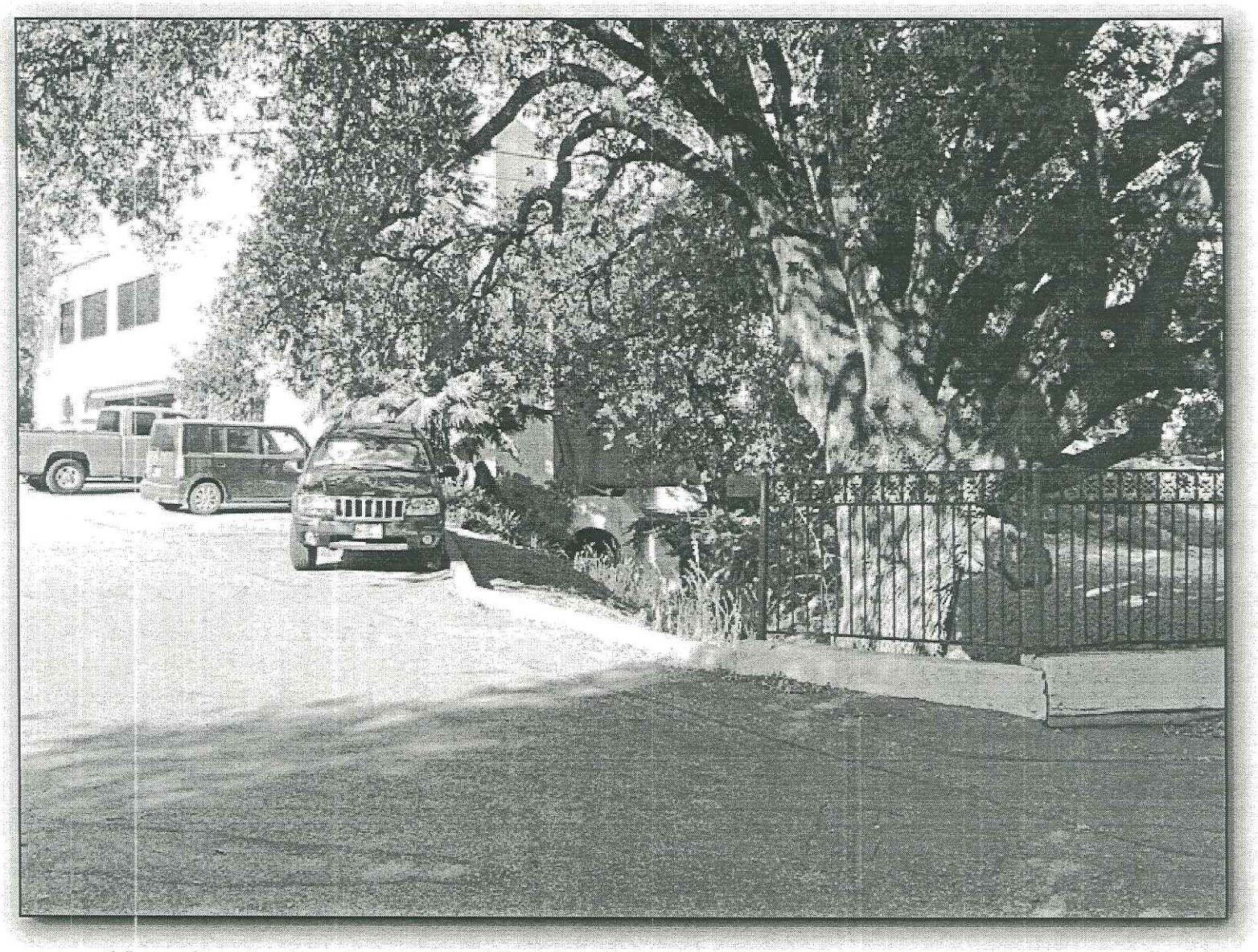
Facing west on Vendell Road, with Santa Monica Mountains in background and embankment of Highway 101 on right.

SOURCE: Impact Sciences, Inc. – December 2006

FIGURE 4

Site Photos

874-001•02/07



View of south-side of existing building, parking lot, and culvert with oak tree in foreground.

SOURCE: Impact Sciences, Inc. – December 2006

FIGURE 5

Site Photos

874-001•02/07

3.2 Vegetation and On-site Habitats

On-site vegetation is comprised of ornamental landscape species, such as Peruvian pepper tree *(Schinus molle)*, rosemary *(Rosmarinus officinalis)*, oleander *(Nerium oleander)*, and crape myrtle *(Lagerstroemia indica)*. Native species such as California walnut *(Juglans californica* ssp. *californica)*, coast live oak *(Quercus agrifolia)*, valley oak *(Quercus lobata)*, and canyon oak trees *(Quercus chrysolepis)* are also located on the site. Located on the southeast portion of the site are non-native grasses dominated by black mustard *(Brassica nigra)*, wild oats *(Avena fatua)*, star thistle *(Centaurea melitensis)*, Russian thistle *(Salsola tragus)*, and red brome *(Bromus madritensis* ssp. *Rubens*). These non-native plants also occur on the south-facing embankment located immediately north of Vendell Road and south Highway 101. A complete list of plant species observed on the site is provided in **Appendix A, Plant Species Observed on the Liberty Canyon Project Site.**

4.0 METHODOLOGY

Impact Sciences' biologists walked the extent of the site boundary (and areas immediately adjacent to the site boundary) to assess all on-site habitats (See, **Appendix B, Site Features and Assessment Boundary**). Prior to visiting the site, a query of the CDFG California Natural Diversity Database (CNDDB) (CDFG 2006) and the California Native Plant Society database (CNPS 2006) was conducted to identify special-status plant and animal species previously recorded in the area. The CNDDB lists historical and recently recorded occurrences of special-status plant and animal species. The CNPS database lists historical and recent occurrences of special-status plant species. The areas queried include the U.S. Geological Survey (USGS) 7.5-minute quadrangles for Calabasas, Canoga Park, Malibu Beach, Oat Mountain, Point Dume, Santa Susana, Simi, Thousand Oaks, and Topanga.

The potential for special-status species to occur on the project site is based on the proximity of the site to recorded CNDDB and CNPS occurrences; known geographic ranges; the quality of on-site habitats, which include, but are not limited to: topography, elevation, and soils; surrounding land uses; and habitat preferences.

Impact Sciences conducted a literature review, which included a master's thesis that examined the Liberty Canyon and 101 Freeway underpass as used by wildlife as a movement corridor, as well as wildlife movement studies prepared for Santa Monica Mountain Conservancy. The literature review also included comparisons of the functions and values of similar corridors occurring in other geographical areas.

Between October 16 and November 6, 2006, Impact Sciences placed two infrared movement cameras on the project site in an attempt to photograph animals that may be utilizing the project site as a movement

corridor. One camera was positioned on Vendell Road, facing to the west, and a second camera was faced towards the south side of the existing building at the culvert. The potential for Vendell Road to serve as a wildlife movement corridor is described in more detail below in **Section 5.2, Wildlife Movement Corridors.**

5.0 IMPACT ANALYSIS

5.1 Special-Status Plants and Animals

No special-status plant species are expected to occur on site, due to the site's lack of suitable habitat for supporting special-status plants. Conversely, there are five special-status animal species that could potentially be present on portions of the site. A comprehensive list of special-status animal species that have the potential to occur on site is provided below in **Table 1, Special-Status Animal Species with Potential to Occur on the Site. Table 1** also identifies the potential development constraints that each species may pose, and **Section 5.1.1, Recommendations**, provides recommendations for addressing each potential constraint. It should be noted that several additional special-status plant and animal species have been recorded in the region; however, **Table 1** only identified those that have the *potential* to occur based on the site's habitat quality and habitat suitability.

Biologists observed an Audubon's cottontail *(Sylvilagus audubonii)*, western fence lizard *(Sceloporus occidentalis)*, and the scat of a coyote *(Canis latrans)* during the site visit. Additionally, the following avian species were observed: house finch *(Carpodacus mexicanus)*, California towhee *(Pipilo crissalis)*, western scrub jay *(Aphelocoma californica)*, acorn woodpecker *(Melanerpes formicivorus)*, white-crowned sparrow *(Zonotrichia leucophrys)*, lesser goldfinch *(Carduelis psaltria)*, European starling *(Sturnus vulgaris)*, American crow *(Corvus brachyrhynchos)*, and mourning dove (*Zenaida macroura*). No special-status plant or animal species were observed during the site visit; however, as previously indicated, focused surveys were not conducted.

Table 1
Special-Status Animal Species with Potential to Occur on the Site

Common Name *Scientific Name*	Status		On-Site Habitat	Development Constraint
	Federal	State		
Reptiles				
Silvery legless lizard *Aniella puchra pulchra*	--	CSC	Could occur within leaf litter underneath oak tree canopies and within areas containing friable, sandy soils.	If site disturbance occurs in these on-site habitat areas, and if this species is observed on the site, a potential significant impact under CEQA.

Common Name *Scientific Name*	Status Federal	 State	On-Site Habitat	Development Constraint
California mountain kingsnake *Lampropeltis zonata pulchra*	--	CSC	Could occur along banks of drainage and within vegetated areas on the site. Known to occur in the adjacent Santa Monica Mountains.	If site disturbance occurs in these on-site habitat areas, and if this species is observed on the site, a potential significant impact under CEQA.
Coast horned lizard *Phrynosoma coronatum*	--	CSC	Could occur in adjacent areas with sandy, friable soils, such as along the south-facing embankment located to the north of the site.	If site disturbance occurs in such habitat areas, and if this species is observed on the site, a potential significant impact under CEQA.
Two-striped garter snake *Thamnophis hammondii*	--	CSC	Could occur along banks of drainage and within vegetated areas on the site. Known to occur in the adjacent Santa Monica Mountains.	If site disturbance occurs in these on-site habitat areas, and if this species is observed on the site, a potential significant impact under CEQA.
Bird				
Cooper's hawk *Accipiter cooperii*	—	CSC	Forages and nests in dense woodlands, preferably near riparian areas.	If site disturbance occurs in such habitat areas, and if this species is observed nesting on the site, a potential significant impact under CEQA.
Mammals				
Pallid bat *Antrozous pallidus*	--	CSC	Could roost in abandoned building and in culvert that extends underneath exiting building.	If this species is observed roosting in the adjacent abandoned building or in the culvert, a potential significant impact under CEQA.
Mountain lion *Felis concolor*		SPM	Vendell Road has the potential to provide a movement corridor from the Santa Monica Mountains to open areas to the north of Highway 101.	A potential significant impact under CEQA, if Vendell Road is impacted, and would result in an impediment to the movement of animals.
Mammals (continued)				
Occult little brown bat *Myotis lucifugus occultus*	--	CSC	Has potential to roost in abandoned building; however, not as likely as the pallid bat.	If this species is observed roosting in the adjacent abandoned building, a potential significant impact under CEQA.
Townsend's western big-eared bat *Plecotus townsendii*	--	CSC	Has potential to roost in abandoned building; however, not as likely as the pallid bat.	If this species is observed roosting in the adjacent abandoned building, a potential significant impact under CEQA.

Status Key:
State: CSC = California Species of Concern; SPM = Specially Protected Mammal

5.1.1 Recommendations

Silvery legless lizard, California mountain kingsnake, coast horned lizard, and two-striped garter snake: If site disturbance occurs in suitable on-site habitats for these species, prior to ground disturbance activities, a qualified biologist should perform a pre-construction survey in areas where these species may occur, to avoid potential direct and indirect impacts.

Cooper's hawk: Prior to ground disturbance activities, a qualified biologist should perform a pre-construction survey in appropriate on-site habitats that could provide nesting opportunities. Such surveys may be concurrent with nesting bird surveys (see **Section 5.3, Native Bird Nests**).

Pallid bat, occult little brown bat, and Townsend's western big-eared bat: Due to the lack of access into the abandoned structure during the site visit, biologists were unable to confirm whether bats are roosting inside. Therefore, prior to the demolition of the structure (if proposed), a qualified biologist should perform a pre-construction survey to determine whether any bats are roosting inside. If roosting sites are observed, and demolition of the abandoned structure is proposed, measures should be employed to avoid impacts, such as limiting construction to months outside of the roosting season, which is generally during the spring and summer. If demolition of the abandoned structure is not proposed, and it is determined that bats are roosting inside, such measures may include limiting construction to the hours between 7:00 am and 5:00 pm.

Mountain lion: The project applicant should avoid the creation of impediments to Vendell Road, which could inhibit the movement of large mammals along this road. Measures should be implemented to avoid impacts to Vendell Road and migrating animals. Several mitigation measures related to migration corridors are provided in **Section 5.2, Wildlife Movement Corridor.**

5.2 Wildlife Movement Corridors

Wildlife movement corridors are linear landscape elements that serve as linkages between historically connected habitat/natural areas, thereby facilitating wildlife movement between these natural areas. Highway 101 severely fragments open space areas to the north and south of the Highway. The Liberty Canyon underpass has the potential to provide access to animals migrating between open space to the north and south of the Highway. As previously indicated, Vendell Road has the potential to provide linkage between the Santa Monica Mountains located to the south and west of the project and the Liberty Canyon/Highway 101 underpass.

