common spaces;

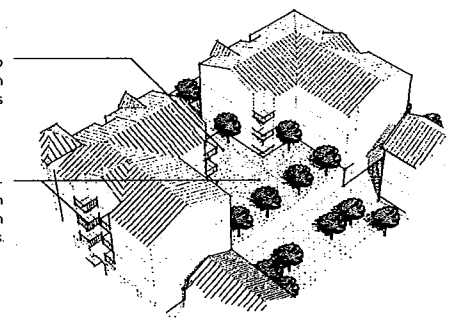
e. Usable open space does not need to be located on the ground;

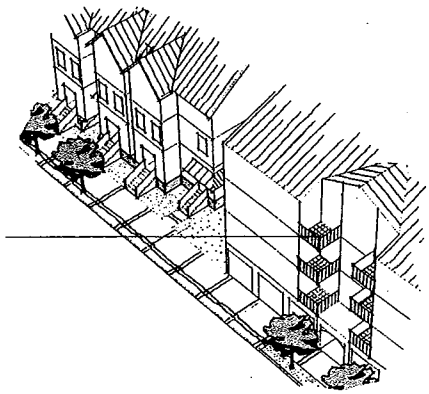
f. Open space should be located to activate the street façade and increase "eyes on the street" when possible;

g. Both private and common open space areas should be buffered from noise where feasible; and

h. Parking may not be counted as open space.







DRAFT
05/10/06

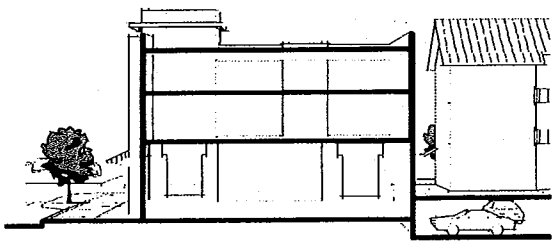
6. Parking Design

Parking needs shall be accommodated but shall not be allowed to overwhelm the character of the project or detract from the pedestrian environment, such that:

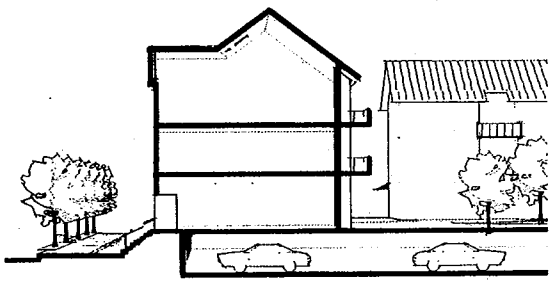
a. Parking is located behind buildings, below grade or, where those options are not feasible, screened by landscaping, low walls, etc.;

b. Structured parking is fronted or wrapped with habitable uses when possible;

c. Parking that is semi-depressed is screened with architectural elements that enhance the streetscape such as stoops, balcony overhangs, and/or art;



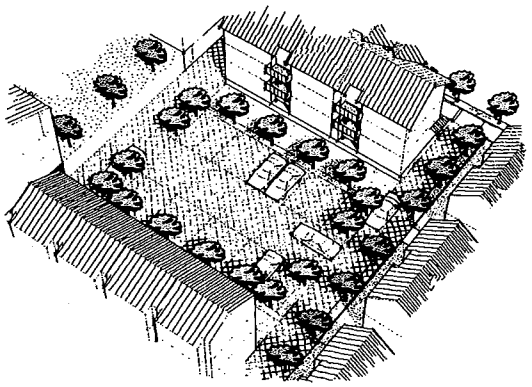
Parking should be wrapped by habitable uses when possible.



Semi-depressed parking can be used to raise residential uses to provide privacy and opportunities for stoops and porches.

d. Landscaping such as trees, shrubs, vines or groundcover is incorporated into surface parking lots;

e. Street parking is utilized for visitor or customer parking and is designed in a manner to enhance traffic calming on the street.



Landscaping should be incorporated into any surface parking lots.

DRAFT
05/10/06

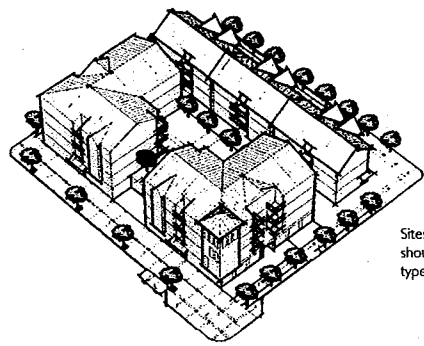
7. Large (multi-acre) Sites

Large (in excess of one acre) sites shall be designed so that street, block, and building patterns are consistent with those of the surrounding neighborhood, and such that:

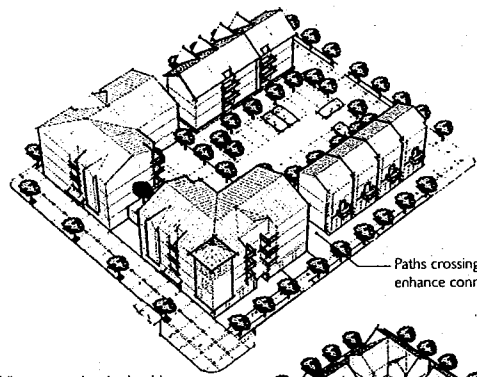
a. New development of large sites maintains and enhances connectivity with a hierarchy of public streets, private streets, walks and bike paths (integrated with Palo Alto's Bicycle Master Plan, when applicable);

b. The diversity of building types increases with increased lot size (e.g., <1 acre = minimum 1 housing type; 1-2 acres = minimum 2 housing types; greater than 2 acres = minimum 3 housing types).

c. Where a site includes more than one housing type, each housing type should respond to its immediate context in terms of scale, massing, and design (e.g., Village Residential building types facing or adjacent to existing single-family residences).

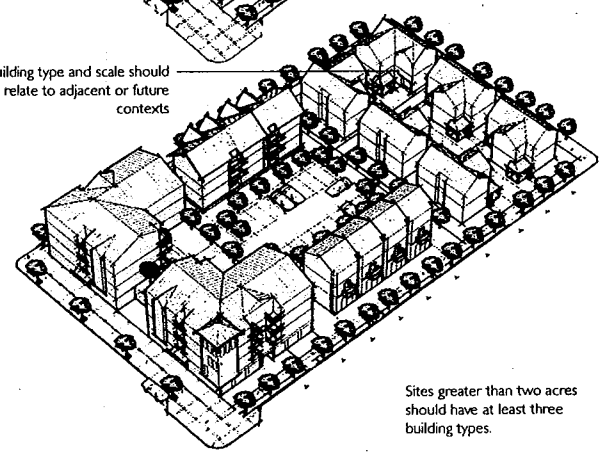


Sites greater than one acre should have at least two building types.



Paths crossing large sites can enhance connectivity.

Building type and scale should relate to adjacent or future contexts



Sites greater than two acres should have at least three building types.

DRAFT
05/10/06

8. Sustainability and Green Building Design

Project design and materials to achieve sustainability and green building design should be incorporated into the project. Green building design considers the environment during design and construction. Green building design aims for compatibility with the local environment: to protect, respect and benefit from it. In general, sustainable buildings are energy efficient, water conserving, durable and nontoxic, with high-quality spaces and high recycled content materials. The following considerations should be included in site and building design:

a. Optimize building orientation for heat gain, shading, daylighting, and natural ventilation.

b. Design landscaping to create comfortable micro-climates and reduce heat island effects.

c. Design for easy pedestrian, bicycle, and transit access.

d. Maximize onsite stormwater management through landscaping and permeable pavement.

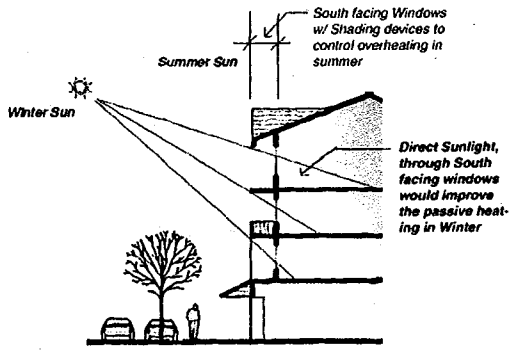
e. Use sustainable building materials.

f. Design lighting, plumbing, and equipment for efficient energy use.

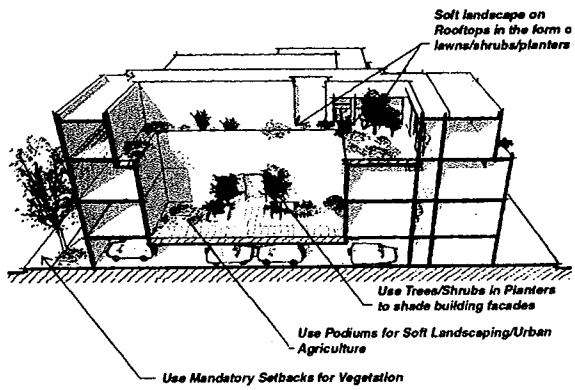
g. Create healthy indoor environments.

h. Use creativity and innovation to build more sustainable environments, One example is establishing gardens with edible fruits, vegetables or other plants to satisfy a portion of project open space requirements.

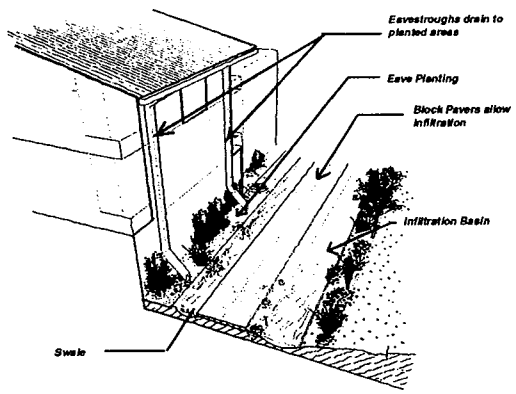
i. Provide protection for creeks and riparian vegetation and integrate stormwater management measures and open space to minimize water quality and erosion impacts to the creek environment.



Use of Shading Devices to Control Solar loads in Summer and gain Passive heat in Winter



'Urban Agriculture' and rooftop/balcony gardens



Minimize Stormwater Runoff to Impermeable areas

DRAFT
05/10/06

DRAFT
05/10/06

The following is a draft- **NOT ADOPTED** - copy of the proposed ZOU PTOD Combining District Chapter. Please contact Zoning Ordinance Update staff at (650) 329-2603 or zoneupdate@cityofpaloalto.org with any questions.

ATTACHMENT C

Chapter 18.66
PEDESTRIAN AND TRANSIT ORIENTED DEVELOPMENT COMBINING DISTRICT

Sections:

18.66.010 Purposes

(a) California Avenue Pedestrian and Transit Oriented Combining District

The California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District is intended to allow higher density residential dwellings on commercial, industrial and multi-family parcels within a walkable distance of the California Avenue Caltrain station, while protecting low density residential parcels and parcels with historical resources that may also be located in or adjacent to this area. The combining district is intended to foster densities and facilities that:

(1) support use of public transportation;

Deleted: substantial

(2) encourage a variety of housing types, commercial retail and limited office uses;

(3) encourage project design that achieves an overall context-based development for the PTOD overlay area;

(4) require streetscape design elements that are attractive to pedestrians and bicyclists;

(5) increase connectivity to surrounding existing and planned pedestrian and bicycle facilities; and

(6) implement the City's Housing Element and Comprehensive Plan.

(b) [Reserved].

Deleted: Downtown Pedestrian Transit Oriented Combining District [to be added]

18.66.020 Applicability

(a) The California Avenue Pedestrian and Transit Oriented Development Combining District (PTOD) may be combined with any R-1, CC(2), CN, GM, PF, RM30, or RM40 district or combination of such districts within the designated California Avenue PTOD boundary (Exhibit A, reflected on the City's Zoning Map),

consistent with the provisions of Chapter 18.08 and Chapter 18.98. Where so combined, the regulations established by this Chapter shall apply in lieu of the provisions established by the underlying CC(2), CN, GM, RM30, and/or RM40 zoning district(s). Compliance with the provisions of Chapter 18.46 Retail Shopping (R) and Chapter 18.47 Pedestrian Shopping (P) combining districts shall also be required where such combining districts are applicable.

(b) [Reserved]

(c) A Pedestrian and Transit Oriented Development Combining District may be applied to a parcel through rezoning of the site, within the specified boundaries of the District, as shown on the City's approved zoning maps, pursuant to the provisions and process outlined in Section 18.66.060 of this Chapter and Chapter 18.98 of the Zoning Ordinance.

Deleted: The Downtown Pedestrian Transit Oriented Development (PTOD) Combining District may be combined with…[to be added]

Deleted: <#>The boundaries of a Pedestrian Transit Oriented Development Combining District may be amended concurrent with rezoning of a site, subject to the provisions and process outlined in Section 18.66.070 of this Chapter and Chapter 18.98 of the Zoning Ordinance.¶

18.66.030 Land Uses

(a) The following land uses shall be permitted in the California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District, subject to limitations outlined in Sections 18.66.040 and 18.66.050.

Table 1 - Land Uses

Land Uses	PTOD – California Avenue	PTOD – University Avenue [Reserved]
Multiple-family residential housing	P	
Mixed-use development, where residential and non-residential uses are combined	P See Section 18.66.030(b) below for specific uses	
Live/Work Units	CUP Subject to limitations of Sec. 18.66.040(b)	
Hotel	P Subject to limitations of Sec. 18.66.040(c)	
(P) = Permitted Use; (CUP) = Conditional Use, Use Permit Required		

Deleted: Downtown

Deleted: Village residential housing

Deleted: P'

(b) Mixed Use development, where residential and non-residential uses are combined, may include two or more of the following uses:

1. Multi-family residential

Deleted: <#>Village residential ¶

Formatted: Bullets and Numbering

2. Non-residential uses, limited to:
   (A) Retail and personal services
   (B) Eating and drinking services
   (C) Other non-residential uses allowed except on the ground floor where an (R) overlay exists:
      (i) Offices;
      (ii) General business services;
      (iii) Business and trade schools;
      (iv) Private education facilities;
      (v) Day care center;
      (vi) Community center;
      (vii) Commercial recreation;
      (viii) Convalescent facility; and
      (ix) Research and development, limited to sites where the underlying zoning district is GM and involving the use and storage of hazardous materials in quantities less than the exempt quantities allowed by Title 15 of the Municipal Code (section 105.8 of the Uniform Fire Code).

(c) Prohibited uses in the California Avenue PTOD:

1. Single-family and two-family uses, other than as part of a Village Residential housing use;

2. Manufacturing, processing, warehousing and distribution; and

3. Research and development where hazardous materials are used or stored in excess of quantities less than the exempt quantities allowed by Title 15 of the Municipal Code (section 105.8 of the Uniform Fire Code).

(d) All land uses must be reviewed and approved by the Planning and Transportation Commission and City Council at the time of rezoning to PTOD.

18.66.040 Pedestrian and Transit Oriented Development (PTOD) Combining District Regulations

(a) Properties in the PTOD combining district are subject to the following regulations:

Table 2 - Development Standards

Standards[1]	PTOD – California Ave	PTOD – Downtown Not Adopted At this Time
Max Dwelling Units:	40 DU/AC[2]	
Max FAR:		

Deleted: 50 DU/AC with bonus BMR[2]

Standards[1]	PTOD – California Ave	PTOD – Downtown – Not Adopted At this Time
100% Residential FAR	1.0:1[2]	
Mixed Use FAR	1.25:1[2,3]	
Mixed Use Non-Residential FAR Cap	Total: 0.35[4] Office and research and development uses: 0.25 FAR	
Hotel FAR	2.0	
Height:	40 feet[2]	
Open Space:		
Minimum area required	5 or fewer units: 200 s.f. per unit 6 or more units: 100 s.f. per unit	
Minimum dimensions	Private open space: 6 feet Common open space: 12 feet	
Parking:	Rates established by use, per Section 18.83.050	
Parking Adjustments:	See Section 18.66.040 (d)	
Setbacks and daylight plane requirements for properties adjacent to R-1 and R-2 zones:		
Setbacks	On portion of site that abuts: 1. Interior side yard: 6 feet/8 feet[5] 2. Rear yard: 20 feet	
Daylight Plane	On portion of site that abuts: 1. Interior side yard: a. Initial height at interior side lot line: 10 feet b. Angle (degrees): 45 2. Rear yard: a. Initial height at rear setback line: 16 feet b. Angle (Degrees): 45	
Setbacks and daylight plane requirements for properties adjacent to Caltrain Right-of-Way:		
Setbacks	On portion of site that abuts Caltrain right-of-way: 5 feet (landscaped)	

Deleted: 1.5:1 w/bonus BMR[2]

Deleted: 1.5 w/bonus BMR[2]

Deleted: s

Deleted: '

Deleted: (50' w/ bonus BMR[2])

Deleted: less

Standards	PTOD – California Ave	PTOD – Downtown Not Adopted At this Time
Daylight Plane	On portion of site that abuts Caltrain right-of-way: a. Initial height at property line w/Caltrain right-of-way: 16 feet b. Angle (Degrees): 45	

[1] Non-residential development that is not consistent with the mixed use limitations set forth above, with the exception of hotels, must be developed per the underlying zoning district regulations.

[2] See Section 18.66.040(e) for Below Market Rate (BMR) bonus provisions.

[3] The residential component of the mixed use may not exceed 1.0:1.

[4] The non-residential component of a mixed use project shall not exceed 50% of the total square footage of the project.

[5] 8 foot interior side setback required in R-1 (7,000), (8,000), (10,000) or (20,000) zones.

Deleted: 100% n

Deleted: H

Deleted: Maximum dwelling units, FAR and height represent the "ceilings" that a project can develop to, even with all bonus FAR and densities; s

Deleted: -

Deleted: ,

(b) Live/Work Units

(1) A live/work unit, for the purposes of this chapter, is defined as a rental or ownership unit comprised of both living space and work area, with the living space occupying a minimum of 60% of the total gross floor area of the unit, and such that the resident of the living space is the owner/operator of the work area.

(2) The work area shall be located on the ground level, oriented to the street and provide for at least one external entrance/exit separate from the living space. The work area may be used for office, retail, personal services, or handcrafted goods (unless otherwise limited by this Chapter), but shall not be used for restaurants or cafes or for any business involving the storage or use of hazardous materials in excess of the quantities allowed by Title 15 of the Municipal Code (Section 105.8 of the Fire Code).

(3) The maximum number of employees who do not reside within the unit is two (2).

(4) The signage shall not exceed the requirements of the City of Palo Alto Municipal Code and shall require approval and recommendation by the architectural review process prior to approval by the Director.

(5) The parking requirements shall include a maximum total of two spaces for the residential unit, plus one space per 200 square feet for the gross square footage of the work area, less one space from the total (to reflect the overlap of the resident and one employee).

(6) The live/work units are subject to the development standards of the PTOD zone outlined in Table 2 for a 100% residential development, except that the maximum non-residential FAR is limited to 0.40.

(7) The maximum size of a live/work unit shall be limited to 2,500 square feet.

(8) The design of street frontage of a live/work unit shall be consistent with the context-based criteria outlined for street frontage in Section 18.66.050 below.

(9) A live/work unit may be converted to an entirely residential unit where residential use on the ground floor is not otherwise prohibited.

(c) **Hotels**

(1) Hotels, for the purpose of this section, are defined as hotels, motels, or other lodging for which City of Palo Alto transient occupancy tax is collected.

(2) Hotels may be constructed to a maximum FAR of 2.0 and a maximum height of 50 feet.

(3) All hotels are subject to the context-based design criteria outlined in Section 18.66.050 below.

(d) **Parking Adjustments:** Adjustments to the required parking standards may be allowed with the Director's approval pursuant to the provisions outlined in Section 18.83.120, with the following additional allowances and requirements:

(1) For multi-family residential or mixed use projects on sites rezoned to the PTOD combining district, the Director may waive a portion of or all guest parking requirements, and may waive any requirement to provide a landscape reserve for parking, subject to the following conditions:

(A) The project includes a minimum of 4 residential units;

(B) The average residential unit size is 1,250 square feet or less; and

(C) Not more than one parking space per residential unit shall be assigned or secured, such that other required parking spaces are available to other residents and guests.

(2) Projects providing more than 50% of the project residential units at low or very-low income housing rates may further reduce parking requirements by an additional 20%.

(3) In no case, however, shall total parking requirements for the site be reduced by greater than 30% from the standard requirements, or by greater than 40% for an affordable housing project consistent with (2) above, or by more than 50% if housing for the elderly is proposed pursuant to Section 18.83.120(d) of the Zoning Ordinance.

