RESOLUTION NO. 3675

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA PAULA ESTABLISHING GUIDELINES FOR THE PREPARATION OF LANDSCAPE AND IRRIGATION PLANS

CDP. No. : 89-12
APPLICANT: City Initiated

WHEREAS, the City of Santa Paula's General Plan sets standards for compatibility of structures and site plans with neighboring development within all zoning categories and recommends zoning and code provisions which will assure good design and functionality within projects; and

WHEREAS, the City has been limited in assuring that these recommended standards for landscaping are met due to lack of guidelines for the preparation of landscape and irrigation plans; and

WHEREAS, the City Council and Planning Commission have found that the creation of guidelines for the preparation of landscape and irrigation plans will enable the City to assure that projects are attractive and will function well once construction has been completed and will allow the City to disapprove poor quality projects.

WHEREAS, by Resolution No. 2988, the Planning Commission has recommended to the City Council of the City of Santa Paula that the Guidelines for the Preparation of Landscape and Irrigation Plans, attached hereto as Exhibit A and incorporated herein as if set forth in full, be adopted.

NOW, THEREFORE the City Council of the City of Santa Paula hereby approves and establishes these Guidelines for the Preparation of Landscape and Irrigation Plans, attached hereto as Exhibit A and incorporated herein as if set forth in full.

PASSED and ADOPTED this 20th day of March, 1989.

Les H. Maland
Mayor, City of Santa Paula

ATTEST:

Clerk, City of Santa Paula

CITY OF SANTA PAULA INCORPORATED APRIL 22, 1902 VENTURA CO. CAL.

EXHIBIT "A"

CITY OF SANTA PAULA

GUIDELINES FOR PREPARATION OF
LANDSCAPE AND IRRIGATION PLANS

Design Guidelines, Standard Conditions of Approval, and Application Requirements

I. DESIGN GUIDELINES FOR SITE AND LANDSCAPE PLANS:

It is the intent of these guidelines to offer as much opportunity for creativity as possible when designing the required landscaping. The applicant is encouraged to take full advantage of the wide range of landscape materials and designs possible within the framework established by these guidelines. However, merely satisfying the minimum requirements will not insure approval. The Planning Commission is concerned with how the landscape space is used, how it relates to the structures on site and to the surrounding area. The Planning Commission will look carefully at the selection and size of the plant materials, their arrangement and grouping and their appropriateness in relation to the environment and proposed structures. The use of plants and irrigation systems that conserve water will be strongly encouraged, as will the design of landscapes for fire safety. Strong review emphasis will be placed on the appropriate design elements, i.e. stones and other natural materials and structural elements, i.e. decks, walks, patios, etc.

A. GENERAL

1. The Planning Commission will require landscape plans that meet the following percentages of lot landscaped for these land uses:

a.	Industrial	15%
b.	Commercial	20%
c.	Institutional	20%
d.	Office	20%
e.	Residential ....(as specified in the permit)	
f.	Multi-family residential	40%
	plus areas of buffers and streetscape zones	

Landscape percentages shall be computed on the basis of the net site area which includes the area of all structures, drives, walks and parking on the site, but not areas dedicated for public right-of-way. Perimeter and interior parking lot landscaping may be credited to the overall site landscaping percentages.

2. Landscaping around the full perimeter of the site adjacent to the property lines is encouraged. Generally, an area adjacent to a public right-of-way should have landscaping, increasing in proportion as the scale, width and height of the structures increases.

3. Each landscape plan shall be compatible with the shape and topography of the site and the architectural characteristics of the structures on the site. Each landscape plan should be compatible with the character of adjacent landscaping, provided the quality of the adjacent landscaping meets the standards of these guidelines. Of particular concern is the ultimate size of the plants in relationship to the scale of surrounding development.

4. Each landscape plan should illustrate a concern for design principles such as balance, scale, texture, form and unity.

5. Each landscape plan should address the functional aspects of landscaping such as drainage, microclimate/appropriate planting, erosion prevention, wind barriers, provisions for shade, sound absorption, dust abatement and reduction of glare.

6. The plant material selected shall be capable of healthy growth within the given range of soil, climate both micro and macro and water availability (see plant list, Attachment 1).

7. The size and spacing of plants at planting time should provide the desired effect within a reasonable period of time and also provide for mature growth and minimize maintenance.

8. Landscaping should be used to relieve solid, unbroken elevations and to soften continuous wall expanses.

9. The landscaping shall permit adequate sight-distance for motorists and pedestrians.

10. Trees and shrubbery shall be arranged so landscaping does not interfere with the effectiveness of signage, parking lot and street lighting or create inappropriate visual barriers.

11. The use of design elements such as architectural features, sculptures or fountains is encouraged. The use of local stone for walls, architectural features, etc. is encouraged.

12. The use of materials such as crushed rock, redwood bark, chips, pebbles and stone or masonry slabs in place of live plant materials shall be discouraged. Artificial plant material is not acceptable.

B. <u>PLANTING FOR FIRE SAFETY</u>

Fire safety begins with isolating structures from fire hazard conditions by modifying and managing a landscape buffer of 100-150 feet around buildings. Within the buffer, four management zones and planting treatments can be established.

The defensible space is divided into four zones as described below. Plants are chosen and pruned to provide less fuel volume, so they are less flammable and there is space for firefighters and equipment to operate safely. Most existing trees can remain but all should be pruned high. In your garden, you may have to compromise between appearance and safety. The numbers after each zone indicate the recommended width of that zone. Use the smaller number if you live in a low hazard area, the greater if you live in an area of high fire risk.

Zone 1, 30 to 50 feet - Domestic planting.

The planting which is located around buildings should be carefully placed and consist of species which do not readily catch fire. Do not compromise buffer treatment by creating heavily planted landscapes which are susceptible to fire during the dry season. In addition, to avoid plants that burn easily, we should limit the amount of tall trees and make efforts to thin foliage and dead branches from large plants next to our houses. Immediately surrounding your house, use slow-to-ignite plants, mostly ground covers and low shrubs. Such plants include dwarf oleander, fortnight lily and Natal plum.

*Acceptable domestic plant species:

Arbutus unedo ..... Strawberry Tree
Arctostaphylos species ..... Manzanita
Ceratonia siliqua ..... Carob Tree
Cercis occidentalis ..... Western Redbud
Convolvulus cnerorum ..... Bush Morning Glory
Feijoa sellowiana ..... Pineapple Guava
Metrosideros excelsus ..... New Zealand Christmas Tree
Myoporum species ..... Myoporum
Nerium oleander ..... Oleander
Pittosporum species ..... Pittosporum
Prunus species ..... Evergreen Cherry
Punica granatum ..... Pomegranate
Pyracantha species ..... Firethorn
Rhamnus alaternus ..... Italian Buckthorn
Ribes species ..... Current, Gooseberry
Schinus terebinthifolius ..... Brazilian Pepper
Simmondsia chinensis ..... Jojoba
Tecomaria capensis ..... Cape Honeysuckle

Undesirable domestic plants species:

Acacia species ..... Acacia
Cedrus species ..... Cedar
Cupressus species ..... Cypress
Dodonaea viscosa ..... Hopseed Bush
Eucalyptus species ..... Eucalyptus
Juniperus species ..... Juniper
Pennisetum ..... Fountain Grass
Pinus species ..... Pine

*These plants are able to survive limited supplemental water, as well as show moderate fire retardance. Other plants are suitable for domestic planting in high fire hazard areas but require ample amounts of moisture for best performance.

Zone 2, 30 to 50 feet - Fire retardant planting.

The third planting zone establishes the maximum fire prevention edge. The use of low groundcover plants which receive regular irrigation will be best suited to stop any ground fire that could reach this area. The low foliage level, in combination with high moisture content, is the key to this planting. Nothing in this zone should be over 18 inches high and a regular program of watering and weed control is necessary. Depending upon the degree of fire risk, this planting can vary from 25-50 feet in width in order to achieve the appropriate level of safety.

While there are some drought tolerant plants which can provide good fire safety in this zone, we should invest a little more water and maintenance to achieve the maximum fire barrier well away from our homes. This drip-irrigated zone uses mostly low-growing ground covers such as Cape weed, coyote brush, dwarf ice plant and gazania. Also in this zone are fleshy succulents such as jade plant and sedum and shrubs such as oleander and star jasmine.

Low growing, high fire retarding plants:

Carpobrotus species ..... Sea Fig
Delosperma 'Alba' ..... White Trailing Ice Plant
Drosanthemum floribundum ..... Rosea Ice Plant
Lampranthus spectabilis ..... Trailing Ice Plant
Malephora crocea ..... Croceum Ice Plant

Low growing, moderate fire retarding plants:

Arctotheca calendula ..... Cape Weed
Baccharis pilularis ..... Prostrate Coyote Bush
Coprosma kirkii ..... Creeping Coprosma
Gazania rigens leucolaena ..... Trailing Gazania
Lippia canescens ..... Lippia
Myoporum parvifolium ..... Myoporum
Osteospermum fruticosum ..... African Daisy
Santolina species ..... Lavender Cotton
Trifolium fragiferum var. O'Connor's ..... O'Connor's Legume
Vinca species ..... Periwinkle

Zone 3, 30 to 100 feet - Low volume, slow burning planting.

This area is the transition between low-volume, slow-burning ground covers and plants native to your area. Selected native and introduced plants which offer some natural character should be in this zone. Growing here are shrubs such as rockrose and buckwheat which have low fuel volume and water needs. Plants with low profile and limited foliage mass can diminish the rate

and intensity of fires as well as provide reasonable soil coverage. Seeds or container plants for this zone will need some supplemental water to become established but the proper species will survive with natural moisture after one or two seasons. Invasive grasses and large or crowded plants must be removed by periodic maintenance.

Any plant that is surviving without supplemental water will have very low moisture content in their leaves during the dry summer months. The effectiveness of this planting is achieved by slowing fires with plants that have little to burn. A mixture of plant types is a good idea, as site conditions vary and different species will survive better in different locations. Plants which are considered of value in low volume, slow burning landscape zone include:

Low fuel volume native plants:

Eriophyllum species ..... Yarrow
Eschscholzia californica ..... California Poppy
Lotus scoparius ..... Deerweed
Lupinus species ..... Annual Lupines
Mimulus species ..... Monkey Flower
Penstemon species ..... Penstemon
Salvia columbariae ..... Chia
Salvia sonomensis ..... Creeping Sage
Trichostema lanatum ..... Woolly Blue Curls
Zauschneria species ..... California Fuchsia

Low fuel volume introduced plants:

Artemisia caucasica ..... Silver
Atriplex glauca ..... Saltbush
Atriplex semibaccata ..... Creeping Saltbush
Cistus crispus ..... Rockrose
Cistus salviifolius ..... Sageleaf Rockrose
Santolina chamaecyparissus ..... Lavender Cotton
Santolina virens ..... Green Santolina

Zone 4, 30 to 100 feet - Selective thinning of native vegetation.

The process of fire safety begins with the selective removal of highly flammable plant species, large shrubby plants and dense groupings of plants to limit overall foliage mass and reduce fuel volume. The removal of natives should be managed:

1. To protect exposure of soils that would result in erosion problems.

2. To result in a natural appearance.

3. To keep down returning plant growth.

Natives are necessary here for soil stability and because they don't require much water. Existing live oaks and shrubs are thinned. Thin all native vegetation selectively every three to five years.

High fire hazard species:

Adenostoma fasciculatum ..... Chamise
Adenostoma sparsifolium ..... Red Shanks
Artemisia californica ..... California Sagebrush
Eriogonum fasciculatum ..... Common Buckwheat
Salvia species ..... Sage

*Valuable watershed species:

Arctostphylos species ..... Manzanita
Ceanothus species ..... Wild Lilac
Comarostaphylis diversifolia ..... Summer Holly
Garrya species ..... Silk Tassel
Heteromeles arbutifolia ..... Toyon
Juglans species ..... Walnut
Rhamnus species ..... Buckthorn
Rhus species ..... Sumac
Quercus species ..... Oak

*These plants provide good slope and soil stabilization, wildlife habitat and are not as flammable as the high fire hazard species. However, all of these plants should be thinned to reduce their foliage mass and be retained in limited numbers to prevent high intensity fires.

C. SCREENING

1. Landscaping may be required to screen storage areas, trash enclosures, parking areas, public utilities and other similar land uses or elements which do not contribute to the enhancement of the surrounding areas.

2. Landscaping screening shall be of suitable width, height and density so that it provides the desired effect within three years growing time.

D. PARKING AREAS

1. Perimeter landscaping adjacent to the property lines is required in parking areas. Berms to shield cars in parking lots from the street are required whenever possible. On corner lots, the landscape shall feature some element as a focal point, i.e. a specimen tree, piece of art or street furniture, etc. The element featured shall have a site with an area of at least 500 square feet.

2. Exposed parking areas should devote a minimum of ten percent of their area to interior landscaping. Interior parking lot landscaping shall be computed on the basis of the net parking facility, which includes parking stalls, access drives, aisles, walkways, dead spaces and required separations from structures, but shall not include required landscaping of the perimeter of the property.

3. Trees should be planted in parking areas to provide shade, diversity and seasonal color, etc. (see list of selected trees, Attachment 2).

4. Interior landscaping shall be contained in planting beds or pockets with a raised concrete curb. Planter area curbs may be used in place of wheel stops.

II. STANDARD CONDITIONS OF APPROVAL FOR SITE AND LANDSCAPE PLANS

NOTE: The following conditions are typically attached, either in whole or in part, to all landscaping applications approved by the City. If any of these conditions are not acceptable, the applicant may discuss them with the staff or the Planning Commission at the time of the meeting.

1. The approval is granted only for the property described in the application and only for the approved landscaping as shown on the plans submitted.

2. The landscaping and irrigation system shall be located, installed and maintained as specified on the approved plans. All dead and/or missing plants must be replaced on a continuing basis.

3. Should the City require any changes to the landscape plans submitted, the applicant shall submit for staff review one (1) complete set of revised plans showing in detail all of the revisions and changes required.

4. No final inspection or occupancy clearance will be granted until all landscaping is installed in accordance with the plans approved and the conditions required by the City.

5. All plant materials and the landscape and irrigation design shall be represented accurately on the plans and any substantial deviation will require the express approval of the proposed revisions by the City. Any substantial change shall require the resubmittal of revised plans to the City for consideration. Any minor changes to the approved plans may be approved by the Planning Director or authorized representative.

6. All landscaping adjacent to parking and vehicular circulation areas shall be contained in planters and/or enclosed by a raised concrete curb. All planters adjacent to the street right-of-way shall be constructed per specifications of the Public Works Director/City Engineer.