The City of Agoura Hills General Plan - Open Space and Conservation Element of the Plan (1993), addresses the value and need for regulation of existing migration corridors within the City. Implementation Measure 1.8 of this section notes that the "City shall consult with the Santa Monica Mountains Conservancy and other affected agencies in the design of Agoura Road near Liberty Canyon to ensure that a reasonably viable wildlife movement corridor is provided."

According to Paul Edelman's corridor study (1990), the Liberty Canyon underpass is a substantial component for wildlife movement across Highway 101. Edelman's study further explains that because of recent development to the south of Agoura Road, animals must travel either on the paved road system or

approximately 1,000 feet on the embankment of Highway 101. "Liberty Canyon is the only currently viable corridor capable of connecting the biota of the Santa Monica Mountains with the hills of Simi Valley and native populations to the north."

Beier (1995) found mountain lions avoided artificially illuminated corridors, choosing vegetated portions instead. Ng (2000) conducted a study between 1999 and 2000, on the use of the Liberty Canyon underpass by migrating animals. The underpass was monitored for four days each month, with three cameras and a track station. The study focused on potential use of the following target species: mountain lion, bobcat (*Lynx rufus*), coyote (*Canis latrans*), gray fox (*Vulpes cinereoargenteous*), and badger (*Taxidea taxus*). Wildlife crossing data were correlated with passage structure dimensions, habitat, and human activity. Ng (2000) found that during this one-year period, the following mammals used the Liberty Canyon underpass: approximately 500 humans (and three people riding horses), fifteen deer, four dogs, two raccoons, one cat, one coyote, and a squirrel. No target species were determined to be using the corridor during the study period.

Between October 16 and November 6, 2006, Impact Sciences placed two infrared movement cameras on the project site in an attempt to photograph any animals that may be utilizing the project site as a movement corridor. Cameras were set up during the morning of October 16 and removed in the afternoon on November 6. One camera was positioned on Vendell Road, facing to the west, and a second camera was faced towards the south side of the existing building at the culvert. Over a three-week period, no mammals were photographed using Vendell Road or the culvert that extends underneath the existing office building.

5.2.1 Impact Analysis

Although the importance of the Liberty Canyon corridor is broadly accepted by the scientific community, regulating agencies, the Santa Monica Mountains Conservancy, and the City of Agoura Hills (as noted in their General Plan), future development near the project site is continuously risking further degradation of an already underutilized corridor. For example, the County of Los Angeles approved a nearby 161-acre development that is located to the north of the Liberty Canyon/Highway 101 underpass (L. A. County Notice of Preparation April 11, 2005). Commercial development, residential neighborhoods, city streets, Highway 101, and ambient nighttime lighting have cumulatively created barriers that discourage the use of the Liberty Canyon underpass by the target species referenced in the Ng (2000) study.

When considering previous and proposed urban development in the area and existing ambient lighting and noise, the addition of a building and parking lot on the subject property would not significantly contribute to further degradation of the Liberty Canyon corridor or the use of Vendell Road by migrating

animals. Fundamentally, most of the damage (i.e., barriers that impede the movement of animals between open space areas to the north and south of Highway 101) to the Liberty Canyon corridor has already been done as a result of urbanization. It is not possible to quantify the additional effects that would result solely from the proposed project, without conducting an intense "before and after" research study. Nonetheless, the impacts of the proposed project would be insignificant when compared to the imposition of the freeway barrier, and past and proposed developments in the vicinity.

5.2.2 Recommendations

Below are recommended mitigation measures to reduce potential impacts on wildlife movement in the area:

- Limit construction to the hours between 7:00 AM and 5:00 PM.
- Employ Best Management Practices (BMP's) during construction, such as picking up trash, checking under vehicles for animals before moving, and placement of drip pans under equipment that would be staged for greater than 24-hours.
- Plant native trees, shrubs, and herbaceous plants along Vendell Road. Choose native plants growing in the vicinity of the project site. Plants should be spaced apart adequately enough to allow wildlife movement and to offer a canopy that provides protection and shelter to animals that may use Vendell Road as a movement corridor. Native trees such as oaks and walnuts should be spaced at approximately 30 feet apart; medium-size native shrubs such as bay laurel, toyon, and scrub oak should be spaced at approximately 15 feet apart; smaller sized native shrubs such as deer weed, black/purple/white sage, and buckwheat should be spaced at approximately 10 feet apart; and annual herbaceous plants such as purple needlegrass, California fescue, and common phacelia should be spaced approximately 5 feet apart. Plants should be drip irrigated and monitored until establishment is confirmed. All plants that do not survive through the monitoring period should be replaced with like plant material.
- Where feasible, create a buffer to screen the view from Vendell Road to the project site. Buffers should not inhibit the movement to, or from, Vendell Road. Such buffers could be constructed of mounded soil to create a "berm", or a single row of densely planted, tall-growing native vegetation to create a screen.
- Avoid any obstruction on Vendell Road, such as buildings, chain-link fencing, cinderblock walls, or hardscape, and do not create any barriers within the drainage or culvert that traverse the project site.
- If feasible, shield nighttime lighting downward to avoid off-site spillage. If free-standing parking lot lights are proposed, install the shortest poles feasible.

5.3 Native Bird Nests

The shrubs and herbaceous plants growing on the project site have the potential to provide suitable nesting habitat for many native bird species. Additionally, the mature trees growing on the site also

provide suitable nesting habitat for such birds, including several raptor species, such as the Cooper's hawk, a state Species of Special Concern.

Breeding birds and their active nests are protected under the Fish and Game Code of California and the Federal Migratory Bird Treaty Act; therefore, impacts on bird nests from grading and/or construction-related activities shall be avoided.

5.3.1 Recommendations

A qualified biologist should conduct a pre-construction nesting bird survey no later than three days prior to the commencement of ground disturbing activities on the site.

Where an active bird nest is located, CDFG guidelines indicate that a 300-foot buffer (or 500-foot buffer for raptors and special-status bird species) should be established around an active nest until the nest is deemed inactive and there is no evidence of a second attempt to use the nest, as determined by a qualified biologist. The buffer area should be delineated with orange construction fencing, and a qualified biologist should verify installation. Most birds breed between the months of February and September; therefore, if construction occurs outside of this time frame, then breeding birds would not be expected to be on site.

5.4 Jurisdictional Resources:

Potential impacts to streams, drainages, and wetlands are regulated by Section 404 of the Clean Water Act as well as by Sections 1600 through 1602 of the Fish and Game Code. The drainage that traverses the site may be considered "waters of the United States" as defined in Section 401 of the Clean Water Act, which are regulated by the ACOE and the RWQCB. The CDFG may regulate the entire riparian corridor, which includes the plant life that is dependent upon the ephemeral drainage for survival. Impacts to jurisdictional water resources are considered potentially significant under CEQA. Appropriate permits (CDFG – Streambed Alteration Agreement, and/or Section 404 – nationwide permit) may need to be obtained prior to executing any direct or indirect impacts to the on-site drainage.

Prior to any activities that may impact the on-site drainage, a jurisdictional delineation should be conducted by a qualified biologist to delineate the precise boundaries of the regulated areas. The delineation would be verified by the regulating agencies, and appropriate mitigation measures would be established in consultation with the agencies.

Often mitigation will require on-site restoration for loss of (or impacts to) regulated areas. At the discretion of the regulating agencies, payment into an in-lieu fee program is occasionally considered acceptable mitigation if on-site mitigation is not feasible.

During a meeting that took place during the week of 28 May 2007 between the project applicant, Paul Edelman (representative of the Santa Monica Mountains Conservancy), and Allison Cook (Senior Planner with the City's Department of Planning and Community Development), it was agreed that the proposed project would drain on-site and would not drain on the adjacent Conservancy property to the west. Drainage on the Conservancy property would remain "as is", with the exception of necessary grading required to accommodate the new parking lot, which would be finished with a pervious paving system. During this meeting, the project applicant also agreed to remove any parking lot lighting from the parking lot on the Conservancy property, to eliminate any potential impacts that nighttime lighting could pose on wildlife.

5.5 Protected Trees

The tree report should identify all protected trees located on the subject property and within 200 feet of proposed daylight grading lines, should describe specific impacts that are proposed on protected trees, and should identify mitigation measures to reduce the overall impact to protected trees that may be impacted. Prior to the commencement of grading activities, a tree permit should be obtained for trees that could be impacted by the project.

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APPENDIX A

Plant Species Observed on the Liberty Canyon Project Site

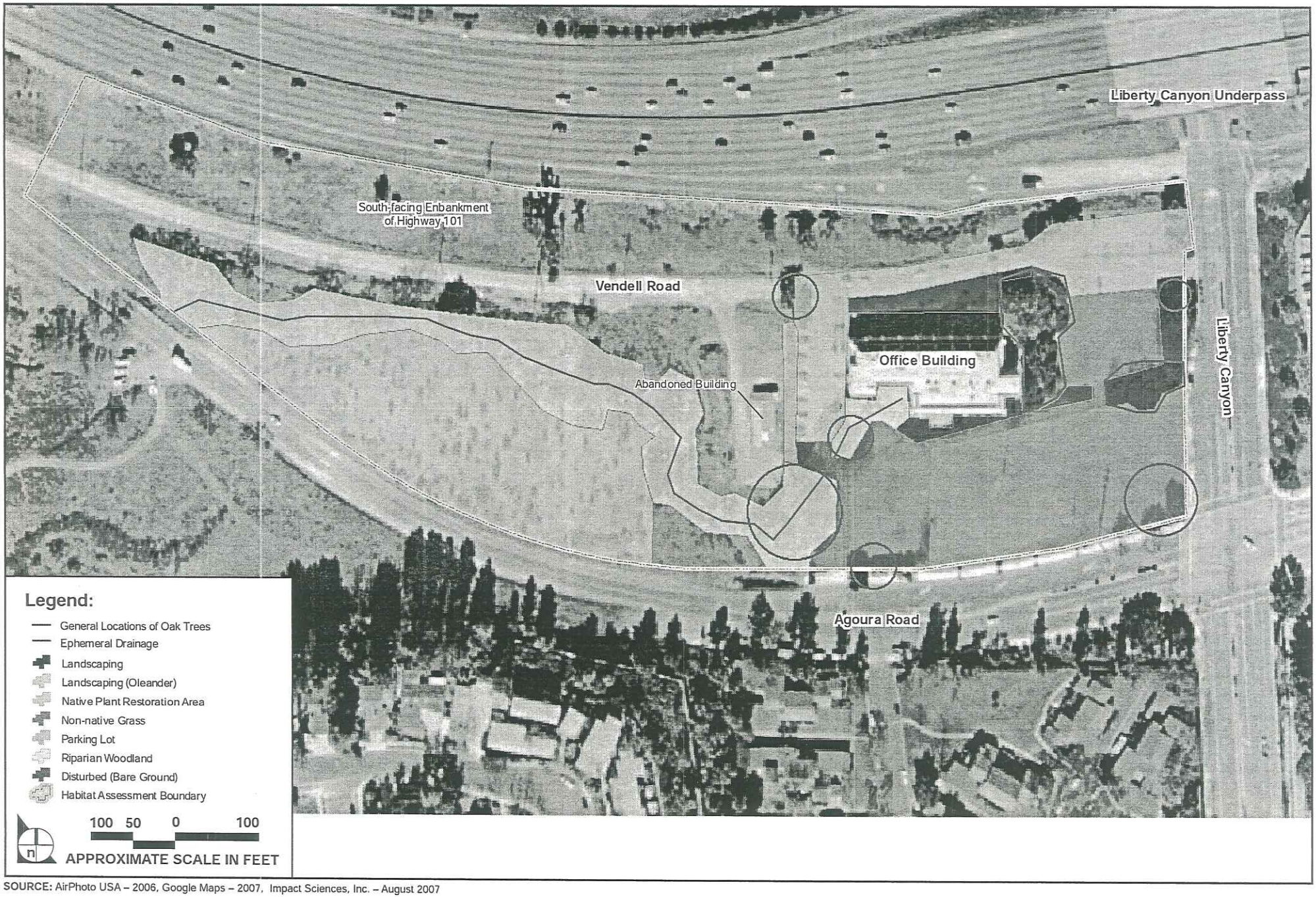
Table A-1
Plant Species Observed on the Liberty Canyon Project Site