(4) For any request for parking adjustments, the project applicant shall indicate parking and traffic demand measures to be implemented to reduce parking need and trip generation. Measures may include, but are not limited to: limiting "assigned" parking to one space per residential unit, providing for Caltrain and/or other transit passes, or other measures to encourage transit use or to reduce parking needs. The program shall be proposed to the satisfaction of the Director, shall include proposed performance targets for parking and/or trip reduction, and shall designate a single entity (property owner, homeowners association, etc.) to implement the proposed measures. Monitoring reports shall be submitted to the Director not later than two (2) years after building occupancy and again not later than five (5) years after building occupancy, noting the effectiveness of the proposed measures as compared to the initial performance targets, and suggestions for modifications if necessary to enhance parking and/or trip reductions.

Deleted:

Deleted: M

Deleted: M

Deleted: U

Formatted: Bullets and Numbering

Deleted: <#>The project applicant shall indicate parking demand measures to be implemented to reduce parking need, which may include, but are not limited to: limiting "assigned" parking to 1 space per unit, providing for transit passes or other measures to encourage transit use; or other innovative parking approaches.¶

Deleted: 40

(e) **Density, FAR, and Height Bonus Provisions**

The following provisions are intended to allow for increased density, FAR, height, and other development bonuses upon construction of additional below market rate (BMR) housing units. The bonus allowances shall be allowed subject to the following limitations:

(1) Bonuses are only applicable where below market rate (BMR) units are provided in excess of those required by Palo Alto's BMR program as stated in Program H-36 of the Housing Element adopted on December 2, 2002. Key elements of Program H-36 include:
   (A) Five (5) or more units: Minimum 15% of units must be BMR units;
   (B) Five (5) or more acres being developed: Minimum 20% of units must be BMR units; and
   (C) BMR units shall meet the affordability and other requirements of Program H-36 and the City's BMR Program policies and procedures.

(2) Density Increase: Density may be increased above the maximum base density allowed (40 units per acre), such that at least 1 additional BMR unit is provided for every 3 additional market rate units constructed. The resultant density may not exceed 50 units per acre. Density shall be calculated based on the gross area of the site prior to development.

(3) FAR Increase: For projects with a residential density greater than 30 units per acre, the allowable residential FAR may be increased. The FAR increase shall be equivalent to 0.05 for each additional 5% (in excess of the City requirements) of the total number of units that are proposed as BMR units, but may not exceed 50% of the residential FAR prior to the bonus, and may not exceed a total FAR of 1.5.

(4) Height Increase: For projects with a residential density greater than 30 units per acre, the allowable project height may be increased. The height increase shall be equivalent to one (1) foot above the maximum for each additional 5% (in excess of the City requirements) of the total number of units that are proposed as BMR units, but may not exceed a maximum height of 50 feet.

(5) Other incentives for development of BMR units, such as reduced setbacks and reduced open space, may be approved where at least 25% of the total units constructed are BMR units and subject to approval by the Architectural Review Board.

(6) The provisions of this section are intended to address the density bonus requirements of State Law within the PTOD District, and the maximum bonus density, FAR, and height may not be further exceeded.

Deleted:
Deleted:
Deleted: the maximum bonus density allowed, as shown in Table 2 (
Deleted:)
Deleted:
Deleted: 10
Deleted: the maximum bonus
Deleted: allowed
Deleted: (
Deleted:)
Deleted:
Deleted: , however,
Deleted: the
Deleted: bonus
Deleted: allowed
Deleted: (
Deleted:)
Deleted:
Deleted:
Deleted: SB 1818 of

18.66.050 Pedestrian and Transit Oriented Development (PTOD) Combining District Context-Based Design Criteria

(a) **Contextual and Compatibility Criteria**

Development in a Pedestrian and Transit Oriented Development Combining District shall be responsive to its context and compatible with adjacent development, and shall promote the establishment of a pedestrian and transit oriented neighborhood.

(1) Context

(A) Context as used in this section is intended to indicate relationships between the site's development to adjacent street types, surrounding land uses, and on-site or nearby natural features, such as creeks or trees. Effective transitions to these adjacent uses and features are strongly reinforced by Comprehensive Plan policies.

(B) The word "context" should not be construed as a desire to replicate existing surroundings, but rather to provide appropriate transitions to those surroundings. "Context" is also not specific to architectural style or design, though in some instances relationships may be reinforced by an architectural response.

(2) Compatibility

(A) Compatibility is achieved when the apparent scale and mass of new buildings is consistent with the pattern of achieving a pedestrian and transit oriented neighborhood, and when new construction shares general characteristics and establishes design linkages with the overall pattern of buildings so that the visual unity of the street is maintained.

(B) Compatibility goals may be accomplished through various means, including but not limited to:

(i) the siting, scale, massing, and materials;
(ii) the rhythmic pattern of the street established by the general width of the buildings and the spacing between them;
(iii) the pattern of roof lines and projections;
(iv) the sizes, proportions, and orientations of windows, bays, and doorways;
(v) the location and treatment of entryways;
(vi) the shadow patterns from massing and decorative features; and
(vii) the treatment of landscaping.

(b) **Context-Based Design Considerations and Findings**

In addition to the findings for Architectural Review contained in Section 18.76.020(d) of the Zoning Ordinance, the following additional findings are applicable in the California Avenue Pedestrian and Transit Oriented Development Combining District, as further illustrated on the accompanying diagrams:

(1) Pedestrian and Bicycle Environment

The design of new projects shall promote pedestrian walkability, a bicycle friendly environment, and connectivity through design elements such as:

(A) Connectivity for pedestrians and cyclists with external and internal (if any) streets, pathways, or bike facilities;
(B) Pathways and streets that present a clear hierarchy and connectivity pattern both within a project and to adjacent sidewalks;
(C) Wide sidewalks (built as easements beyond the property line if needed, but not to the detriment of existing or future bike lanes) along Park Boulevard to reinforce the street as a primary pedestrian and bicycle linkage to the multimodal station; and
(D) Bicycle amenities that contribute to the area's bicycle environment and safety needs, such as bike racks, storage or parking, or dedicated bike lanes or paths.
(E) Ground floor uses that are appealing to pedestrians through well-designed visibility and access;
(F) On primary pedestrian routes such as Park Boulevard and California Ave., climate and weather protection where possible, such as covered waiting areas, building projections and colonnades, and awnings;
(G) Streetscape or pedestrian amenities that contribute to the area's streetscape environment such as street trees, bulb-outs, benches, landscape elements, and public art; and
(H) Vehicle access from alleys or sidestreets where they exist, with pedestrian access from the public street.

Deleted: and

(2) Street Building Facades

Street facades shall be designed to provide a strong relationship with the sidewalks and the street(s), to create an environment that supports and encourages pedestrian activity through design elements such as:

(A) Facade articulation reflecting the rhythm of nearby commercial and residential areas such as California Avenue;
(B) Placement and orientation of doorways, windows, and landscape elements to create strong, direct relationships with the street;
(C) Facades that include projecting eaves and overhangs, porches, and other architectural elements that provide human scale and help break up building mass;
(D) Entries and windows that face onto the street;
(E) Entries that are clearly defined features of front facades, and that have a scale that is in proportion to the size of the building and number of units being accessed; larger buildings should have a more prominent building entrance, while maintaining a pedestrian scale; and
(F) Residential units and storefronts that have a presence on the street and are not walled-off or oriented exclusively inward.

Deleted: , centralized

(3) Massing and Articulation

Buildings shall be designed to minimize massing and provide for articulation and design variety through elements such as:

(A) Buildings that include pedestrian-scaled detail, articulation and craftsmanship of the façade;
(B) Rooflines that emphasize and accentuate significant elements of the building such as entries, bays, and balconies;
(C) Corner buildings that incorporate special features to reinforce important intersections and create buildings of unique architectural merit and varied styles;
(D) Design with articulation, setbacks, and materials that minimize massing, break down the scale of buildings, and provide visual interest from the train and neighborhood east of the tracks;
(E) Limiting facades such that no more than seventy percent (70%), and no more than 100 continuous linear feet of the street façade exceeds a height of 25 feet;
(F) Landscape elements to buffer the rear of the lot and the railroad tracks, with trees spaced at a maximum of 25 feet on center and combined with other landscape elements such as fencing, hedges or shrubs;
(G) Application of daylight plane requirements for R-1 and R-2 adjacencies to property boundaries adjacent to the railroad right-of-way; and
(H) Maintaining view corridors from Colorado Avenue and El Dorado Avenue west to the hills.

Deleted: and

Deleted: .

Formatted: Bullets and Numbering

Deleted: s

(4) Low-Density Residential Transitions

Where new projects are built adjacent to existing lower-scale residential development, care shall be taken to respect the scale and privacy of adjacent properties through:

(A) Transitions of development intensity from higher density development building types to building types that are compatible with the lower intensity surrounding uses;
(B) Massing and orientation of buildings that respect and mirror the massing of neighboring structures by stepping back upper stories to transition to smaller scale buildings, including setbacks and daylight planes that match adjacent R-1 and R-2 zone requirements;
(C) Respecting privacy of neighboring structures, with windows and upper floor balconies positioned so they minimize views into neighboring properties;
(D) Minimizing sight lines into and from neighboring properties;
(E) Limiting sun and shade impacts on adjacent properties;
(F) Providing pedestrian paseos and mews to create separation between uses; and
(G) Design with articulation, varied setbacks, and materials that minimize sound reflection to neighboring properties adjacent to the railroad.

Deleted: , such as Village Residential land uses

Deleted: <#>Design creativity to address compatibility with adjacent structures;¶

Deleted: P

Formatted: Bullets and Numbering

(5) Project Open Space
Private and public open space shall be provided so that it is usable for the residents, visitors, and/or employees of a site.

(A) The type and design of the usable private open space shall be appropriate to the character of the building(s), and shall consider dimensions, solar access, wind protection, views, and privacy;
(B) Open space should be sited and designed to accommodate different activities, groups and active and passive uses, and should be located convenient to the users (e.g., residents, employees, or public);
(C) Common open spaces should connect to the pedestrian pathways and existing natural amenities of the site and its surroundings;
(D) Usable open space may be any combination of private and common spaces;
(E) Usable open space does not need to be located on the ground;
(F) Open space should be located to activate the street façade and increase "eyes on the street" when possible;
(G) Both private and common open space areas should be buffered from noise where feasible; and
(H) Parking may not be counted as open space.

Deleted: O
Deleted: provide
Deleted: buffering from surrounding uses
Deleted: and where privacy can be maintained

(6) Parking Design
Parking needs shall be accommodated but shall not be allowed to overwhelm the character of the project or detract from the pedestrian environment, such that:

(A) Parking is located behind buildings, below grade or, where those options are not feasible, screened by landscaping, low walls, etc.;
(B) Structured parking is fronted or wrapped with habitable uses when possible;
(C) Parking that is semi-depressed is screened with architectural elements that enhance the streetscape such as stoops, balcony overhangs, and/or art;
(D) Landscaping such as trees, shrubs, vines or groundcover is incorporated into surface parking lots; and
(E) Street parking is utilized for visitor or customer parking and is designed in a manner to enhance traffic calming on the street.

(7) Large (multi-acre) Sites
Large (in excess of one acre) sites shall be designed so that street, block, and building patterns are consistent with those of the surrounding neighborhood, and such that:

(A) New development of large sites maintains and enhances connectivity with a hierarchy of public streets, private streets, walks and bike paths (integrated with Palo Alto's Bicycle Master Plan, when applicable);

Deleted: two
Deleted: s

(B) The diversity of building types increases with increased lot size (e.g., <1 acre = minimum 1 housing type; 1-2 acres = minimum 2 housing types; greater than 2 acres = minimum 3 housing types); and

(C) Where a site includes more than one housing type, each housing type should respond to its immediate context in terms of scale, massing, and design (e.g., lower density building types facing or adjacent to existing single-family residences).

Deleted: Village Residential[2]

(8) Sustainability and Green Building Design

Project design and materials to achieve sustainability and green building design should be incorporated into the project. Green building design considers the environment during design and construction. Green building design aims for compatibility with the local environment: to protect, respect and benefit from it. In general, sustainable buildings are energy efficient, water conserving, durable and nontoxic, with high-quality spaces and high recycled content materials. The following considerations should be included in site and building design:

Deleted: Consider p
Deleted: means
Deleted: ing
Deleted: s

(A) Optimize building orientation for heat gain, shading, daylighting, and natural ventilation;

(B) Design landscaping to create comfortable micro-climates and reduce heat island effects;

(C) Design for easy pedestrian, bicycle, and transit access;

(D) Maximize onsite stormwater management through landscaping and permeable pavement;

(E) Use sustainable building materials.

(F) Design lighting, plumbing and equipment for efficient energy use;

Deleted: for efficient energy use through

(G) Create healthy indoor environments;

(H) Use creativity and innovation to build more sustainable environments. One example is establishing gardens with edible fruits, vegetables or other plants to satisfy a portion of project open space requirements; and

Deleted: ,
Deleted: such as

(I) Provide protection for creeks and riparian vegetation and integrate stormwater management measures and open space to minimize water quality and erosion impacts to the creek environment.

(c) **[Reserved] Diagrams to be Added**

(d) **Historic Preservation**

Deleted: 9.

Historic resources review, as required in Chapter 16.49 of Title 16 of the Municipal Code, is required for alterations or modifications to any structure designated on the City's Historic Inventory as a Category 1 or Category 2 historic structure as defined in Section 16.49.020 of the Municipal Code or any contributing structure located within a locally designated historic district. The Category 1 or Category 2 designation process for becoming a historic structure is contained in Chapter 16.49 of Title 16 of the Municipal Code.

(e) **Performance Standards**

Formatted: Bullets and Numbering

All development subject to the PTOD District requirements must also comply with the performance standards outlined in Chapter 18.64 (Additional Site Development and Design Regulations for Commercial and Industrial Districts), pertaining to noise, lighting, visual, and access impacts.

18.66.060 Review Process

Rezoning and review of a site to a Pedestrian and Transit Oriented Development (PTOD) Combining District shall be made pursuant to the following procedures:

(a) Application to apply the PTOD overlay district may be made by an owner of record of any property located or partially located within the PTOD boundary, or may be initiated by vote of the Planning and Transportation Commission or City Council;

(b) Applications for rezoning shall be made and reviewed in accordance with Chapter 18.98 (Amendments to Zoning Map and Zoning Regulations), and more specifically with Section 18.98.020 regarding Changes in District Boundaries. Planning and Transportation Commission review and City Council approval shall establish limits on allowable or required uses and intensity (e.g., density, floor area ratio, height, site coverage) of development. The specified limitations shall be part of the rezoning and shall be recorded as property restrictions enforceable by the City of Palo Alto. Revisions to these restrictions requires rezoning through the same process, except that the Director of Planning and Community Environment may determine that a revision is minor and does not materially alter the City Council's restrictions or intent regarding land use and intensity. As used in this subsection, the term "minor" means a change that is of little visual significance, does not materially alter the appearance of previously approved improvements, is not proposed to change the use of the land in question, and does not alter the character of the structure involved. If the cumulative effect of multiple minor changes would result in a major change, a new application for approval of a Pedestrian and Transit Oriented Development is required and shall be reviewed by the Architectural Review Board, Planning and Transportation Commission, and/or City Council, as determined by the Director. Submittal requirements for the PTOD Combining District may be supplemented as determined by the Director of Planning and Community Environment;

Deleted:

Deleted: directed

(c) Applications for amendments to the Comprehensive Plan to designate a site consistent with Transit Oriented Residential Development shall be made and reviewed pursuant to the provisions of Chapter 19.04.080 (Amendments to Comprehensive Plan); and

(d) Upon approval of rezoning of a property to Pedestrian and Transit Oriented Development (PTOD) Combining District, the project plans shall be submitted as a Major Architectural Review to the Architectural Review Board (ARB), who

shall review the project for compliance with the Architectural Review criteria specified in Section 18.76 of the Zoning Code, as well as Section 18.66.050 of this Chapter. A single preliminary review by the ARB may be allowed in advance of rezoning approval if plans are submitted and reviewed prior to Planning Commission consideration of the rezoning request.

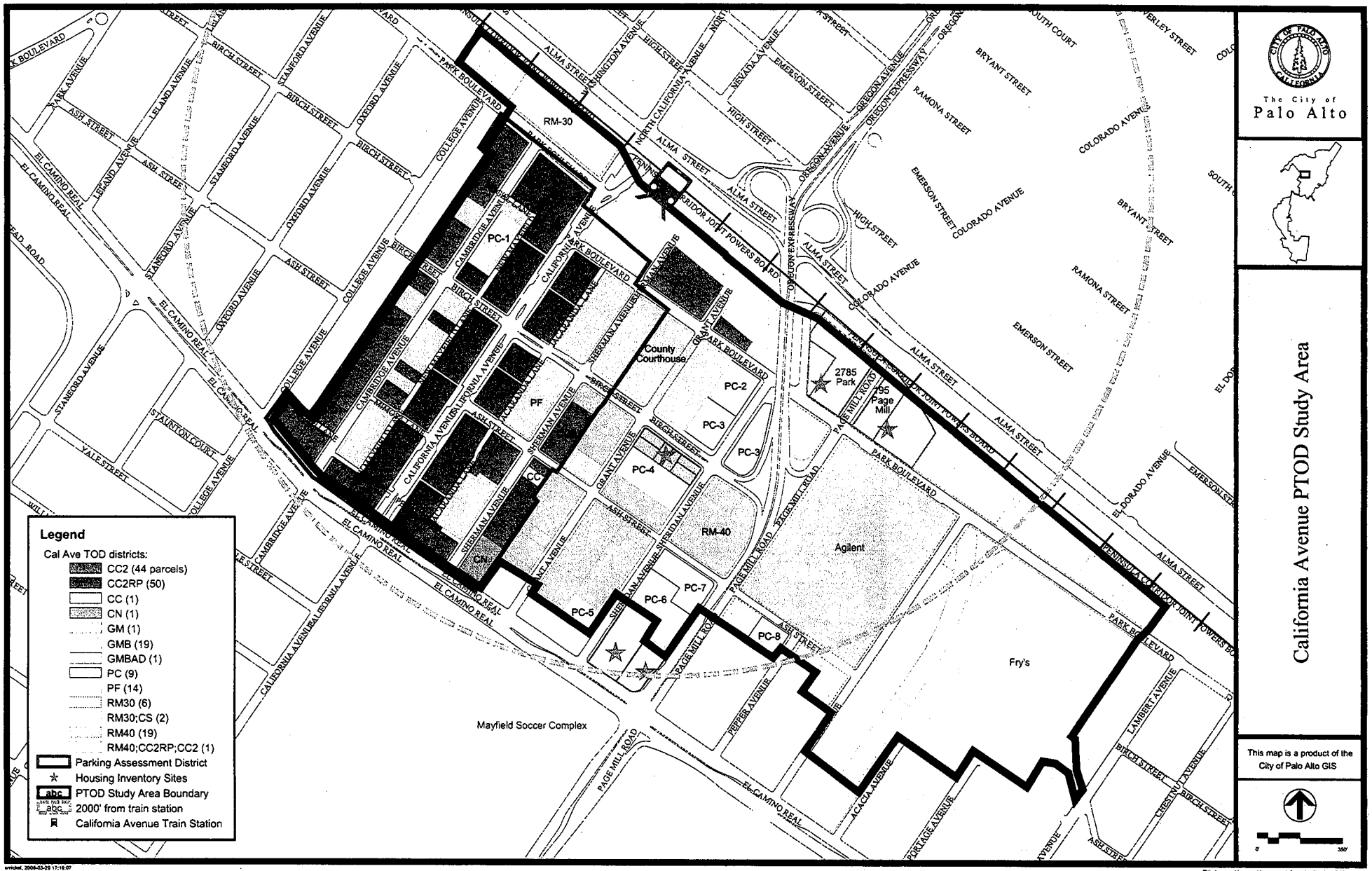
18.66.070 Non-conforming Uses and Non-complying Facilities

Owners of sites with existing legal non-conforming uses and non-complying facilities within the PTOD boundary may request the application of the PTOD Combining District to the site through the rezoning process referenced in Section 18.66.060 above. In applying the PTOD combining district, the use and/or facility would then be subject to the PTOD overlay standards.

[more transit/ped/bike TDM measures for parking section?]

[exclude any site with AD overlay?]

[how to incorporate context-based design criteria?]