7. The landscape architect shall certify the plans have been implemented according to the approved plan.

8. This approval is subject to the applicants paying all fees and assessments to the City as required by the Fee Schedule Resolution.

9. All approvals of the City are subject to and dependent upon the applicant complying with all applicable ordinances, codes, regulations, adopted policies, these conditions and the payment of all applicable fees and assessments.

10. At the sole discretion of the City, the failure to comply with any condition hereof may result in the amendment or revocation of any underlying permit, or the issuance of a citation, as may be appropriate in the case.

11. Should the applicant fail to comply with any condition hereof, the City may, in its sole discretion, undertake such acts and incur such expenses as it may consider necessary to effect compliance, the cost thereof to be reimbursed by the applicant or current property owners, as may be appropriate in the case.

III. APPLICATION REQUIREMENTS FOR SITE AND LANDSCAPE PLANS

Applications for Planning Commission approval of landscape plans shall be accompanied by the following three (3) items. Each item must be folded to fit into a 9" x 14" envelope. Four (4) copies of each item is required for preliminary review. Eleven (11) copies of each item is required for Planning Commission review.

A. A LANDSCAPE PLAN dimensioned and drawn to scale and including the following:

1. Name and address of the project by street number, street name and zip code or by Assessor's parcel number and lot number if no address has been assigned.

2. A vicinity map which locates the project in relation to streets and adjacent buildings and gives a general indication of existing landscaping on adjacent property and on site.

3. A North arrow and a bar graph indicating the scale. Acceptable drawing scales are: 1/4" = 1', 1/8" = 1', 1" = 10', 1" = 20', 1" = 30' and 1" = 40'.

B. A SOILS REPORT analyzing the texture, gypsum / lime / nitrogen / phosphorous / potassium / salinity content and pH in the areas proposed for landscaping may be required. The necessity for a soils report will be determined by staff subject to approval of the Planning Commission for those projects that the Planning Commission reviews. Generally, projects requiring a soils report will be those in newly developing areas and/or those projects of a scale that could visually affect the surrounding area.

C. Upon approval by the City of a landscape plan, two (2) copies of AN IRRIGATION PLAN must be submitted to the staff to insure that an adequate irrigation system is provided. Final approval of a landscape plan will depend on the adequacy of this submittal and its subsequent approval.

1. The following technical design guidelines should be considered when preparing an irrigation plan:

   a. Water meter and line sizes for the property should be calculated from total water demand which should be at least the sum of the maximum irrigation demand and all building demand.

   b. Flex-risers or other means of protecting exposed irrigation heads and lateral lines from damage shall be used where vandalism is probable.

   c. When appropriate, underground irrigation piping shall be buried deep enough to protect lines from damage.

   d. The system should be designed with separate control valves and/or sprinkler heads as appropriate for trees, shrubs and turf with varying irrigation requirements.

   e. The distance between sprinklers should not exceed 70% (seventy percent) of the nozzle diameter requirements.

   f. The irrigation system shall be designed so that streets, sidewalks, windows, walls and fences are not sprinkled.

2. A complete irrigation plan will generally include the following information:

   a. The point of connection.
   b. The design pressure.
   c. Indication of the pounds per square inch (PSI) and gallons per minute (GPM) of supply lines.
   d. Pipe specification: Type of pipe, size, class and/or schedule.
   e. Piping plans in relation to the landscaping plan.
   f. Type, model number and location of sprinkler heads and valves.

g. Hose bibbs.
h. Location of backflow devices.
i. Name, address and telephone number of the professional person who prepared the irrigation plans and date of preparation. Include state license number if prepared by registered landscape architect or if prepared by a licensed individual.

Attachment "3" is an example irrigation plan.

IV. SUBMITTAL REQUIREMENTS

The project's landscape design plans shall be prepared by a California registered landscape architect, unless waived by the Planning Director or designee. In order to allow evaluation of the project's landscape plans in a comprehensive and complete manner, submittals shall include the following:

1. Plan Check Fee: The applicant shall pay the required fees to cover landscape review and inspection.

2. Planting Plan: The planting design shall be drawn on clear and legible base sheets prepared especially for the landscape submittal. Three (3) copies shall be submitted at the time of filing. The following requirements and information shall be provided:

   a. Size: Plans shall not exceed 30" x 42" or be less than 22" x 36" in size.

   b. Scale: The scale shall not be smaller than 1" = 20', unless prior approval has been granted by the Planning Director or designee. Exceptions for smaller scale shall be only for those plans that are for large areas not requiring detail. In no case shall the scale be less than 1" = 40'.

   c. Title Block: Indicate on all plans the names, addresses and phone numbers of the applicant and landscape architect. Also the Community Development Project identification number shall be indicated (i.e. CDP No. 89-01).

   d. Physical Characteristics: The landscape plans should accurately and clearly portray the following existing (to be retained) and proposed features:
      - Landscape materials, trees, shrubs, groundcover, etc.
      - Property lines.
      - Streets, street right-of-ways, access easements and/or public or private driveways, walkways, bike paths and any other paved areas.
      - Buildings and structures.
      - Parking areas, lighting, striping and wheel stops.

- Grading areas, top and toe of slopes, slope direction.
- Utilities, streetlighting, fire hydrants (if available).
- Natural features, water courses, rock outcropping, etc.

Landscape designs may include design elements such as boulders, mounds, signs, sculpture, etc. All design elements shall be designated as to the size (at maturity in the case of plant materials) and be in scale with the proposed project.

Planting symbols shall be clearly drawn and plants labeled or abbreviated (3 letter minimum) on each sheet by botanic name. Numeric or graphic definition alone is not acceptable. Container size and/or spacing and quantities shall be clearly indicated for each group of plants. Sizes of plants at planting time should be adequate to meet specific conditions of project approval.

See Attachment "4" as an example of a landscape design (planting) plan.

3. Irrigation Plan: The irrigation design shall provide adequate coverage and sufficient water for the continued healthy growth of all proposed plantings with a minimum of waste or overspray on adjoining areas.

Irrigation plans shall be drawn in a legible manner, separate from, but utilizing the same format as the landscape design plan. Plans shall be concise and accurate, including, but not limited to:

a. Design pressure as well as static pressure (contact Santa Paula Water Wks., Ltd).

b. Point of connection (location and size).

c. Backflow protection, as approved by Ventura County Environmental Health.

d. Valves, piping, controllers, heads, quick couplers, etc. Show gallonage requirements for each valve on the plan.

The legend shall include equipment manufacturer, type of equipment, model number, gallons per minute (GPM) demand, pounds per square inch (PSI) demand, radius/diameter of coverage, remarks or special notes and a reference to the corresponding detail number. All equipment shall be designed for installation per manufacturer's recommendation, Uniform Plumbing Codes and all local regulations.

4. Written Specifications/Applicable Details: Three (3) copies of the details and specifications shall be provided. These shall include, at the minimum, specifications and details necessary for planting, soil preparation, tree staking and guying, separation of different types of planting areas, installation details and post installation maintenance programs, etc. (see Attachment "5").

5. Site Plan: One copy of the approved development permit site plan for the proposed project shall be provided in order for the landscape consultant to have a clear and accurate portrayal of the project and project site.

6. Architectural Elevations: One copy of the proposed project's elevations shall be submitted in order to review compatibility of proposed plant materials with architectural design elements.

7. Grading Plan: One copy of the approved grading plan shall be provided in order to review height of graded slopes, pad elevations and finished grade in relation to the plantings and irrigation planned.

8. Conditions of Approval: One copy of the approved project conditions, initialled by the applicant's landscape architect, shall be submitted with the landscape plans so that the applicant's landscape architect is ensured of having seen the conditions and so that the landscape consultant can review the proposed landscape plans for consistency with the specific conditions.

V. LANDSCAPE STANDARDS

Proposed plant materials should relate to architectural design elements of the structures on the site and should be compatible with the character of adjacent landscaping, provided the quality of the adjacent landscaping meets the standards of this guide. The following landscape standards for permanent landscaping are minimums. When special circumstances or exceptional characteristics are applicable to the property involved (size, shape, topography, etc.), the Planning Director may modify (reduce or increase) the standard(s) except as otherwise limited by the Zoning Ordinance Code.

1. Minimum Site Coverage: Landscape percentages shall be computed on the basis of the net project site area which includes the area of all structures, drives, walks and parking on the site but not areas dedicated for public right-of-way. The required percentages of landscaping relative to site area are as follows:

a. Industrial 15%
b. Commercial 20%
c. Institutional 20%
d. Office 20%
e. Residential ....(as specified in the permit)
f. Multi-family residential 40%
plus areas of buffers and streetscape zones

Minimum coverage requirements for commercial lots of less than 5,000 square feet may be modified by the Planning Director, depending on architectural design.

2. Minimum Planter Width: Landscaped areas shall be a minimum of five (5) feet wide (including curbs). Narrower landscape areas may be permitted but shall not be counted toward meeting the minimum coverage requirements of No. 1 above and No. 4a. below.

3. Perimeter Planting: The area within required setbacks of commercial or industrial projects not used for other purposes shall be landscaped.

4. Parking Areas: All open (uncovered) automobile parking areas shall have landscaping in accordance with the following:

a. Open Parking areas shall contain a minimum of ten percent (10%) of the area in landscaping, which is counted toward meeting the minimum site coverage requirements. Landscaping shall be computed on the basis of the net parking facilities, which includes parking stalls, access drives, aisles and walkways, but shall not include required landscaping adjacent to streets.

b. A landscaping strip shall be provided along property lines adjacent to any public or private street right-of-way. These planting strips shall not be less than five (5) feet wide for commercial lots and not less than ten (10) feet wide for industrial lots. Landscape strips adjacent to major thoroughfares may be required to be greater.

c. All parking lot planting areas shall be entirely enclosed within a reinforced brick or masonry planter box or portland cement concrete curb not less than six (6) inches high.

d. Landscaping shall permit adequate site-distance for motorists and pedestrians and shall not interfere with the effectiveness of signage or parking lot lighting.

e. Trees should be planted in parking areas to provide shade, diversity and seasonal color.

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f. A minimum of one tree shall be installed within a tree well or planter area of the parking lot for every ten (10) single-row parking stalls or every twenty (20) double-row parking stalls. Tree wells shall be a minimum of sixteen (16) square feet (including curbs).

g. Concrete wheel stops shall be provided for all parking spaces. The concrete curb around landscape areas may be utilized as a wheel stop provided the area of car overhang (2 1/2 foot maximum) does not damage or interfere with plant growth or irrigation systems. If this alternative is utilized, minimum planter widths (including curb) shall be as follows (see Attachment 6).

(1) Not less than 5 1/2 feet for single-vehicle overhand.

(2) Not less than 8 feet for double-vehicle overhang.

5. Screening: Landscaping should be used to screen storage areas, trash enclosures, parking areas, public utilities and other similar land uses or elements which do not contribute to the enhancement of the surrounding areas. Landscape screening shall be planted at a height and density so that it provides the desired effect within three (3) years growing time.

Long expanses of walls should be interrupted by inserts for plants.

6. Street Trees: Street trees may be required as a conditions of the development permit. No street tree will be approved for planting where its growth will cause interference, obstruction, damage or injury (either directly or indirectly) to use of a sidewalk or street right-of-way (see Attachment "7" for list of suggested street trees). Street trees shall be planted according to the following standards and as delineated per Attachments "7A" and "8":

a. Trees shall not be planted within thirty (30) feet of the curb return of a street intersection.

b. Trees shall not be planted closer than four (4) feet from any walkway or public sidewalk, except where tree wells or parkways are provided in the sidewalk area (see Attachments "8-B" and "8-C"). Where trees are planted closer than six (6) feet from any public sidewalk, Type "D" tree well details shall be used (see Attachment "8-D").

c. Trees shall not be located closer than ten (10) feet from any driveway, utility pole, fire plug or to the rear of any street or directional sign; fifteen (15) feet from light standards and twenty-five (25) feet from the front of any traffic or directional sign.

d. Trees shall be spaced an average of forty (40) feet apart but not less than one per lot and two per corner lots.

7. Use of Plant Materials: The scope of a project will ultimately determine landscape plant selection. A listing of native and exotic plant materials is outlined on Attachment "1". In order for landscaping to relate to architectural design, the following criteria is suggested:

a. Evergreen trees are encouraged against buildings to soften the appearance of blank expanses of walls, visually screen neighboring projects and subdivided exterior spaces.

b. Deciduous trees are effectively used for solar control in summer and winter. Some trees are flowering and are desirable as accents.

c. Trees that typically grow taller than twenty (20) feet in height and do not lend to top trimming will not be permitted under utility wires.

d. Large shrubs are used to screen undesirable views and act as an intermediate height element to bring buildings into human scale.

e. Medium/low shrubs are ornamental and provide foliage, texture and color to landscape themes (see Attachment "9").

f. Vines and espaliers are effective screens for visually softening walls and fences. Many vines are available that grow in narrow planters and can provide excellent flower color to brighten buildings and walls (see Attachment "10").

g. Applicable native plant materials and drought tolerant species are encouraged for water conservation (see Attachment "1").

8. Groundcover: The use of perennial groundcover is an acceptable landscaping method in reducing maintenance costs and controlling erosion. Irrigated and non-irrigated groundcovers are discussed below:

ATTACHMENT "1"

"FOR YOUR XERISCAPE GARDEN"

XERISCAPE

The word XERISCAPE is coined from the Greek word Xeros, meaning dry. A Xeriscape is not a completely dry landscape. Even drought tolerant plants need an occasional watering. The idea is simply to take the natural environment into consideration. And with Ventura County's dry summer climate and limited water supply, Xeriscape is appropriate here. A Xeriscape uses half as much water, demands fewer of your hours for mowing, watering, and feeding and can be just as beautiful.

HARDSCAPES

Hardscapes are patios, walkways, decks and other non-plant elements. They offer an aesthetic means of gaining greater use and enjoyment in the yard. Materials include paver blocks, stones, redwood, bricks and concrete.

LAWNS

Lawns are thirsty and time consuming, so plant one only where it will be used for play and entertaining. In the front yard, consider replacing the unused lawn with a creative arrangement of shrubs, trees, attractive ground covers and hardscapes. Low water using ground covers make great lawn substitutes. They need less maintenance and provide nice variety and texture. If you must include lawn, use low water using species, such as improved Fescues and Bermuda hybrids and set the lawn mower to cut longer grass blades, which helps cut down on evaporation.

IRRIGATION

Use water efficient irrigation systems, such as drip and low output sprinkler heads. Drip irrigation applies water at a slow rate only where needed, at the base of the plant, thus reducing runoff and allowing for deep watering.