Scientific Name	Common Name	Native Species (Yes/No)
ANGIOSPERMS		
DICOTYLEDONS		
ANACARDIACEAE	**CASHEW FAMILY**	
Schinus molle	Peruvian pepper tree	No
APOCYNACEAE	**DOGBANE FAMILY**	
Nerium oleander	Oleander	No
Trachelospermum jasminoides	Star jasmine	No
ARALIACEAE	**GINSENG FAMILY**	
Hedera helix	English Ivy	No
ASCLEPIDACEAE	**MILKWEED FAMILY**	
Asclepias fascicularis	Narrow-leaved milkweed	Yes
ASTERACEAE	**SUNFLOWER FAMILY**	
Baccharis pilularis	Coyotebrush	Yes
Baccharis salicifolia	Mulefat	Yes
Centaurea solstitialis	Yellow star-thistle	No
Conyza canadensis	Horseweed	Yes
Gnaphalium californicum	California everlasting	Yes
Helianthus annuus	Annual sunflower	Yes
Heterotheca grandiflora	Telegraph weed	Yes
Lactuca serriola	Prickly lettuce	No
Stephanomeria virgata	Twiggy wreath plant	Yes
BRASSICACEAE	**MUSTARD FAMILY**	
Brassica nigra	Black mustard	No
CACTACEAE	**CACTUS FAMILY**	
Opuntia oricola	Prickly pear cactus	Yes
CHENOPODIACEAE	**GOOSEFOOT FAMILY**	
Salsola tragus	Russian thistle	No
EUPHORBIACEAE	**SPURGE FAMILY**	
Chamaesyce sp.	Chamaesyce species	Yes
Eremocarpus setigerus	Doveweed	Yes
FABACEAE	**LEGUME FAMILY**	
Cercis canadensis	Eastern redbud	No
FAGACEAE	**OAK FAMILY**	
Quercus agrifolia	Coast live oak	Yes
Quercus chrysolepis	Canyon oak	Yes
Quercus lobata	Valley Oak	Yes
GERANIACEAE	**GERANIUM FAMILY**	
Erodium cicutarium	Red-stem filaree	No
JUGLANDIACEAE	**WALNUT FAMILY**	
Juglans californica ssp. *californica*	California walnut	Yes
LAMIACEAE	**MINT FAMILY**	
Marrubium vulgare	Horehound	No
Rosmarinus officinalis	Rosemary	

Scientific Name	Common Name	Native Species (Yes/No)
LYTHRACEAE	**LOOSESTRIFE FAMILY**	
Lagerstroemia indica	Crape myrtle	No
MYRTACEAE	**MYRTLE FAMILY**	
Eucalyptus sp.	Eucalyptus species	No
PLATANACEAE	**SYCAMORE FAMILY**	
Platanus racemosa	Western sycamore	Yes
POLYGONACEAE	**BUCKWHEAT FAMILY**	
Eriogonum fasciculatum	California buckwheat	Yes
RHAMNACEAE	**BUCKTHORN FAMILY**	
Ceanothus integerrimus	Deerbrush	Yes
Ceanothus sp.	Ceanothus species	Yes
Rhamnus californica	Coffeeberry	Yes
SALICACEAE	**WILLOW FAMILY**	
Populus fremontii	Fremont's cottonwood	Yes
SOLANACEAE	**NIGHTSHADE FAMILY**	
Datura wrightii	Jimson weed	Yes
Nicotiana glauca	Tree tobacco	No
ANGIOSPERMS		
MONOCOTYLEDONS		
ARECACEAE	**PALM FAMILY**	
Washingtonia robusta	Mexican fan palm	No
POACEAE	**GRASS FAMILY**	
Avena fatua	Wild oats	No
Bromus diandrus	Ripgut brome	No
Bromus hordeaceus	Softchess brome	No
Bromus madritensis ssp. *rubens*	Red brome	No
Hordeum murinum	Foxtail barley	No
Piptatherum miliaceum	Smilo grass	Yes

APPENDIX B

Site Features and Assessment Boundary



SOURCE: AirPhoto USA – 2006, Google Maps – 2007, Impact Sciences, Inc. – August 2007

APPENDIX **B**

Site Features and Assessment Boundary

874-001•08/07

LIBERTY CANYON

AGOURA ROAD, L.L.C.

OAK TREE REPORT

RICHARD W. CAMPBELL
OAK TREE PRESERVATION SPECIALIST

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OAK TREE REPORT

LIBERTY CANYON OFFICES

February 28, 2006

(Revised 03-13-07, 4-10-07 & 6-11-07, 8-6-07, 9-6-07)

27489 Agoura Road, LLC
5000 N. Parkway Calabasas #100
Calabasas, California 91302

Attn.: Marc Spellman & Mark Leonard

SUBJECT SITE:

LIBERTY CANYON OFFICES
AGOURA HILLS, CALIFORNIA

GENERAL STATEMENT

Between February 23, ***June 8 and July 27, 2007*** Oak Tree "Surveys" were conducted at the Subject Site. Ground level field inventory and external details (caliper size, general health, and physical & aesthetic character) were recorded based upon the existing site conditions. ***Fifty (50)*** Oak Trees (25-Quercus agrifolia, ***20*** Quercus lobata and 5 Quercus ilex) were evaluated for their present conditions based on "Owner's" concern for the general health and impact potential relative to the proposed new offices grading and building construction. Revised Preliminary Grading and Drainage Plans, dated ***06-05-07 and 08-02-07***, were reviewed and this Report has been revised to reflect the changes. The results of the "Survey"and changes from the revised Preliminary Grading and Drainage Plan are shown on the ***previously submitted*** "Oak Tree Evaluation Summary" forms, Sketch Sections, Oak Tree Map Photo Reference Plan and as outlined herein. ***Two Trees (T-29 and T-41) have died and are to be replaced.*** It is proposed that ***six (6)*** of the Oak Trees ***(T-11, T-19, T-33, T-48, T-49 and T-50)*** be removed and ***forty-two (42)*** be protected in place, with ***eleven (11) (T-5, T-6, T-9, T-17,T-18, T-21, T-23, T-27, T-30, T-31 and T-32)*** of those proposed to be "protected in place" ***have new encroachments and twelve (12) (T-4, T-5, T-6, T-12, T-13, T-36, T-37, T-38, T-39, T-40, T-45 and T-46) to have some existing encroachments reduced by new improvements*** (see Oak Tree Map and sketch sections). It is anticipated that only ***ten (10)*** Trees***(T-4, T-5, T-6, T-17, T-23, T-30, T-31, T-32, T-42 and T-43)*** will be directly impacted, requiring minor to significant clearance and***/or root*** pruning. Field monitoring will direct workers to avoid and preserve the branching and root areas of the Trees, to remain protected in place, during construction.

The American Society of Landscape Architects founded 1899

PURPOSE AND SCOPE

The purpose and scope of this report, in accordance with the City of Agoura Hills Zoning Ordinance #9657 and #9657.5, Appendix A, **Oak Tree Preservation Guidelines,** is to identify native and "planted" Oak species and evaluate their present condition. A report on impacts, if known, and proposed mitigation measures are required for submittal to the City for review by the Planning Department if any work is planned to take place in or within the "PROTECTED ZONE" of any Quercus genus two (2") inches and over in diameter at 42" above grade.

SITE CONDITIONS

The Site for the Trees is located along Agoura Road at the intersection of Liberty Canyon Road (northwest corner). The general topography, ***other than the graded pads,*** is moderate to steeply sloping upward from the south to the north. There is a natural and improved drainage course running diagonally thru the site, from north-center to the southwest corner. Surrounding the southern portion of the drainage course is a stand of native Oaks ***Walnuts*** and arroyo Willows. ***Where practical, protect existing Walnut Trees in place.*** The upper portion of the drainage course flows in a 72" RCP under the existing building. This drainage course flows through the southwest area of the site and joins a westerly off-site drainage course, and thence into a southeasterly coursing storm drain system under Agoura Road.

The high point of the Site is located along the northeasterly area of the property, where an existing paved parking lot and graded "pad" is located. The low point of the site is in the southwest corner, where the drainage course exits the site. A second graded "pad" is located across the lower southerly half of the site. The property is bordered by the 101 (Ventura) freeway to the north, Liberty Canyon Road to the east, Agoura Road to the south and an abandoned residential site and Santa Monica Mountain Conservancy land to the west.

Each of the evaluated Oak Trees has been tagged with an aluminum flag on the northerly side of each Tree at 4'-6" above grade. A few previously installed tags are not necessarily located on the north side of the Trees. Older "washer" tags remain on a few of the Trees, but are not used for this Report. Tree number T-1 is "Registered" Oak #82.

Most of the Oak Trees have either been "planted" or are young volunteers. The others are fully mature and young volunteers. ***Seven*** of the Oak Trees evaluated are City street trees, in the Agoura Road Right-of-Way sidewalk.

The mature Oak Trees all have minor to moderate Pit Scale or Twig Girdler, depending on their species. Many of them have fill on their trunks and have average shoot growth. Seedlings are generally emerging under most of the mature Oaks. The younger Trees have average to good shoot growth. Some Trees have been pruned in the past for clearance or health. A few of the Trees exhibit signs of minor to moderate fire damage, form the past. Some of the Trees in the drainage course and on the steeper sloped areas have exposed roots. Branch and trunk cavities, included bark, intertwining one with each other, exudation, wire around trunk, galls, exfoliation, broken branch scars, water traps, low branching,

branches on ground, borers, Ehrhorn's scale, beehive in cavity, codominant branching, trunk cankers and deadwood are other conditions observed.

The Oak Trees within this report are located in several areas of the Site. Oak Trees T-1 through T-5, and T-45, T-46 & 49 are located in the southwest corner of the Site along the entrance drive and on-site arroyo, near Agoura Road. Oak Trees T-6 through T-11 are located along the lower drainage course near the existing building. Oak Trees T-12 and T-13 are located in the northwest corner of the site. Oak Trees T-14 thru T-30 are located along the steep slope in the center of the site, near the east side of the existing building. ***Tree T-29 has died and is to be replaced.*** Oak Trees T-31 through T-33 are located in the northeast quadrant of the property. Oak Trees T-34 through T-44 are ***City*** Oak Trees located along the Agoura Road Right-of-Way. ***Tree T-41 is missing and is to be replaced.*** Oak Tree T-47 is located in the south center of the site. Oak Tree 48 is located in the center of the site, near the south side of the existing building. Both Oak Trees T-47 and T-48 are proposed to be removed due to proposed grading, retaining walls, paving and building construction. Of the Oak Trees to remain protected in place, T-5, T-6, ***T-9,*** T-12, T-13, T-17, T-23, ***T-27,*** T-30, T-31, T-32, T-34, T-35, T-36, T-37, T-38, T-39, T-40, T-42, T-43, T-45 and T-46 will be encroached upon by the proposed new ***demolition,*** grading, retaining walls and site construction. See Oak Tree Map, sketch sections and "Oak Tree Evaluation Summary" forms for specific notes and remarks relative to these Oak Trees. Trees ***T-5, T-6, T-17, T-23, T-30, T-31 and T-32*** are expected to require ***minor to moderate canopy and/or possible root*** pruning for new ***driveways,*** Building "B", ***grading, walk and retaining wall*** clearances.

Although there are a few Oak Trees west of the west ***site improvements***, within the two hundred fifty (250') foot reporting zone, they are beyond the "protected" Trees along the west boundary. These westerly boundary Trees "guard" the additional Oak Trees beyond, and thus the additional Trees cannot be impacted without these "guardian" trees being affected. Therefore, the "additional" Trees are not included in this Report.

WORK PROCEDURES (AS APPLICABLE)

All work, as applicable, (construction/maintenance activity) around existing Oak Trees is recommended to follow this work procedures program. This program has been developed to minimize the impacts to each Tree and protect them from unscheduled damage and unauthorized treatment.

1. **All work** within the Oak Tree aerial/root ("protected") zone shall be regularly observed by the Oak Tree Preservation Consultant.

2. The extent of all new construction work affecting Oak Trees shall be staked, where applicable, by field survey and reviewed with the Oak Tree Preservation Consultant.

3. Any approved pruning shall be done by a qualified Tree trimmer, and observed by the Oak Tree Preservation Consultant of record.

4. **Hand dig** vertical trench or fence post(s) at the final location to final grade and "bridge-over," move footing/post or cleanly cut and seal with Tree/root seal, as approved by the Oak Tree Preservation Consultant, any and all roots encountered.

(This procedure shall protect the root system from unnecessary damage by excavation equipment).

5. All footings for wall construction (as applicable) shall be designed to provide minimal impact to the Tree and backfilled with topsoil. Where roots greater in diameter than one inch (1") are encountered, footings must be "bridged" over the affected roots.

6. Unless waived, a minimum five foot (5') high temporary chain link fence shall be constructed at the limit of approved work, prior to the commencement of work, to protect the adjacent Trees from further unauthorized damage and remained in place until completion of construction. A Fencing Plan shall be submitted at the preconstruction meeting. The fence must have four (4) warning signs located equidistant from each other around each Tree or group of Trees. For groves of Oak Trees, the signs must be no further than fifty feet (50') apart around the grove. The signs must be two feet (2') square and contain the following language:

THIS FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE CITY OF AGOURA HILLS DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

Should any work be required within the limit of work, and the temporary fence must be opened, the Oak Tree Preservation Consultant **must direct all work** at any time the fence is open.

7. No further work within the aerial/root ("protected") zone shall be done beyond that which was approved, without obtaining written approval prior to proceeding.

8. The area within the chain link fence shall not be used at any time for material or equipment storage or parking.

9. No chemicals or herbicides shall be applied to the soil surface within one hundred feet (100') of an Oak Tree's aerial/root (protected) zone.