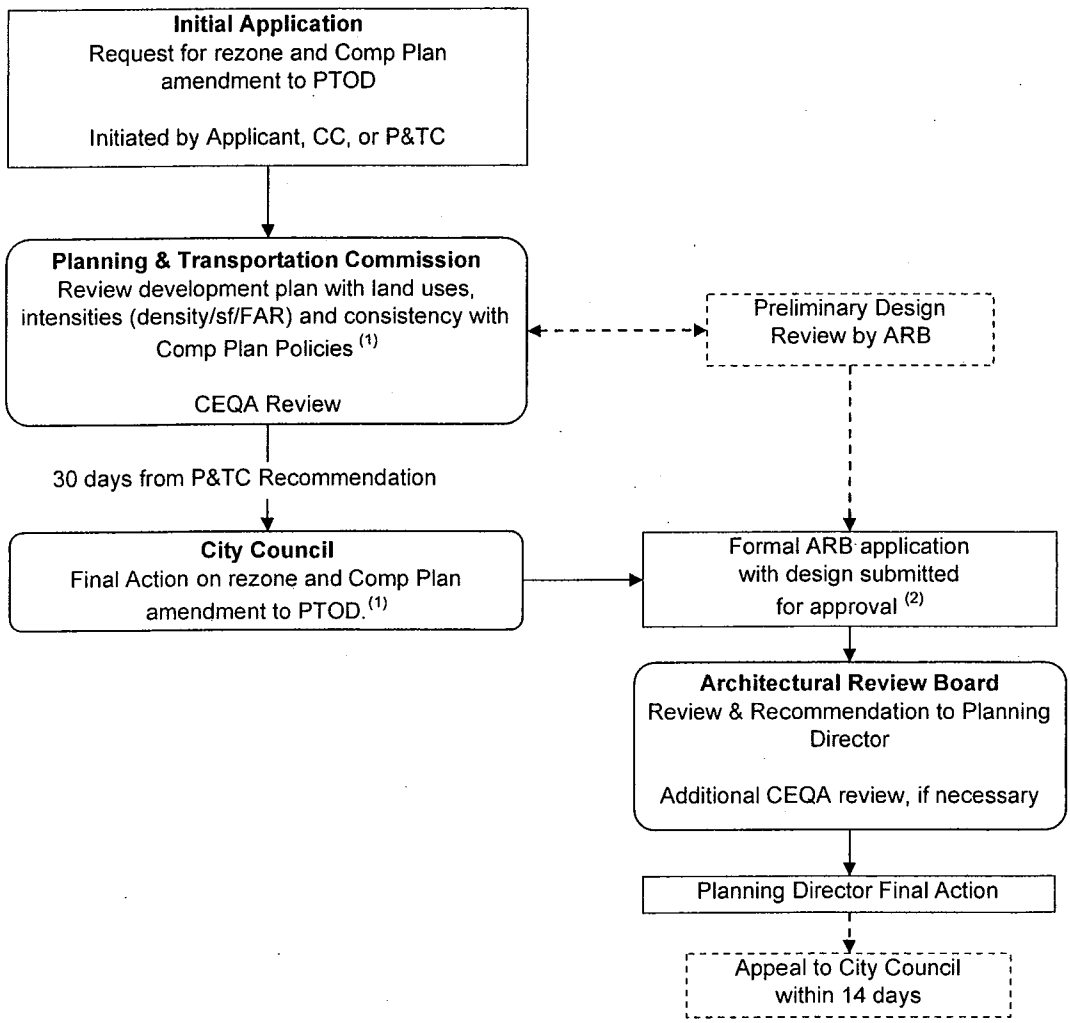


Attachment D

Attachment E

REVIEW PROCESS

Pedestrian Transit Oriented District (PTOD)



(1) Section 18.66.060(b) Review Process and 18.98; Amendments to Zoning Map and Zoning Regulations

(2) Section 18.66.050; Contextual and Compatability Criteria and 18.76; ARB Standards of Review

Attachment F

PTOD Frequently Asked Questions

1. What is Pedestrian and Transit Oriented Development (PTOD)?
2. Why is the PTOD District being proposed? What are the benefits to the community?
3. Where will the PTOD zoning apply?
4. How is a PTOD project reviewed? Is PTOD a rezoning?
5. Will I, as a member of the community, be able to comment on a proposed PTOD project and design?
6. What kinds of uses will be allowed under the PTOD zoning? Who decides?
7. What densities, heights, and floor area would be allowed by the PTOD? What about parking?
8. What bonuses are allowed for increasing these allowances?
9. What can be done now under existing standards? How will the PTOD zoning change the extent of allowable development on these sites?
10. Will everyone build to the PTOD maximum standards?
11. I currently walk and bike to California Avenue . How will the PTOD zoning create a more pleasant experience for me when I go to California Avenue or to Caltrain?
12. How will the PTOD regulations affect businesses on California Avenue and in the rest of the PTOD area?
13. What regulations are being proposed to ensure that developments are compatible with our neighborhoods?
14. What studies have been done that demonstrate that this type of development enhances transit use and pedestrian activity?
15. Are there requirements to facilitate the use of pedestrian, bicycle and transit modes?
16. Does the decreased ridership at the California Avenue Caltrain station jeopardize the success of the PTOD?
17. How will PTOD projects impact traffic and parking in the area?
18. Will new development along the railroad tracks increase the noise reflection in the neighborhoods east of Alma Street?

19. How will schools be impacted by the additional students generated by new housing in the PTOD area?

20. Will there be public parks for new residents, especially children, to use?

1. What is Pedestrian and Transit Oriented Development (PTOD)?

The Palo Alto Comprehensive Plan Program L-11 directs the City to develop standards and criteria for Transit Oriented Residential Development. This zoning would provide for higher density residential uses in the University Avenue/Downtown and California Avenue commercial centers within a walkable distance (a 2,000 foot radius is specified) of the City's two multi-modal transit stations. Some of the components of this Comprehensive Plan program include net densities of up to 50 units per acre (this is not what is being proposed for the California Avenue PTOD district) and performance standards to ensure that projects contribute to the street environment and encourage use of non-vehicular modes of transportation. Relevant Housing Element policies direct that increased housing density be allowed immediately surrounding commercial areas and particularly near transit centers, and that parking requirements be modified to allow higher densities in appropriate areas. The Pedestrian and Transit Oriented Development (PTOD) combining district responds to the directives of the Comprehensive Plan program, but equally emphasizes the importance of mixed use and pedestrian oriented design and uses to minimize trips and to support local retail and service businesses. An environment that supports pedestrians may be more significant for reducing vehicle trips as it allows errands to be run on foot and to be combined, rather than generating additional vehicle trips.

2. Why is the PTOD District being proposed? What are the benefits to the community?

The California Avenue PTOD combining district is proposed primarily to implement the provisions of the Comprehensive Plan. In addition, the City's Housing Element identifies three "housing opportunity sites" within the California Avenue study area, including two in the General Manufacturing (GM) zone. Project applications are pending for those two sites, requesting residential use or mixed residential/commercial uses. In October of 2005, the City Council revised the GM district requirements such that residential uses are no longer allowed, which results in the City's Housing Element and Comprehensive Plan being out of compliance with State housing law. The application of the PTOD zoning to those sites will allow housing on sites within proximity to transit, but will retain housing prohibitions in other areas of the city, where industrial uses should be preserved.

The benefits of the PTOD zoning to the community are to:

- *Support the use of public transportation, pedestrian, bicycle, and other non-vehicular modes of transportation;*
- *Provide for a mix of uses to minimize the need for external trips;*
- *Contribute to the pedestrian design and environment of area streets;*
- *Implement the City's Housing Opportunity sites and address the City's jobs/housing imbalance; and*
- *Support retail and service uses on California Avenue and in the immediate vicinity*

Return to top

3. Where will the PTOD zoning apply?

The California Avenue PTOD combining district area is generally bounded by Cambridge Avenue to the north, El Camino Real to the west, the Caltrain rail line to the east, and Lambert Avenue to the south. There are a few pockets of areas that are excluded from the boundary, such as the R-1 area around Pepper Avenue and some El Camino Real areas that are governed by the City's El Camino Real Design Guidelines. A minimum half-block of land is generally excluded from the zoning between surrounding single-family (R-1) zones and the PTOD district. A map of the California Avenue PTOD zone boundaries is attached for a more specific delineation. The boundaries of the district do not imply that the PTOD criteria automatically apply to properties lying within the boundaries (see the next question).

4. How is a PTOD project reviewed? Is PTOD a rezoning?

The PTOD combining district is different from most zoning districts in that the boundaries of the district do not imply that the PTOD criteria automatically apply to properties lying within the boundaries. Instead, the boundaries only provide that such properties are "eligible" for rezoning to PTOD. A full rezoning process is required for each property requesting to use the PTOD criteria. Unless rezoning is requested, the property remains governed by existing zoning, such as Community Commercial, General Manufacturing, or Multiple Family Residential. The steps required for a PTOD rezoning include a) initiation of rezoning by the Planning and Transportation Commission, b) submittal of a preliminary design to the Architectural Review Board (ARB), c) public hearing and recommendation by the Planning and Transportation Commission, and d) public hearing and action by the City Council. The Council's actions would include specification of the types of uses and density/intensity of development that could occur, and then final design may proceed through the ARB hearing and action. Environmental review, including traffic, noise, or other studies that may be needed, must also be conducted prior to action by the Commission and Council. See the attached flow chart for a summary of this process.

Return to top

5. Will I, as a member of the community, be able to comment on a proposed PTOD project and design?

There are several opportunities for review and comment by the public on a PTOD rezoning. The ARB, Planning and Transportation Commission, and City Council reviews are all public hearings, involving public notice to all property owners and residents within the PTOD area and within 600 feet of the PTOD boundaries. The environmental review generally requires similar public noticing. The rezoning process is highly "discretionary," meaning that City officials have considerable latitude to determine the appropriateness and compatibility of a project and to place conditions or restrictions to minimize project impacts.

6. What kinds of uses will be allowed under the PTOD zoning? Who decides?

The land uses proposed to be allowed with the application of the PTOD combining district include multiple-family residential, village residential, live/work units, hotels, and residential mixed-use projects (including a potential mix of residential with retail, personal services, eating and drinking services, and other nonresidential uses). The mix of land uses proposed for any zoning change would be reviewed by the Planning and Transportation Commission with public notice and input, and would require approval by the City Council as part of the rezoning process.

Return to top

7. What densities, heights, and floor area would be allowed by the PTOD? What about parking?

The proposed development standards (please refer to Section 18.66.040 of the draft ordinance for a complete list) reflect many of the allowable development standards already in the area and

incorporate additional standards for mixed use development. Residential development standards are generally similar to those found in the RM-40 (multiple family zone allowing up to 40 units per acre) zone and include maximum densities up to 40 units per acre, a floor area ratio (FAR) up to 1.0, height of up to 40 feet, residential unit open space requirements, and setback and daylight plane limitations when developments abut single- and two-family residential districts. Mixed use development would allow for a FAR of up to 1.25 to accommodate the additional non-residential space, but with a cap of 0.35 FAR on the non-residential portion (leaving a predominantly residential development). Hotel FAR would be allowed up to a maximum of 2.0. Parking rates and allowable adjustments are the same as required by existing regulations contained in Chapter 18.83 of the Municipal Code. Some of the parking reductions now allowed, however, could only be achieved in the PTOD where smaller average unit sizes are proposed and where parking and transportation management measures are included to encourage transit, walking, or bicycling (see question #14 below).*

**FAR = the ratio of allowable developed building square footage to lot size, e.g., a 1.0 allowable floor area ratio would allow 10,000 square feet of development on a 10,000 square foot lot.*

8. What bonuses are allowed for increasing these allowances?

State legislation requires that cities grant development standard bonuses for projects with significant amounts of below market rate (BMR) housing. Below market rate housing (BMR) bonuses have been included in the PTOD combining district to encourage more affordable units and so the City can specify and cap the extent of bonuses that developers are allowed to request in response to the existing State legislation. Without these limitations, applicants could potentially propose extensive density increases and incentives on top of the maximum development allowances. The PTOD combining district allows for bonuses to be considered for projects that provide BMR units in excess of the existing city BMR requirements (generally 15% of the total units). Bonuses in height (up to 50 feet maximum), floor area (up to 1.5 FAR), and density (up to 50 units per acre) may be allowed proportional to the additional percentage of BMR units provided. In order to achieve a 1.5 FAR and 50 foot height, for example, the standards would require that at least 65% of the units are affordable, according to City and State housing criteria.

Return to top

9. What can be done now under existing standards? How will the PTOD zoning change the extent of allowable development on these sites?

Existing development standards for zoning districts in the California Avenue area include residential densities of 30 – 40 units/acre (except that no residential is currently allowed in the GM district), heights ranging from 35 – 50 feet, floor area ratios from 0.5 – 2.0, and daylight plane requirements when adjacent to low density residential districts. Changes to the existing standards are minimal in most instances, particularly in areas now zoned RM-40 (multi-family) or CC(2) (community commercial), each of which is prevalent within the PTOD area and which have development standards similar or more intense than those proposed for the PTOD overlay. The most significant areas of potential change are likely to be those now zoned General Manufacturing (GM), particularly along Park Blvd. These areas would now allow residential zoning if a PTOD rezoning is approved, though the density, height and FAR would be similar to other multi-family residential in the area. A table comparing development standards for existing zone districts with the proposed PTOD standards is attached.

10. Will everyone build to the PTOD maximum standards?

Most future development, particularly in the RM-40 and CC(2) zoned areas, will likely use the existing zoning, as the PTOD standards do not provide for more density, FAR, or height than what is already permitted under existing zoning. Property owners wishing to maintain or build non-residential uses only (research and development, office, for example) must do so under the

existing zoning, as the PTOD zoning is only for residential, mixed use, and hotel uses. The zoning will likely be most advantageous to properties now zoned General Manufacturing (GM), where a residential or mixed-use project is desired. For sites zoned RM-30 (30 units per acre), there is potential for some higher density or mixed use, which might particularly apply to the Fry's site. The zoning might also be useful for an affordable housing project, though that is likely to be rare. Estimates of the extent to which the PTOD zoning will be used would be highly speculative at this point.

Return to top

11. I currently walk and bike to California Avenue . How will the PTOD zoning create a more pleasant experience for me when I go to California Avenue or to Caltrain?

The proposed PTOD design criteria largely focuses on requiring developments to enhance the pedestrian, and bicycle facilities related to their development, including provisions for wider sidewalks, landscaping, pedestrian amenities (lighting, street furniture, etc.), additional streetscape design elements (bulbouts and other traffic calming devices, enhanced crossing facilities, etc.), and pedestrian scale entrances, as well as to consider contextual connections to bicycle, pedestrian, and transit facilities. Improvements adjacent to roadways would not generally impact the existing roadway width and instead would be required through dedication of easements on private property. Additionally, designating this area as a pedestrian and transit area could foster both private and public investment into pedestrian, bicycle, and transit improvements in the area. The new developments may also justify additional traffic control and calming measures such as new signalized intersections and lighted pedestrian crossings. The deployment of Transportation Demand Management (TDM) measures will be expected of new developments within the PTOD area.

12. How will the PTOD regulations affect businesses on California Avenue and in the rest of the PTOD area?

Owners of businesses on California Avenue , like any other property owner or business, are not required to use the PTOD regulations and in many cases are likely not to find the regulations advantageous. In other areas of the PTOD, particularly south of Page Mill Road / Oregon Expressway, however, businesses may find opportunities to add a residential component or property owners may prefer to replace marginal businesses with a residential or mixed-use project. The implementation of the PTOD provisions, however, should increase the number of residents in the area and thereby provide additional customers to help bolster retail and service businesses on California Avenue .

Return to top

13. What regulations are being proposed to ensure that developments are compatible with our neighborhoods?

The boundaries of the PTOD have been drawn to exclude almost all low density residential neighborhoods in the vicinity from the zoning area. In most cases, a row of existing uses is retained to provide a buffer between the PTOD uses and the homes. Design criteria within the PTOD include daylight planes for setbacks and privacy when any use is proposed adjacent to R-1 or R-2 residential uses. For residences east of the railroad tracks and Alma Street, design criteria would require a daylight plane and setbacks, building articulation, and protection of view corridors to minimize the massing of structures built adjacent to the railroad tracks.

14. What studies have been done that demonstrate that this type of development enhances transit use and pedestrian activity?

Recent studies are available on the City's zoning website at www.cityofpalotalto.org/planning-

community/ptod.html. One of these studies (Nelson/Nygaard 2005) outlines the elements for success of transit oriented development zones, and concludes that housing density and mixed use are vital factors, as well as the availability of transit. Another study (Lund, Cervero, and Wilson 2005) evaluated several rail transit stations in California, including Palo Alto's University Avenue Caltrain station, and determined that providing increased housing density was a critical element of successful transit-oriented development, and that households in proximity to transit used transit at a rate three (3) times the rate used by office workers near transit. A third study (Nelson/Nygaard 2004) analyzed vehicle ownership per household throughout Palo Alto and indicated that the lowest vehicle ownership in Palo Alto is for households in the Census tracts around the California Avenue and University Avenue Caltrain stations, where transit is available and a mixed-use, pedestrian-oriented environment exists. The City follows the County's Congestion Management Program which allows for a 3% trip reduction of an office development located within 2000 feet of a Caltrain station, while it allows a 9% trip reduction (i.e. three times the value) of a residential development within the 2000 feet walking distance of the station.

Return to top

15. Are there requirements to facilitate the use of pedestrian, bicycle and transit modes?

The proposed PTOD district would require that, for any request for parking reductions, an applicant would need to provide for a series of Transportation Demand Management (TDM) measures geared towards facilitating use of other modes of transit. These measures may include provision of transit passes, loaner or rented bicycles, car sharing, leasing parking separate from the unit rent or sales price, shuttle services, or similar techniques. Design requirements are also included that are intended to provide more pedestrian-friendly design on area streets.

16. Does the decreased ridership at the California Avenue Caltrain station jeopardize the success of the PTOD?

No. The success of the PTOD is closely tied not only to Caltrain, but also to linkages to California Avenue and surrounding areas to minimize vehicle trips, even if transit is not the preferred mode. The PTOD zoning, however, is expected to enhance the potential for increasing ridership at the California Avenue station by increasing the number of available households that could use the train. Caltrain level of service is directly tied to ridership numbers, so an increase in ridership at the California Avenue station could justify increased service. Additionally, Caltrain and the Valley Transportation Authority (VTA) are planning improvements at the California Avenue station that will provide for improved service by allowing for two trains to be stopped at the station at one time. Some of those improvements will also enhance safety for pedestrians' crossings of the tracks.

Return to top

17. How will PTOD projects impact traffic and parking in the area?

Staff believes that the PTOD zoning will improve traffic and parking in the area by a) reducing the need for vehicle use by enhancing access to the train and to local services; b) requiring adequate parking for projects so that spillover on adjacent streets does not result, and c) spreading the peak hours impact from residential development that would otherwise be developed commercially. Existing traffic calming measures to minimize traffic impacts on neighborhoods adjacent to the PTOD area will remain and additional measures will be considered if appropriate.

18. Will new development along the railroad tracks increase the noise reflection in the neighborhoods east of Alma Street?

No. The City commissioned a study by a local noise expert (EIP 2006), who measured noise in areas east of the railroad tracks adjacent to buildings that might reflect railroad noise and

adjacent to vacant areas without buildings. The noise measurements showed no detectable difference in the noise level. The consultant also recommended measures for design of buildings (materials, building articulation, window treatments) that are to be incorporated into the design criteria of the ordinance, and that will further minimize the noise impacts on and off the site. The study noted that the peak hour noise impacts in the area are generated primarily by vehicle traffic on Alma , not by the train. The train noise is more significant in off-peak hours, but reflection from buildings appears to be negligible.

Return to top

19. How will schools be impacted by the additional students generated by new housing in the PTOD area?

The new housing would incrementally increase demand on area schools. The degree of impact is uncertain, however, because a) much of the area already allows housing, and b) the types of housing proposed (generally apartments and condominiums) typically generate a low level of students (Cupertino 2006). Additionally, new development must pay school impact fees to help offset costs of school construction, and the increased property taxes will help provide additional operating revenues for the school district. The City intends to reevaluate the impact of residential development on the local schools as part of the Comprehensive Plan Update, and expects to commission a study of school impacts as one of the initial tasks in that effort.