Group plants according to similar needs, (sun, soil, water) and then match the irrigation system to these needs. Water trees and shrubs (with deep root systems) longer and less frequently than shallow-rooted plants, which require smaller amounts of water more frequently. Use of an automatic timer will save time and money. Automatic timers can be set to accommodate the differing water needs of the landscape, and to always water in the cool hours of the day to reduce evaporation.

Be sure to adjust your sprinkler heads properly to minimize water overspray onto unplanted areas, like sidewalks.

MULCHES

Mulches contribute greatly to water conservation by reducing evaporation, soil compaction and weeds. They can also be an attractive addition to your Xeriscape. Use bark, wood chips, pebbles or even grass clippings, compost or sawdust.

a. Irrigated: Irrigated groundcovers may be planted from rooted cuttings or applied as hydromulch. Rooted cuttings and hydromulched groundcovers may be selected from Attachment "11". Other rooted cuttings and seed mixtures may be considered if submitted by a California registered landscape architect.

b. Non-irrigated: In certain situations, temporary plantings may be required where irrigation is not economically feasible nor desirable. Non-irrigated hydromulch seeds as indicated on Attachment "12" are acceptable for natural or undisturbed slopes. Hydromulch seeds should be applied following the first measurable rainfall in the FALL of the year or a temporary irrigation method shall be provided to ensure germination and minimum growth. If the natural rainfall fails to provide adequate moisture for germination, supplemental irrigation may be required.

LOW WATER USING PLANTS

Use low water consuming plants, suited to local soil and climate, and group according to their water requirements. Fall is the best time to plant a Xeriscape. Keep in mind that new Xeriscape plants need water to keep roots moist until established. This plant list contains a sampling of low water using plants suitable for most areas in the County. Please consult the references for more complete lists.

- **Remember, water requirements of plants can vary significantly between sites due to differences in microclimates, soil, drainage and exposures.**

No supplemental water required once established	Botanical Name	Common Name	Preference: Good Drainage	Preference: Part Shade	Preference: Full Sun	Tolerance: Seacoast Conditions	Tolerance: Heat	Tolerance: Wind
	TREES - EVERGREEN							
	Botanical Name	*Common Name*						
◆	Casuarina stricta	Beefwood			✔	✔	✔	✔
◆	Eucalyptus citriodora	Lemon-Scented Gum			✔	✔	✔	
◆	Eucalyptus sideroxylon	Pink Ironbark			✔		✔	✔
	Melaleuca quinquenervia	Cajeput Tree		✔	✔	✔		✔
◆	Olea europea	European Olive	✔		✔	✔	✔	✔
	Pinus canariensis	Canary Island Pine			✔		✔	✔
◆	Prunus lyonii	Catalina Cherry	✔		✔	✔	✔	✔
◆	Quercus agrifolia	Coast Live Oak	✔		✔		✔	✔
◆	Rhus lancea	African Sumac			✔		✔	
◆	Tristania conferta	Brisbane Box	✔		✔	✔	✔	✔
	TREES - DECIDUOUS							
	Ginkgo biloba(grafted male)	Maidenhair Tree			✔	✔	✔	✔
	Lagerstroemia indica	Crape Myrtle			✔		✔	
	Metrosideros tomentosa	New Zealand Xmas Tree		✔	✔	✔	✔	✔
	Pistacia chinesis	Chinese Pistache			✔		✔	✔
	Platanus acerifolia	European Sycamore		✔	✔		✔	✔
	Platanus racemosa	California Sycamore	✔		✔		✔	
◆	Quercus lobata	Valley Oak			✔		✔	✔
	SHRUBS - LARGE							
	Abelia grandiflora	Glossy Abelia		✔	✔		✔	✔
	Arbutus unedo	Strawberry Tree		✔	✔	✔	✔	✔
◆	Arctostaphylos (species)	Manzanita	✔	✔	✔		✔	✔
	Callistemon (species)	Bottlebrush			✔	✔	✔	✔
◆	Ceanothus (species)	Wild Lilac	✔		✔		✔	✔
◆	Cercis occidentalis	Western Red Bud	✔	✔	✔			✔
	Cotoneaster (species)	Cotoneaster		✔	✔		✔	✔
◆	Elaeagnus pungens	California Silver Berry		✔	✔		✔	✔
	Escallonia 'Fradesii'	Pink Escallonia		✔	✔	✔	✔	✔
◆	Fremontodendron	Flannel Bush	✔		✔		✔	
◆	Heteromeles arbutifolia	Toyon	✔	✔		✔	✔	
	Juniperus (species)	Juniper	✔	✔	✔	✔	✔	✔
	Leptospermum laevigatum	AustralianTea Tree		✔	✔	✔		✔
	Myoporum laetum	Myoporum		✔	✔	✔	✔	✔
◆	Nerium oleander	Oleander varieties			✔		✔	✔
◆	Photinia fraseri	Photinia	✔		✔		✔	
◆	Prunus ilicifolia	Hollyleaf Cherry	✔	✔	✔		✔	
◆	Punica granatum	Pomegranate			✔		✔	✔
	Rhamus californica	Coffeeberry		✔	✔	✔	✔	
	Rhus integrifolia	Lemonade Berry	✔	✔	✔	✔	✔	✔
	Xylosma congestum	Shiny Xylosma		✔	✔		✔	✔
	SHRUBS - MEDIUM							
	Cassia artemisioides	Feathery Cassia	✔		✔		✔	
◆	Echium fastuosum	Pride of Madiera			✔	✔	✔	✔
	Mahonia aquifolia	Oregon Grape (compact)		✔	✔		✔	✔
	Raphaeolepis indica varieties	Indian Hawthorne	✔		✔		✔	✔
	SHRUBS - LOW							
◆	Arctostaphylos hookeri	Monterey Manzanita	✔	✔	✔	✔	✔	✔
	Ceanothus griseus horiz.	Wild Lilac	✔		✔		✔	✔
◆	Cistus purpureus	Rock Rose	✔		✔	✔	✔	✔
	Juniperus (species)	Juniper varieties	✔	✔	✔	✔	✔	✔
	Pittosporum tobira	Dwarf Mock Orange		✔	✔		✔	✔
	Pyracantha prostrata	Santa Cruz Prostrata			✔		✔	✔
	GROUND COVERS							
	Arctotheca calendula	Yellow Capeweed			✔	✔	✔	✔
	Arctostaphylos edmundsii	Little Sur Manzanita	✔	✔	✔	✔	✔	✔
◆	Baccharis pilularis 'Twin Peaks'	Coyote Brush			✔	✔	✔	✔
	Cotoneaster microphylla	Rock Spray			✔		✔	✔
	Euryops acraeus	Euryops			✔	✔	✔	✔
	Gazania (species)	Gazania	✔		✔	✔	✔	✔
	Myoporum parvifolium	Myoporum		✔	✔	✔	✔	✔
◆	Rosmarinus prostratus	Dwarf Rosemary	✔		✔	✔	✔	✔
	Botanical Name	*Common Name*						
	VINES							
◆	Bougainvillea (species)	Bougainvillea			✔	✔	✔	
◆	Doxantha unguis-cati	Cats Claw			✔		✔	✔
	PERENNIALS - FOR COLOR							
	Coreopsis auricula	Golden Coreopsis			✔	✔	✔	
◆	Dietes (species)	Fortnight Lily		✔	✔	✔	✔	✔
◆	Diplacus hybrids	Cal. Monkey Flower		✔	✔	✔	✔	✔
	Euryops pectinatus	Green Gold Daisy			✔		✔	✔
◆	Galvezia speciosa	Island Snapdragon		✔	✔	✔		
◆	Hemerocallis aurantiaca	Golden Day Lily		✔	✔	✔	✔	
	Kniphofia uvaria	Red Hot Poker		✔	✔	✔	✔	✔
◆	Limonium perezii	Statice	✔	✔	✔	✔	✔	✔
	Penstemon hybrids	California Penstemon	✔	✔	✔	✔	✔	✔
◆	Romneya coulteri	Matilija Poppy	✔		✔		✔	✔

References/Sources

Trees and Shrubs for Dry California Landscapes, Bob Perry, Land Design Publishing, PO Box 857, San Dimas, CA 91773 ($28.50).

Flowering Plants in the Landscape, Mildred E. Mathias, University of California Press, Berkeley, California 94720.

Plants for California Landscapes: A Catalog of Drought Tolerant Plants, Bulletin 209, Department of Water Resources, State of California, P.O. Box 388, Sacramento, California 95802. ($1.60)

Plants for Dry Climates, HP Books, PO Box 5367, Tucson, Arizona, 85703 ($7.95).

Sunset Western Garden Book, Sunset Magizine, 80 Willow Road, Menlo Park, California 94025.

Success List of Water Conserving Plants, Saratoga Hor-

ACKNOWLEDGEMENT

A special thanks to the East Bay Municipal Utility District and the Saratoga Horticultural Foundation for allowing us

ATTACHMENT "2"

SELECTED TREES

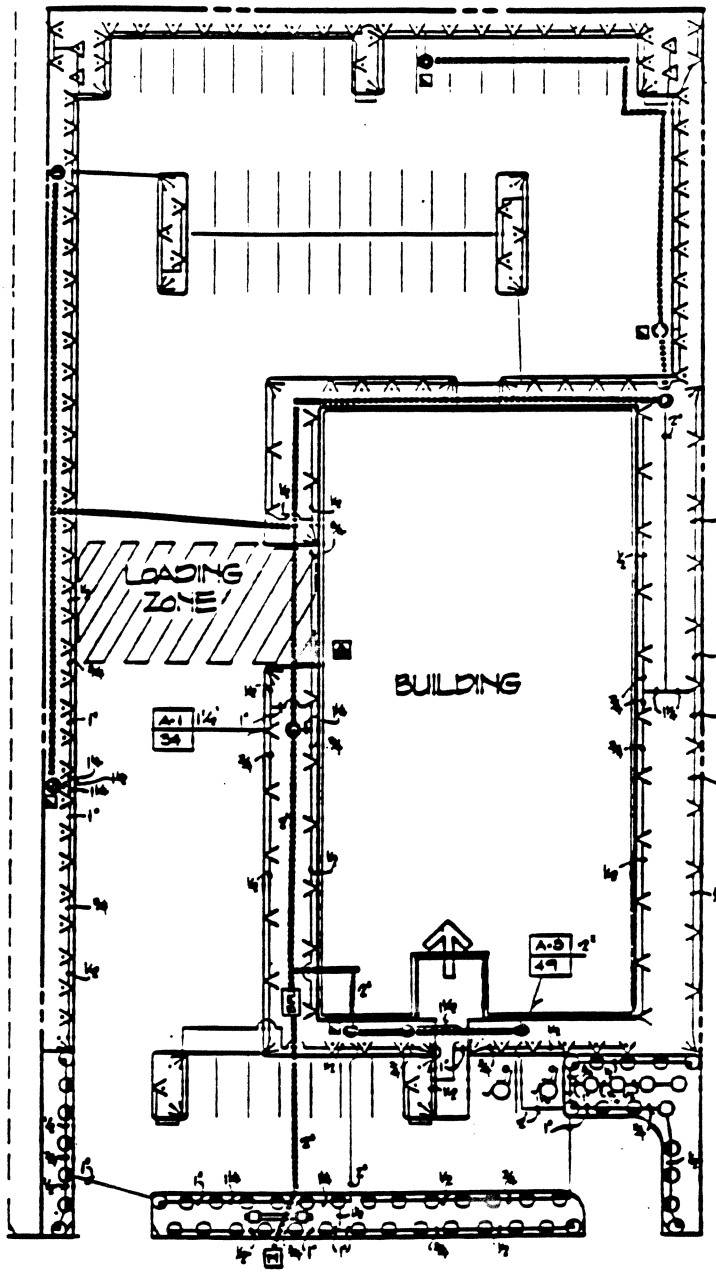
	SCIENTIFIC NAME	COMMON NAME	Evergreen	Deciduous	Large	Medium	Small	Fall Foliage Color	Flowers Showy	Preferred
1.	Acacia baileyana	Bailev Acacia	X			X			X	X
2.	Acacia Baileyana 'Purpurea'	Purple Bailey Acacia	X			X			X	X
3.	Acer negundo	Boxelder		X	X			X		
4.	Alnus rhombifolium	White Alder		X		X				X
5.	Albizia julibrissin	Silk Tree/Mimosa		X		X			X	X
6.	Callistemon viminalis	Weeping Bottle Brush	X			X			X	
7.	Ceratonia siliqua	Carob	X		X					X
8.	Eriobotrya deflexa	Bronze Loquat	X				X	X		
9.	Eriobotrya japonica	Loquat	X			X		X		
10.	Eucalyptus camaldulensis	Red Gum	X		X					
11.	Eucalyptus sideroxylon 'Rosea'	Red Ironbark	X			X			X	
12.	Eucalyptus polyanthemos	Silver Dollar Gum	X			X				
13.	Eucalyptus nicholii	Willow Leaf Peppermint	X			X				
14.	Eucalyptus rudis	Desert Gum	X		X					
15.	Fraxinus velutina 'Glabra'	Modesto Ash		X	X			X		
16.	Ginkgo biloba	Ginkgo/Maidenhair		X	X			X		X
17.	Hymensporum flavum	Sweetshade	X			X			X	X
18.	Jacaranda acutifolia	Jacaranda		X		X			X	X
19.	Koelreuteria paniculata	Golden Rain Tree		X		X			X	X
20.	Lagerstroemia indica	Crape Myrtle		X			X		X	
21.	Laurus nobilis	Grecian Laurel	X			X				
22.	Liquidamber styraciflua	Sweet Gum		X		X		X		X
23.	Liriodendron tulipifera	Tulip Tree		X	X			X	X	X
24.	Ligustrum lucidium	Glossy Privet	X			X				
25.	Macademia ternifolia	Macademia Nut	X			X				X
26.	Magnolia grandiflora	Southern Magnolia	X		X-X				X	X
27.	Morus alba	Fuitless Mulberry		X	X			X		X
28.	Oleo europaea	Olive	X			X				X
29.	Pinus canariensis	Canary Island Pine	X		X					X
30.	Pinus halepensis	Aleppo Pine	X		X					X

SELECTED TREES Cont'd.