10. Copies of the following (as applicable) shall be maintained on the site during any work to or around the Oaks, as applicable:

OAK TREE REPORT
OAK TREE PERMIT
OAK TREE LOCATION MAP
ENGINEERING PLANS
INSPECTION TICKET
OAK TREE PRESERVATION AND GUIDELINES
OAK TREE ORDINANCE
APPROVED SITE PLAN
APPROVED PLANTING AND IRRIGATION PLAN

11. Oak Tree preservation devices, such as air ventilation systems, Tree wells, drains, special paving and branch cabling, if required, must be installed prior to completion of grading and prior to the construction phase.

12. A utilities trenching pathway Plan must be submitted, prior to completion of grading and prior to the construction phase, in order to avoid unnecessary damage to the Tree root systems. The Plan shall indicate the routing of all trenching including, but not limited to, storm drains, subdrains, sewers, easements, area drains, gas lines, electrical service, cable TV, water mains, irrigation main lines and any other underground installations.

13. In areas where Trees are in or adjacent to walkways or parking areas, pervious paving shall be employed to mitigate the effects of root air space reduction, as approved.

14. Oak Tree removals shall be replaced as follows:

Commercial properties:	For dead or hazardous Trees, one (1) thirty-six inch box Oak Tree shall be planted on site for each unhealthy Oak Tree approved for removal. For healthy Trees, (a minimum 4:1 replacement using the total inches of diameter equivalent) and at least two (2) twenty-four inch box specimen Oak Trees and one (1) thirty-six inch box specimen Oak Tree shall be planted on site for each healthy Oak Tree approved for removal. For landmark Trees (forty-eight inch diameter and larger), a nursery grown Oak Tree of equivalent diameter to the Tree removed or two (2) nurse container grown sixty inch box Oak Trees shall be planted on site for each healthy Oak Tree approved for removal.
Residential properties:	For dead or hazardous Trees one (1) thirty-six inch box Oak Tree shall be planted on site for each Tree approved for removal. However, in cases where houses currently exist on the property, the requirement for replacement shall be one (1) fifteen gallon Oak Tree be planted on site for each unhealthy Tree approved for removal. For landmark Trees (forty-eight inch diameter and larger), one (1) nursery container grown sixty inch box Oak Tree shall be planted on site for each healthy Oak Tree approved for removal.

In the case of Trees which are candidates for transplant, a refundable cash deposit, in the amount equal to the cost of purchasing an equivalent nursery grown Oak Tree, shall be made with the City. The deposit will be refunded after twelve (12) months if, in the opinion of the City's Oak Tree Consultant, the transplanted Tree has survived and is considered to be in good health. Should the Tree be in marginal health or physical condition, the deposit will be retained for an additional twelve (12) months. At the end

of the second twelve month period, should the Tree continue to be in a marginal or poor health condition, then the Tree shall be removed and replaced with an equivalent nursery grown Oak Tree and the deposit will be retained for at least an additional twelve (12) months.

15. Whenever any construction work is being performed contrary to the provisions of the Oak Tree Permit/Ordinance, a City inspector may issue a written notice to the responsible party to stop work on the project on which the violation occurred or upon which danger exists. The "Stop Work Order" will state the nature of the violation or danger and no work may proceed until the violation has been rectified and approved by the code enforcement officer or City's Oak Tree Consultant. During any construction and/or treatment, Tree work and impacts must be closely monitored to further mitigate shock symptoms should they occur. If needed, water must be provided to irrigate the Tree(s) and also to wash the dust from foliage.

PROTECTION

Per paragraph 6 above, to preserve Oak Trees in a construction area, a minimum 5' height chain link **fence** must be installed at the limit of work, prior to any clearing, grubbing, demolition, construction and/or treatment, in order to protect the sensitive "Z.O.N.E.," during all work operations. The Oak Tree Preservation Consultant of record must "function" as the **fence** for any work necessary within the Z.O.N.E. fenced area, while directing or observing work in and near any Oak Tree.

Z.O.N.E. = "Zone of Nutraire Endemic" (the area of natural or amended planting medium, which may extend to or beyond the dripline of a native Tree). An Oak care and maintenance guideline, as provided by the City of Agoura Hills, should be followed, as well as regular monitoring throughout each Tree's life cycle, by a qualified Oak Tree Preservation Consultant.

EVALUATION CRITERIA

In evaluating Oak Trees, as with any other Trees, the reporting format records the external observation of the Tree(s) at the time of the "survey," including approximate sizes of trunk, height and spread of the branching system to the outer dripline, surface observation of the Trees' condition and other pertinent information. The Rating designation assigns a health/aesthetic value for each Tree. Ratings range from "A" to "F," with "A" as the indicator of a Tree exhibiting the best condition for the species in the area, and the lower letters indicating lesser values. The "C" value represents an average condition for the species. An "F" rating is a candidate for removal for health or hazard reasons. Plus (+) and minus (-) sub-values are assigned where a clear letter designation is not appropriate. The letter "E" is not used in order to avoid confusion with the term "excellent".

CARE AND SAFETY

It must be noted that the Tree(s) referred to in this report is are living organisms, and therefore subject to change. And since internal, crown or subsurface systems could not be investigated, no warranties, neither expressed nor implied, are made that these Trees will be in any condition other than as observed and reported herein beyond the date of the

inventory walk-thru ("survey"). A copy of the OAK TREE CARE AND MAINTENANCE , for the care and maintenance of Oak Trees, is available from The City of Agoura Hills for use in providing guidelines for the "on-going" maintenance of your Oak Trees. The preferred maintenance procedure used in caring for native Oak Trees is to promote and encourage proper vigor within the Tree systems. In this way, the natural defenses are better able to ward-off pests and diseases.

CONSTRUCTION AND MAINTENANCE PROCEDURES

According to the "City" Oak Tree Ordinance, all work, should it be necessary, within the "Protected Zone" (that area enclosed by a line five feet (5') beyond the natural "dripline" of the Oak Tree, but not less than fifteen feet (15'), shall be done using hand tools under the observation of the Oak Tree Preservation Consultant. This also includes pruning/trimming for clearance. Pruning for aesthetics is <u>not</u> permitted per the Ordinance.

Current maintenance/treatment procedures for the Oak Trees at the LIBERTY CANYON OFFICES, consist of the following (also see Oak Tree Evaluation Summary forms, Sketch Sections and Oak Tree Map):

1) GENERAL:

<u>IT IS OUR RECOMMENDATION THAT THE FOLLOWING TREATMENT(S) TO THE APPROPRIATE OAK TREES BE IMPLEMENTED, AS DIRECTED:</u>

OAK TREE PRESERVATION SPECIALIST IS TO MONITOR AND DIRECT ALL WORK NEAR THE TREES TO REMAIN PROTECTED IN PLACE.

REMOVE DEADWOOD FROM APPROPRIATE SPECIMENS.
CLEAN-CUT PRIOR PRUNING/BROKEN BRANCH SCARS, AS DIRECTED.

CLEAN AND SCREEN WATER TRAPS AND CAVITIES, AS DIRECTED.

REMOVE BEE HIVE(S), THEN SCREEN OPENING(S).

REMOVE "WATERSPOUTS" AND CROSSING BRANCHES, AS DIRECTED.

CABLE TRUNKS/BRANCHING ON APPROPRIATE OAK TREES, AS DIRECTED.

PROTECT "DUFF" AREAS TO ALLOW SEEDLINGS TO ESTABLISH.

ALL "L" CONFIGURED WALL FOOTINGS SHOULD BE "TURNED AWAY FROM" THE TRUNK(S) OF ALL IMPACTED OAK TREES; AND, THESE "L" CONFIGURED FOOTINGS SHOULD BE SHOWN ON THE GRADING PLANS.

THE "PROTECTED ZONES" OF EVALUATED OAK TREES MUST BE PROPERLY FENCED TO PROTECT THE TREES FROM CONSTRUCTION AND/OR GRADING, PER CITY ORDINANCE.

CAREFULLY REMOVE TREE STAKES AND TREE TIE WIRES FROM ALL EXISTING PLANTED OAK TREES, AS DIRECTED.

FINAL DETERMINATION OF TREATMENT WILL BE AS DIRECTED IN THE FIELD BY THE OAK TREE PRESERVATION SPECIALIST.

2) IMPACTS:

SIX TREES (***T-11, T-19, T-33,*** T-47, T-48 AND ***T-50***) ARE PROPOSED TO BE REMOVED DUE TO GRADING, PAVING, SITE CONSTRUCTION ***AND ROAD WIDENING***. TOTAL INCHES DIAMETER OF THESE ***SIX*** TREES IS ***110.5"***.

TWENTY-TWO OTHER OAK TREES (T-5, T-6, T-9, T-12, T-13, T-17, T-23, T-27, T-30, T-31, T-32, T-34, T-35, T-36, T-37, T-38, T-39, T-40, T-42, T-43, T-45 AND T-46) WILL HAVE ENCROACHMENTS INTO THEIR "PROTECTED ZONES" BY THE PROPOSED DEMOLITION, GRADING AND SITE CONSTRUCTION, AND TEN OF THESE TREES WILL REQUIRE SOME CLEARANCE AND/OR POSSIBLE ROOT PRUNING. OF THESE TEN OAK TREES, EIGHT (T-5, T-6, T-17, T-23 ,T-30, T-31, T-32 AND T-42) ARE EXPECTED TO HAVE MINOR IMPACT TO THEIR ROOT ZONES, FROM PROPOSED PAVING AND BUILDING COVERAGE; HOWEVER ,ONLY TREES T-31 AND T-32 MAY HAVE ROOTS ENCOUNTERED ON THEIR NORTHERLY SIDES. ALL OTHER OAK TREES ARE TO BE MONITORED SO AS TO DIRECT WORKERS TO AVOID DAMAGE TO THE OAK TREES TO REMAIN IN PLACE. ONE TREE (T-29) HAS DIED AND ONE TREE (T-41) IS MISSING AND ARE REQUIRED TO BE REPLACED.

3) REPLACEMENT(S):

THE PROPOSED REMOVAL OF OAK TREES ***T-11, T-19, T-33 T-47***, T-48 AND ***T-50***, TOTALING 110.5" IN TRUNK DIAMETERS, SHOULD BE REPLACED WITH A MIXTURE OF 3/4 QUERCUS AGRIFOLIA AND 1/4 QUERCUS LOBATA TO EQUAL ***110.5*** INCHES OF DIAMETER IN REPLACEMENT BOXED OAK TREE SPECIMENS; AND, SHOULD BE SHOWN ON THE LANDSCAPE PLANS. THE MUNICIPAL CODE REQUIRES THAT A 4:1 MINIMUM RATIO OF THE REPLACEMENT, BEGINNING WITH ***TWO*** 24" BOX, ***ONE*** 36" BOX ***AND ONE 15 GALLON*** OAK TREES. ***IN THIS CASE , IT WAS AGREED TO A 1:1 REPLACEMENT OF DIAMETER INCHES. FOR EACH DEAD, MISSING OR HAZARDOUS OAK TREES (T-29 AND T-41), ONE 36" BOX OAK TREE IS REQUIRED FOR REPLACEMENT ON COMMERCIAL PROPERTIES.***

4) DISPOSITION / TREATMENT(S):

IT IS PROPOSED THAT THE ***CANOPIES OF*** OAK TREES ***T-4, T-5, T-6, T-17, T-23, T-30, T-31, T-32, T-42 AND T-43*** BE PRUNED TO ALLOW FOR ***TRAFFIC,*** BUILDING, ***RETAINING*** WALLS AND SITE CONSTRUCTION, AS WELL AS, MONITORING FOR ***ALL*** CONSTRUCTION AS FOLLOWS:

TREE T-4 = PRUNE UP TO 1% OF THE EASTERLY CANOPY FOR DRIVEWAY CLEARANCE. IN ADDITION TO THE DRIVEWAY CLEARANCE PRUNING, CAREFUL MONITORED HAND WORK IS REQUIRED FOR DEMOLITION, GRADING AND RECONSTRUCTION OF THE DRIVEWAY, AS FOLLOWS:

(1)6" DIAMETER EAST LOWER CANOPY BRANCH

(1) 6" SOUTHEAST LOWER CANOPY BRANCH

10-15 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

TREE T-5 = PRUNE UP TO 5% OF THE NORTHERLY CANOPY FOR DRIVEWAY CLEARANCE. IN ADDITION TO THE DRIVEWAY CLEARANCE PRUNING, CAREFUL MONITORED HAND WORK IS REQUIRED FOR

GRADING AND RECONSTRUCTION OF THE WEST PARKING LOT, AS FOLLOWS:

10-15 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

TREE T-6 = PRUNE UP TO 15% OF THE EASTERLY CANOPY FOR DRIVEWAY CLEARANCE. IN ADDITION TO THE DRIVEWAY CLEARANCE PRUNING, CAREFUL MONITORED HAND WORK IS REQUIRED FOR DEMOLITION, GRADING AND RECONSTRUCTION OF THE DRIVEWAY, AS FOLLOWS:

(1) 4" DIAMETER SOUTH LOWER CANOPY BRANCH

10-15 MISCELLANEOUS UNDER 2" DIAMETER SOUTH LOWER CANOPY BRANCHES

(1) 14" AND (3) 2 1/2" SOUTHEAST LOWER CANOPY BRANCHES
(1) 12" EAST LOWER CANOPY SCAFFOLD BRANCH

(1) 4" AND (1) 2 1/2" SOUTHEAST MID-CANOPY BRANCHES

(1) 8 , (1) 3" AND (4) 2" NORTHEAST LOWER CANOPY BRANCHES

TREE T-11 = REMOVE THIS TREE FOR GRADING AND PAVING CONFLICT.