20. Will there be public parks for new residents, especially children, to use?

The PTOD zoning will require private and common open space (courtyards, balconies, etc.) for residents, but not for the public. On large sites of more than a few acres, the City may require area to be set aside for public parkland, but otherwise imposes park impact fees to fund future acquisition of parkland and improvements to parks. There is one small park within the PTOD area, and several small parks within walking distance of the PTOD area. In addition, the Mayfield soccer complex will soon begin construction within walking distance of the area. Stanford University 's facilities and open space are also nearby. Studies of the demography of the type of residential development proposed (generally apartments and condominiums) again generally show that these units include relatively few children, so that the need for playfields or tot lots is not likely to be substantial. However, because each project will be required to have open space provisions such as a courtyard or green, a quality living environment will be ensured.

Return to top

DEVELOPMENT STANDARDS
COMPARISON OF THE PTOD WITH EXISTING DISTRICTS

	CS [18.45]	GM [18.20]	CC(2) [18.44]	RM-40 [18.26]	Cal Ave. PTOD [18.66]
Height	50' (35' if within 150'of residential zone)	50' (35' if within 150'of residential zone)	37'	40'	40' (50' with bonus BMR units)
Maximum Density	30 DU/AC	N/A	30 DU/AC	40 DU/AC	40 DU/AC (50 DU/AC w/ bonus BMR units)
FAR	100% non-res: 0.4:1	0.5:1	2.0:1 (3.0:1 if ≥60% is residential)	1:1	100% res: 1:1 (1.5:1 with bonus BMR)
	100% res: 0.6:1				Mixed Use: 1.25:1 Max .35 non-res (1.5:1 with bonus BMR)
	Mixed Use: 1:1 Max .4 non-res; Max .6 res				
Setbacks	No Requirement *Restrictions when adjacent to residential	No Requirement *Restrictions when adjacent to residential	No Requirement *CC(2) properties may have building setback from alleys where applicable	Side & Rear Yard: 10' Additional 2nd story setback restrictions when adjacent to low density residential zones	No Requirement *Restrictions when adjacent to R-1 & R-2
Daylight Plane	Restrictions when adjacent to residential	Restrictions when adjacent to residential	Restrictions when adjacent to residential	45° @15' for side and rear prop line	Restrictions when adjacent to R-1 & R-2

Attachment G

Existing Apartment Buildings in the PTOD Area

	Address	Units**	Area	DU/Acre	# Stories	Height	Zone/Yr Built
1	2323-2281 Park (California Park)	45	75184	26	2-3	25-30'	RM-30/89
2	309-311 Grant	3	5000	26	3	35'	RM-40/86
3	2700 Ash (Page Mill Court)	24	32798	32	2	25'	PC/98
4	435 Sheridan*	35	46102	33	3	35-40'	PC/2000
5	425/455 Grant*	36	43552	36	3	35-40'	RM-40/62
6	2557-2585 Park/101-161 California (Palo Alto Central)*	140 du	166067	37	3-4	40-45'	RM-40/82
7	469 Grant (Grant Ave Garden Apartments)	20	22800	38	3	30'	RM-40/60
8	302-330, 332-362 Grant (Birch Court)*	40	40628	43	2-4+	45'	RM-40/83
10	345 Sheridan (The Mayfield)	69	69871	43	4+	40-50'	RM-40/86
9	408 Grant/2502-2508 Ash (Mayfield Manor)	38	33150	50	4	45'	RM-40/74
11	200 Sheridan	30	26096	50	4+	45-50'	PC/97
12	410 Sheridan*	55	42852	56	4+	45-50'	RM-40/77
13	360 Sheridan	57	37740	66	3	30'	PC/79
	*Condominiums						
	**Numbers derived from the county records						

Attachment H

Pedestrian and Transit Oriented Development
Summary of Papers and Articles[1]

Papers/Articles	Key Concepts and Findings
1. *Travel Characteristics of Transit-Oriented Development in California*; Lund, Cervero, and Wilson; January 2004	The study evaluated transit-oriented developments (TODs) in non-CBD (central business district) locations and the resultant use of transit. The study sites were in San Diego, Los Angeles, and the Bay Area, including San Jose VTA light rail, Caltrain commuter rail (including the University Ave. station in Palo Alto), and Bay Area Rapid Transit (BART). The results indicate a high rate of transit use for residents of TODs, higher than in comparable regions, cities or adjacent areas not near transit. Residents living near transit stations are 5 times more likely to commute by transit than the average resident worker in the same city. Caltrain statistics showed a 17.4% transit use by residents. Office workers also had higher rates of transit use, about 3.5 times that of workers elsewhere in the surrounding region. Factors that influenced the use of transit included the frequency of transit, the availability and cost of parking, the distance from the residence or workplace to the transit station, and streetscape design.
2. *Parking Technical Memorandum #2: Proposed Parking Requirements in Three New Zoning Districts & Approaches to Shared Parking*; prepared for City of Palo Alto; Nelson/Nygaard Consulting Associates; February 2004	This memorandum analyzed parking needs for village residential, mixed use, and transit-oriented developments in Palo Alto based on household characteristics and vehicle ownership data from the U.S. Census. The study includes maps depicting vehicle ownership by Census tract in Palo Alto, which indicate that the Census tracts around the California Avenue and University Avenue train stations have the lowest vehicle ownership per household (1.21 and 0.94-1.43, respectively) in Palo Alto, compared to an average citywide of 1.76 vehicles per household. The study also indicates lower vehicle use based on rental (versus ownership) housing.
3. *Crediting Low-Traffic Developments: Adjusting Site-Level Vehicle Trip Generation Using URBEMIS*; Nelson/Nygaard Consulting Associates; August 2005	This analysis looked at how typical ITE Trip Generation rates vary and are often not appropriate indicators of trips in areas with other transportation options or locational factors. The study used URBEMIS, an air quality model, to reflect these adjustments. Trip reduction credits were developed to reflect a number of physical measures, including the density of development, the mix of uses, the availability of local serving retail, accessibility to transit service, and pedestrian and bicycle friendliness, as well as transportation demand management (TDM) factors such as parking supply and/or pricing mechanisms, free transit passes, and telecommuting. The evaluation estimated residential trip reductions of up to 15% for transit service, up to 9% for mixed uses, and up to 9% for pedestrian and bicycle friendliness, with further reductions with increased density. Demand management strategies were most effective for non-residential land use types and were typically up to 25% for parking strategies and/or other programs. In many cases, these reductions are cumulative, with residential trip reductions of about 3 times those of non-residential reductions.

Attachment I

Papers/Articles	Key Concepts and Findings
4. *Transportation Impact Analysis Guidelines*; Santa Clara Valley Transportation Authority; Congestion Management Program; Adopted May 7, 1998; Updated March 29, 2004	This document outlines VTA's methodology for acceptable trip reductions based on locational or programmatic factors. The basis for initial trip estimates is again the ITE Trip Generation Manual. VTA identifies three scenarios that provide for measurable trip reductions: mixed-use development (which decreases internal trips), a strong transportation demand management (TDM) program, and development near transit stations or major bus lines. The guidelines provide for 10-13% reductions in retail or hotel trips in mixed use areas, up to 5% reductions for TDM programs, and up to 9% reductions for locations within a 2,000 foot walk of a Caltrain station. These numbers may in some cases be cumulative, so that greater reductions are available for a mixed use development near a transit station, for example.
5. *How to Make Transit-Oriented Development Work*; Jeffrey Tumlin and Adam Millard Ball; Nelson/Nygaard Consulting Associates; Planning; May 2003	This article stresses that effective transit-oriented development (TOD) is not just location near a transit station, but requires "density, design, and diversity." True TOD requires a mixed use environment and is further enhanced by reduced parking and/or parking pricing strategies. Design for walkability is also an important component of TOD. Frequent transit service also is a key to reduced trips and parking, and enhances the TOD experience. One of the examples in the article is Alma Place in Palo Alto, where affordable housing at high density and access to the Caltrain station reduces peak-hour parking demand to 0.4 parking space per unit, despite parking being free.

[1] Papers and articles are available online at www.cityofpaloalto.org/planning-community/ptod.html

EIP ASSOCIATES

Evaluation of the Potential for Train Noise Reflection near the California Avenue Caltrain Station in Palo Alto

The City of Palo Alto is considering the establishment of a new overlay zoning district, the Pedestrian Transit Oriented Development Combining District (PTOD), in an area surrounding the California Avenue Caltrain station west of the Caltrain tracks. Community comments that have been received on this project include concerns about the potential for increased train noise in the residential neighborhood east of the station due to reflection from tall buildings proposed for two of the track-side parcels. Existing zoning on these parcels allows a 50-foot maximum building height, though PTOD provisions could drop the maximum height to 40 feet. Most of the existing buildings near and south of the California Avenue station are 20 to 35 feet high, though the Danger Building near Olive Avenue is 46 feet high.

Study Approach

EIP Associates was asked by the Palo Alto Planning Department to evaluate the potential for increased train noise reflection from the taller proposed buildings in the PTOD. Because of the presence of a number of existing structures west of the Caltrain tracks, near to and south of the California Avenue station, the first priority was to determine the magnitude of any existing train noise reflection effects. Also, Caltrain operations were not the only source of noise in the area. Alma Street, which parallels the Caltrain tracks east of the station, seemed likely to have a significant effect on local noise levels in the residential areas east of Alma Street.

It was determined that measurements should be taken at two pairs of locations: the first pair, in locations west of the Caltrain tracks, where traffic noise from Alma Street was expected to be secondary to train noise; the second pair, east of the Caltrain tracks, in the east sidewalk of Alma Street, closer to the residential neighborhoods concerned about train noise and likely to provide data on the joint influence of train and traffic noise there. One location from each pair was sited near an existing building that had the potential to produce significant noise reflection (in this case, Palo Alto Central, a multi-story residential structure with a frontage of several hundred feet along the entire length of the California Avenue station parking lot); the other location was chosen far from any buildings that could produce significant reflection.

After determining the magnitude of train noise reflection from existing buildings, the likelihood of enhanced train noise reflection with implementation of the PTOD would be addressed by relating what is known about noise reduction/enhancement effects to what is known about plans for proposed buildings in the area.

Data Regarding Reflected Train Noise from Existing Structures

After a preliminary survey of the California Avenue station vicinity on February 24, 2006, four key locations were chosen for noise measurements, as shown in Figure 1.

The City of
Palo Alto

Figure 1

Train/Traffic Noise Measurement Locations

Survey by EIP Associates

This map is a product of the City of Palo Alto GIS

0' 300'

smickel, 2006-03-01 10:38:58
(\\cc-maps\gis$\gis\admin\Personal\Planning.mdb)

Short-term measurements (i.e., 10-15 minutes duration) were made at these locations on March 2 and March 8, 2006.

Two noise measurements were taken west of the Caltrain tracks: the first at Location #1 in the parking lot of the California Avenue Caltrain station about 70 feet from the track centerline; the second at Location #2 equally close to the tracks but several hundred feet south of the station. Noise levels at each location were recorded over periods that included two train operations. Data from Location #1 shows the signatures of train idling at the station (see Figure 2; two broad, flat peaks, each 2 to 3 minutes in duration, centered at 14:27 and 14:36), while data from Location #2 shows the signatures of train pass-bys with no idling (see Figure 3; two narrow, sharp peaks, 10 to 20 seconds duration, centered at 15:32 and 15:33).

Another series of noise measurements were taken east of the Caltrain tracks: two measurements at Location #3 near Alma Street across from the California Avenue Caltrain station (and Location #1), one during the early morning, the other during the morning commute peak; another three measurements at Location #4 near Alma Street but further south of the station (across from Location #2), one each during the early morning, the morning commute peak, and after the morning commute peak. At Location #3, data from the early morning measurement period clearly shows the signature of train idling at the station (see Figure 4; one broad, flat peak, about 2 minutes in duration, centered at about 5:32), while the signature is much less obvious in data from the morning commute peak (see Figure 5; for two train operations, noise from the first, a broad peak about 1 minute in duration beginning just before 8:31, is somewhat distinguishable, but noise from the second, a train arrival noted at about 8:33, is largely obscured by motor vehicle traffic noise). At Location #4, noise from one train operation during the early morning measurement period is somewhat distinguishable (see Figure 6; a narrow, sharp peak, 10 seconds duration, centered just after 4:55, compared with the many narrower, lower motor vehicle peaks), but the noise signatures of train operations during the morning commute peak (see Figure 7; train arrival was noted after 8:09) and post peak (see Figure 8, train arrivals was noted at about 10:06 and 10:07) are indistinguishable from motor vehicle traffic noise.

The measurement data from all seven noise measurements at the four locations are summarized in Table 1, including L_{eq}, (i.e., average noise intensity), standard deviation (i.e., a measure of the variability of the instantaneous noise intensity), L_{min} /L_{max} (i.e., minimum/maximum instantaneous noise level), and, in the last row, an estimate of L_{dn} (i.e., the average noise intensity over a 24-hour period with 10 dB "penalty" added to the noise intensity measured during 10 PM and 7 AM, when people are more sensitive to noise intrusion) at Location #4. All these parameters are specified in decibels (dBs), the common unit of noise intensity.

Since the duration of train operations within each measurement period was much less than the duration of the measurement, a further segregation and analysis of the measurement data was performed to distinguish the noise levels produced when train and motor vehicle operations occur concurrently from noise levels produced only by motor vehicles. Table 2 shows the L_{eq}, standard deviation, L_{min} and L_{max} for selected data sets at the four measurement locations.

Table 1 - Palo Alto Noise Measurement Data

Noise Measurement Location/Time		Influential Noise Sources	Noise Level Statistics (dB)		
			L_{eq}	Standard Deviation	L_{min}/ L_{max}
#1	West of Caltrain tracks; parking lot of California Avenue Caltrain Station. Thursday, March 2, 2006, between 14:26 and 14:43.	Primary: Caltrain operations (two; one at 14:27, another at 14:36) with pauses at the station (each about 2 minutes). Secondary: Traffic on Alma Street; very few vehicle operations in parking lot.	74.4	10.2	48.8/ 84.4
#2	West of Caltrain tracks; end of Page Mill Road. Thursday, March 2, 2006, between 15:24 and 15:40.	Primary: Caltrain operations (two; one at 13:32, another at 15:33) with no pauses at this measurement location. Secondary: Traffic on Alma Street; no vehicle operations on Page Mill Road.	70.5	5.5	52.3/ 88.7
#3	East of Caltrain tracks; east sidewalk along Alma Street, across from Station and measurement location #1. Wednesday, March 8, 2006,				
	Between 5:25 and 5:40 (Early AM)	Primary: Traffic on Alma Street. Secondary: Caltrain operations (one at 5:32) with pause at the station (about 2 minutes).	68.3	9.7	45.7/ 81.2
	Between 8:25 and 8:35 (AM Peak)	Primary: Traffic on Alma Street. Secondary: Caltrain operations (two; one at 14:27, another at 14:36) with pauses at the station (each about 2 minutes).	77.5	4.4	62.7/ 85.0
#4	East of Caltrain tracks; east sidewalk along Alma Street, near Colorado Avenue, across from measurement location #2. Wednesday, March 8, 2006.				
	Between 4:50 and 5:10 (Early AM)	Primary: Traffic on Alma Street. Secondary: Caltrain operations (one at 4:55) with no pause opposite the measurement location.	66.5	8.7	43.8/ 82.8
	Between 8:05 and 8:15 (AM Peak)	Primary: Traffic on Alma Street. Secondary: Caltrain operations (one at 8:09) with no pause opposite the measurement location.	79.3	4.3	64.2/ 86.6
	Between 10:00 and 10:15 (AM Off-Peak)	Primary: Traffic on Alma Street. Secondary: Caltrain operations (one at 10:07) with no pause opposite the measurement location.	76.6	6.5	57.6/ 85.4
	L_{dn} (Estimate)	Using the 3 short-term measurements above	75.0		

Noise measurements were made in the City of Palo Alto at the locations shown in Figure 1 on March 2 and March 8, 2006. Measurement periods were 10-15 minutes in duration. L_{eq} is the average noise intensity during a given measurement period; the Standard Deviation is a measure of the variability of the instantaneous noise intensity during a given measurement period, L_{min} /L_{max} is the minimum/maximum instantaneous noise level during a given measurement period; L_{dn} is the average noise intensity over a 24-hour period with 10 dB added to the noise intensity measured during 10 PM and 7 AM.

Source: EIP Associates, 2006

Table 2 - Palo Alto Noise Measurement Data Separated into Train+Traffic and Traffic-Only Categories

Noise Measurement Location/Time		Portion of Data Used for Noise Level Statistics	Noise Level Statistics (dB)		
			L_{eq}	Standard Deviation	L_{min}/ L_{max}
#1	West of Caltrain tracks; parking lot of California Avenue Caltrain Station. Thursday, March 2, 2006, between 14:26 and 14:43.	During Caltrain operations, includes traffic on Alma Street	79.4	8.3	56.8/ 84.4
		Only traffic on Alma Street; very few vehicle operations in parking lot.	58.8	3.2	48.8/ 75.2
#2	West of Caltrain tracks; end of Page Mill Road. Thursday, March 2, 2006, between 15:24 and 15:40.	During Caltrain operations, includes traffic on Alma Street	80.6	9.1	60.9/ 88.7
		Only traffic on Alma Street; no vehicle operations on Page Mill Road.	58.6	2.2	52.3/ 65.8
#3	East of Caltrain tracks; east sidewalk along Alma Street, across from Station and measurement location #1. Wednesday, March 8, 2006, between 5:25 and 5:40 (Early AM)	During Caltrain operations, includes traffic on Alma Street.	73.1	7.2	50.8/ 81.2
		Only traffic on Alma Street.	65.3	8.0	45.7/ 80.7
#4	East of Caltrain tracks; east sidewalk along Alma Street, near Colorado Avenue, across from measurement location #2). Wednesday, March 8, 2006, between 4:50 and 5:10 (Early AM)	During Caltrain operations, includes traffic on Alma Street.	76.5	8.4	58.1/ 82.8
		Only traffic on Alma Street.	64.1	7.9	43.8/ 79.9

Noise measurements were made in the City of Palo Alto at the locations shown in Figure 1 on March 2 and March 8, 2006. Measurement periods were 10-15 minutes in duration. L_{eq} is the average noise intensity during a given measurement period; the Standard Deviation is a measure of the variability of the instantaneous noise intensity during a given measurement period, L_{min} /L_{max} is the minimum/maximum instantaneous noise level during a given measurement period.

Source: EIP Associates, 2006

The aim of this procedure was to isolate the train noise effect when noise from other sources (i.e., motor vehicles) was relatively low, making any potential reflection effects more apparent, and then to compare the train noise levels at locations with and without a reflective surface present. The data sets selected were the mid-afternoon measurements at Locations #1 and #2, and the early morning measurements at Locations #3 and #4. Comparisons were made only between Location #1 and Location #2, and between Location #3 and Location #4. Had all the measurement locations been equally far from the Caltrain tracks, useful comparisons could have been made between Location #1 and Location #3, and between Location #2 and Location #4. But Locations #1 and #2 were closer to the tracks than Locations #3 and #4, and it would have been difficult to sort out the signature of any reflected noise from the higher noise levels that would be expected at locations closer to the tracks.

For the purposes of this study, the most important conclusions that can be drawn from these data are as follows:

- The major difference in circumstances between Location #1 and Location #2 is the presence near Location #1 of a surface potentially reflective of train noise (i.e., Palo Alto Central's multi-story residential structures with a frontage of several hundred feet along the entire length of the California Avenue station parking lot); in contrast, there is a vacant lot behind Location #2. Comparing the L_{eq} at Locations #1 and #2 during Caltrain operations (i.e., 79.4 dB and 80.6 dB, respectively, in Table 2), one finds a difference much less than the standard deviations of the L_{eq}s. Similar comparisons of the L_{eq}s at Locations #3 and #4 yield similar results. This is strong evidence that there is no significant train noise reflection effect east or west of the Caltrain tracks in the vicinity of the California Avenue station.

- Graphs of the measurement data at Location #4 (see Figures 6, 7 and 8) show that, on the average, motor vehicle traffic noise has a much more influential effect there than train noise, though the highest peak noise (L_{max}) events occur during train operations. These measurements are characteristic of the worst-case noise exposure of the residential neighborhood east of the Caltrain tracks and Alma Street, suggesting that train operations may be the main focus of noise complaints from the residents, even though traffic is the main source of ambient noise.