SCIENTIFIC NAME	COMMON NAME	Evergreen	Deciduous	Large	Medium	Small	Fall Foliage Color	Flowers Showy	Preferred
31. Pinus radiata	Monterey Pine	X		X					
32. Pittosporum undulatum	Victorian Box	X			X-X				
33. Pittosporum rhombifolium	Queensland Pittosporum	X			X				
34. Pittosporum phyllyraeoides	Weeping Pittosporum	X			X				
35. Platanus acerfolia	London Plane Tree		X	X			X		X
36. Platanus occidentalis	American Sycamore		X	X			X		X
37. Platanus racemosa	Western Sycamore		X	X			X		
38. Pistacia chinensis	Chinese Pistachio		X		X		X		X
39. Prunus cerasifera 'Atropurpurea'	Purple Leaf Plum		X		X		X	X	X
40. Prunus caroliniana	Carolina Laurel Cherry	X			X				X
41. Prunus lyonii	Catalina Cherry	X			X				X
42. Pyrus kawakamii	Evergreen Pear	X			X				
43. Quercus lobata	Valley Oak		X	X					X
44. Quercus agrifolia	Coast Live Oak	X		X					X
45. Quercus suber	Cork Oak	X		X					X
46. Ulmus parvifolia 'Sempervirens'	Evergreen Chinese Elm	X-X			X				
47. Schinus molle	California Pepper	X		X					X
48. Schinus terebinthifolius	Brazilian Pepper	X		X					X

ADJACENT BUILDING

ADJACENT PROJECT



ADJACENT BUILDING

ADJACENT PROJECT

NOTE!
LOCATION OF MAINLINE & VALVES ARE SCHEMATIC.

STREET NAME

LANDSCAPE ARCHITECT'S STAMP

OWNER'S NAME/ADDRESS:

LANDSCAPE ARCH.'S NAME/ADDRESS:

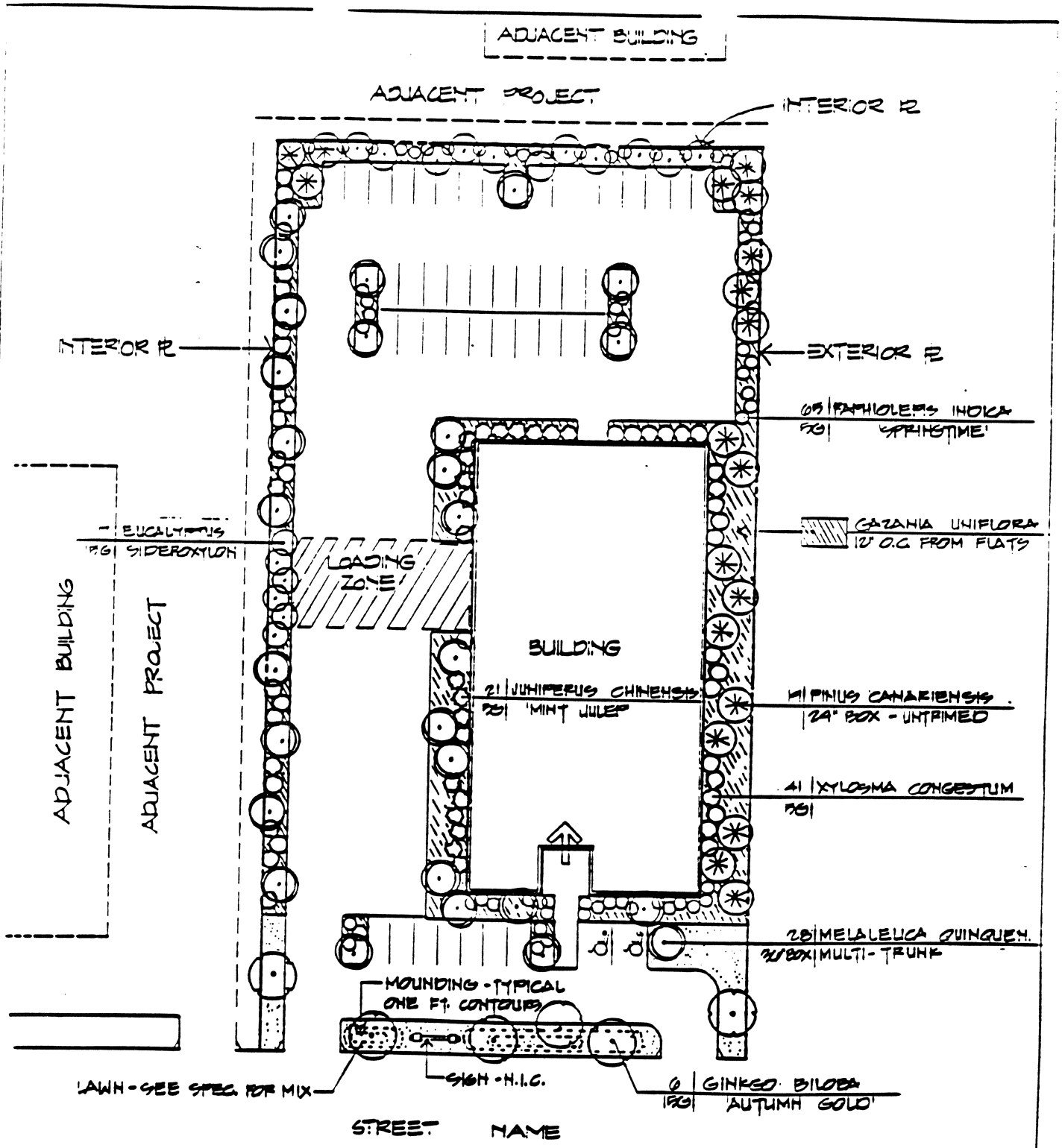
SHEET TITLE:
IRRIGATION PLAN

PROJECT NAME:
ATTACHMENT "3"

DATE: 1-1-01
SCALE: 1" = 20'
REVISIONS:

SHEET No.

OF 3



NOTES:

1. SEE SPECIFICATIONS FOR SOIL PREP. & BACKFILL MIX.
2. SEE DETAILS FOR STAKING, GUYING & PLANTING.
3. ALL WORK SHALL BE APPROVED BY LANDSCAPE ARCH.

NORTH

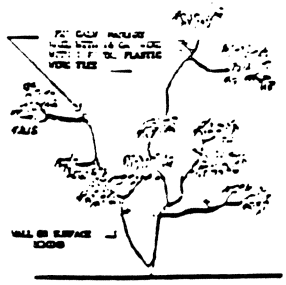
LANDSCAPE ARCHITECT'S STAMP	OWNER'S NAME/ADDRESS:	SHEET TITLE: PLANTING PLAN	DATE: SCALE: N.T.S. REVISIONS: SHEET NO.
	LANDSCAPE ARCH.'S NAME/ADDRESS:	PROJECT NAME: ATTACHMENT "4"	OF 3

LEGEND

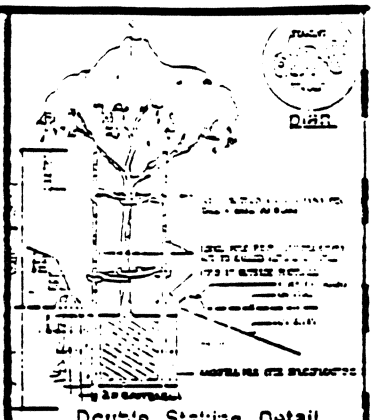
BOTANICAL NAME	COMMON NAME	QUANTITY		
-TREES-		15 g.c.	5 g.c.	1 g.c.
CERCIS OCCIDENTALIS	WESTERN REDBUD	4		
MELALEUCA DECORTICATA	PINK MELALEUCA	6		
PINUS CANARIENSIS	CANARY ISLE PINE	31		
PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	65		
-SHRUBS-				
BACCHARIS PILULARIS	COYOTE BUSH			110
CEANOTHUS IMPRESSUS	SANTA BARBARA LILAC		21	
[illegible]	CALIFORNIA SILVERBERRY		41	
[illegible]	CALIFORNIA SYRINGA			7
[illegible]	B.C.M.		26	
JUNIPERUS CHINENSIS TORULOSA	HOLLYWOOD JUNIPER		14	
JUNIPERUS C. ARMSTRONGII	ARMSTRONG JUNIPER		22	
JUNIPERUS C. CONFERTA	SHORE JUNIPER			2400
JUNIPERUS C. "MINT JULEP"	MINT JULEP JUNIPER			47
MAHONIA AQUIFOLIUM	TALL OREGON GRAPE			42
HYPOCHOM LAETUM	B.C.M.			40
XYLOSMA CONGESTUM	SHINY XYLOSMA		71	
-COLOR-				77
HEMEROCALLIS HIBRID	DWARF YELLOW DAYLILY			99
KNIPHOFIA UVARIA	RED HOT POKER			95
-GROUND COVER-				
ARCTOTHECA CALENDULA	CAPEWEED - PLANT FROM ROOTED CUTTINGS @ 18" O.C. AND 18" FROM OTHER PLANTS			
SEEDED TURF	PER CITY OF VENTURA SPECIFICATIONS			

PLANTING NOTES

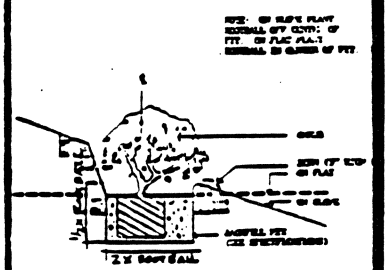
1. ALL NORTH BANK OR. PLANTING AREAS TO RECEIVE 2" OF PEBBLE BARK MULCH UNLESS OTHERWISE NOTED.



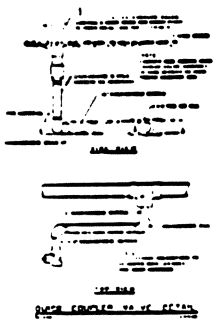
Vine Tying



Double Staking Detail



Shrub Planting

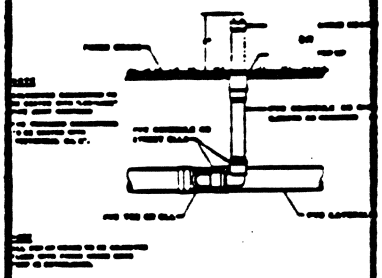


LEGEND

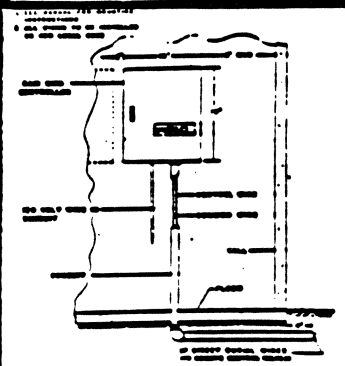
KEY	DESCRIPTION	MANUFACTURER	P.S.I.	G.P.M.	RAD.
● ● ●	TURF POP-UP 6" H./FULL HEAD	RAINBIRD 4FCSD	30	1.5-3.8	14'
◐ ◐ ◐	SAME - ADJUST NOZZLE	SAME	15	1.1-2.9	11'
▼ ▼ ▼	STREAM SPRAY 4" H./FULL HEAD	RAINBIRD 8H15S	25	0.7-1.9	20'
▼ ▼ ▼	SAME - ADJUST NOZZLE	SAME	15	0.5-1.5	16'
▼ ▼ ▼	SAME - SPACE AT 10 Ft.	SAME	15	0.5-1.5	16'
				REMARKS	
—	DRIP EMITTER	RAINBIRD XERI-7 (5 OUTLETS)	W/=600 TEA by PEPCO		
⋈	PRESSURE REGULATOR	WILEY * 991	LINE SIZE		
▭	FILTER	JAINE ANNILIE	AM 1-C		
S	WATER METER	PER CITY STANDARD	SIZE ON PLAN		
⊠	BACKFLOW PREVENTER	TORO 800	REDUCED PRESSURE TYPE		
⊙	REMOTE CONTROL VALVE	RAINBIRD SERIES "E A"	SIZE ON PLAN		
▣	QUICK COUPLER	RAINBIRD "E" TYPE	LOCKING		
⋈	GATE VALVE	NIBCO OR EQUAL	LINE SIZE		
C	CONTROLLER	PEDCO - PEDESTAL MOUNT	A=RC-12A B=RC-8A		
	"	" - WALL MOUNT	C.D.B.S= RC-8		
———	MAINLINE	ARCO OR EQUAL	CLASS 315 P.V.C.		
———	DOMESTIC	ARCO OR EQUAL	CLASS 315 P.V.C.		
———	LATERAL LINE	ARCO OR EQUAL	CLASS 200 P.V.C.		
·····	DRIP LATERAL LINE	RAIN BIRD OR EQUAL	CLASS 200 P.V.C.		

GENERAL NOTES

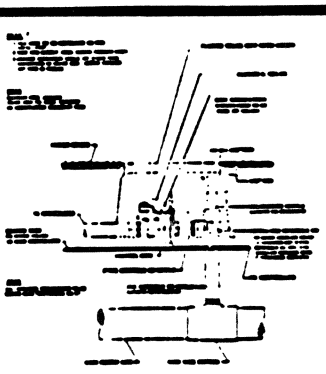
1. DESIGN PRESSURE IS 60 P.S.I.
2. SEE WRITTEN SPECIFICATIONS FOR INSTALLATION DETAILS
3. A-6 ← STATION SEQUENCING; 1" ← VALVE SIZE; 15.5 ← G.P.M.
4. INSTALL CHECK VALVES IN LATERALS WHERE NEEDED.