TREE T-17 = PRUNE UP TO ***5 %*** OF THE EASTERLY CANOPY FOR ***PARKING LOT*** CLEARANCE. IN ADDITION TO THE ***PARKING LOT*** CLEARANCE PRUNING, CAREFUL, MONITORED, HAND WORK IS REQUIRED FOR DEMOLITION, GRADING AND RECONSTRUCTION OF THE WEST ***PARKING LOT, AS FOLLOWS:***

10-20 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

TREE T-19 = REMOVE THIS TREE FOR GRADING, PAVING AND BUILDING CONFLICT.

TREE T-23 = PRUNE UP TO 10% OF THE EAST CANOPY FOR WALKWAY CLEARANCE, AS FOLLOWS:

10-20 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

TREE T-30 = PRUNE UP TO 1% OF THE EAST CANOPY FOR WALKWAY CLEARANCE, AS FOLLOWS:

5-10 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

TREE T-31 = PRUNE UP TO ***5 %*** OF THE NORTHEASTERLY CANOPY FOR BUILDING CLEARANCE, ***AS FOLLOWS:***

5-20 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

SOME ROOTS MAY BE ENCOUNTERED ON THE TREE'S NORTHERLY SIDE AND MAY REQUIRE PRUNING FOR RETAINING WALL CONSTRUCTION. A FIELD DETERMINATION WILL BE MADE AS TO ROOT PRUNING NEEDS.

TREE T-32 = PRUNE UP TO 5% OF THE WEST CANOPY FOR BUILDING CLEARANCE, AS FOLLOWS:

5-20 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

SOME ROOTS MAY BE ENCOUNTERED ON THE TREE'S NORTHERLY SIDE AND MAY REQUIRE PRUNING FOR RETAINING WALL CONSTRUCTION. A FIELD DETERMINATION WILL BE MADE AS TO ROOT PRUNING NEEDS.

TREE T-33 = REMOVE THIS TREE FOR GRADING, PAVING AND ROAD WIDENING CONFLICT.

TREE T-42 = PRUNE UP TO 5% OF THE SOUTH CANOPY FOR SIDEWALK CLEARANCE, AS FOLLOWS:

5-20 MISCELLANEOUS UNDER 2" DIAMETER LOWER CANOPY BRANCHES

TREE T-43 = PRUNE UP TO 15% OF THE SOUTHERLY AND WESTERLY CANOPY FOR SIDEWALK AND DRIVEWAY CLEARANCE. IN ADDITION TO THE SIDEWALK AND DRIVEWAY CLEARANCE PRUNING, CAREFULLY MONITORED HAND WORK IS REQUIRED FOR DEMOLITION, GRADING AND RECONSTRUCTION OF THE SIDEWALK AND DRIVEWAY, AS FOLLOWS:

(1) 2" DIAMETER SOUTHEAST MID CANOPY BRANCH

10-15 MISCELLANEOUS UNDER 2" DIAMETER SOUTHEAST LOWER CANOPY BRANCHES

(1) 2 1/2" SOUTH MID CANOPY BRANCHES

5-10 MISCELLANEOUS UNDER 2" DIAMETER SOUTH LOWER CANOPY BRANCHES

5-10 MISCELLANEOUS UNDER 2" DIAMETER SOUTHWEST LOWER CANOPY BRANCHES

(1) 12" EAST LOWER CANOPY SCAFFOLD BRANCH

(2) 3" WEST LOWER CANOPY BRANCHES

(1) 8 , (1) 3" AND (4) 2" NORTHEAST LOWER CANOPY BRANCHES

TREE T-47 = REMOVE THIS TREE FOR GRADING, PAVING AND BUILDING CONFLICT.

TREE T-48 = REMOVE THIS TREE FOR GRADING AND PAVING CONFLICT.

TREE T-50 = REMOVE THIS TREE FOR GRADING AND PAVING CONFLICT.

IN ADDITION TO THESE PROCEDURES PERIODIC (AT LEAST QUARTERLY) MONITORING FOR DECLINING BRANCHING SYSTEMS IS ALSO RECOMMENDED.

Cordially,

Richard W. Campbell, A.S.L.A., B.S.L.A.

LIBERTY CANYON OFFICES OAK TREE EVALUATION SUMMARY (50 TREES)

Tree No	Tree Name	Trunk Diam(s)	N	NE	E	SE	S	SW	W	NW	Ht ±	Hlth	Aest	Notes/Remarks
T-1	Quercus lobata	54"	45'/6'	35'/25'	35'/30'	45'/11'	41'/0'	26'/2'	39'/10'	36'/1'	70'	C	B+	BROKEN BRANCH SCARS, BRANCH CANKERS, BRANCH CAVITIES, DEADWOOD, EXUDATION, FILL ON TRUNK, PIT SCALE, REGISTERED OAK TREE # 1, ROT SUSPECTED, SEEDLINGS IN DUFF, WATER TRAP
T-2	Quercus agrifolia	13", 9 ½", 5"	0'/0'	10'/14'	28'/4'	30'/3'	22'/7'	30'/0'	0'/0'	0'/0'	30'	B	C	EHRHORN'S SCALE, EXPOSED ROOTS, HORIZONTAL BRANCHING, INTERTWINED WITH TREES T-3 AND T-4, LEANS TO SOUTHWEST AND EAST, NEST IN TREE, PRIOR PRUNING, SEEDLINGS IN DUFF, TWIG GIRDLER
T-3	Quercus lobata	62"	40'/22'	40'/15'	47'/15'	38'/16'	34'/22'	18'/36'	40'/4'	42'/12'	70'	C-	B	BRANCH CAVITIES, BROKEN BRANCH SCARS, EXPOSED ROOTS, DEADWOOD, GRAINERY, INCLUDED INTO TREE T-4, INTERTWINED WITH TREES T-2 AND T-4, PRIOR PRUNING, PIT SCALE, SEEDLINGS IN DUFF, TRUNK CAVITY, WATER TRAP
T-4	Quercus agrifolia	(2) 14"	11'/26'	28'/2'	29'/6'	32'/7'	32'/24'	14'/20'	23'/3'	13'/30'	24'	B-	C	BROKEN BRANCH SCARS, EHRHORN'S SCALE, EXPOSED ROOTS, INTERTWINED WITH TREES T-2 AND T-3, LEANS TO SOUTHEAST, PRIOR PRUNING, SEEDLINGS IN DUFF, TRUNK INCLUDED INTO TREE T-3, TWIG GIRDLER, WATER TRAP
T-5	Quercus agrifolia	16"	19'/16'	21'/11'	15'/14'	15'/9'	17'/8'	17'/12'	19'/14'	22'/14'	36'	B+	B+	INTERTWINED WITH OLEANDER HEDGE, PRIOR PRUNING, TWIG GIRDLER
T-6	Quercus lobata	56"	51'/17'	33'/11'	40'/13'	40'/14'	39'/11'	42'/16'	30'/13'	28'/14'	65'	C	B	BROKEN BRANCH SCARS, DEADWOOD, EXFOLIATION, EXICORMIC GROWTH, EXPOSED ROOTS, GALLS, INCLUDED BARK, PIT SCALE, PRIOR PRUNING, WATER TRAP
T-7	Quercus lobata	14", 13"	16'/12'	12'/11'	25'/10'	29'/12'	26'/11'	20'/7'	19'/12'	18'/14'	35'	B	B	GALLS, NEST IN TREE, PIT SCALE, PRIOR PRUNING
T-8	Quercus lobata	1 ¾", ¾"	0'/0'	0'/0'	4'/7'	18'/12'	6'/10'	6'/6'	3'/9'	0'/0'	13'	A	A	GALLS, PIT SCALE,
T-9	Quercus lobata	6 ½"	6'/15'	8'/9'	6'/9'	11'/13'	14'/14'	9'/16'	12'/18'	10'/16'	30'	A	A	GALLS, PIT SCALE, PRIOR PRUNING

LIBERTY CANYON OFFICES OAK TREE EVALUATION SUMMARY (50 TREES)

Tree No	Tree Name	Trunk Diam(s)	N	NE	E	SE	S	SW	W	NW	Ht ±	Hlt h	Aest	Notes/Remarks
T-10	Quercus lobata	6"	5'/10'	8'/14'	13'/10'	9'/10'	14'/12'	10'/15'	2'/10'	5'/9'	35'	A	A	GALLS, PIT SCALE, PRIOR PRUNING
T-11	Quercus lobata	5"	6'/11'	8'/12'	6'/11'	11'/8'	10'/10'	7'/11'	4'/10'	2'/8'	32'	A	A	GALLS, PIT SCALE, PRIOR PRUNING
T-12	Quercus ilex	11"	15'/10'	16'/7'	14'/12'	14'/10'	14'/11'	13'/11'	14'/12'	13'/7'	30'	D+	B	PRIOR PRUNING, WIRE IN TRUNK
T-13	Quercus agrifolia	15 ½"	18'/11'	17'/11'	14'/8'	17'/6'	20'/7'	22'/6'	19'/11'	17'/7'	28'	C-	B	LEANS INTO CHAIN LINK FENCE, PRIOR PRUNING, TWIG GIRDLER, WIRE IN TRUNK
T-14	Quercus agrifolia	9 ½", 6"	6'/6'	6'/6'	6'/5'	12'/6'	14'/4'	21'/3'	18'/5'	11'/4'	30'	B	B	DEADWOOD, FILL ON TRUNK, LOW BRANCHING, TWIG GIRDLER
T-15	Quercus agrifolia	13"	15'/4'	10'/3'	10'/6'	13'/4'	16'/8'	18'/8'	15'/3'	16'/5'	35'	C-	B	DEADWOOD, FILL ON TRUNK, TWIG GIRDLER, WIRE IN TRUNK
T-16	Quercus agrifolia	8", 6", 4", (2) 2 ¼", 1"	16'/10'	16'/5'	14'/7'	14'/6'	12'/10'	11'/5'	13'/5'	15'/10'	40'	B	B	DEADWOOD, FILL ON TRUNK, LOW BRANCHING, TWIG GIRDLER
T-17	Quercus lobata	62"	34'/22'	28'/17'	35'/9'	27'/1'	28'/6'	29'/4'	37'/6'	31'/6'	45'	C	B+	BROKEN BRANCH SCARS, DEADWOOD, FILL ON TRUNK, GALLS, PIT SCALE, PRIOR PRUNING
T-18	Quercus agrifolia	(2) 6", (2) 2", 1 ½"	12'/5'	14'/2'	11'/3'	9'/11'	11'/7'	22'/13'	19'/2'	16'/2'	24'	B-	B	DEADWOOD, FILL ON TRUNK, INCLUDED BARK, LOW BRANCHING, TWIG GIRDLER
T-19	Quercus agrifolia	10", 8", 6 ½", 3"	10'/6'	13'/0'	18'/0'	17'/5'	16'/11'	9'/11'	12'/7'	11'/4'	30'	B-	B	DEADWOOD, FILL ON TRUNK, INCLUDED BARK, LOW BRANCHING, TWIG GIRDLER
T-20	Quercus agrifolia	11"	7'/7'	6'/6'	10'/1'	8'/5'	13'/7'	14'/8'	12'/5'	10'/5'	35'	C-	B-	DEADWOOD, EXUDATION, FILL ON TRUNK, LOW BRANCHING, TWIG GIRDLER, WIRE IN TRUNK
T-21	Quercus lobata	2 ¼"	2'/3'	2'/2'	5'/7'	5'/8'	4'/10'	5'/11'	5'/3'	2'/3'	18'	B+	B+	GALLS
T-22	Quercus agrifolia	8 ½"	11'/6'	11'/2'	7'/14'	8'/10'	9'/12'	14'/8'	13'/5'	9'/7'	40'	C-	B	DEADWOOD, FILL ON TRUCK, NEST IN TREE, TWIG GIRDLER, WIRE IN TRUNK

LIBERTY CANYON OFFICES OAK TREE EVALUATION SUMMARY (50 TREES)