- The L_{dn} at Location #4, 75 dB, is very high for a residential neighborhood. The US Environmental Protection Agency has found that an L_{dn} less than or equal to 55 dB is "requisite to protect public health and welfare with an adequate margin of safety." The City of Palo Alto's Comprehensive Plan sets a guideline for maximum outdoor noise levels in residential areas at an L_{dn} of 60 dB. Even with account taken of the additional drop-off in noise level due to the setback of homes facing Alma Street, and with the shielding afforded by the Alma Street homes to the residents on the west side of Emerson Street, it is likely that both groups of residents would still experience noise levels above 55 dB L_{dn}. The main contributor to this high noise exposure is motor vehicle traffic, not train operations.

Factors Influencing the Potential for Increased Train Noise Reflection from the Proposed Structures

The following paragraphs briefly discuss the general factors that affect the intensity of noise as it travels outward from common sources. The specific sources considered are on-road motor vehicles and trains.

Noise propagating outward from motor vehicles traveling on a road or from trains traveling on a track behaves as if the road or track were a "line source" of noise energy. The intensity of the noise, as commonly measured in decibels (dBs), decreases as it spreads out into space from this line source. In the absence of any absorption of the noise energy by the air or ground, or without additional attenuation caused by the interruption the direct noise propagation path (i.e., by walls, buildings, terrain features, etc.), the intensity of noise radiating from a long, straight line source would decrease by 3 dB with each doubling of distance from the source. For example, if the noise intensity at 50 feet from a road were 60 dB, it would decrease to 57 dB at 100 feet. When air/ground absorption and path interruption effects become important, as they would with increasing distance between noise source and receiver, the decrease of noise intensity with distance would be greater than 3 dB per distance doubling.

In contrast to the effects mentioned above, reflection can increase noise intensity. For instance, if a wall were erected along one side of a road or train track, the noise energy reflected by the wall would be additive to the noise energy reaching a receiver directly from the source. The size of the additive effect would depend on the characteristics of the wall and on the relative locations of the source, the wall and the receiver. If the wall were very long, very high, very flat, non-energy-absorptive and continuous, if the road or track were long and straight, and if there were no air/ground absorption and path interruption effects, the resultant noise intensity at a receiver location could be much as 3 dB higher than it would have been without the wall. This maximum 3 dB noise enhancement would be experienced at locations far from the road or track; at closer points, the increase would be less.

Although it may appear that noise reflection would always significantly worsen noise exposure, the following two qualifications should be kept in mind. First, the intensities of both direct and reflected noise decrease with distance from the source. Thus, the noise intensity at 1000 feet from a road or railroad track would be much less than at 100 feet, with or without reflection from a wall. For example, if the noise intensity from a road or railway would be 60 dB at 100 feet, it would drop to at least 50 dB at 1000 feet and probably much lower when air/ground absorption and path interruption effects are important. At this low level of traffic/train noise intensity, the increment added by the introduction of a wall near the source would not have a significant disruptive effect at the receiver location. Second, the greater the distance from the primary noise source, road or track, the greater the likelihood that other noise sources in the vicinity of the receiver would dominate the resultant local noise level. For example, if the noise intensity from a road or railway were 47 dB at some distant location, and if the noise intensity there from other closer sources is already 60 dB, the resultant noise level would only be a fraction of a dB higher

than 60 dB (60.2 dB, to be exact). If a wall were added near the road or track, reflection from it would increase the automobile or train noise intensity at the same distant location to 50 dB. However, the resultant noise level would also be only a fraction of a dB higher (i.e., 60.4 dB) than it would have been without the wall. [Note: the resultant noise levels were obtained by applying the accepted rules of decibel addition to the primary and local noise intensity components]

The following conclusions can be drawn from the application of these principles to plans for the future configuration of the PTOD:

- In order for the magnitude of train noise reflected from the future façade of the PTOD to reach the full 3 dB per distance doubling maximum potential, a substantial length of the PTOD frontage facing the Caltrain tracks would have to be built up to a substantial height and consist of a continuous, flat, non-energy-absorptive surface. It is our understanding that measures are proposed to prevent this occurring in the PTOD district. Most of the frontage will remain as it is now: structures of varying heights with varying vertical setbacks and varying horizontal gaps. The new track-side buildings, though they may be somewhat higher than the present average height, would not be as high as the existing Danger Building and they would have varying setbacks and articulation. The reflective potential of the future façade is not likely to increase substantially.

- There is a substantial non-train-related noise effect from Alma Street traffic on the residential neighborhood east of the California Avenue station. Even the train noise reaching the homes facing Alma Street directly from train operations is secondary in comparison to the noise effects of motor vehicle traffic.

- The main source for worsening noise levels in the residential neighborhood east of Alma Street would be an increase in motor vehicle traffic on Alma Street. By providing new residential uses in areas close enough for those occupants to walk to the California Avenue station, implementation of the PTOD would lessen the growth of traffic volumes on and related noise levels along Alma Street.

- Techniques to further reduce future noise increases/impacts in the PTOD could include

  a) The use of absorptive exterior building materials, such as wood, stucco, or coarse concrete, rather than finished concrete or polished stone;
  b) The installation of noise minimizing window treatments (i.e., smaller windows, thicker glass, double glazing, etc.). [Note: this measure would benefit the occupants of the buildings proposed for the PTOD by reducing interior noise from traffic and trains; it would have little effect on noise reflection];
  c) The orientation of buildings and/or windows at angles not parallel to the Caltrain tracks or Alma Street, or with articulation that avoids sustained flat surfaces greater than 100 feet in length.

Figure 2: Palo Alto Train/Traffic Noise
Location #1- California Avenue Station (Parking Lot)

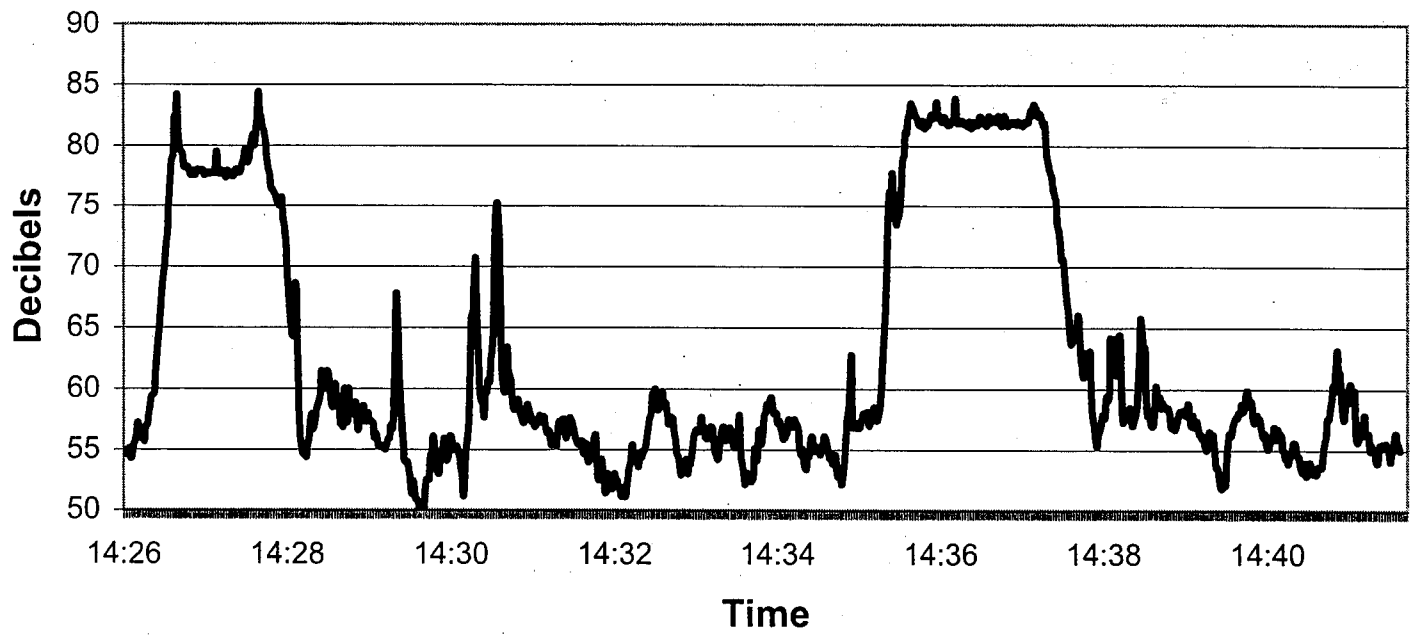


Figure 3: Palo Alto Train/Traffic Noise
Location #2 - South of California Avenue Station

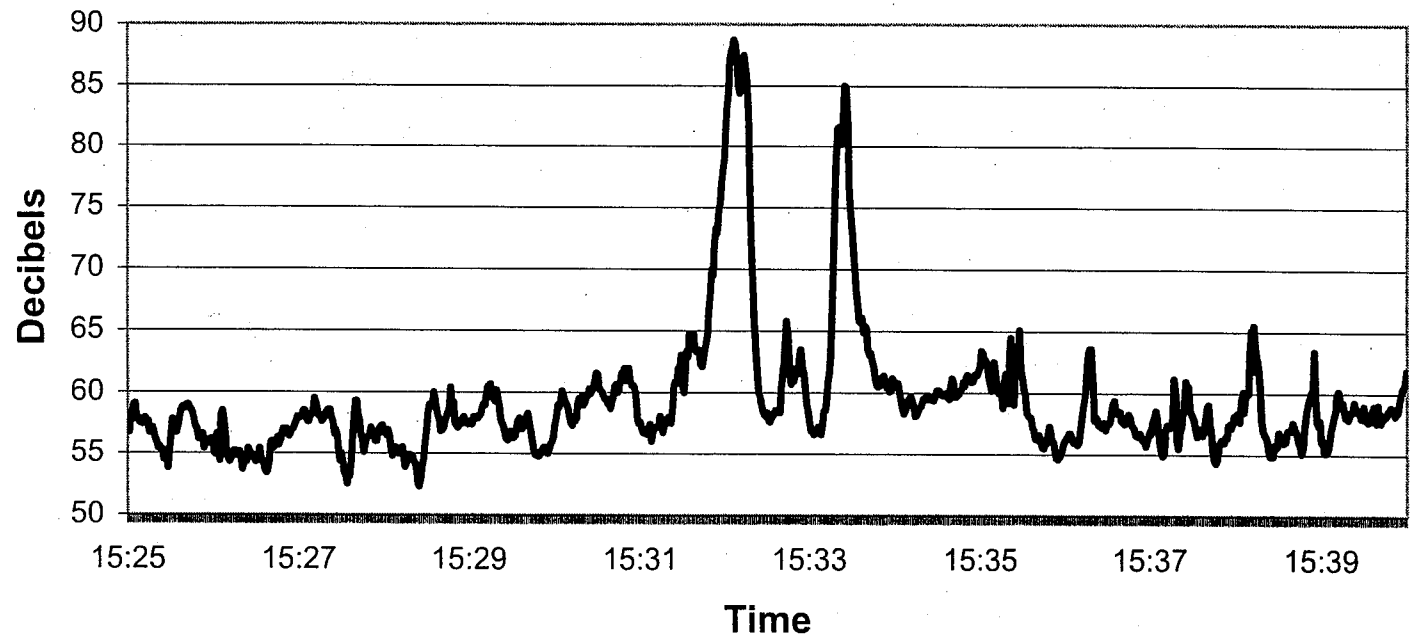


Figure 4: Palo Alto Train/Traffic Noise
Location #3 - Alma Street, Opposite Station (Early AM)

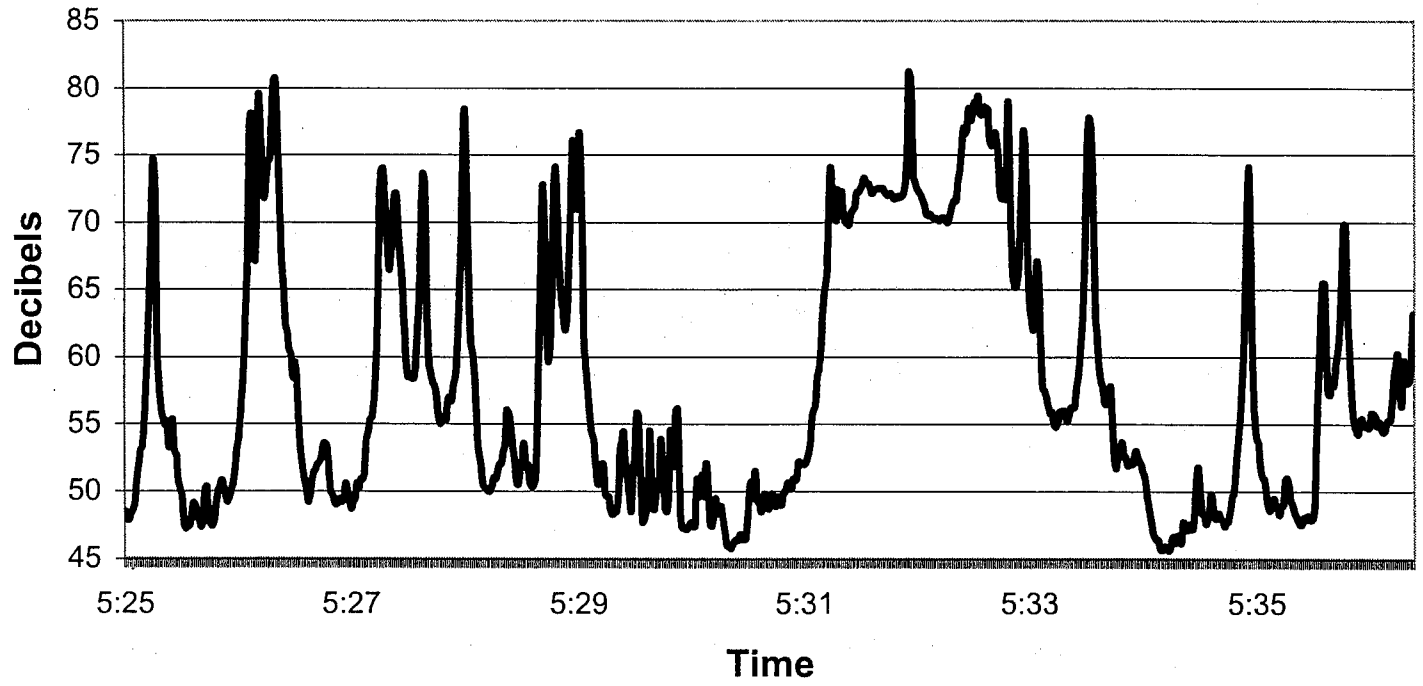


Figure 5: Palo Alto Train/Traffic Noise
Location #3 - Alma Street, Opposite Station (Peak AM)

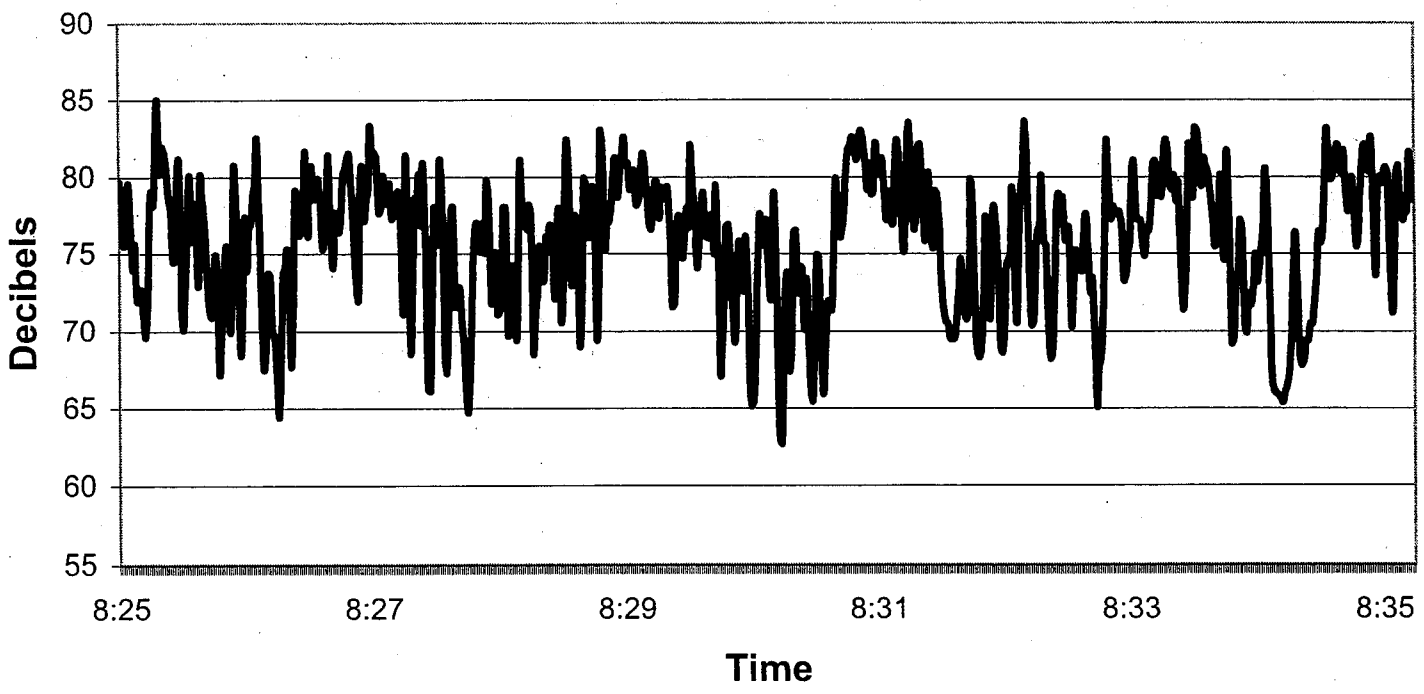


Figure 6: Palo Alto Train/Traffic Noise
Location #4 - Alma Street, Residential Area (Early AM)

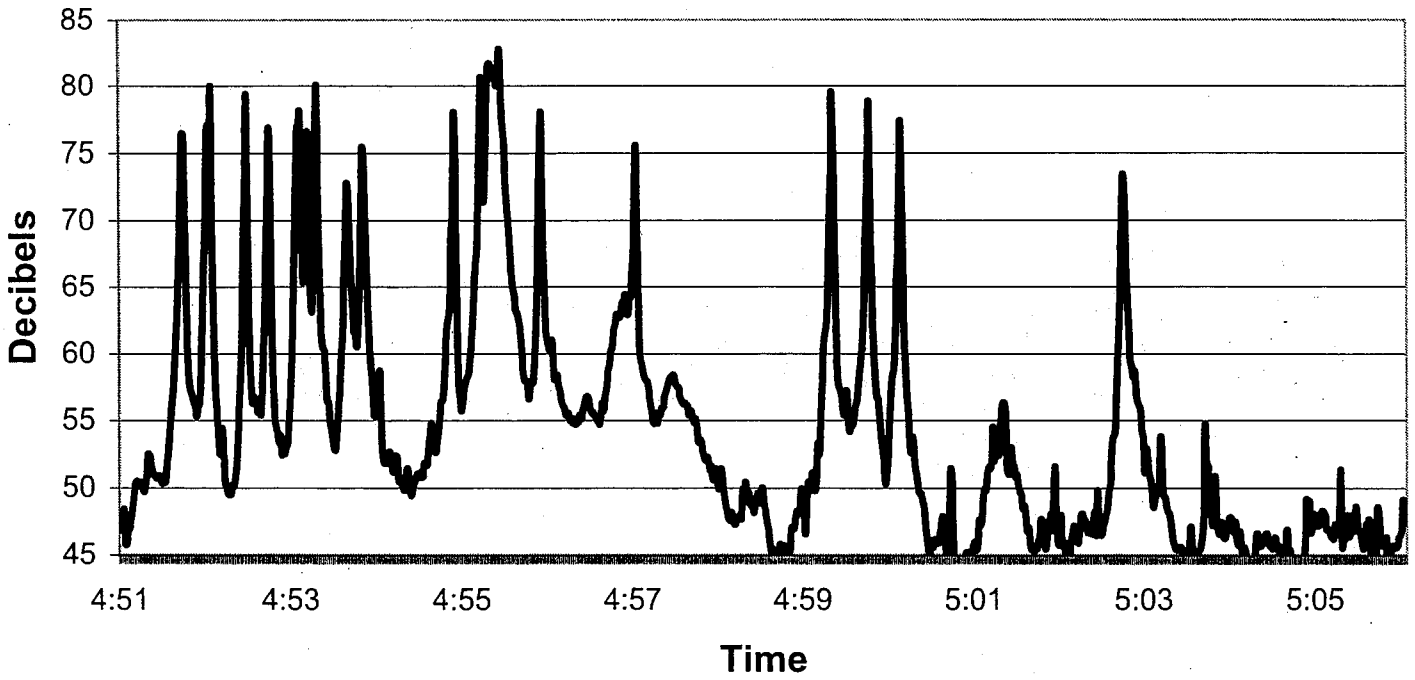


Figure 7: Palo Alto Train/Traffic Noise
Location #4 - Alma Street, Residential Area (Peak AM)