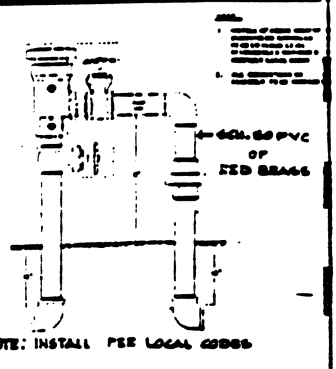


TYPICAL SPRAY HEAD OR SHRUB HEAD



CONTROLLER DETAIL





NOTE: INSTALL PER LOCAL CODES

PRESSURE TYPE VACUUM BREAKER ASSEMBLY

LANDSCAPE ARCHITECTS GROUP

OWNER'S NAME/ADDRESS:

LANDSCAPE ARCH'S NAME/ADDRESS:

SHEET TITLE: LEGENDS & DETAILS

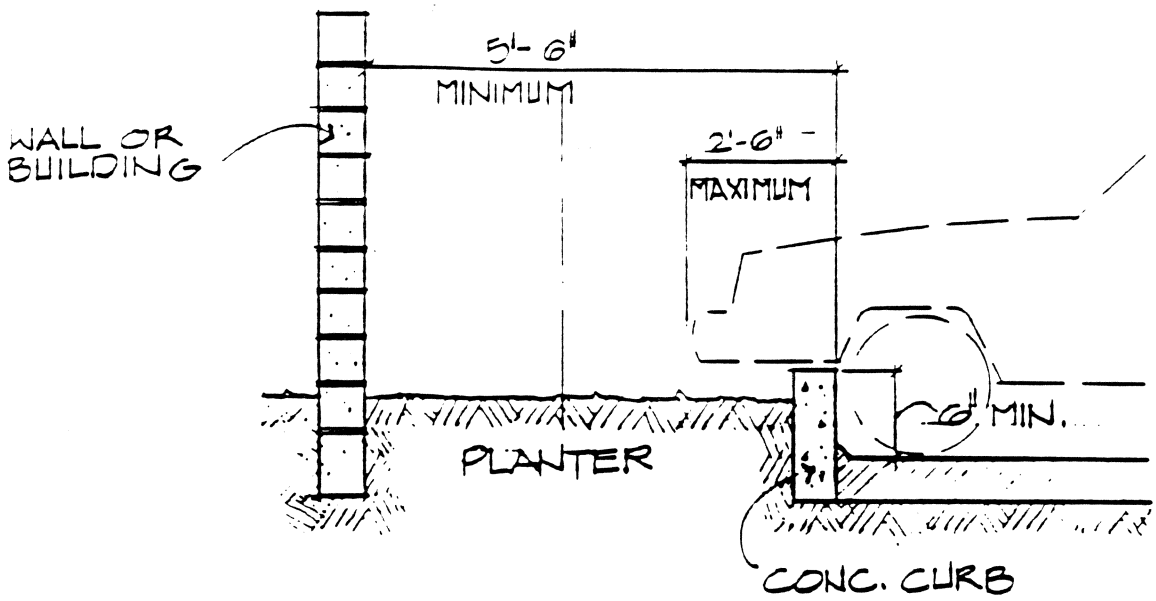
PROJECT NAME: ATTACHMENT "5"

DATE: 1-1-01

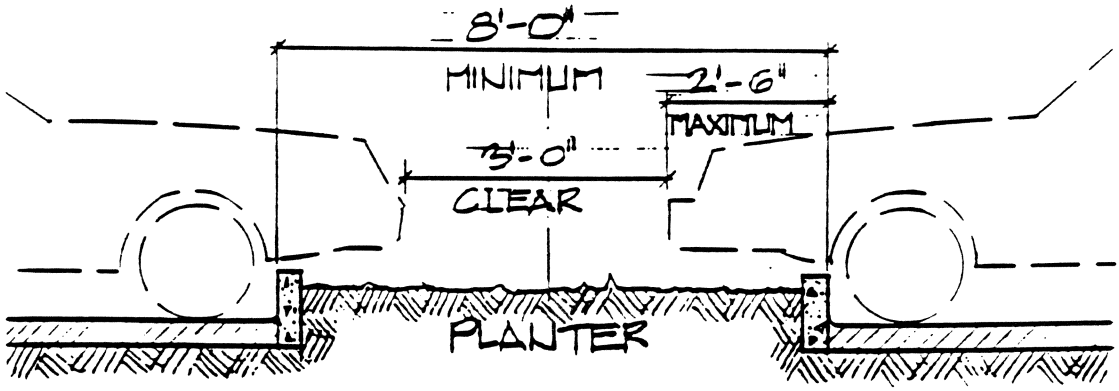
SCALE: N.T.S.

REVISIONS:

SHEET NO. 3 OF



SINGLE VEHICLE OVERHANG

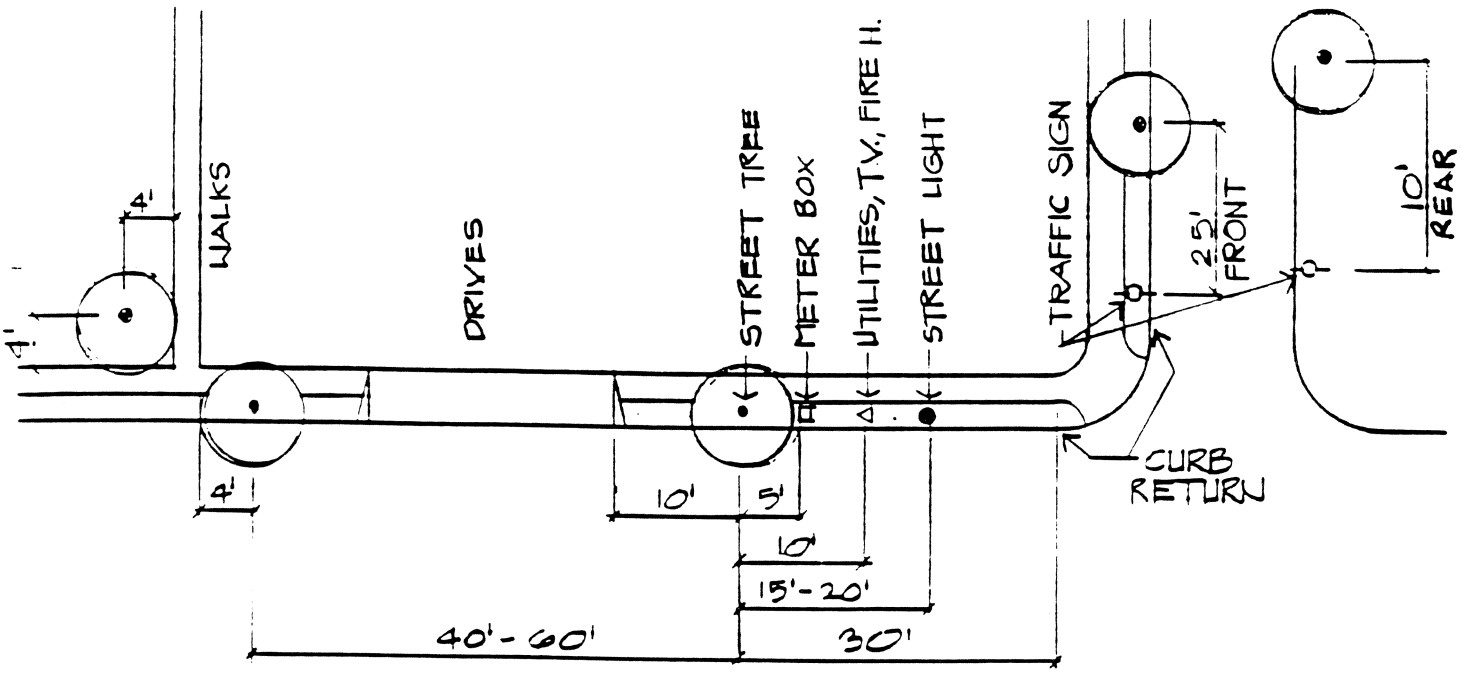


DOUBLE VEHICLE OVERHANG

RECOMMENDED STREET TREES

Botanic Name	Common Name
Evergreen	
*Callistemon viminalis	Bottle brush
Cinnamonum camphora	Camphor
Corynocarpus laveigata	New Zealand Laurel
*Cupania anacardioides	Carrotwood
Eucalyptus cinerea	Ash Colored Eucalyptus
Eucalyptus ficifolia	Red Flowering Gum
Eucalyptus maculata	Spotted Eucalyptus
Eucalyptus nicholii	Nichols Eucalyptus
Eucalyptus pulverrulenta	Silver Mountain Gum
Eucalyptus sideroxylon rosea	Red Ironbark
Eucalyptus torquata	Coral Gum
*Geijera paviflora	Australian Willow
*Ligustrum lucidum	Glossy Privet
*Maytenus boaria	Mayten Tree
*Melaleuca quinquenervia	Cajeput Tree
*Metrosideros tomenitosa	New Zealand Christmas Tree
*Nerium oleander 'Sister Agnes'	Oleander
*Podocarpus gracilor	Fern Podocarpus
*Quercus agrifolia	California Live Oak
*Quercus ilex	Holly Oak
Quercus virginiana	Southern Live Oak
*Tristania conferta	Brisbane Box
*Ulmus parviflora sempervirens	Evergreen Elm
Conifers	
*Pinus canariensis	Canary Island Pine
Pinus pinea	Italian Stone Pine
Pinus torreyana	Torrey Pine
Deciduous	
Calodendrum capense	Cape Chestnut
*Ginkgo biloba	Maidenhair
*Koelreutaria paniculata	Golden Rain Tree
*Lagerstroemia indica	Crape Myrtle
*Liriodendron tulipfera	Tulip Tree
*Liquidambar styraciflua-Palo Alto	Sweet Gum
*Pistacia chinensis	Chinese Pistache
Platanus acerifolia	European Sycamore
*Prunas pissardi	Purple Leaf Plum
*Pyrus calleryana 'Bradford'	Bradford Pear
Tipuana tipu	Tipu Tree
*Zelcova serrata	Sawleaf Zelcova

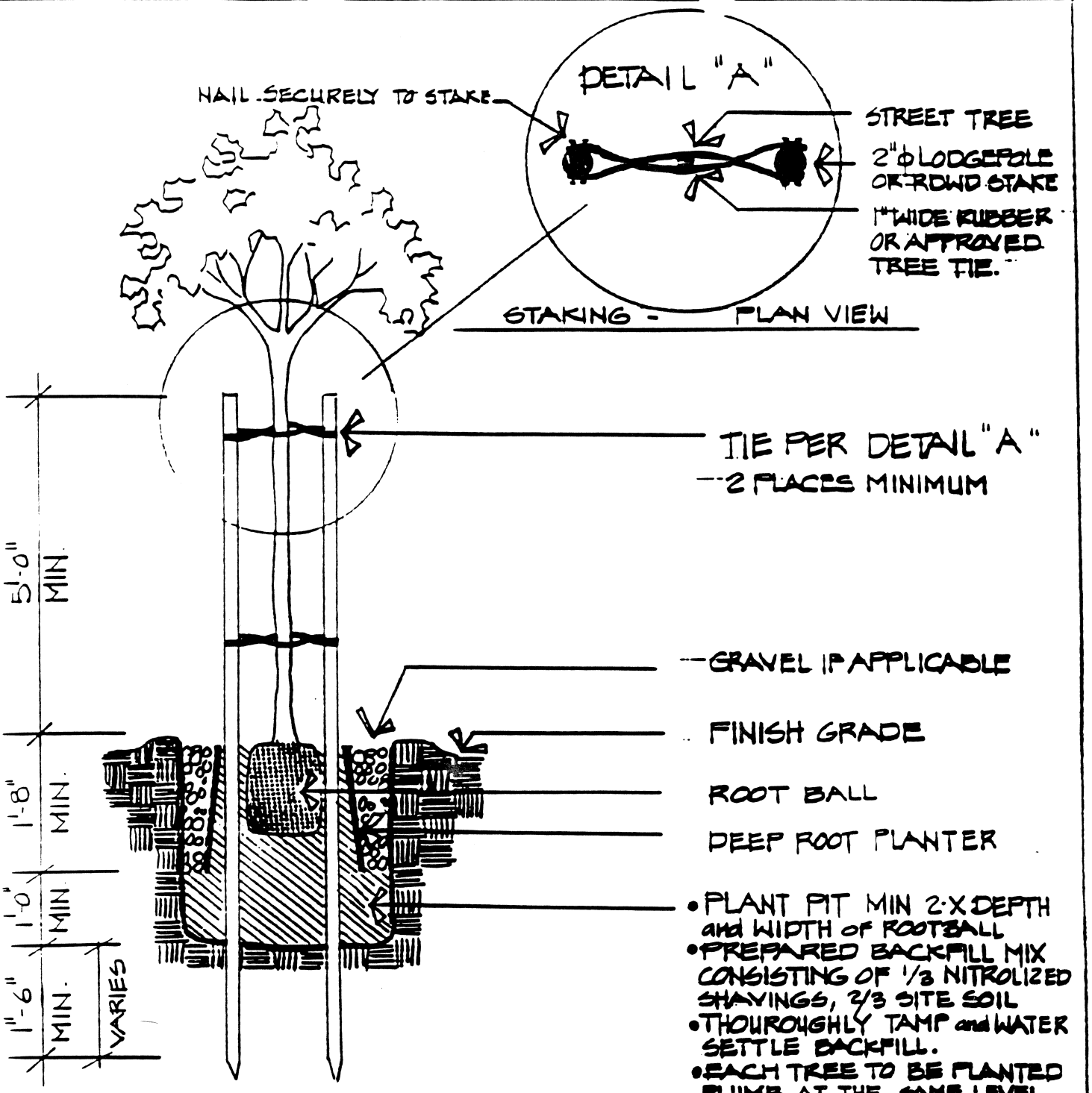
ATTACHMENT "7"



STREET TREE PLACEMENT

1. EXACT LOCATIONS OF UTILITIES, ETC. SHALL BE VERIFIED ON SITE AND SUBJECT TO CO. INSPECTION.
2. A MINIMUM OF ONE TREE PER INTERIOR LOT AND TWO PER CORNER LOT IS REQUIRED.