Tree No	Tree Name	Trunk Diam(s)	N	NE	E	SE	S	SW	W	NW	Ht ±	Hlt h	Aest	Notes/Remarks
T-23	Quercus agrifolia	13", 8"	12'/4'	19'/2'	16'/0'	22'/10'	20'/8'	15'/8'	16'/6'	12'/7'	32'	C-	B	BRANCHES ON GROUND, DEADWOOD, INCLUDED BARK, LOW BRANCHING, TWIG GIRDLER, WIRE IN TREE
T-24	Quercus agrifolia	10", 3 ½"	10'/5'	7'/6'	7'/3'	5'/2'	7'/7'	13'/10'	11'/9'	11'/7'	22'	C-	B	FILL ON TRUNK, LOW BRANCHING, TWIG GIRDLER, WIRE IN TRUNK
T-25	Quercus agrifolia	(2) 3 ½ "	6'/7'	4'/5'	6'/3'	8'/4'	9'/8'	8'/6'	9'/7'	8'/9'	16'	D+	C+	EXPOSED ROOTS, FILL ON TRUNK, LOW BRANCHING, TWIG GIRDLER, WIRE IN TRUNK
T-26	Quercus agrifolia	10 ½", 4"	8'/9'	9'/6'	11'/6'	11'/7'	14'/15'	16'/14'	18'/14'	16'/11'	32'	C-	C+	DEADWOOD, EXPOSED ROOTS, LOW BRANCHING, PRIOR PRUNING, TWIG GIRDLER, WIRE IN TRUNK
T-27	Quercus agrifolia	7", 5", (3) 2", 1 ½"	8'/6'	10'/5'	10'/0'	10'/4'	10'/0'	11'/6'	11'/7'	10'/5'	22'	C-	B-	BORERS, BRANCHES ON GROUND, LOW BRANCHING, EXFOLIATION, EXUDATION, TWIG GIRDLER
T-28	Quercus agrifolia	10", 6"	13'/20'	9'/10'	13'/10'	12'/13'	8'/12'	13'/13'	13'/10'	20'/15'	40'	C-	B-	DEADWOOD, EHRHORN'S SCALE, FILL ON TRUNK, PRIOR PRUNING, TWIG GIRDLER, WATER TRAP
T-29	Quercus agrifolia	(2) 8", 7", 5"	14'/0'	10'/0'	15'/0'	20'/0'	22'/4'	22'/1'	17'/2'	10'/3'	35'	F	F	BRANCHES ON GROUND, DEADWOOD, LOW BRANCHING, TWIG GIRDLER, WIRE IN TRUNK, TREE DEAD
T-30	Quercus lobata	15"	13'/11'	13'/10'	17'/5'	18'/3'	20'/6'	20'/6'	19'/7'	15'/10'	38'	B	B	GALLS, PIT SCALE
T-31	Quercus lobata	11"	24'/13'	21'/17'	14'/6'	15'/10'	13'/10'	16'/2'	10'/14'	14'/15'	28'	C+	B-	DEADWOOD, PIT SCALE, SEEDLINGS IN DUFF
T-32	Quercus lobata	39"	22'/14'	30'/0'	30'/0'	33'/0'	27'/0'	27'/3'	22'/6'	25'/10'	50'	C	B+	BASAL CAVITY, BEEHIVE IN BASAL CAVITY, BRANCHES ON GROUND, BROKEN BRANCH SCARS, DEADWOOD, GALLS, EXUDATION, PIT SCALE, SEEDLINGS IN DUFF, TRUNK CANKERS
T-33	Quercus lobata	45"	33'/3'	38'/10'	42'/20'	38'/22'	36'/0'	26'/8'	30'/10'	31'/5'	60'	C+	B+	BROKEN BRANCH SCARS, DEADWOOD, EXUDATION, GALLS, PIT SCALE, PRIOR PRUNING, ROT SUSPECTED, SEEDLINGS IN DUFF, WATER TRAP
T-34	Quercus agrifolia	11", 8"	18'/0'	14'/0'	16'/0'	16'/0'	17'/0'	15'/0'	16'/0'	19'/0'	28'	B+	B+	BRANCHES ON GROUND, EHRHORN'S SCALE LOW BRANCHING, TWIG GIRDLER

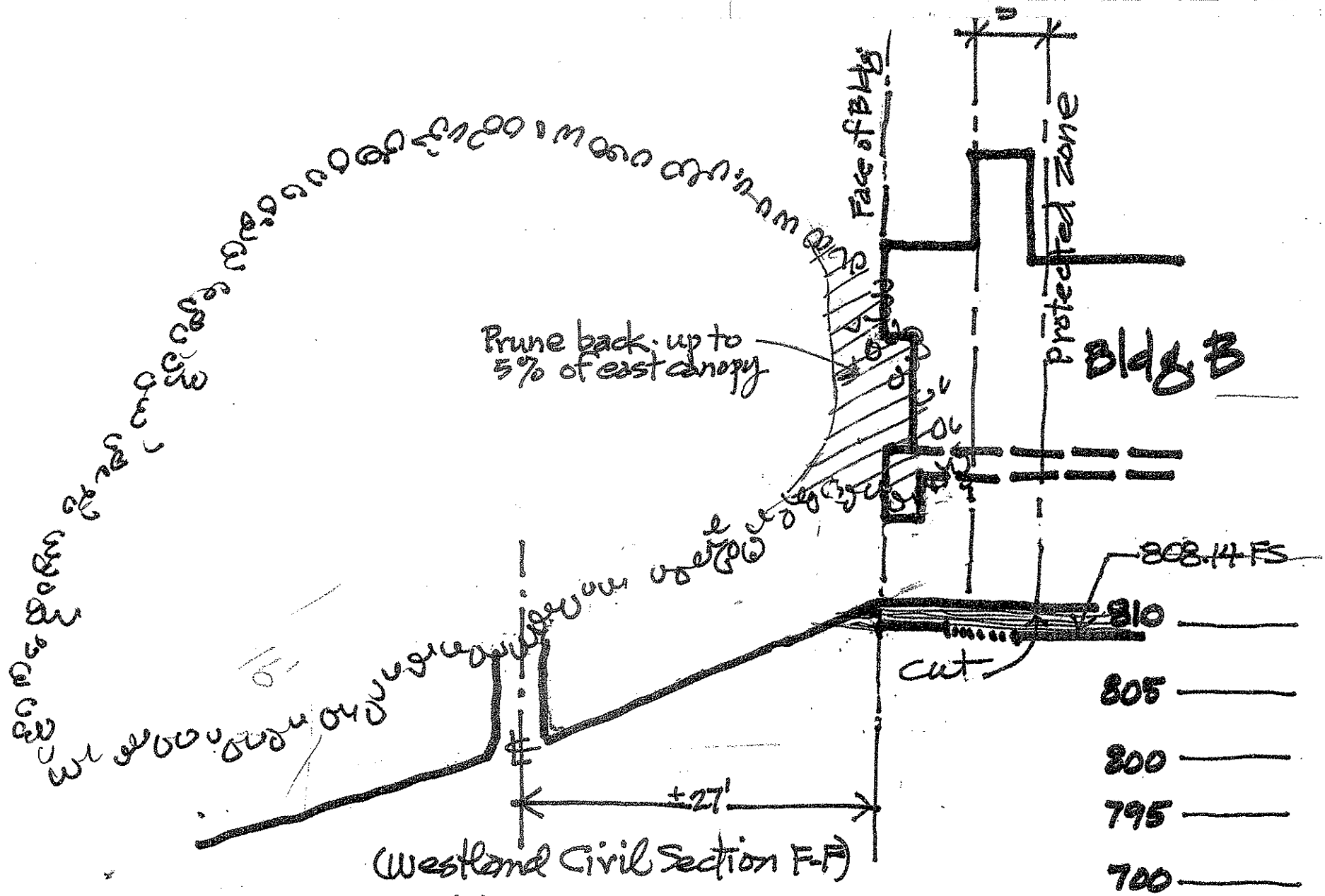
LIBERTY CANYON OFFICES OAK TREE EVALUATION SUMMARY (50 TREES)

Tree No	Tree Name	Trunk Diam(s)	N	NE	E	SE	S	SW	W	NW	Ht ±	Hlth	Aest	Notes/Remarks
T-35	Quercus agrifolia	13"	14'/7'	18'/8'	17'/9'	20'/16'	17'/15'	17'/15'	18'/11'	18'/8'	20'	C-	B	INCLUDED BARK, PRIOR PRUNING, STREET TREE, TWIG GIRDLER
T-36	Quercus agrifolia	14"	15'/7'	13'/7'	14'/7'	19'/11'	10'/14'	16'/14'	16'/7'	11'/8'	20'	C	C-	MECHANICAL DAMAGE TO TRUNK, PRIOR PRUNING, STREET TREE, TWIG GIRDLER
T-37	Quercus ilex	1 ½"	2'/4'	2'/4'	2'/4'	2'/4'	2'/4'	2'/4'	2'/4'	2'/4'	8'	B	B	PRIOR PRUNING, STREET TREE
T-38	Quercus agrifolia	2 ½"	4'/6'	4'/4'	4'/4'	3'/4'	3'/6'	5'/6'	5'/6'	3'/5'	14'	B+	B+	STREET TREE
T-39	Quercus agrifolia	3 ¼"	4'/5'	5'/4'	5'/5'	6'/6'	6'/5'	6'/5'	6'/5'	5'/5'	10'	B	B	PRIOR PRUNING, STREET TREE
T-40	Quercus agrifolia	2 ½"	5'/5'	5'/4'	6'/5'	5'/5'	5'/5'	5'/6'	3'/3'	5'/5'	13'	B	B	STREET TREE
T-41	Quercus ilex	1 ½"	2'/5'	2'/5'	2'/5'	2'/5'	2'/5'	2'/5'	2'/5'	2'/5'	8'	F	F	STREET TREE, TREE MISSING
V-42	Quercus lobata	5"	6'/5'	6'/5'	10'/7'	15'/7'	10'/6	9'/6'	2'/6'	3'/6'	24'	B	B	CODOMINANT SCAFFOLDS, GALLS, PIT SCALE
T-43	Quercus ilex	12"	17'/10'	17'/10'	16'/11'	16'/8'	16'/11'	16'/13'	14'/8'	16'/9'	30'	A	A	PRIOR PRUNING
T-44	Quercus ilex	(2) 3 ½", (2) 2 ½"	5'/6'	6'/6'	7'/6'	9'/6'	9'/6'	8'/6'	5'/6'	4'/6'	20'	C+	C+	PRIOR PRUNING
T-45	Quercus lobata	2 ¼"	0'/0'	6'/8'	6'/7'	7'/6'	2'/6'	0'/0'	0'/0'	0'/0'	16'	B	B	GALLS, PIT SCALE
T-46	Quercus lobata	2 ½"	1'/7'	1'/6'	5'/4'	11'/10'	4'/8'	2'/7'	1'/7'	1'/7'	18'	B	B	PIT SCALE
T-47	Quercus lobata	(2) 8", 4 ½", 1 ½"	18'/5'	16'/7'	15'/5'	18'/11'	18'/10'	16'/0'	14'/0'	17'/0'	35'	B	A	BRANCHES ON GROUND, DEADWOOD, PIT SCALE
T-48	Quercus lobata	5 ½", 4 ½"	13'/12'	11'/14'	12'/14'	13'/18'	11'/18'	12'/20'	11'/18'	14'/11'	22'	B-	B	CODOMINANT TRUNKS, GALLS, PIT SCALE
T-49	Quercus agrifolia	1 ¼"	2'/4'	2'/3'	2'/3'	2'/3'	4'/3'	4'/3'	3'/2'	3'/2'	7'	A	B	EXPOSED ROOTS

LIBERTY CANYON OFFICES OAK TREE EVALUATION SUMMARY (50 TREES)

Tree No	Tree Name	Trunk Diam(s)	N	NE	E	SE	S	SW	W	NW	Ht ±	Hlt h	Aest	Notes/Remarks
T-50	Quercus lobata	2"	6'/6'	3'/3'	4'/9'	4'/5'	5'/10'	4'/12'	7'/13'	3'/11'	14'	A	B+	GALLS, GROWING AGAINST WALL OF ABANDONED HOUSE, LOW BRANCHING

RICHARD W. CAMPBELL, ASLA, RSLA - OAK TREE PRESERVATION SPECIALIST



SECTION T-17

LOOKING NORTH

SCALE: 1"=10'