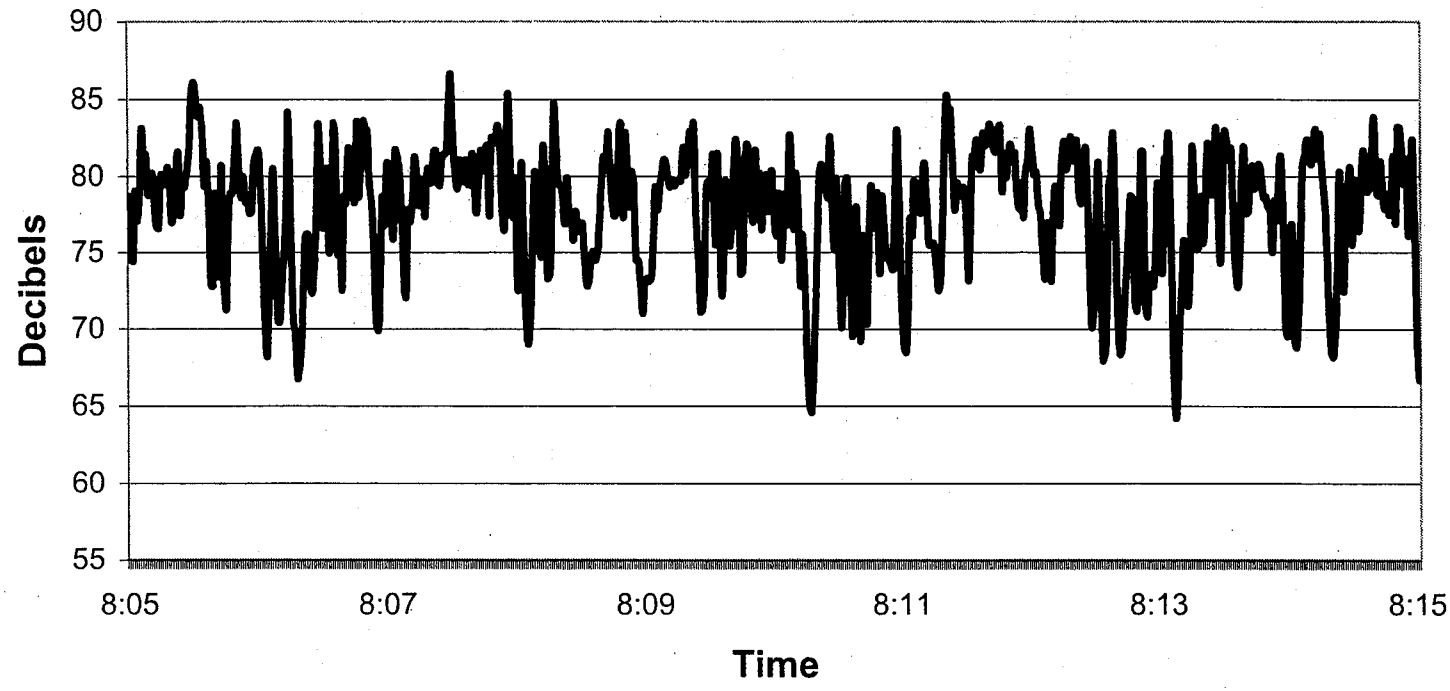
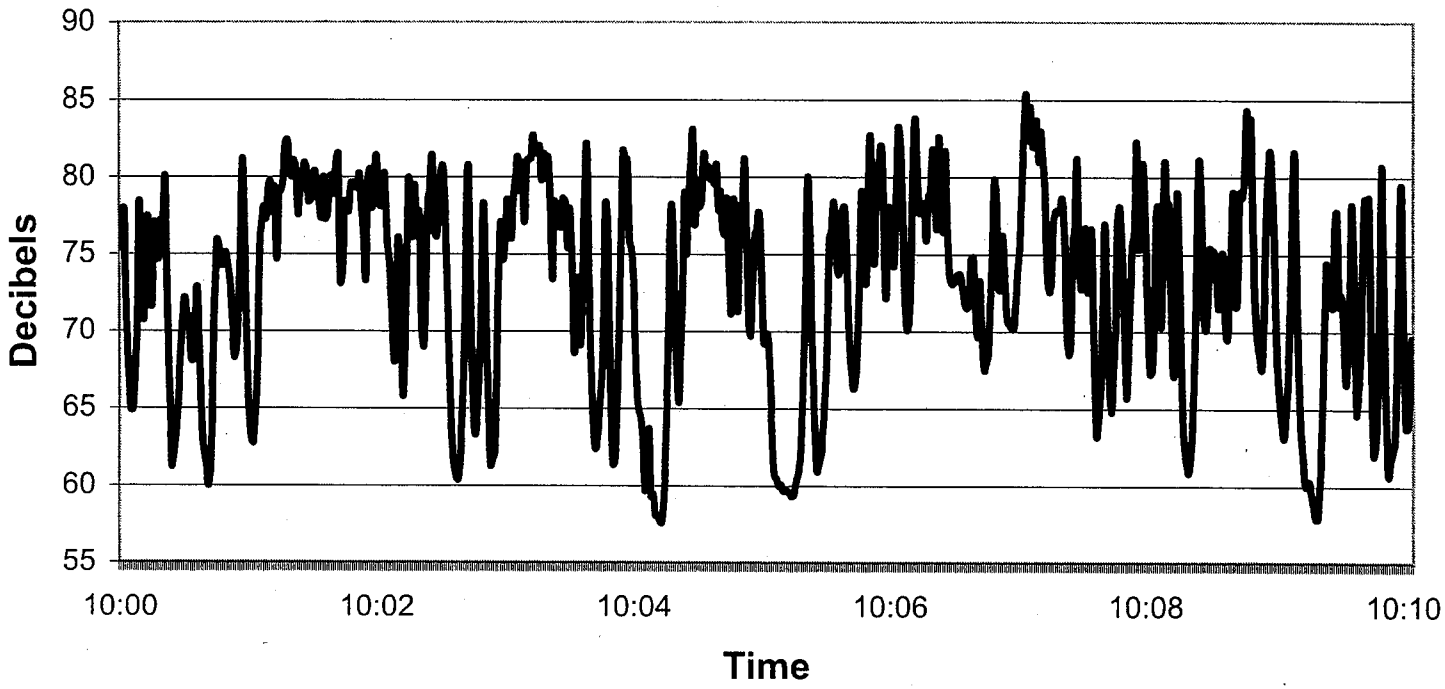


Figure 8: Palo Alto Train/Traffic Noise
Location #4 - Alma Street, Residential Area (Off Peak AM)



Addendum to the City of Palo Alto Comprehensive Plan EIR for the California Avenue Pedestrian Transit Oriented Development Combining District

Pursuant to Section 15164 of the California Environmental Quality Act (CEQA), the City of Palo Alto has prepared an Addendum to an Environmental Impact Report (EIR) for the 1998–2010 Comprehensive Plan because the proposed project, as described below, is considered minor under CEQA; it does not raise important new issues about the significance of impacts on the environment that were not addressed in the Comprehensive Plan EIR and 2002 Housing Element Amendment Addendum. None of the conditions described in CEQA Guidelines Section 15162 requiring a subsequent EIR are applicable.

Adoption of the California Avenue Pedestrian Transit Oriented Development combining district is intended to allow higher density residential dwellings on commercial, industrial and multifamily parcels within a walkable distance of the California Avenue Caltrain station, while protecting low density residential parcels and parcels with historical resources that may also be located in or adjacent to this area. The combining district is intended to foster densities and facilities that:

- support substantial use of public transportation;
- encourage a variety of housing types, commercial retail and limited office uses;
- encourage project design that achieves an overall context based development for the PTOD overlay area;
- require streetscape design elements that attract pedestrians and bicyclists;
- increase connectivity to surrounding existing and planned pedestrian and bicycle facilities; and
- implement the City's Housing Element and Comprehensive Plan.

The primary intent of the PTOD overlay is to encourage a mixture of housing types, including residential densities up to 40 units/acre and, to a lesser extent, to provide for mixed uses, particularly ground floor retail and services to support the residential population. The overlay would also accommodate residential and residential mixed use in the industrial zone, which is now prohibited by the recent zoning change, and would in some cases require a variety of housing types. The objective of the development criteria used for development and design review would allow the city to achieve an area wide pedestrian and transit oriented environment. Some of the basic tenets of the context based design criteria would include the following:

- Pedestrian walkability: minimum sidewalk width, landscape, and streetscape of private development; lighting, street furniture, and how buildings respond to the street.
- Frontage and build-to requirements.
- Connectivity/hierarchy of streets.
- Open space (private/common): Performance-standard approach.
- Compatibility of land uses, including new vs. existing.
- Protection for low density residential and historic buildings.
- Vary housing type with increased lot size.
- Green building and sustainability.

The increases under the PTOD zoning are not substantial compared to prior projections of the 1998-2010 Comprehensive Plan and Housing Element. The primary difference in the zoning today and the PTOD zoning is a shift in emphasis to more residential and mixed use and less non-residential use, along with a focus on pedestrian-oriented design. Also, each site requesting the PTOD zoning will require full discretionary review by the Planning Commission and Council regarding the types and intensity of uses to be allowed. The Fry's site (if proposed under the PTOD District), while not anticipated to be redeveloped within this planning period, would require discretionary review relative to allowable uses and density/FAR, as well as full environmental review, likely an EIR for this large site.

Background

City of Palo Alto Comprehensive Plan

In 1998, the Palo Alto City Council adopted the City's Comprehensive Plan 1998-2010, which, in Program L-14 of the Land Use Element, directs City staff to "create and apply zoning standards for Transit Oriented Residential (TOR) housing." The Comprehensive Plan defines Transit Oriented Residential as follows:

> "Transit Oriented Residential: Allows higher density residential dwellings in the University Avenue/Downtown and California Avenue commercial centers within a walkable distance, approximately 2,000 feet, of the City's two multi-modal transit stations. The land use category is intended to generate residential densities that support substantial use of public transportation and especially the use of Caltrain. Design standards will be prepared to ensure that development successfully contributes to the street and minimizes potential negative impacts. Individual project performance standards will be developed, including parking, to ensure that a significant portion of the residents will use alternative modes of transportation. Net density will range up to 50 units per acre, with minimum densities to be considered during development of new City zoning regulations."

The adoption of the Comprehensive Plan included the certification of the Comprehensive Plan EIR. In 2002, the City adopted the Housing Element Amendment of the Comprehensive Plan and prepared an Addendum to the Comprehensive Plan EIR. The following discussion provides an overview of the Comprehensive Plan EIR and the Housing Element EIR Addendum environmental analysis, impacts and assumptions relevant to the California Avenue Pedestrian Transit Oriented Development (PTOD) area.

The Comprehensive Plan identified a broader area around the PTOD study area, the Cal-Ventura area. The Plan describes the Cal-Ventura area as a mixed use area adjacent to the California Avenue business district, identifiable as a Multi-Neighborhood Center, with a diverse mix of land uses, including retail, service, office, and residential. The Cal-Ventura area was identified as an exceptional opportunity for new transit-oriented residential development due to its proximity to the Caltrain California Avenue train station. For the designation of the Transit Oriented Residential land use, the Comprehensive Plan recommended consideration of a 2,000 foot radius area surrounding the train station.

The Comprehensive Plan Land use assumptions and growth projections account for population growth and anticipated development throughout the city. The Comprehensive Plan does not model full-build out conditions. Instead, projected development outlined in the Comprehensive Plan EIR is based on citywide land use assumptions that were created by assigning reasonable levels of development allowable through the implementation of the Comprehensive Plan Update to each parcel in the City. These assumptions represent a level of development beyond what was forecasted by ABAG as likely to occur, and as such, represent a reasonable worst-case scenario for analysis in the EIR through the year 2010. Additionally the population growth projected for the Comprehensive Plan time period, as further discussed in the Population & Housing section below, has since been significantly decreased to represent current population growth rates. The total assumed growth in the 1998–2010 Comprehensive Plan for the California Avenue-Ventura Area, an area slightly larger than the proposed PTOD boundary, was 309 dwelling units and 102,000 non-residential square feet. Planning approvals since 1998 for this area indicate 81 senior housing units have been approved and built in this overall area.

Housing Element Addendum to the Comprehensive Plan

In 2002, the City Council adopted the Housing Element Amendment to the City's Comprehensive Plan and with it an Addendum to the Comprehensive Plan EIR. The Housing Element Amendment was intended to encourage new housing opportunities, including reinforcing City policies supporting transit use and decreasing automobile use.

The Housing Element Amendment to the Comprehensive Plan identified three Housing Opportunity Sites within or adjacent to the California Avenue study area. Each Housing Opportunity Site contains several parcels and all of the sites in this area are shown in Figure 1. For the purposes of CEQA review, the Housing Element Addendum to the Comprehensive Plan EIR modeled the Housing Inventory Sites, including the ones within the California Avenue PTOD area, at higher densities (up to RM-40 densities) than allowed or existing under the previous zoning. The Housing Opportunity Sites within the PTOD study area boundaries included an additional 135 residential units to be developed by 2010 with a loss of non-residential square feet (exact number was not reported). The senior housing development mentioned above was also located within a housing inventory site, just outside the California Avenue PTOD study area.

The California Avenue PTOD combining district begins to implement Program H-1 of the Housing Element, "to allow for increased housing density immediately surrounding commercial area and particularly near transit centers", but it does not change the zoning, designation or entitle any transit oriented residential development to occur. Individual development applications would still need to rezone and undergo project and design review to apply the combining district.

Zoning Ordinance Update for the Office/Research/Manufacturing Districts

In October 2005, the City Council adopted an update to the Office/Research/Manufacturing zoning districts as part of the Zoning Ordinance Update. As part of these revisions, the City Council prohibited residential development in the GM and GM(B) zoning districts and eliminated the (B) overlay. One of the adopted Housing Opportunity sites (with several parcels) was zoned GM(B), which, prior to the revisions, allowed residential density at up to 30 units per

acre with a maximum 0.5 FAR. By removing residential as an allowable use in this district, the zoning for this Housing Inventory Site is now inconsistent with the City's adopted Housing Element of the Comprehensive Plan.

CEQA Analysis

The following is a description of the proposed Pedestrian Transit Oriented Combining (PTOD) District area. As previously discussed, the adoption of the PTOD combining district does not in itself change any of the zoning or land use designations in the area, nor does it entitle any development to occur. Each individual development and application of the combining district, would require a change in the zoning and land use designation, as well as project and design review. Through this process further project-level CEQA analysis for the development would occur.

The environmental analysis of the PTOD combining district, for the purposes of CEQA, analyzes general land use differences in this area between the existing zoning (as analyzed under the 1998–2010 Comprehensive Plan EIR and Housing Element EIR Addendum), and potential land use intensities to the year 2010 if the PTOD overlay is applied. This represents the net additional change to the study area above what was modeled for the area in the Comprehensive Plan and Housing Element Amendment. Similar to the Comprehensive Plan methodology, the land use assumptions do not represent built-out conditions but do represent a reasonable level of development within the same time frame as the Comprehensive Plan EIR (to 2010) and as such, represent a reasonable scenario for this analysis. The level of realistic potential redevelopment for the area includes proposed or preliminary projects in the review process, as well as anticipated levels of redevelopment for each zoning district.

Applying the California Avenue PTOD combining district will allow for residential development on the Housing Inventory Sites previously adopted with the Housing Element Amendment. To apply the combining district, or "floating overlay" zone, each development would require rezoning of the subject property and would be reviewed by the Planning and Transportation Commission and City Council to determine appropriate uses and intensities of development. The Architectural Review Board and the Director of Planning and Community Environment would subsequently or simultaneously conduct project and design review of the project. Each rezoning application would also be subject to review under CEQA to analyze the specific effects of the project.

Project Setting

Proposed Boundaries of the California Avenue PTOD Overlay Area

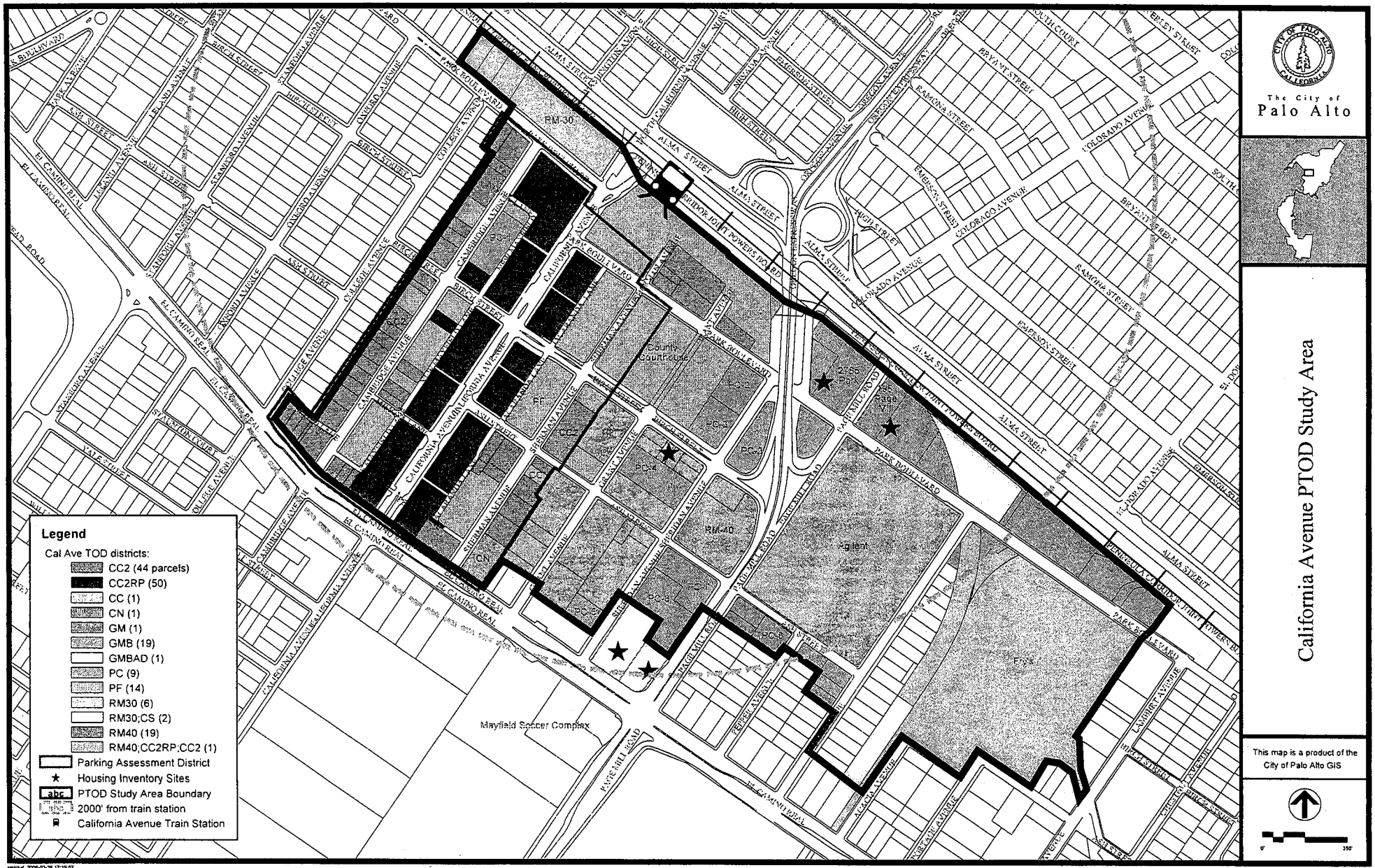
Figure 1 shows the proposed boundaries of the California Avenue PTOD district. This boundary differs in a few key respects from the 2,000-foot radius around the train station, as specified in the Comprehensive Plan in the following ways:

1. The R-1 and other low-density uses are excluded, with the exception of the strip along Olive Avenue north of the Fry's site.