ATTACHMENT "7A"

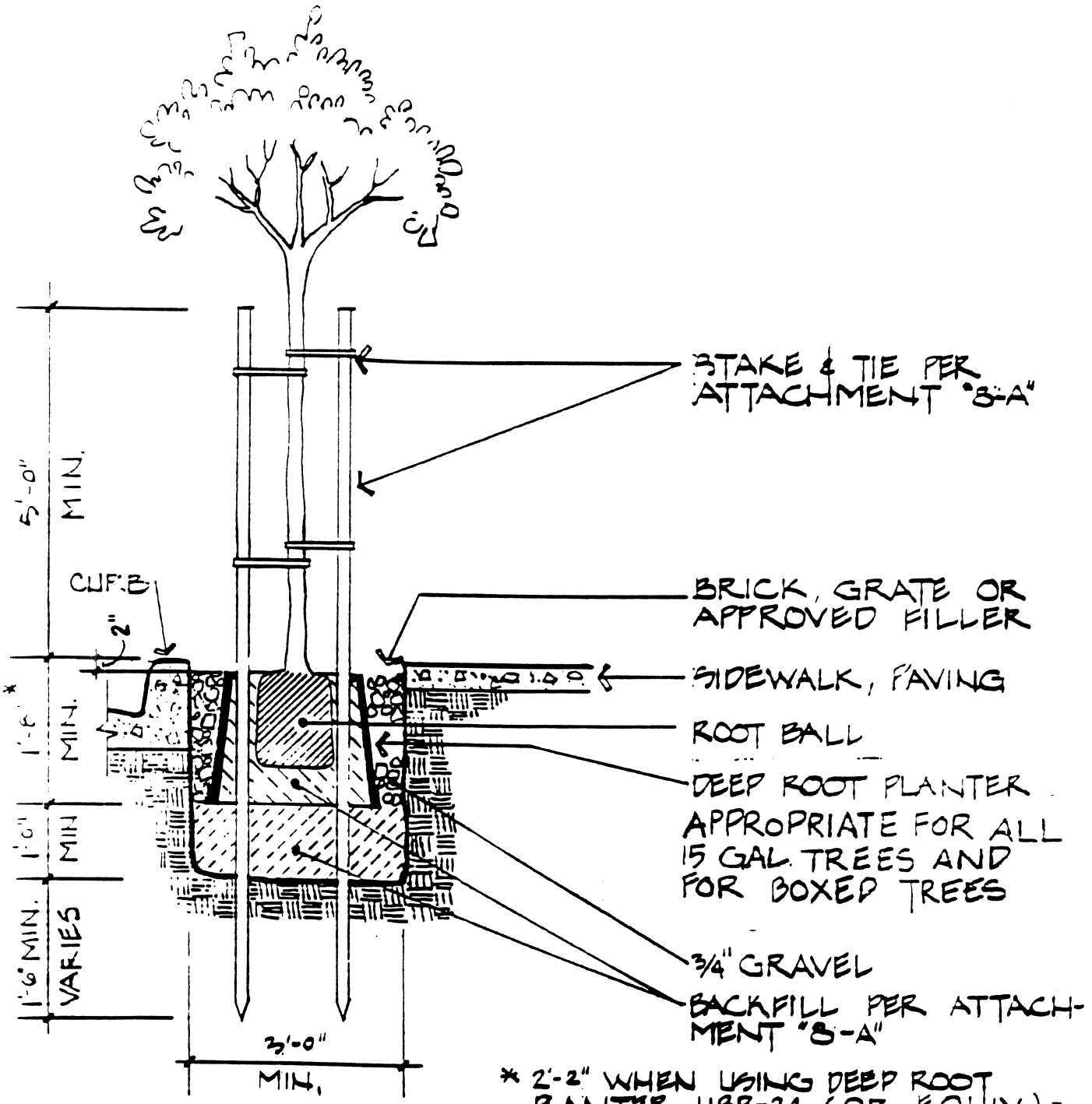


STREET TREE PLANTING and STAKING DETAIL 8-A

ATTACHMENT "8-A"

VENTURA COUNTY
PUBLIC WORKS AGENCY

JUNE 7, 1982

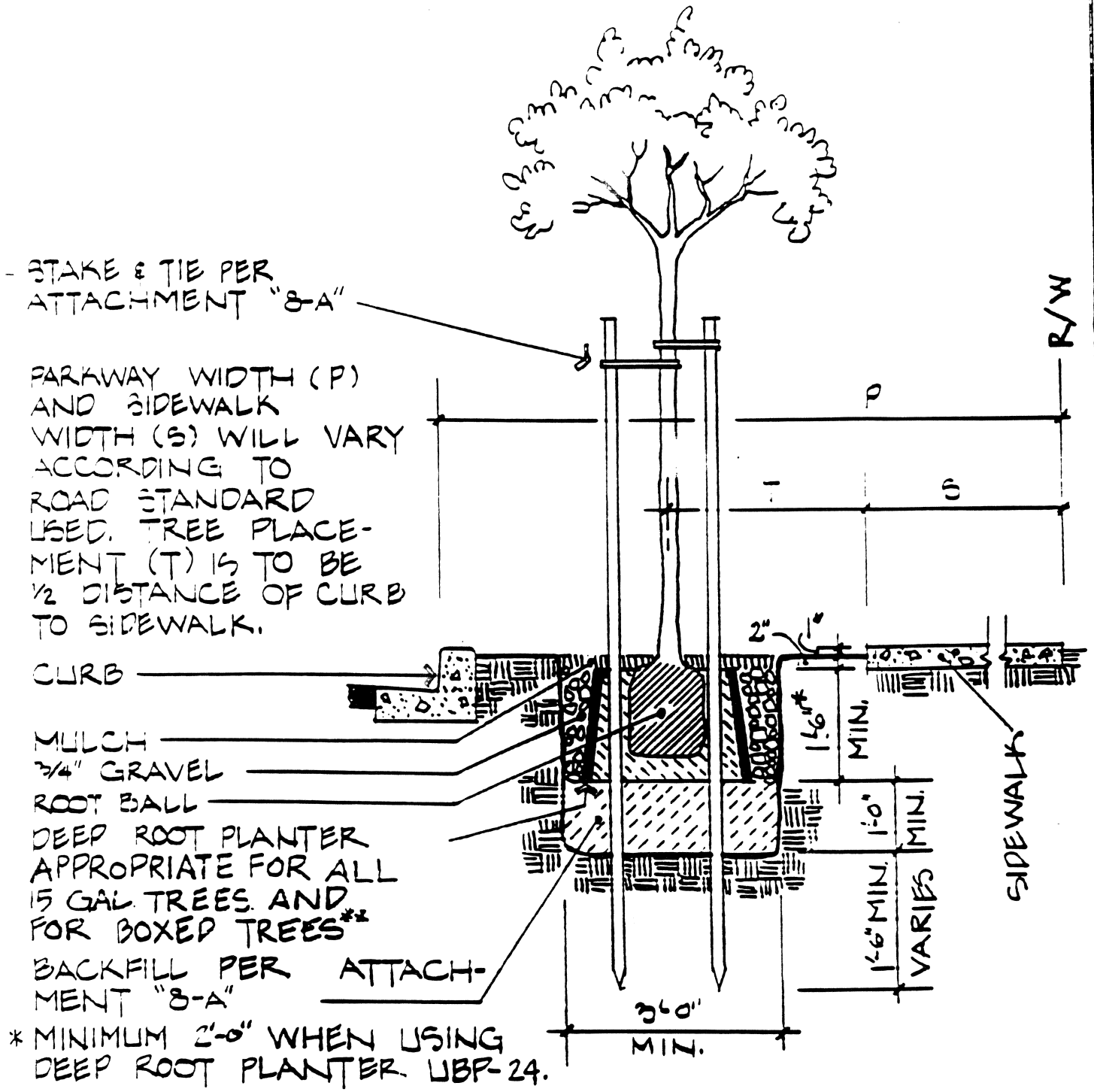


STREET TREE DETAIL TYPE "B" - TREEWELL

ATTACHMENT "8-B"

VENTURA COUNTY PUBLIC WORKS AGENCY

DRAWN BY B. LOCKARD
JUNE 7, 1982



* MINIMUM 2'-0" WHEN USING DEEP ROOT PLANTER. UBP-24.

** OR APPROVED EQUIV.

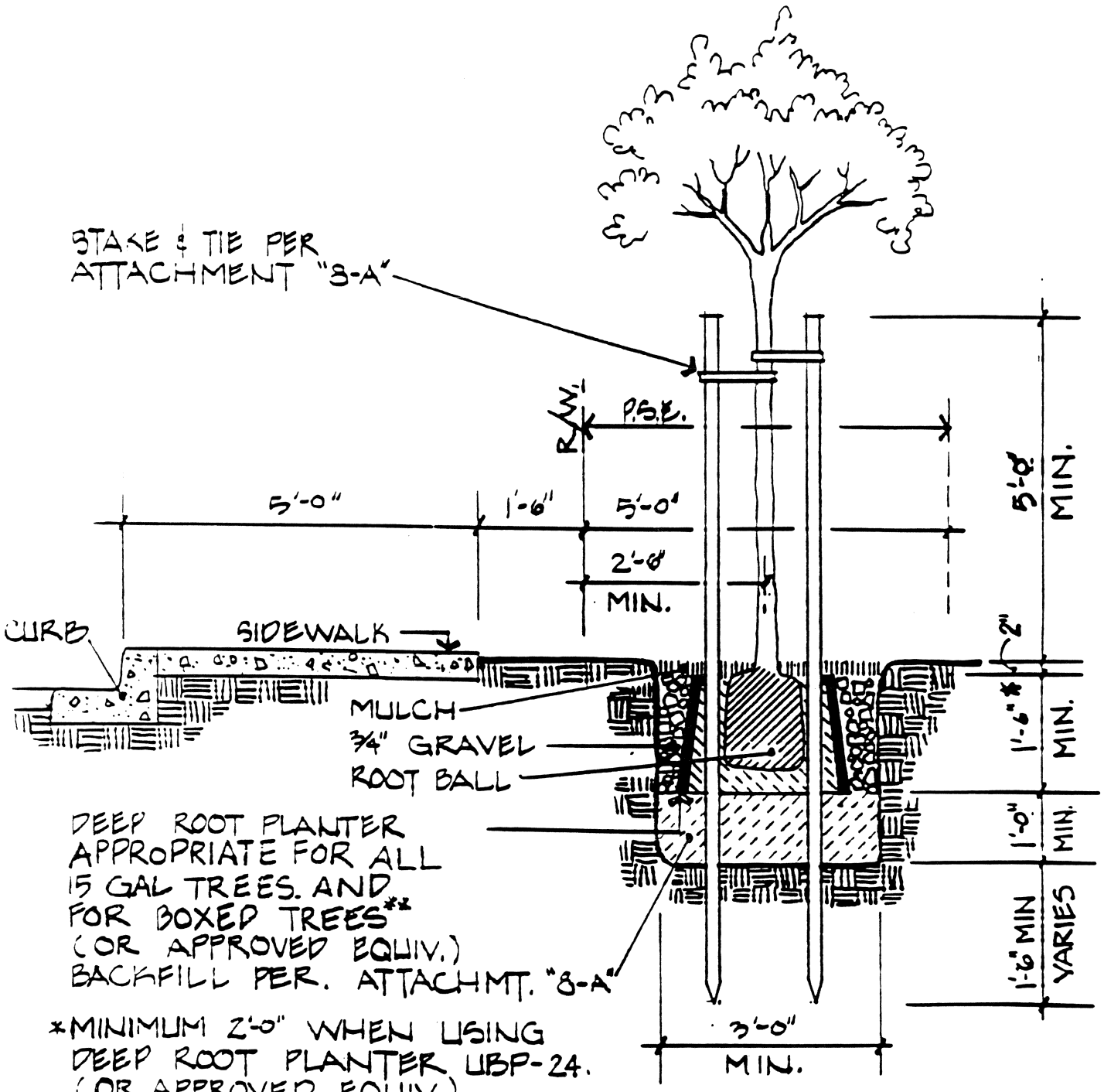
NO SCALE

STREET TREE DETAIL TYPE "C" - SIDEWALK ADJACENT TO RIGHT OF WAY

ATTACHMENT "8-C"

VENTURA COUNTY PUBLIC WORKS AGENCY

DRAWN BY B. LOCKARD
JUNE 7, 1982

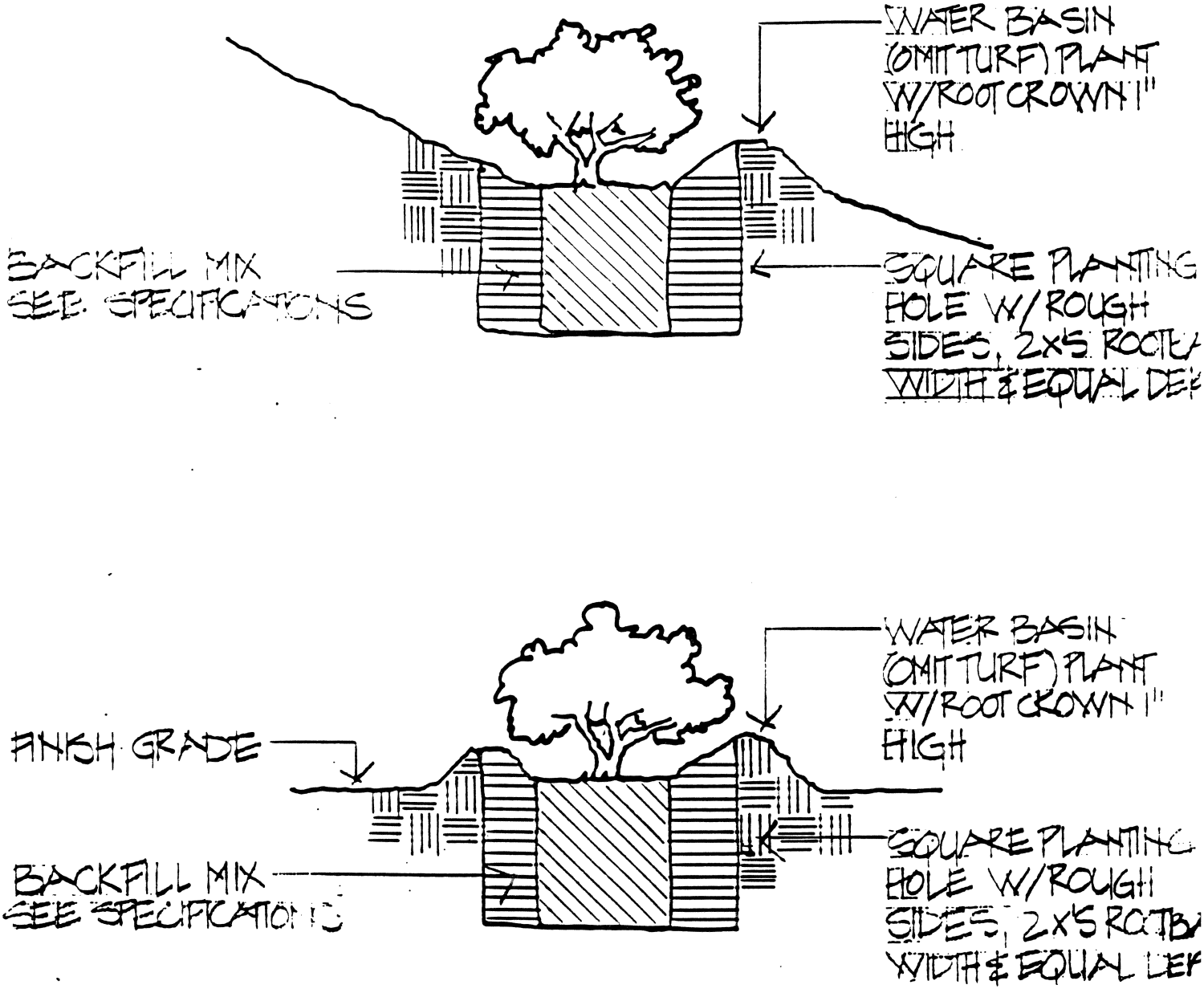


STREET TREE DETAIL TYPE "D" - SIDEWALK ADJACENT TO CURB

ATTACHMENT "8-D"