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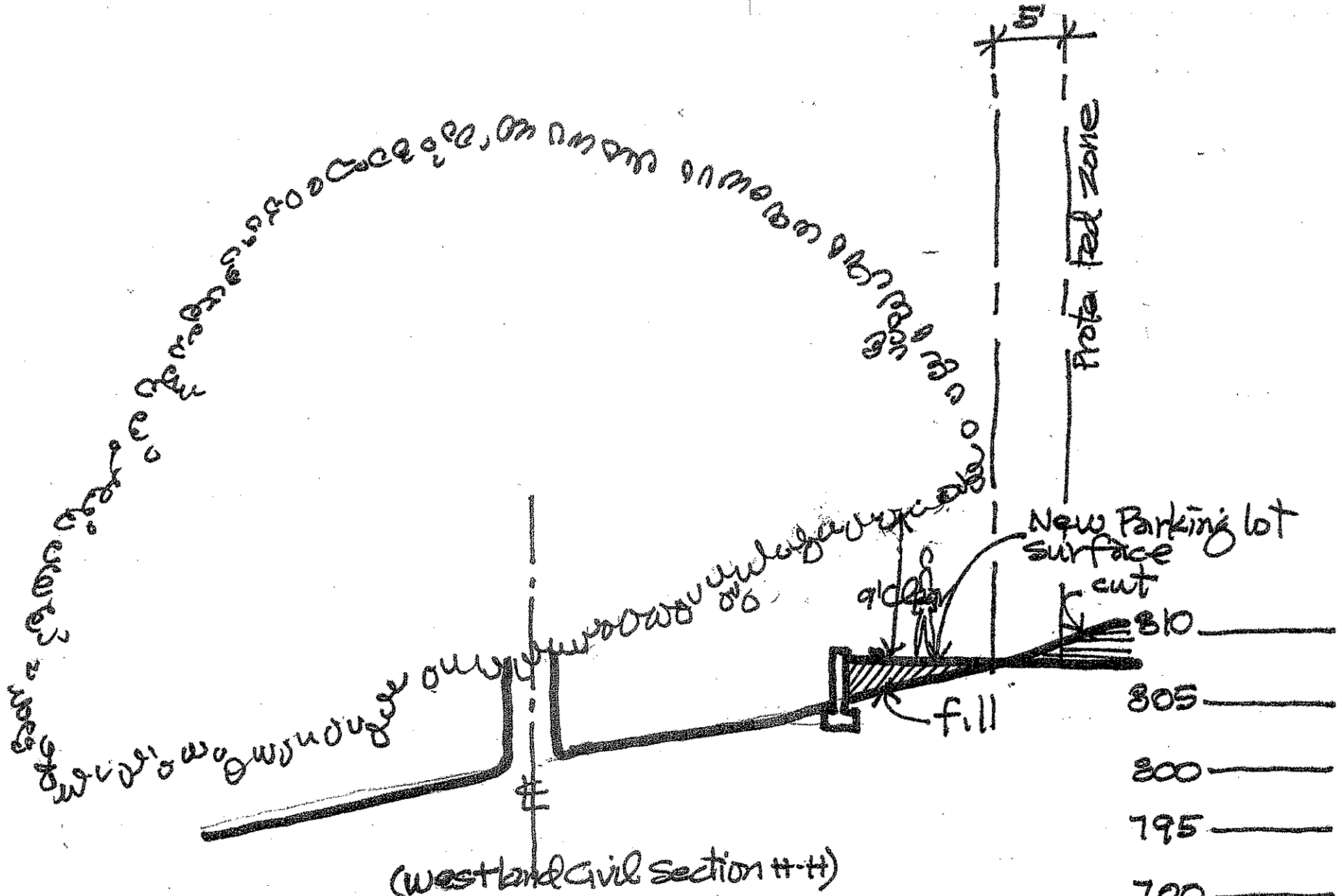
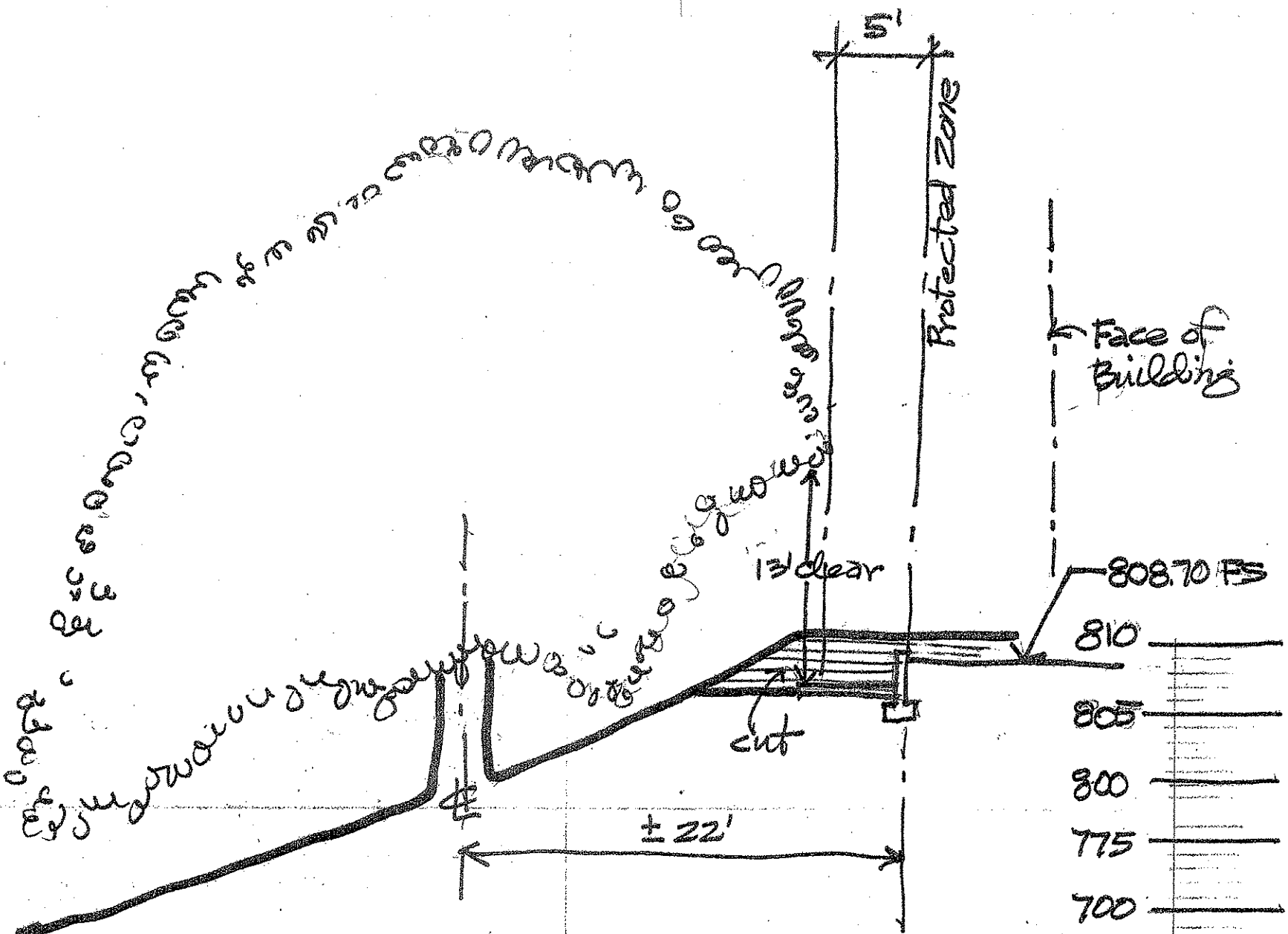


SECTION T-17a

LOOKING NORTHWEST

LIBERTY CANYON OFFICES

SCALE: 1" = 10'

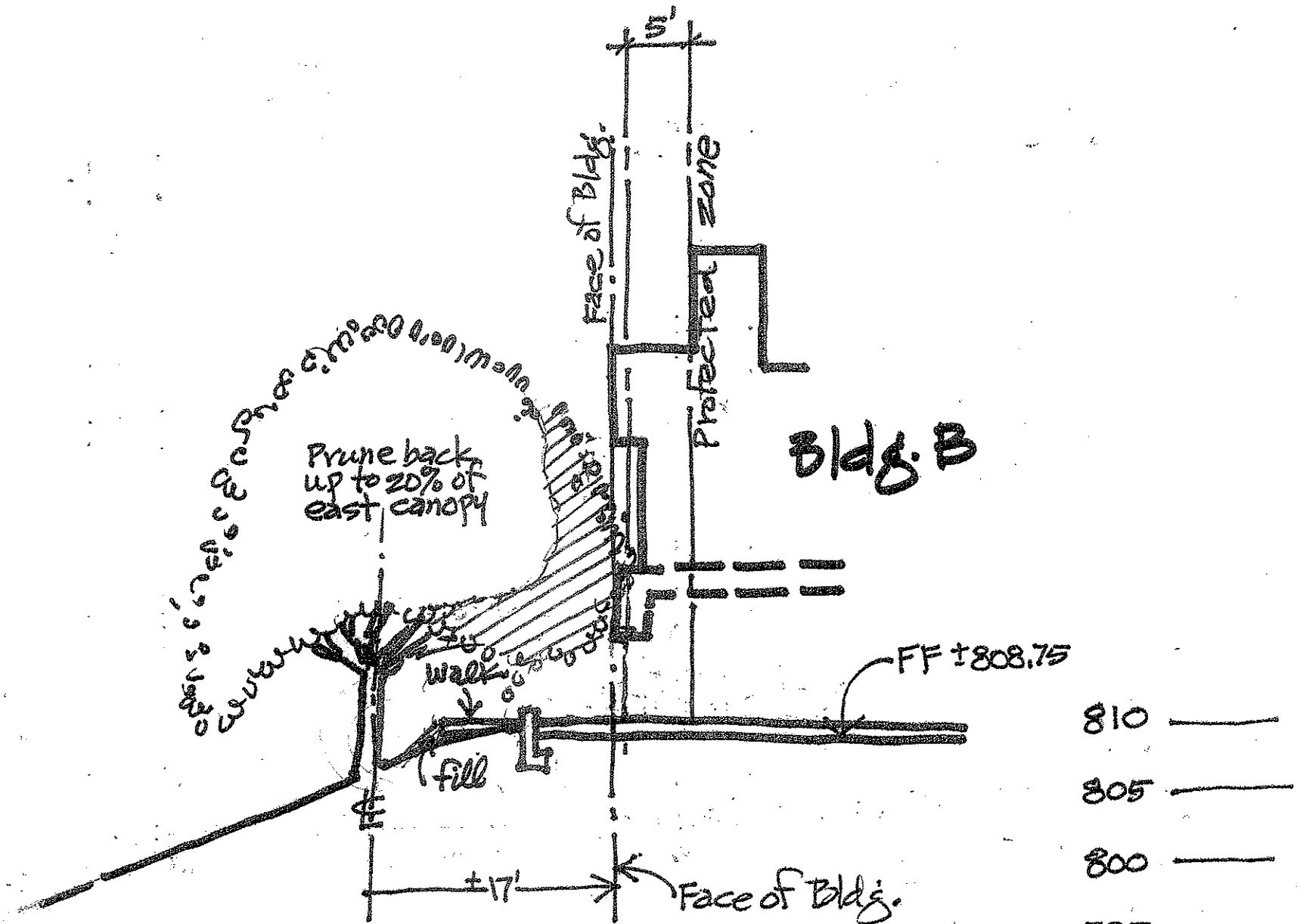


SECTION T-17b

LOOKING NORTHEAST

SCALE: 1" = 10'

LIBERTY CANYON OFFICES

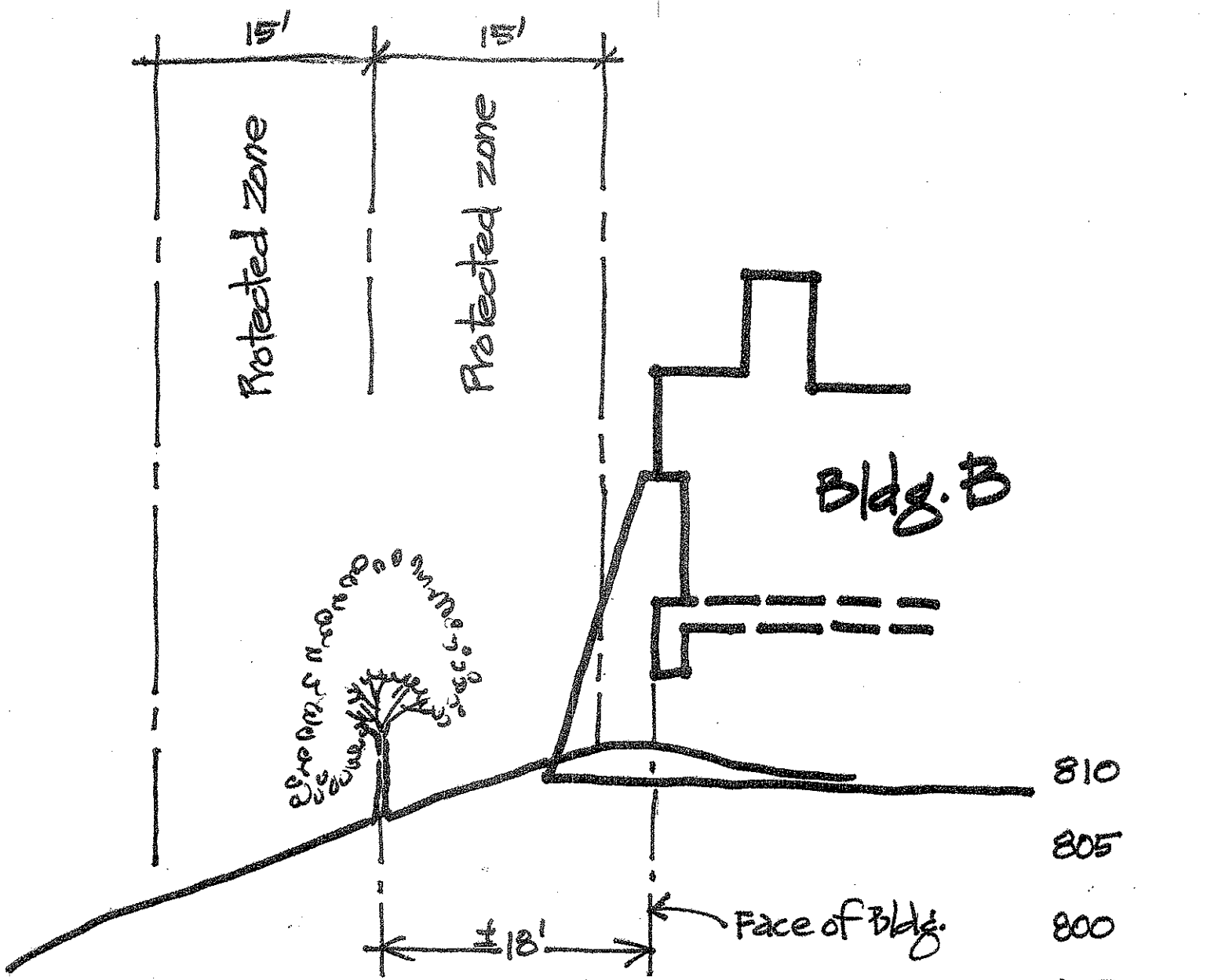


SECTION T-19

LOOKING NORTH

SCALE: 1" = 10'