2. The areas east of the railroad tracks are excluded due to the limited access to the train station.
3. The multi-family (RM-30) parcels just north of Cambridge Avenue would remain as transition areas from higher intensities to the adjacent R-1 and R-2 areas.
4. The first row of lots fronting on the eastside of El Camino Real are excluded, since they have an El Camino Real character and are not oriented toward the train station. Lots to the west of El Camino Real are also excluded, since they are limited in number and the most significant lots are already governed by the development agreement with Stanford.
5. The area is extended to the south to include any parcel with a portion of its site within 2,000 feet, and parcels across from Fry's to the corner of Park Boulevard and Lambert Avenue. This area has a direct connection to the train station (maximum 15 minutes walk) via Park Boulevard. Park Boulevard is a relatively pedestrian-friendly street that could be further enhanced through added design criteria. This boundary extension also allows the City to provide housing opportunities for key redevelopment sites, including the Housing opportunity sites and in the future, the Fry's site.

Implementation of the California Avenue PTOD Combining District

The PTOD land use would be implemented through the establishment of the Pedestrian and Transit Oriented Development (PTOD) Combining District, to be applied to parcels within the defined California Avenue PTOD area. Following the adoption of the California Avenue PTOD combining district, owners of individual parcels within the defined area who wish to redevelop can choose to 1) develop under the existing zoning; or 2) change their zoning to add the PTOD combining district and proceed under the related regulations. A change in zoning to apply the PTOD combining district standards would follow the city's defined rezoning process for a parcel, requiring review by the City's Planning and Transportation Commission and approval by the City Council. Major projects throughout the City are also subject to design review by the Architectural Review Board, and projects within the PTOD Combining District would be subject to additional design review criteria to address the pedestrian and transit oriented nature of the area.



The environmental impacts of the adoption of the PTOD Combining District were previously addressed by the 1998-2010 Palo Alto Comprehensive Plan Update Final EIR, which was adopted by the City in July 1998, and the Housing Element Addendum to the EIR, which was adopted by the City Council in 2002. Specifically, the following impacts were reviewed and found to be adequately considered by the Comprehensive Plan EIR and Housing Element Addendum:

Land Use & Planning	Aesthetics	Air Quality
Biological Resources	Cultural Resources	Geology & Soils
Hazards & Hazardous Materials	Hydrology & Water Quality	Noise
Population & Housing	Public Services	Recreation
Transportation & Traffic	Utilities & Service Systems	

Elements that have been determined to clearly have no impact such as Agricultural Resources and Mineral Resources are not further discussed here. The attached environmental analysis completed for this project evaluates and compares each of the above mentioned categories as discussed in the Comprehensive EIR and Housing Element Addendum to the EIR in conjunction with the California Avenue PTOD Land Use amendment.

Land Use & Planning

The primary intent of the PTOD overlay (or combining district) is to encourage a mixture of housing types, including up to RM-40 density developments (consistent with the Housing Element Amendment) and, to a lesser extent, to provide for mixed uses, particularly ground floor retail and services to support the residential population and to create through design criteria a more pedestrian/transit oriented environment. These uses are intended primarily for the multifamily, industrial, and commercial parcels within the defined California Avenue PTOD study area. The overlay zone would allow mixed use development, which focuses mainly on the residential-above-retail type of development, but could include some office use. The non-residential portion within a mixed use development is limited with a floor area cap (0.35) for non-residential. The PTOD overlay also includes design criteria to be utilized in the City's design review process to encourage a high quality pedestrian-oriented street and transit environment within the area.

The following is a general discussion of the proposed changes and how they may affect each type of land use within the area. As previously discussed, zones within the area include commercial (CN and CS), manufacturing/industrial (GM), multifamily (RM-30 and RM-40), public facilities (PF), single family residential (R-1), and planned community (PC) districts. The adoption of the PTOD combining district does not in itself change any of the zoning or land use designations in the area, nor does it entitle any development to occur. Each individual development and application of the combining district, would require a change in the zoning and land use designation, as well as project and design review.

Commercial

Land uses all along California Avenue are commercial in nature and existing zoning allows for a higher floor area/square footage of development for commercial or mixed use developments than would be allowed under the proposed PTOD combining district. It is not anticipated that

properties in the commercial zones would generally add the PTOD combining district, as the application would actually reduce the amount of floor area allowed on a site. The one exception to this in the study area is one parcel (2515 ECR) with Neighborhood Commercial zoning which could develop a mixed-use project under the PTOD District, and therefore this parcel was included in the land use assumptions for potential redevelopment. Additional small commercial space as part of an overall mixed use project may be added to the area. Some uses, when part of a mixed use project adjacent to an existing manufacturing/industrial use may create some land use conflicts, or increased complaints about existing industrial uses in the PTOD combining district study area. Individual development projects would need to address compatibility between proposed and existing uses. A hotel use is also being considered for the PTOD combining district area. Such a development would be subject to its own project level development review and related environmental analysis.

Manufacturing/Industrial

As discussed above, the General Manufacturing (GM) parcels within the area include two designated as Housing Inventory sites in the Comprehensive Plan Housing Element. The recent City Council revisions to the GM district, however, prohibit all residential uses in the zone. The Housing Inventory Sites within the GM district were previously analyzed under the Housing Element Addendum to the Comprehensive Plan EIR, and likely would be first to redevelop into multifamily projects upon the adoption of the PTOD Combining District. Other GM sites that were not designated as Housing Inventory Sites in this area, could redevelop as residential or as mixed use developments by applying the PTOD combining district, with potential increases in residential units but likely reductions in potential non-residential square footage. As discussed in the Housing Element Amendment Addendum, placing housing on industrial sites, near other industrial sites creates some land use conflicts where there may be an increase in complaints related to the adjacent non-residential use. Additionally, some land uses such as daycares near an industrial use would be required to take additional safety measures in building and program development. Compatibility and potential land use conflicts with individual projects is addressed in the City's project and design review process.

Multifamily

The existing multifamily residential (RM) zoning districts within the California Avenue PTOD study area range in allowable densities from 30 to 40 dwelling units per acre. The other Housing Inventory Site parcel is included in these multifamily zones. See Figure 1 for the location of these zones. RM-40 parcels (at up to 40 units per acre) would likely not redevelop to increase density (as the PTOD maximums without state-dictated bonuses would similarly allow only 40 units/acre), but could consider a mixed use development. Such an application of mixed use on an RM-zoned site would decrease the residential density and increase the non-residential square footage on the site. RM-30 zoned parcels (30 units per acre) could apply for the PTOD Combining District to potentially increase the overall density (to 40 units per acre) or to propose a mixed use development. One of the larger Comprehensive Plan designated multifamily sites in the area is the existing Fry's retail site. This site is amortized for the existing retail/office use until 2019, although the Comprehensive Plan designation for the site is for multifamily development. Although the Comprehensive Plan designates this site as multifamily, the likely redevelopment considering the amortization date is not within the timeframe of the 1998 – 2010 Comprehensive Plan. Ongoing long-range planning does consider this as future development site, but not within the timeframe of the Comprehensive Plan. The PTOD overlay and related design criteria have been created with the potential redevelopment of this site in mind (for

connectivity to the site, and to allow potential for mixed use development on this site), so the preliminary planning could begin to occur. As discussed in the Manufacturing/Industrial section above, locating multifamily adjacent to existing industrial uses, may create some land use conflicts resulting in increased complaints about the existing industrial uses. Multifamily projects seeking to redevelop on such parcels would need to address in the project and design review process ways to make the uses more compatible with each other. A new land use type that is being considered with defined development standards are Live/Work units.

Public Facilities

Public Facilities in the area include City and County facilities such as City-owned parking lots, the County Courthouse and the County Mental Health facility. Most of these uses are not anticipated to change with the potential application of the PTOD combining district. An exception would be the potential redevelopment of the City parking lots to include housing or mixed use (while still providing public parking on-site). The Comprehensive Plan and the Housing Element both include programs to encourage the development of housing on parking lots. Because most of the parking lots are within the parking assessment district, any redevelopment of a city parking lot would require such a development to provide for additional parking and replace existing parking either on-site or at another nearby parking lot.

Single Family Residential

The PTOD boundary area cannot be applied to single family or low density residential zoning districts. There is a row of single family residential homes within the California Avenue PTOD study area, along Olive Avenue Such R-1 (Single Family Residential) parcels could consider applying the Village Residential or cottage cluster land use type, when developed in the Zoning Ordinance Update. Village Residential uses may, according to the Comprehensive Plan, allow densities up to 20 units/ acre, but on single family lots these densities would more likely replicate existing cottage cluster development densities at 8 – 15 units per acre. Development to a Village Residential use here would require consolidation of several existing lots, which could be difficult given the different property ownerships. The Comprehensive Plan considered a moderate increase in single family units along this street, which has not occurred to date. As part of the land use assumptions for this analysis, Village Residential development was also considered where common ownership of contiguous parcels occurred.

Planned Community

Planned Community zoning districts within the City of Palo Alto are zoned specific to a certain development, and include a component (public spaces, affordable housing, etc.) defined as a "public benefit." Since each of these zones is specific to the approved development, it is not anticipated that the existing PC developments would apply the PTOD Combining District. Changes to Planned Community zones throughout the city would require zoning change review process similar to that required for application of the PTOD combining district.

Summary of Land Use Changes

The 1998 – 2010 Comprehensive Plan EIR projected 309 dwelling units and 102,000 non-residential square footage in the Cal-Ventura area. The 2002 Housing Element Amendment, within the proposed California Avenue PTOD study area proposed changing the zoning for several parcels in two Housing Opportunity Sites, adding 135 additional residential units to this area. The California Avenue Pedestrian Oriented Development combining district project an

additional (above Comprehensive Plan and Housing Element projections) 67 – 72 residential units could be added, and non-residential square footage reduced from previous projections.

Table 1: Existing Comprehensive Plan & Housing Element Amendment Projected Growth (to 2010)	
1998-2010 Comprehensive Plan growth for the Cal-Ventura Area:	+309 dwelling units and +102,000 non-residential square feet.
Housing Element Amendment within the California Avenue PTOD combining district:	+ 135 dwelling units
Comp Plan & Housing Element Total	+444 dwelling units & +102,000 non-res sf
Cal Ave PTOD (to 2010) Potential Land Use Development Summary Table	
GM(B) zones not on Housing Inventory	+44 to +48 dwelling units & -11,555 to -25,555 nonresidential sf
GM(B) zones on Housing Inventory	-33 dwelling units & -41469 nonres sf (with 2 developments occurring development of Page Mill ROW will not occur & one proposed project is a mixed use project)
PF	+34 dwelling units & +18,697
RM-30	+4 to +5 dwelling units & +5,271 (although some existing use may be nonres)
RM-40	No density change (even though units are lost with mixed use development) & +29,910 sf non-res
CN	+12 dwelling units & -1,114 sf non-res
R-1 (If VR applied)	+6 dwelling units
Potential Incremental Change (over Comp Plan and Housing Element) for California Avenue PTOD	**+67 to +72 dwelling units; -260 to -14,260 sf non-residential**

Note: Methodology for density estimates is consistent with that used for the Housing Element Amendment. A larger number of units, particularly with adopted state legislation, may be approved on any site when consistent with the Comprehensive Plan, zoning, building and state law.

- As shown in Table 1 above, the incremental increase in residential units in the California Avenue PTOD study area (above the Comprehensive Plan and Housing Element Amendment projections), is 67 – 72 residential units, with an overall loss on non-residential development of 200 – 14,260 square feet.
- This represents a 16% increase in residential units relative to the Comprehensive Plan EIR & Housing Element Addendum for the Cal-Ventura area.
- PTOD combining district could introduce residential/non-residential mixed use developments within the California Avenue PTOD study area.
- Additional commercial development in the area would be limited to that allowed in a mixed use development, and overall there will be an incremental decrease in non-residential square footage. Any new commercial, retail or office square footage would be limited in size and supplemental to the existing California Avenue commercial. The PTOD combining district, where applied, is not intended to compete with the existing California Avenue commercial center.

- As discussed in the Housing Element Addendum, some land use conflicts may occur between multifamily and to a lesser extent commercial uses (in mixed use projects) and the existing industrial land uses along Park Boulevard.
- The Comprehensive Plan encourages the development of housing on parking lots. The City has several public parking lots in the area that if the existing parking could be replaced may accommodate residential or mixed use development.
- Single family residential zoning districts, even within the PTOD combining district area may not apply the combining district. Single family parcels may, however, consider a Village Residential, or cottage cluster type development when that land use is defined through the Zoning Ordinance Update.
- The primary difference in the zoning today and the PTOD zoning is a shift in emphasis to more mixture of housing types and neighborhood serving mixed use with a focus on pedestrian-oriented design.

Aesthetics

As discussed in the Comprehensive Plan, the City of Palo Alto is committed to the preservation of its historic heritage, visual and aesthetic qualities including preservation of protected trees and committed to design review on a majority of projects throughout the city. The City has an Architectural Review Board and Historic Resource Board that conducts design review for all new commercial, mixed use and multifamily residential development.

According to the Comprehensive Plan, the view of California Avenue from the train station (along California Avenue to El Camino) is identified as a view corridor. As previously discussed, the commercial land use around California Avenue is not anticipated to change with this project as the existing zoning allows more development and height than if the combining district was applied. Additionally the project focuses primarily on residential and mixed use development in the study area and does not change the existing road right-of way widths or requirements. Therefore, the view down California Avenue is not anticipated to change beyond that allowed under the existing zoning.

The PTOD study area contains parcels that are developed with urban uses and a few vacant parcels surrounded by existing urban development. The area is relatively flat land and does not encroach on any prominent vistas or views. The scale of development within the study area would be consistent with existing land uses and zoning allowances in the area. The proposed 40' maximum building height for the California Avenue PTOD combining district is consistent with the allowable building heights of underlying districts (GM = 50'; RM-30 = 35'; RM-40 = 40'; CC = 50'; CC(2) = 37'). The light and glare generated by residential or mixed use development is comparable to existing land use development in the area. The PTOD would provide for multifamily housing in the GM zone which is located adjacent to the Caltrain railroad line. The PTOD zoning includes design development criteria which requires design, with articulation, setbacks, and material that would address appropriate design and minimize sound reflection to neighboring properties adjacent to the railroad.

If individual properties within the California Avenue PTOD study area change their zoning to apply the combining district occurs in the study area, any proposed redevelopment would be

subject to review by the ARB, including additional pedestrian/transit related findings that are being adopted with this new land use.

Comprehensive Plan Policies that address potential visual impacts for land use include L-4, L-5, L-11, L-18, L-20, L-21, L-29, L-30, L-31, L-36, L-49, L-51, L-52, L-60, L-63, L-69, and L-73. Development of parcels in the area are subject to CEQA themselves and similarly must show their consistency with the Comprehensive Plan, Palo Alto design review standards and the city's tree protection ordinance which all contribute to the visual character of the city. Compatibility of redevelopment in the city and this area is ensured through the application of existing land use and design policies, such as those noted above; the development standards in the existing code and proposed chapter; and the development and architectural review processes within the City.

Air Quality

The City of Palo Alto utilizes the Bay Area Air Quality Management District (BAAQMD) thresholds of significance for project review of potential air quality impacts. BAAQMD is the responsible agency for regulating and providing guidance to jurisdictions for air quality and pollutants of concern. Many pollutants of concern such as carbon monoxide and ozone are regulated on a region-wide basis. The BAAQMD thresholds for projects look at 1) a project's direct contribution to pollutants of concern (those in non-attainment) to the region (most often through additional vehicle trips), 2) where project traffic causes intersections with D or worse to decline further, and 3) for projects that directly add 100 or more vehicle trips, whether those additional vehicle trips cause significant shifts in traffic patterns.

The PTOD combining district does not in itself change land use designations, rezone any land or entitle any development. Development on parcels in the area would still require project level traffic review, and if wanting to apply the Combining district a rezoning and amendment to the Comprehensive Plan designation for the site which would include review by the Planning & Transportation Commission and approval by City Council. When redevelopment is proposed on any parcels in the city, analysis, for the BAAQMD thresholds is addressed.

As further discussed in the Population and Housing section the ABAG population growth assumptions utilized for the Comprehensive Plan EIR have since been updated by ABAG and indicate far less population growth than previously anticipated in the Comprehensive Plan EIR. Additionally, a majority of the anticipated residential growth for this specific area has not occurred to date. Therefore, the incremental residential growth change with the potential application of the California Avenue PTOD combining district is well within growth parameters (ABAG projections) modeled for the Comprehensive Plan EIR.

The implementation of the PTOD combining district boundaries near California Avenue is therefore consistent with the 2000 Bay Area Clean Air Plan which is still the overarching BAAQMD air quality plan for the region. The BAAQMD has added addition ozone restrictions on a regional level to encourage alternative modes of transportation, and continue to modernize the mix of vehicles within the Bay Area. The City also has Comprehensive Plan policies related to encouraging alternative transportation, one of which is increasing residential densities near the two commuter rail stations. The City shall continue to encourage alternative transportation

policies in the Comprehensive Plan and reduce mobile source emissions including for developments that are reviewed near the transit stations.

Defining the California Avenue PTOD combining district area will not directly result in a significant impact in relation to toxic air contaminants or odors. Similar to the discussion in the Housing Element Amendment Addendum, sites developed as multifamily or residential mixed uses near industrial uses could potentially expose more people to potential sources of industrial type emissions. This could result in an increase in complaints regarding odors or emissions and in turn, result in future limitations being placed on remaining industrial uses. Developments will be subject to project and design review for the application of the PTOD combining district which will address compatibility with surrounding land uses.

Biological Resources

The existing land use in the PTOD study area is urban in nature, and all projects would be subject to the City's review process for trees and creeks. Therefore, no impact would occur on species, riparian, or wetland habitat.

The City has a tree protection ordinance and related requirements to address the protection of city street trees, and protected trees such as Heritage trees, Coast Live Oak, Coastal Redwoods, or designated trees on developments. Individual redevelopment projects throughout the city, including the study area are subject to determining what trees are located on or near their property and if any of the protected categories above apply, are required to add tree protection measures during construction and retain most, if not all, protected trees. The City's project and design review process reviews proposed landscaping of new developments, including trees on-site. Individual developments rezoning to apply the PTOD combining district would be subject to additional design review criteria to address the pedestrian (and other alternative modes of transportation) facilities along public and private streets.

Cultural & Archaeological Resources

There are no known archaeological resources located in the proposed PTOD study area. The area, like most of the City of Palo Alto, is designated as a moderately sensitive archaeological area in the City's Comprehensive Plan. The area consists of primarily urban uses with existing development which have previously disturbed the underlying ground with the existing development. In the event, however, that future individual development projects uncover any cultural, historic resource or human remains, standard County, state and tribal regulations would require construction activities be halted until the appropriate County, state, or tribal review can occur.

There are also no Category I or II historic resources listed in the PTOD study area; however, there are some properties identified in the Dames & Moore report that have been identified as potentially eligible for the state or national list of historic resources. Many of these are located on California Avenue, where as discussed in the land use section, developments would not likely apply to change their zoning to the PTOD combining district. The Dames & Moore report assessments are preliminary, and only after each property has been thoroughly surveyed and researched can complete evaluations be made for eligibility to the national or state lists.

The PTOD overlay does not change zoning, land use designations or entitle any development to occur within the boundary areas; therefore it does not directly impact any cultural or archeological resources in the study area. Any redevelopment in the area would be subject to additional CEQA review. If a building found to be eligible for either the National or State Register is identified on or adjacent to any proposed development throughout the city, the following measures could be required (depending on the resource):

- Following the Secretary of Interior's Standards for the Treatment of Historic Properties with the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating historic buildings per CEQA Guidelines Section 15064.5(b)(3); or
- Feasible measures to mitigate significant adverse changes in the significance of an historic resource could be adopted through fully enforceable permit conditions, agreements, or other measures (CEQA Guidelines Section 15064.5(b)(4)).

Geology and Soils

The City of Palo Alto is located in the seismically active San Francisco Bay Area and is subject to earthquakes as well as ground shaking potential ranging from "strong" to "very strong". The PTOD study area is not on or near any earthquake fault lines. The area is relatively flat and is not subject to, or near any area that may be subject to landslides, subsidence nor liquefaction zones. The area does not noted contain expansive soils, or soil that is otherwise unstable. The Comprehensive Plan includes goals and polices to address geology and geotechnical hazards including earthquakes, flooding and fire. Policies typically focus on emergency preparedness. The City also minimizes hazards through the strict enforcement of the seismic restrictions of the Uniform Building Code. Individual development projects are subject to project review which includes review for consistency with the Uniform Building Code by the Building Department.