VENTURA COUNTY PUBLIC WORKS AGENCY

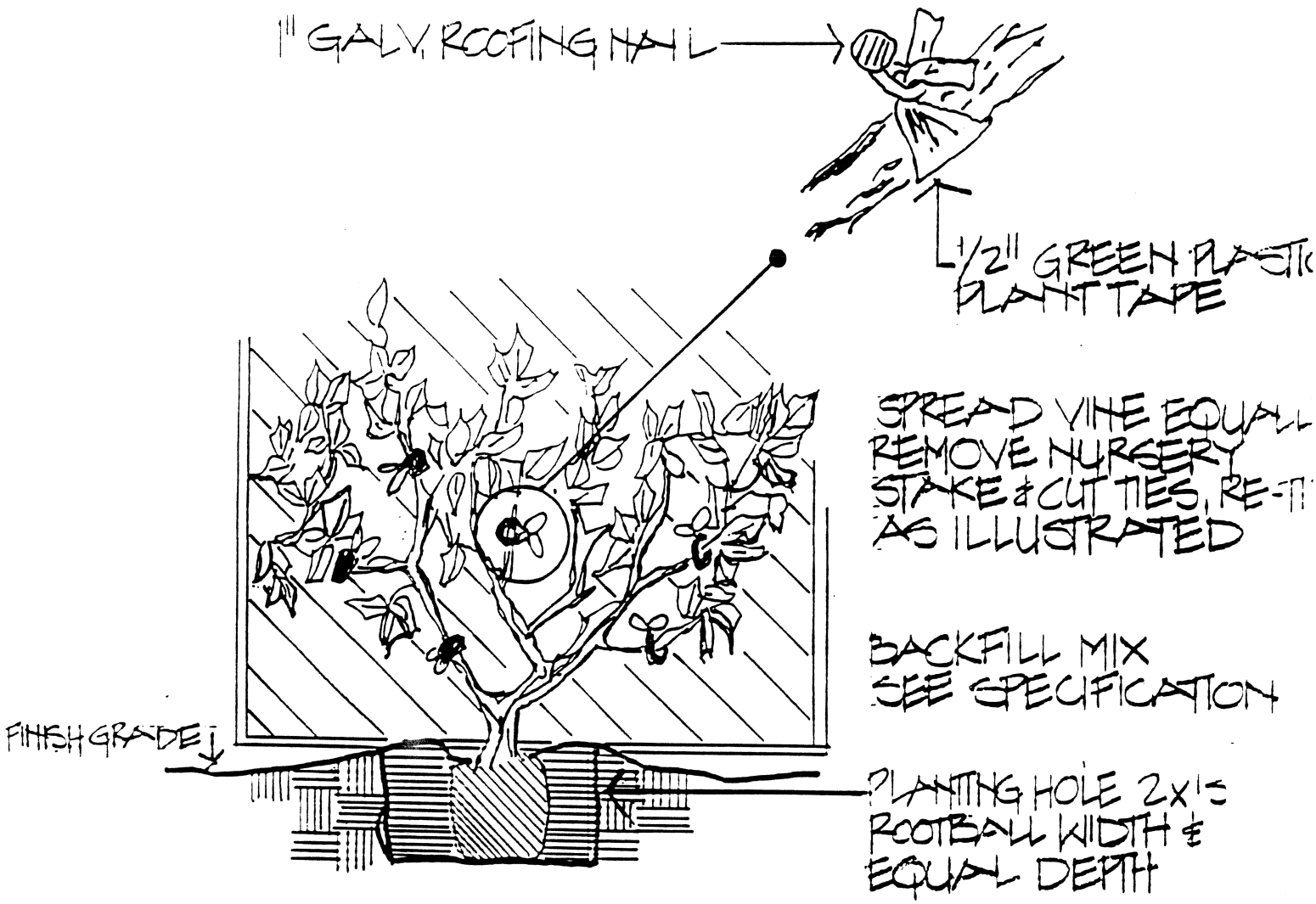
DRAWN BY B. LOCKARD
JUNE 7. 1982



SHRUB PLANTING DETAIL

ATTACHMENT "9"

NRS



NOTE: ON STUCCO WALL LOCATE STUD FOR NAIL LOCATION. ON WOOD FENCE UTILIZE RAILINGS OR STRINGERS FOR NAILING.

VINE PLANTING & TYING DETAIL

NTS

ATTACHMENT "10"

ATTACHMENT "11"

Irrigated Groundcovers

Proposed plant materials shall relate to architectural design elements based upon the characteristics of plant groups to assure compatibility with site improvements. Landscape materials not included on the following list may be considered, if recommended by a California registered Landscape Architect.

BOTANIC NAME	COMMON NAME
Dimorphotheca aurantiaca	Cape Marigold
Eschscholzia californica	California Poppy
Calendula officinalis	Pacific Beauty
Tagetes patula	Marigold
Lobularia maritima	Alyssum
Gazania (species)	Gazania
Trifolium fragiferum	O'Conners Legume

Depending upon the terrain of the site, the following slurry mix ratio shall be utilized:

Slope	Mulch	Fertilizer
Very Flat (10:1)	1000 Lbs/Ac	500 Lbs/Ac+8-8-4*
Gentle (5:1)	1200 Lbs/Ac	500 Lbs/Ac+17-13-5**
Cut & Fills (2:1 or 1½:1)	1800 Lbs/Ac	500 Lbs/Ac+17-13-5**
Severe (1:1)	2000 Lbs/Ac	500 Lbs/Ac+17-13-5***

* 8-8-4 Fertilizer: per soil analysis
** 17-13-5 Fertilizer: per soil analysis
*** Use "Ecology Control"/M-Binder (or equal)

ATTACHMENT "12"

Non-Irrigated Groundcovers

Proposed plant materials shall relate to architectural design elements based upon the characteristics of plant groups, to assure compatibility with site improvements. Landscape materials not included on the following list may be considered, if recommended by a California registered Landscape Architect.

BOTANIC NAME	COMMON NAME
Atriplex semibacata	Saltbush
Baileya multiradiata	Desert Baileya
Lasthenia glabrata	Gold Field
Encelia californica	NCN*
Eriogonum fasciculatum	Buckwheat
Eriophyllum confertiflorum	Golden Yarrow
Lotus scoparius	Deer Weed
Lupin succulentus	Blue Lupin
Salvia columbariae	Blue Chia
Virguiera laciniata	NCN*
Dimorphotheca anna	African Daisy
Achiella millefolium	White Yarrow
Avena fatua (variety) Montezuma	Montezuma Oats
Bromus mollis	Blando Brome
Eschscholzia californica	California Poppy
Layia platyglossa	Tiny Tips
Linum grandiflorum rubrum	Red Flax
Linum lewisii	Blue Flax
Oenotheria hookeri	Wild Primrose
Pennisetum villosus	Fountain Grass
Sisyrinchum bellum	Blue Eyes Grass
Lobularia maritima	Alyssum

*NCN = No Common Name

RA:IE211

OTHER

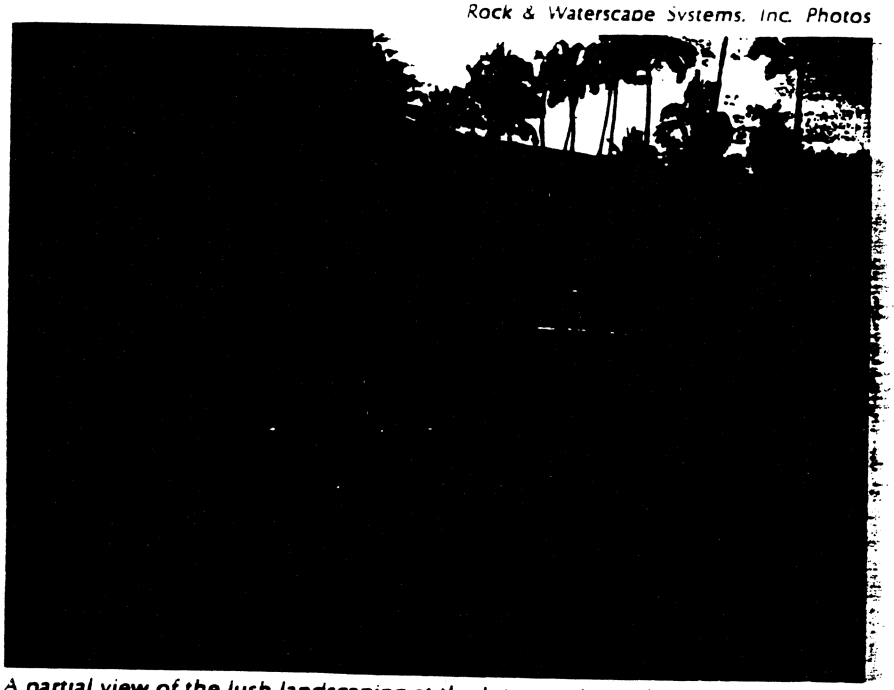
INFORMATIONAL

ATTACHMENTS

HOW VALUE ENGINEERING NETS SIGNIFICANT SAVINGS

By Gerald W. Bushree

Rock & Waterscape Systems, Inc. Photos



A partial view of the lush landscaping at the Intercontinental Hotel in San Diego.

Budgeting for landscape and irrigation can often be one of the most expensive and formidable facets of construction. This also involves the escalating costs of water.

Value engineering, applied to this important aspect of construction, can save developers 30 to 60 percent on landscape and irrigation costs, reducing the eventual price tag for consumers.

Value engineering, a method to determine whether you are receiving the most value for your construction dollar, recognizes the necessary functions of a project and provides, through knowledge and creativity, the step-by-step techniques and alternatives necessary to achieve those functions at the lowest possible cost.

Experts have estimated that 85 percent of all landscapes are overwatered. This means that possibly 85 percent of all landscape/irrigation systems are poorly designed, installed and maintained right from the beginning. Most system designs benefit from value engineering, and the savings can be tremendous, resulting in efficient operation, water conservation and less cost.

Even though value engineering has reduced the amount of equipment or offered alternatives, the integrity of the project is maintained — and in most cases improved. If a project has budgeted for medium grade landscape/irrigation services and equipment, a reduction in equipment cost can mean additional funds to upgrade the quality of all the materials on the project.

The heart of an irrigation system is the piping. If techniques common to agriculture engineers are used, the number of mechanical parts of the system such as valves and time clocks can be reduced. A good piping design can compensate for this equipment loss. Most designers do not understand the engineering behind piping since their training is lacking in hydraulic design techniques, thus designers with *agriculture engineering* backgrounds are the best experts.

R-3175

Designing the irrigation portion of a landscape is often viewed as mundane, uncreative work. Such tasks are often relegated to the person with the lowest seniority in the firm — usually the person right out of school with the least amount of training and field experience. This produces irrigation systems designed by the least trained people who overcompensate for their lack of knowledge by using hydraulic overkill. If in doubt, beef it up.

An example is a housing project in the North Orange County area of Southern California. The plans called for 1,000 remote control valves. Through a careful analysis, it was recommended that only 500 were actually needed. With the average cost per valve at $65, the savings was great, netting a total of $32,500.

In another case a set of drawings for a developer's commercial project specified 21, 110 V electrical pedestals that would run 21 irrigation time clocks. By investigating the capabilities of all the time clocks on the market, a cost effective alternative was found: A time clock that could run on 24 V. Now only one $2,000 pedestal was used versus the original 21, resulting in a savings of $40,000. In addition to the above savings, less expensive low voltage wiring was used to connect the one central pedestal to all the other controllers.

Each basic irrigation system consists of an electrical pedestal, a time clock, water meter and back-flow device. The above project specified 21, 2" water meters which cost $1,200 apiece from the municipality that had jurisdiction. Through value engineering, it was determined that only 5 water meters were actually needed on this project instead of 21, saving a total of $19,200.

Much of the savings that is possible through value engineering comes from utilities. With 75 percent fewer water meter connections, a lower volume of water is used. This reduces the human tendency to overwater and translates into lower water bills. The liability is lower now too because there is less equipment to malfunction. Future maintenance is simplified and economical with less to fix.

Value engineering is applied to the aesthetic side of the landscape plans as well. The *whole picture* must be examined: the growth rate, container size and cost of certain plants, their adaptability to the soil conditions and other environmental influences. This information is matched against the developer/builder's sales and marketing schedule. Perhaps the initial budgetary figures planned for landscaping become unnecessary due to quicker than normal sales activity. It may be more cost effective to use five gallon size trees that would mature in two years instead of the specified 15 gallon size trees that are more costly. The design criteria is maintained. In no way does value engineering detract from the overall beauty of the project.

"Experts have estimated that 85 percent of all landscapes are overwatered."

Site observations and liability are another important factor since the project goes to the lowest bidding contractor. When the contractor substitutes less expensive equipment to optimize profits, these changes are frequently the source of a majority of eventual problems. If the designer has not carefully supervised the installation of the project, he points the finger of blame at the contractor, saying, "He didn't follow my plans!" When the original designer requires site observations, then it is guaranteed that the products specified are the products installed. This reduces everyone's liability.

Contractors, at first, may not like these methods. But, as they begin to work within such checks and balances, they realize how well they are being protected in the long run from legal problems.

Another aspect of reducing liability is making sure that the correct equipment has been designated. When design firms feel they are too busy to allow manufacturer representatives to visit, how can they be well informed about new technology? People become entrenched in habits and design with one particular brand of equipment for 20 years. Knowledge of the entire product spectrum and manufacturers' reputations insures efficient and cost effective systems.

The application of value engineering to the landscape and irrigation portion of construction has saved developers thousands of dollars. It is well worth selecting a firm that practices this methodology. □

Gerald W. Bushree is a senior principal, along with Stephen A. Alvarez and Reginald W. Stevens, of San Diego, California-based Precision Land Design, Inc.

A-3675

STATE OF CALIFORNIA)
COUNTY OF VENTURA) ss
CITY OF SANTA PAULA)

I, STACEY B. MacDONALD, City Clerk of the City of Santa Paula, do hereby certify that the above and foregoing Resolution was duly passed and adopted by the Council of said City at a Regular meeting thereof held on the 20th day of March, 1989, by the following vote:

AYES: Councilmembers Wilson, Barringer, Melton and Mayor Maland

NOES: Councilmember Urias

ABSENT: None

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City this 21st th day of March, 1989.

STACEY B. MacDONALD, CMC
City Clerk

CITY OF SANTA PAULA
INCORPORATED
APRIL 22, 1902
VENTURA CO. CAL.

Ventura County Lawn Watering Guide

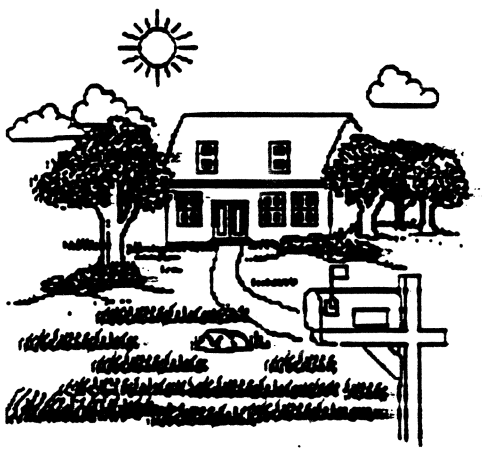
A simple way to determine your lawn watering needs

1. Set 5 flat bottom cans or coffee mugs at various places on your lawn.
2. Turn on your sprinkler(s) for 15 minutes.
3. Measure the depth of water in each can with a ruler and determine the average water depth in the cans.
4. Find your average water depth on the top of the Lawn Watering Guide.
5. Read the number of minutes you should water every third day and record the times for future reference.

Use these watering times as a guide only. Your lawn may need more water when it's extra hot or less when it's cool. Watering can be skipped when it rains. Avoid watering on windy days or midday when evaporation is high.

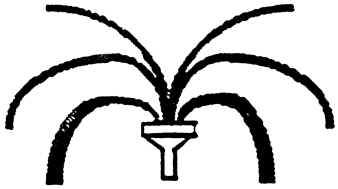
Average water depth in cans/inches		11/4"	3/4"	5/8"	1/2"	3/8"	5/16"	1/4"	1/8"
SPRING	Coast	4	8	9	12	16	19	24	49
	Inland	5	9	11	14	19	23	28	57
SUMMER	Coast	7	12	14	18	24	29	37	74
	Inland	9	15	18	22	30	36	45	90
FALL	Coast	4	7	9	11	15	18	23	46
	Inland	4	8	9	12	16	19	24	49
WINTER		Water only during prolonged warm or dry periods							

PLN186-4/89

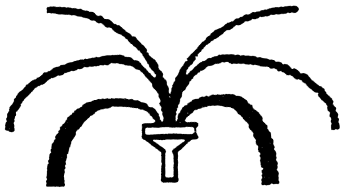


Sprinkler Adjustment

One of the greatest defects of lawn watering systems is poor uniformity of water distribution. An even distrubution of water over the entire lawn area is water efficient and can result in significant water savings.



After you have done the suggested test of your watering system, note the difference in the amount of water in each of the containers. That will tell you a lot about the uniformity of your sprinkler system. If there is more than a 1/4" difference between containers, you should adjust or change sprinkler heads or experiment with the positioning of hose end sprinklers.



If you have questions or would like additional information:

call

Ventura County Water Conservation Coordinator at (805) 654-2471

or write

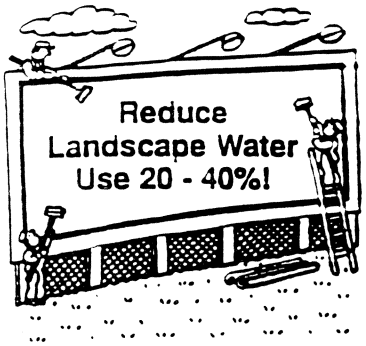
Ventura County Water Conservation Program
800 South Victoria Avenue,
Ventura, CA 93009.

For more information:
call
Ventura County Water Conservation Coordinator at (805) 654-2471

STANDARD DEVELOPMENT CONDITIONS FOR
SUBDIVISIONS WITH MODEL HOMES:
MODEL HOME WITH LOW WATER USE LANDSCAPING

That prior to the issuance of a Zone Clearance for more than two model homes for this tract, the permittee shall submit to the Planning Director, along with the appropriate plan check fee, a landscape plan for one of these model homes. Said landscape plans shall utilize low water using landscape design treatment. The intent of this conditions is to demonstrate to prospective home buyers the feasibility and aesthetic qualities of low water using landscape design. The permittee shall provide appropriate signing (shown on the landscape plan) explaining that this model home utilizes a low water using landscape and indicating which plant materials are used. For further details and information refer to the City of Santa Paula Guidelines for Preparation of Landscape and Irrigation Plans, Appendix 1.

Lawn Watering Guide



If you are a typical Ventura County resident, nearly half the water you pay for hits the dirt - your lawn, flowerbeds, and gardens. And, if you are typical, you can reduce your landscape water by 20 to 40% without any adverse effects. Read this brochure, perform a simple test on your watering system, and then change a few habits.For this small investment of your time, you can save money and water and still have the best looking yard in your neighborhood! Here's how.

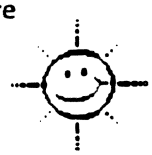
1. USE THE "LAWN WATERING GUIDE" ON THE BACK OF THIS BROCHURE TO DETERMINE YOUR APPROXIMATE WATERING NEEDS. Whether sprinklers are underground or attached to the end of a hose, follow the directions on the Guide to calculate your approximate watering times. Sprinklers on each valve will require separate measurement and calculation. It is best to conduct the test when you would normally water so that water pressure will be the same. Please remember that Ventura County has many different micro climates, soil types and rainfall patterns, so the recommendations should be used only as guidelines.

2. GET TO KNOW HOW PLANTS SIGNAL FOR WATER. The lawn itself is a reliable instrument for indicating when water is needed. Grass will not spring back after being stepped on if moisture is low. Some plants lose their gloss and start to droop a little before wilting. The time to water is when the plants need it.

Because the distribution of water, even by the best sprinkler systems, is imperfect, a small part of the lawn that received the least water will appear dry first. A good rule is "never water a lawn until part of it looks like it needs it". Rigid watering schedules waste water. If you have an automatic timer, don't be afraid to reset it.

3. SELECT APPROPRIATE GRASSES. Select grasses which are adapted to warmer, drier climates such as, varieties of Bermuda, St. Augustine, Zoysiagrass and new fescue varieties.Watering can be reduced by 20% over the more thirsty grasses such as, bluegrass, bent grass, and annual rye grass.

4. AVOID WATERING ON WINDY DAYS OR MIDDAY WHEN EVAPORATION IS HIGH. Water early in the morning before 6:00 a.m. Evenings after 8:00 p.m. is second best but then fungus has all night to attack moist foliage. Avoid watering during the peak water use hours of 5:00 p.m. to 8:00 p.m.



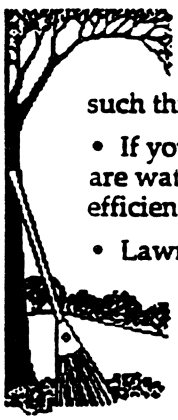
5. ADJUST SPRINKLERS TO WATER PLANTS ONLY - not the sidewalk, driveway, patio or street. Make sure that coverage is even so that you don't have to drown one area in order to get enough water on another.

6. SOIL TYPES VARY. For sandy soil, more frequent short watering periods are best. This prevents water loss beneath the root zone of the grass. For compacted or heavy soils, such as clay, it is best to water deeply and less frequently because these soils hold water longer.
It is best to split the watering time into 2 or more sessions to allow for greater absorption and decrease runoff.

In addition, use a shovel or long screwdriver to check the moisture in the soil before watering. Such a probe will usually move easily through moist soil but will stop when it reaches dry soil.

7. USE A KITCHEN TIMER as a reminder to turn sprinklers off. ***Remember,*** **if you have an automatic timer on your sprinkler system, it will need to be reset when the weather changes.**

Additional Water-Saving Hints:



- Compared with other plants, grass is very water consumptive. Use it only where it will be enjoyed for such things as play or entertaining.
- If you have a gardener, do not assume they are waterwise. Encourage them to follow efficient watering practices.
- Lawns which are cut very short will lose excessive water through evaporation. Let lawns reach a height of 3-4 inches.
- Fertilizing in moderation with a balanced formula saves water and will provide your lawn with the necessary nutrients to remain attractive and healthy.
- Remove water-robbing weeds.

WATER CONSERVING LANDSCAPE DESIGN
MODEL HOME DEVELOPMENT CRITERIA

The following criteria apply to model homes being designed to meet the water saving landscaping condition for residential tracts. Each "water saving" model home shall contain exclusively low water use plant materials and low flow irrigation systems, with appropriate signs and information for prospective home buyers.

WATER METER

All models in the complex including the low water use model shall be equipped with a separate water meter (to be obtained at no cost from the water agency serving the tract) in order to generate records regarding how much water the landscaping uses. This information will be used in public information materials about the model and the water savings potential for low water use landscapes.

PLANT MATERIALS

Some plants considered to be low water using in Ventura County are identified in the attached plant list. Other low water use plants may be substituted, if approved by the County landscape consultant for the project. Many of the plants listed are attractive, flowering, require relatively little maintenance once established, and will enhance the appearance of the model.

USE OF TURF

Turf requires more water than any other plant or groundcover. Turf shall be allowed only as needed for recreational purposes or play areas, and may cover no more than 20% of the total non-sloped lot area. Low water use varieties of turf shall be used (see plant list on page I-3) to minimize water required by turf areas.

IRRIGATION SYSTEM

As described in the Ventura County Guide to Landscape Plans, the irrigation system serving a low water use landscape shall include low precipitation rate sprinklers or drip systems. The sprinklers shall be located properly to minimize over-spray onto un-planted areas. At least one moisture sensor should be placed in the turf area with a sign indicating its location. The moisture sensor will override the controller if the soil is too wet to require irrigation.

SIGNS

Signs identifying aspects of the landscape design and irrigation shall be placed around the model. These signs should be clearly marked on the landscape plan for the model. Example language for the signs is attached. The following criteria should be used in developing and placing the signs.

Front Yard Sign Identifying Model: A sign, large enough to be visible from the street and sidewalk (at least 2 feet by 2 feet) shall be located in front of the model home. The sign shall indicate that the model is landscaped with low water using plant materials and irrigation systems.

Other Exterior Signs: Several signs shall be placed throughout the landscaped area identifying the irrigation system used, the different sub-areas of the landscape, and any other features that contribute to the overall water conserving theme (hardscapes, redwood bark, mulch). One sign indicating the use of a moisture sensor in the lawn (turf) should also be included.

Interior Signs or Displays: A drawing, or combination of drawings, should be displayed inside the model providing a schematic of the landscape. These drawings should include a key identifying the plants in the yard. It is suggested that this schematic also be printed in a one page handout to be available at the model or the sales office. The drawings could be a simplified rendering of the landscape plan itself, using common names rather than the often used Latin names for the plants. The drawings should be colorful, easy to read, and should be framed for protection.

LITERATURE

A package of literature describing water conserving landscaping shall be given out to individuals upon purchasing a home in the tract (see attached). This literature (see attached list), and additional materials shall be displayed inside the model, also enclosed in a frame, with a note indicating where this material can be obtained. Literature to be given to homebuyers at the time of purchase can be obtained by contacting the Planning Division (some are free, others must be purchased).

**NOTE: Two important aspects of a water conserving landscape are: placement or grouping of plants, and appropriate location with respect to slope and sun exposure. Many plants that are not strictly low water using, can be grouped together in confined areas, or placed in the shade, to reduce their water needs. Plants must be grouped according to the amount of water they need, and irrigated accordingly, to assure actual water savings. The landscape architect can provide expertise in this area.

Attachments

Reference list for literature
Signs (alternative wording)

EXAMPLE LANGUAGE FOR SIGNS

Sign at Entrance:

_____ Development Company presents a model home which utilizes a water conserving landscape design. Features used on this model are described in signs located in the front and rear yards, with further information available in the sales office. We believe you will find this model an attractive alternative to traditional landscapes that will help cut your water costs and maintenance time.

Sign Regarding Plants:

In an effort to demonstrate water conservation in the landscape, the plants used in this model are low water using and drought tolerant. As you can see in this landscape, it is possible to have an attractive, lush and diverse group of plants that do not require a lot of water. Plants are grouped according to their water needs, and sun or shade tolerance.

Sign Regarding Turf (Lawn):

The use of lawn in this landscape is minimized due to its high water consumption. Lawn is placed in the rear yard where it can be best used for recreational purposes. A special variety of lawn that requires less water has been used here.

Sign Regarding Irrigation System:

The irrigation system has been designed to minimize wasted water. Plants that require similar amounts of water are grouped together on the same irrigation valves. Water conservation is acheived through use of low application rate sprinklers or drip irrigation to lessen runoff. An automatic control system is used to apply water accurately and consistently. A moisture sensor placed in the lawn area determines when water is needed. This is connected to the automatic controller.

LITERATURE FOR WATER CONSERVING MODEL HOMES

Information for Model Home for General Public
Nursery Program Brochure

Literature for Homeowner Folder
Information sheet describing need for water conserving landscapes
Xeriscape Brochure - (from Orange County Water District)
Sunset Reprint- Water Saving Planting Ideas
Nursery Plant Tagging Program Brochure

Suggested Literature for display
Selected California Native Plants in Color
Success List for Water Conserving Plants
Plants For California Landscapes
"Drip..It's Time Has Come"
How To Have a Green Garden in a Dry State
40 Ways to Save Water in Your Yard and Garden

WHERE THIS LITERATURE CAN BE OBTAINED
Ventura County Planning Division
Metropolitan Water District of Southern California
Water purveyor providing water service to the tract
City of Thousand Oaks Utilities Division

COST
The cost to obtain copies of the general brochure to be kept in each model home will be paid by the County The folders of literature to be distributed to new home buyers shall be purchased by the developer from the County, at a reasonable cost. The developer shall purchase at least as many folders as there are units in the tract. The County will provide the folders and the literature to the developer when they have paid the appropriate fee.

Other Water Conserving Planting Suggestions:

Trees: instead of *Podocarpus* (to 60') — *Cedrus libani* (Cedar of Lebanon) - to 80')
*Umbellularia californica** (California Bay)
*Quercus agrifolia** (Coast Live Oak)

instead of *Pyrus* — *Tabebuia impetiginosa* (Pink trumpet tree) - to 25', briefly deciduous
*Fremontodendron californicum** (Flannel Bush) - perhaps should be considered a shrub, various cultivars avail.

Shrubs: instead of *Raphiolepus* "pink lady" —
Hakea suaveolens (Sweet Hakea) - evergreen and fast growing
*Ceanothus** (California lilac) - numerous cultivars avail. from small trees, to shrubs, to ground cover
*Heteromeles** (Toyon) - red berries in winter
*Garrya** (Silk-tassel)
*Calycanthus** (Spice Bush)
Arbutus (Strawberry tree) - shrubby cultivars avail.
*Rhus integrafolia** (Lemonade berry)
Duranta repens (Sky flower, Golden dew drops)
Murraya paniculata (Orange jassamine)

*California natives

Suggestions from Jennifer Matos, rec. 8/25/98.