Significant soil erosion or loss of topsoil would not occur with the application of the California Avenue PTOD combining district boundaries. The area is urban in nature and largely covered by impervious surfaces. The Final Comprehensive Plan EIR indicates that soil erosion or loss of topsoil are adequately mitigated with Comprehensive Plan policies and goals such that expansive soils, liquefaction, subsidence, lateral spreading, or collapse will be avoided.

Hazards & Hazardous Materials

The California Avenue PTOD study area is primarily an urban area with a mix of multifamily, commercial, public, and industrial land uses. For hazards, the application of the combining district does not impact any of the existing evacuation routes, reservoirs or fire stations in the area, nor increase flooding potential in the city. As the area is redeveloped, wastewater lines and connections through upgrade, can actually improve local storm drainage conditions. As discussed in the Housing Element Addendum, industrial sites that convert to housing or other uses may be exposed to any hazardous materials on adjacent industrial sites. The redevelopment sites may also contain historical or underlying hazardous materials. In general changing the development in an area from industrial to residential reduces the potential risk for hazardous material exposure in an area because new residential development would be required to meet

current County and State hazardous materials regulations. The Comprehensive Plan contains many policies and programs to mitigate potential hazardous material users to prevent spillage/contamination. The City has permitting procedures for commercial and industrial storage for hazardous materials, including verification that all applicable codes are met. Defining the combining district area does not zone, designate or entitle any development within the boundary areas to redevelop, therefore it does not directly impact any potential Hazardous Materials in the study area. Any redevelopment in the area would be subject to its own review that includes a full disclosure of past uses and inventory of hazardous materials that were potentially used on the site (Phase I environmental assessment), depending on the age of the building a lead and/or asbestos material survey and where appropriate Phase II assessments and Hazardous Materials Management Plan.

The 1998 – 2010 Comprehensive Plan Flood Hazards Map indicates the southern edge of the California Avenue PTOD study area at the time of the Comprehensive Plan contained an area subject to flooding during a 100 year event near Matadero Creek. The flood zone partially covers the Fry's site and the last GM parcel within the boundary area along Park. Since the Comprehensive Plan, the Santa Clara Valley Water District has conducted significant improvements of Matadero Creek to address flooding concerns. With the improvements, that have been completed, this area is no longer considered in danger of flooding during a 100-year flood event and the designation of the area by FEMA as a flood hazard area will soon be removed.

Hydrology & Water Quality

The California Avenue PTOD study area is an urbanized, built out area, covered in large part with impervious area. Defining the potential application of the PTOD combining district does not zone or entitle any development to occur in this area. Therefore no direct impacts to Hydrology and Water Quality will occur. Individual properties that rezone and apply for the PTOD combining district will be subject to project level review and required to meet current City/regional storm water regulations which require greater storm water retention on a development site than in the past. Projects subject to design review and located near creeks must address as part of the compatibility and sustainability design criteria the protection, where applicable of the creek. Further, all new development will be required to comply with the goals, policies, and programs of the City's Natural Environment Element which seek to protect the City's water quality and protect its riparian habitats.

Noise

According to the Comprehensive Plan Analysis and projections, exterior noise levels in the California Avenue PTOD study area range from 65 dB to 70 dB Ldn. These noise levels, as shown in the Comprehensive Plan for this area, do not significantly change when projecting future noise contours. Major noise sources throughout city, as described in the Comprehensive Plan include traffic noise, railroad noise, electrical substations, and the Palo Alto Airport. In general, this area is in exceedance of the residential goal for exterior noise Ldn of 60 dB. However, the Comprehensive Plan acknowledges that this goal cannot be met throughout the city. Therefore, the outdoor noise environment on multifamily developments shall be evaluated on a case-by-case basis and where a 60dB Ldn level is not feasible, the goal may be lessened for

related outdoor areas. The Final EIR for the Comprehensive Plan and the Addendum for the Housing Element Amendment recognize that existing and new development adjacent to major noise sources, such as the railway, could be exposed to unacceptable noise levels.

As previously discussed, defining the potential application area of the California Avenue PTOD area does not rezone any parcel to apply the combining district, nor entitle any development to occur. Individual projects and rezonings within the combining district would still be subject to further analysis, including potential noise impacts, and require review and approval by the City Council. Therefore, defining the California Avenue PTOD area does not directly increase noise levels in the area. Redevelopment of sites in the area, depending on whether the overall traffic to and from the site is reduced or increased, may increase noise levels along local streets as a result of traffic. However, since potential sites in the area are already developed, particularly with commercial and industrial uses, a change to residential may decrease the ambient noise environment. Increases in ambient noise levels, if any, would likely be insignificant in comparison to the overall ambient noise environment. The State of California determines the insulation standards required for indoor noise levels which are required to be met by multifamily developments.

Some community members have expressed concern regarding the noise environment in the area and potential impact of increased heights and design along the west side of the train station. This is not a significant increase from the Housing Element Amendment designations or height limitations under existing regulations for these parcels. Individual developments as discussed above must conduct analysis including noise and meet noise regulations for redevelopment. Using the PTOD contextual based design criteria, the city through its existing project and design review can address noise levels and design alterations that could aid in further deflecting noise, but the ambient noise levels in the area will remain as projected with the Comprehensive Plan.

Population & Housing

The PTOD overlay area includes a potential incremental increase of 67-72 additional housing units above what is already anticipated under the Comprehensive Plan and Housing Element projected residential growth for this area. This residential growth is still within the land use growth alternatives evaluated by the Comprehensive Plan Final EIR. The ABAG population projections used for the Comprehensive Plan EIR are far higher than similar ABAG adjusted population projections that have since occurred. For example, the Comprehensive Plan EIR (using ABAG projections at the time) estimated Palo Alto's population would increase to 81,100 by 2010. Adjusted current projections indicate 63,500, a significantly smaller increase.

Therefore the slight increase of 154 -166 additional persons (using Census data of 2.3 average household size) would still be well under the population modeled for the Comprehensive Plan EIR. Using current projected population growth levels, that is an approximate 2% increase in the next 5 years in this area. The Comprehensive Plan contains policies and programs to reduce the jobs/housing imbalance in the city by providing more housing, particularly near the existing transit stations. The reported jobs/housing in-balance in the city for 2000 was 2.77 jobs in the city for every Palo Alto resident. More housing has been provided in the City since 2000, and a preliminary estimate of the 2005 ratio is 2.43. But this is still far above the jobs/housing balance many cities strive for. A 1.0 jobs/housing ratio would indicate a balance, but many cities strive

toward jobs/housing balance slightly higher in jobs, such as 1.5. The proposed California Avenue PTOD overlay, where applied by individual properties, would in general reduce the amount of non-residential square footage and possibly related jobs and slightly increase the number of residential units in the area. New multifamily residential developments are required to provide units or contribute to the City's Below Market Rate Program. For developments less than 5 acres in size there is a 15% BMR requirement. The City of Palo Alto is still deficient in below-market rate housing, particularly moderate income units in the city.

Public Services

The Final EIR for the Comprehensive Plan identified and adopted a statement of overriding considerations for one significant unavoidable impact related to Public Services (schools). . All other impacts to public services were less than significant or could be mitigated to less than significant levels. As discussed in the Population and Housing section, the projected population growth utilized for the Comprehensive Plan was far greater than updated projections indicate. The potential application of the PTOD Combining District within the California Avenue study area will have only incremental (less than significant) public service impacts as discussed in the Comprehensive Plan and Housing Element Amendment Addendum and be well within those analyzed in the Comprehensive Plan EIR.

The significant unavoidable public service impact adopted with the Comprehensive Plan EIR related to projected growth in the City at the time and anticipated overcrowding in the Palo Alto School District. The Palo Alto School District (PAUSD) is in the process of updating its District-wide student enrollment forecasts and is receiving data on potential land use development from the City including known developments within the California Avenue Pedestrian Transit Oriented Development Combining district area. The PAUSD enrollment projections consider overall population growth and patterns, migration into and out of the area, as well as planned housing developments. The last student enrollment projections (2003) indicated that new housing development throughout the city actually produced fewer than expected students.

Considering the projected incremental growth within the California Avenue PTOD study area, new residential units in the area could be purchased or rented by households with or without school-age children. . Anecdotal reports from realtors of market-rate for sale units indicate that those units are sold more to single or two-person households (of varying ages) than families. According to citywide Census data approximately 27% of households have school age children (children under the age of 18) with an average family size of 2.95. Using that Census data, approximately 20 of the 72 projected units could have school age children. Alternately, using generation rates from prior housing developments, the number of students generated would range from 17 – 33 additional elementary, middle and high school students.

The PAUSD charges a school impact fee for new residential and commercial development with residential development having higher impact fees ($2.24/square foot of residential versus $0.36/sf of commercial development).

As indicated in the population and housing section, the population projected for the Comprehensive Plan EIR was far greater than current population projections. The approximately

2% growth of the adjusted ABAG projections that would result from the projected number of units would not represent significant additional demand on schools or other public services. For other public services, such as fire and police the growth would be within those projected and less than the demand anticipated and analyzed with the Comprehensive Plan.

Recreation

The City of Palo Alto has approximately 4,350 acres of park area. Within the California Avenue PTOD study area, there is one city park, Sarah Wallis Park. Other nearby parks include Bowden (accessible through the pedestrian/bicycle railroad underpass), Boulware Park, Peers Park and to a lesser extent (not within walking distance) College Terrace parks and Stanford University facilities. Soccer fields are also under development for the corner of Page Mill and El Camino Real. The City's ratio of parks to population is currently 6.72 acres/1,000 residents (after subtracting out open space parks such as Foothills, Arastradero, & Baylands). This far exceeds the city-wide goal of 2 acres of park per 1,000 residential population. The City collects community impact fees from all new developments in the city which includes a park impact fee to plan for addition park facilities. Additionally, individual developments would be subject to City design review which examines the amount and quality of open space provided with multifamily and mixed use developments.

Transportation & Traffic

Major streets within the study area include California Avenue, Park Boulevard, and Page Mill Expressway. California Avenue and Park Boulevard are classified in the City's Comprehensive Plan as collector streets that mostly serve local traffic and provide access to adjacent properties. Page Mill is classified as an expressway which mainly serves through traffic and has limited access to adjacent properties.

There are traffic calming devices provided on Park Boulevard including an in-pavement lighted crosswalk at Page Mill Road, and bulbouts that help regulate the on-street parking.. There is also a half-closure provided on Park Boulevard to the south of Lambert Avenue. This closure prevents commercial related traffic, including traffic generated by Fry's, from proceeding south along the residential street segments. The aforementioned traffic calming devices will remain and additional devices may be considered as developments are proposed on this collector street.

Park Boulevard is designated as a Class II bike route (i.e., has bike lanes) connecting to other bike routes that serve Stanford and other major traffic generators. California Avenue is also designated as a bike route with bike lanes provided to the east of Alma Street and to the west of El Camino Real There is a dedicated bike route connecting the California Avenue Caltrain station to the University Avenue station. There is a pedestrian/bicycle railroad undercrossing presently provided at the California Avenue train station. There are future long-term plans to reconstruct this undercrossing to become ADA compliant which would provide an improved connection with communities to the east of Alma Street. To implement this project, the City will seek potential funding opportunities through grants and cost sharing by VTA and Caltrain. Any improvements to the streets design, including additional traffic calming measures when feasible, would need to retain and if possible improve upon bicycle facilities in the area.

At the California Avenue train station, Caltrain commuter trains presently average about 2 trains per hour during peak and non-peak hours. Caltrain conducts annual boarding surveys, and the last (2005) California Avenue station survey indicates on an average weekday 839 people board trains at this station. Based on this survey, the station was ranked by boardings as 11th, less than such stations as University Avenue (ranked 2nd), Redwood City (ranked 7th) and greater than such stations as San Carlos (ranked 12th) and Burlingame (ranked 15th). According to Caltrain, the California Avenue station has maintained a steady ridership.

The California Avenue Caltrain station is served by both Stanford and Santa Clara Valley Transportation Authority (VTA) buses. The Stanford University Marguerite Shuttle system includes one fixed bus route servicing the Stanford Campus every 20 minutes. The Marguerite system also has the Stanford Research Park shuttle with service every 20 minutes during peak travel times. The VTA bus route 88 runs throughout the day (every 20 minutes during peak periods) providing service between the California Avenue and University Avenue train stations. This bus also provides a connection to El Camino Real. Express bus 104 travels along the adjacent segments of Alma Street and serves through traffic on Page Mill Expressway and State Highway 101(via a connecting route that runs on Charleston Road, San Antonio Road and Old Middlefield Way). There are a range of local, regional and express buses on El Camino Real, approximately a 10-15 minute walk from the California Avenue train station. One such route, VTA bus route 22, provides 24-hour service every 10-15 minutes traveling between San Jose and Menlo Park.

The City has Comprehensive Plan policies related to encouraging alternative transportation, one of which is increasing residential densities near the two commuter rail stations. Although the title "Pedestrian Transit Oriented Development" appears to focus on pedestrian and transit facilities', it references a type of land use development that encourages a mix of uses and alternative transportation modes, including trains, buses, bicycling and walking. Additionally consistent with Comprehensive Plan goals, employers and multifamily developments, particularly in the PTOD combining district should be encouraged to develop transportation demand management (TDM) programs and consider purchasing Caltrain's GoPass and/or VTA's EcoPass for employees and residents.

The Transportation Chapter of the Final EIR of the Comprehensive Plan identified and adopted a statement of overriding consideration for several significant unavoidable traffic-related environmental impacts as a result of the implementation of the Plan's policies and programs. As previously discussed in the Land Use section, the Comprehensive Plan included policies and programs to increase residential density near the commuter rail stations, including California Avenue. For traffic, the adopted Comprehensive Plan EIR significant unavoidable impacts included:

- Loss of automobile travel lanes by accommodating bicycle travel could reduce opportunities to relieve traffic congestion, or increase traffic congestion in some areas.
- Choosing not to create additional roadway capacity.
- Forgoing intersection improvements in favor of pedestrian and bicycle safety.
- Significant decreases in the Level of Service at the intersections listed below under the Plan's 2010 horizon year:

  - El Camino Real/Page Mill Road (LOS D to LOS F).
  - Middlefield/San Antonio (LOS D to LOS F).
  - El Camino Real/Arastradero/Charleston (LOS D to LOS E).
  - El Camino Real/San Antonio (LOS D to LOS E).
  - Alma/Charleston (LOS D to LOS F).
  - Embarcadero/East Bayshore (LOS E)
- Traffic volumes on some local residential streets may increase significantly due to future congestion on adjacent collector and arterial streets.
- Several non-residential arterial streets and expressways are projected to have significant and unavoidable congestion impacts at several major intersections.
- Increased traffic would exceed one percent of existing capacity of Highway 101, which currently maintains LOS F peak hour conditions.
- Increased traffic would result in overall adverse impact on bus service and bicyclists.

Not all of the traffic-related impacts in the Statement of Overriding Considerations would apply to the California Avenue PTOD study area, and as indicated above some are policy, not project related decisions. It should also be noted that traffic volumes along the Palo Alto street network were generally decreasing between years 1999 and 2004. For example, the El Camino Real intersections referenced above are still operating at LOS D under existing traffic conditions. More updated land use data for year 2010 (based on regional land use growth provided by VTA and known projects within Palo Alto) was recently incorporated in the City's traffic model. This resulted in 2010 volume forecasts and associated levels of service that differ from the Comprehensive Plan projections. For example, the intersection of Middlefield/San Antonio would operate at LOS "E" under the 2010 traffic conditions. In addition, the operational LOS along the Embarcadero and the Charleston-Arastradero corridors would improve through the deployment of adaptive signal control systems.

The estimated increase of new residential units and decrease in non-residential square footage within the California Avenue Pedestrian Transit Oriented Development overlay area would not constitute a significant increase when considering the applicable significant unavoidable traffic impacts adopted with the Comprehensive Plan EIR, in particular the level of service projections at the high capacity El Camino Real/Page Mill Road intersection. As noted earlier, there is a potential increase of 67-72 residential units. Using general apartments as an average approximation for the different residential densities, these units would generate an additional 450 - 484 daily trips (at an average rate of 6.72trips/day/unit), or 34 – 37 trips during the a.m. peak period (average rate on the adjacent street of 0.51 trips/unit) and 42 – 45 trips during the p.m. peak period (average rate on the adjacent street of 0.62 trips/unit). These trips would then be distributed and assigned to the streets in the California Avenue PTOD study area. An overall loss of non-residential square footage in the area could represent a loss of employees and related vehicle trips. Such reduction in traffic volumes is dependant on the type and size of land use replaced, and would be considered during project review of any proposed project. However, again it can be concluded that the assessed increase of residential developments in the area is not a significant additional impact over what was modeled for the Comprehensive Plan and Housing Element Amendment. Additionally much of the projected growth and developments modeled under the Comprehensive Plan have not occurred to date.

Defining the potential application area for the California Avenue PTOD overlay does not change the zoning, designation nor entitle any development to occur within the area. Individual development projects would undergo further analysis, including related traffic impacts of a development. The potential additional residential units within the overlay area would replace existing development in the area and the conversion of non-residential to residential typically results in a decrease of average peak hour trips and residential development has a "reverse commute" as compared to many non-residential uses. Existing policies within the Comprehensive Plan address operational levels of service, such that development needs to be consistent with the City's traffic level of service policies (H-4). Program H-5 allows for increased densities near transit stations where project makes use of transit facilities and will not significantly worsen existing traffic levels of service on nearby intersections.

The California Avenue Caltrain station has a park-and-ride facility. In addition, there are a number of public parking lots in the area as part of the California Avenue parking assessment district. This includes Lots C-1, C-2, C-3, C-4, C-5 and C-9 along Cambridge Avenue (a total of over 500 parking spaces), as well as lots C-6, C-7 and C-8 along Sherman Avenue (a total of over 400 spaces). The PTOD combining district would not change the operation of the California Avenue parking assessment district. Any redevelopment of a public parking lot would require the replacement parking be provided nearby or on the same site. The Comprehensive Plan contains a program to encourage the development of housing over parking lots while maintaining required parking. The PTOD combining district is not changing the existing parking requirements established in the PAMC. However, developments with an average unit size of up-to 1250 square feet may apply to waive a portion of their guest parking requirement, and if applying for existing allowable parking reductions, to waive the landscape reserve requirement where applicable.

Utilities & Service Systems

The Final EIR for the Comprehensive Plan identified and adopted a Statement of Overriding Considerations for one significant unavoidable impact relating to Public Services and Utilities, specifically an impact to the stormwater system resulting from cumulative increase of impervious surfaces into local creek conditions at that time. Since the Comprehensive Plan, several improvements in policies and facilities have been completed to address this impact.

As discussed in the Hazard section, Matadero Creek is located just south of the PTOD combining district area and for the Comprehensive Plan an area just south of Fry's was indicated as being within the 100 year floodplain, with the stormwater system potentially contributing to flooding in the area. Since that time the Santa Clara Valley Water District has made improvements to Matadero Creek, indirectly aiding the stormwater system during flooding and this area will soon be removed as a flood hazard area by FEMA. Additionally, new development must meet current stormwater retention regulations which frequently require all stormwater to be treated and prevented from entering the stormwater system as much as possible.

The Comprehensive Plan EIR examined increased water and wastewater demand for increasing residential densities throughout the City. It also looked at solid waste, electricity and natural gas demand. Demand for these services, using projected development and population growth, could be mitigated to a less than significant level. The application of the combining district does not

rezone, designate or entitle any development to occur and individual developments would still be subject to project, site and environmental review. Therefore, adoption of the California Avenue PTOD district would not have directly impact utilities and other service systems provide. Additionally, the projected incremental growth would be within available, water, wastewater, and utilities capacity and within projections utilized for analysis in the Comprehensive Plan EIR.

For a general discussion of the projected residential growth, most of the California Avenue PTOD study area is built out, indicating that the potential residential growth would be replacing existing non-residential demand. Multifamily demand for utilities such as electricity and natural gas may be higher or lower than previous non-residential use, depending on the type of non-residential use. Water and wastewater demand for multifamily use in comparison to industrial or commercial use is typically higher. However, the City has more than sufficient available water and wastewater capacity to service projected housing growth in the city. Additionally, the City has capacity fees to address the increase individual development demand for water and wastewater hookups and the fees are based on facility water use and wastewater demand. Through the project review process the City ensures sufficient facilities are provided and may require developers to upgrade water or wastewater lines where needed to meet flow/capacity requirements for a development.