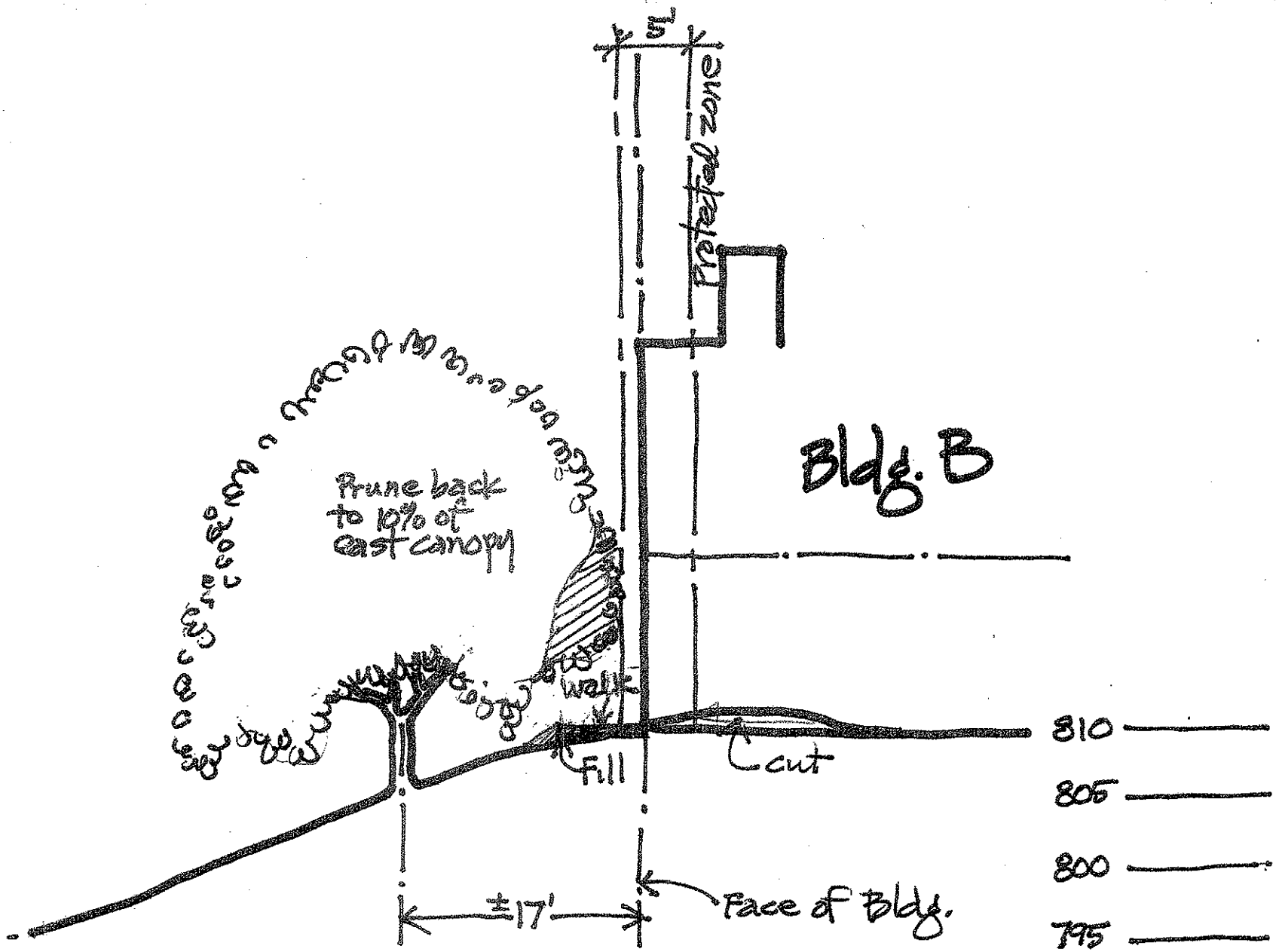
LIBERTY CANYON OFFICES



SECTION T-21
LOOKING NORTH

SCALE: 1" = 10'

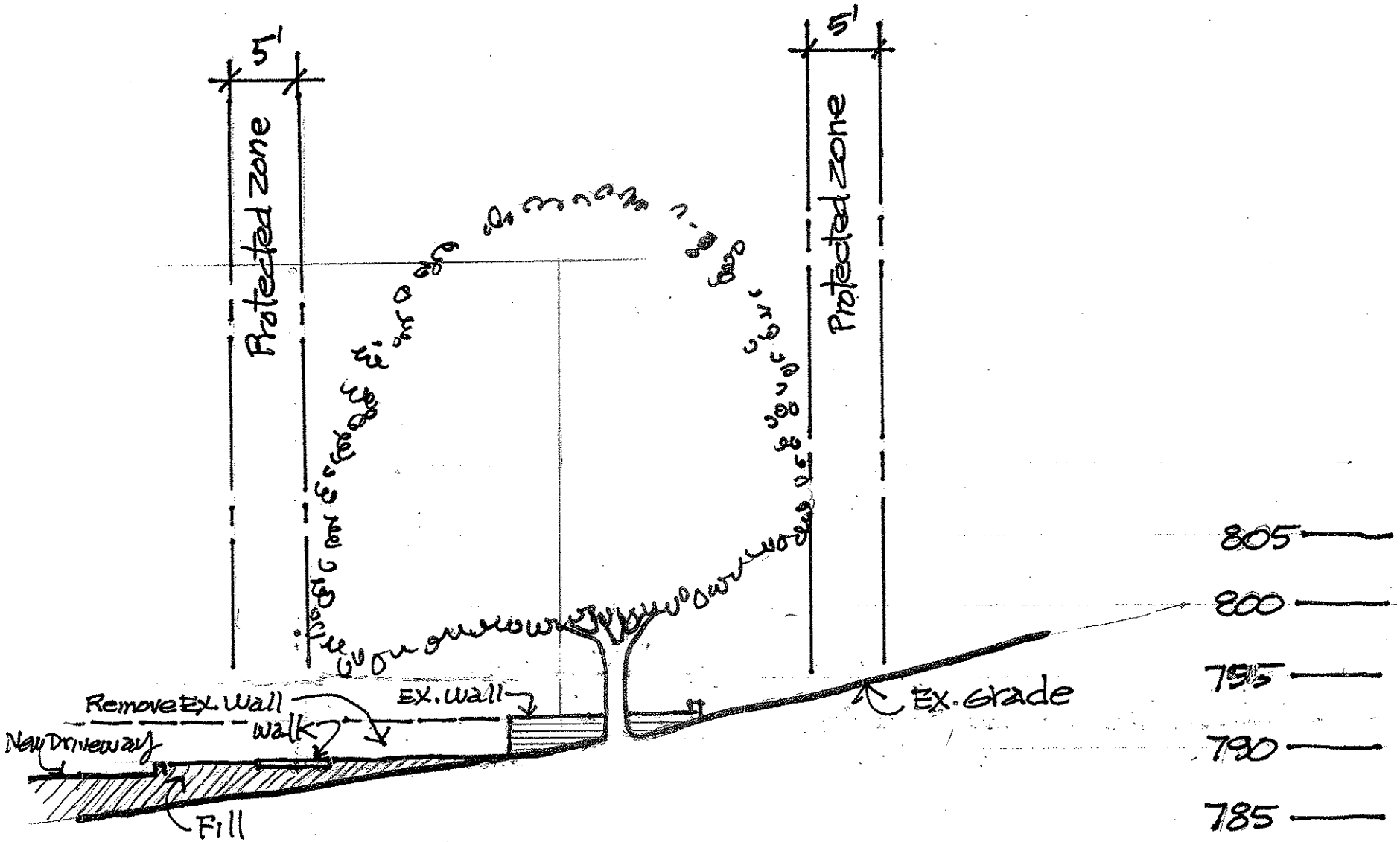
LIBERTY CANYON OFFICES



SECTION T-23
LOOKING NORTH

SCALE: 1" = 10'

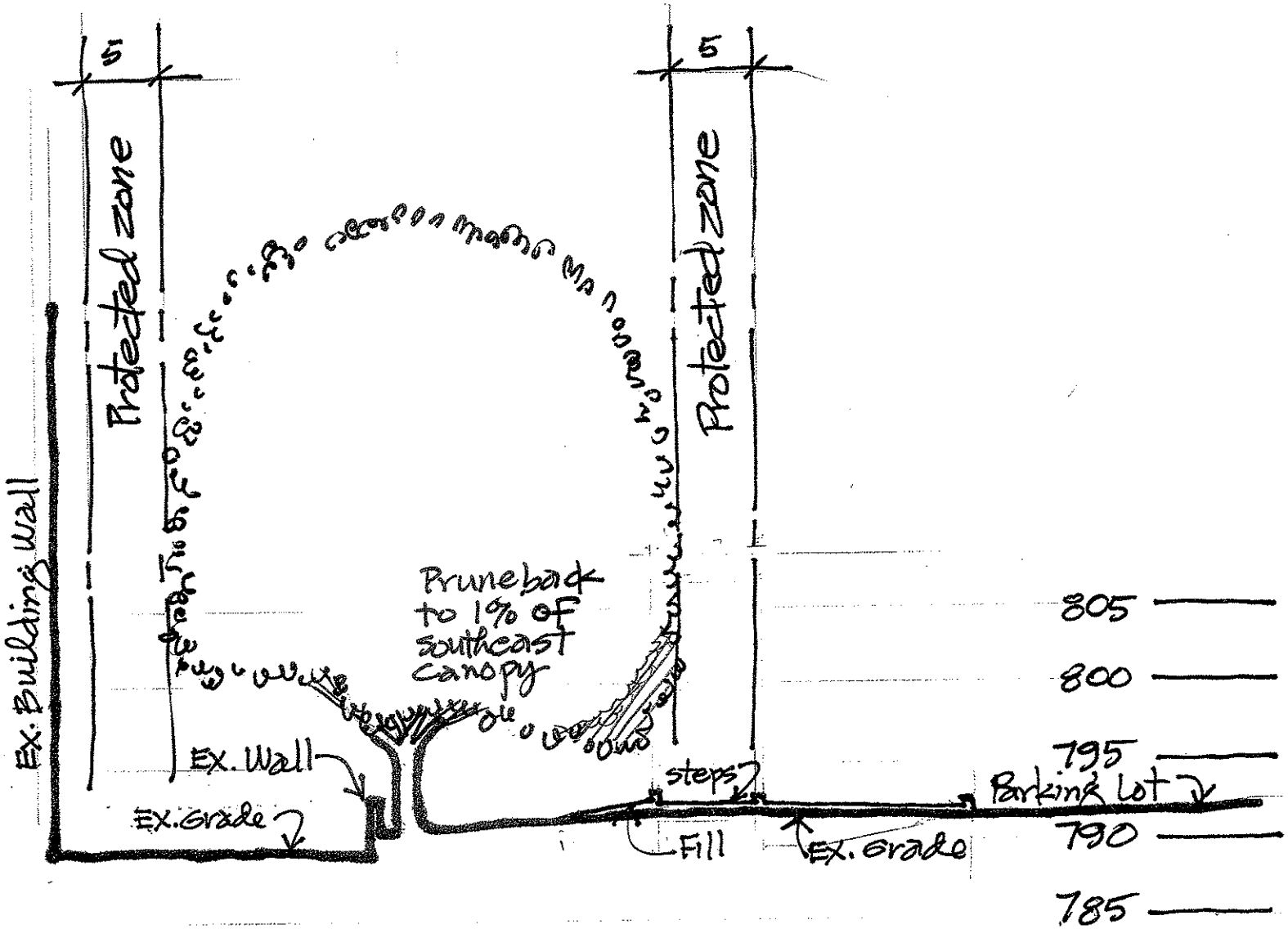
LIBERTY CANYON OFFICES



SECTION T-30
LOOKING NORTHWEST

SCALE: 1" = 10'

LIBERTY CANYON OFFICES

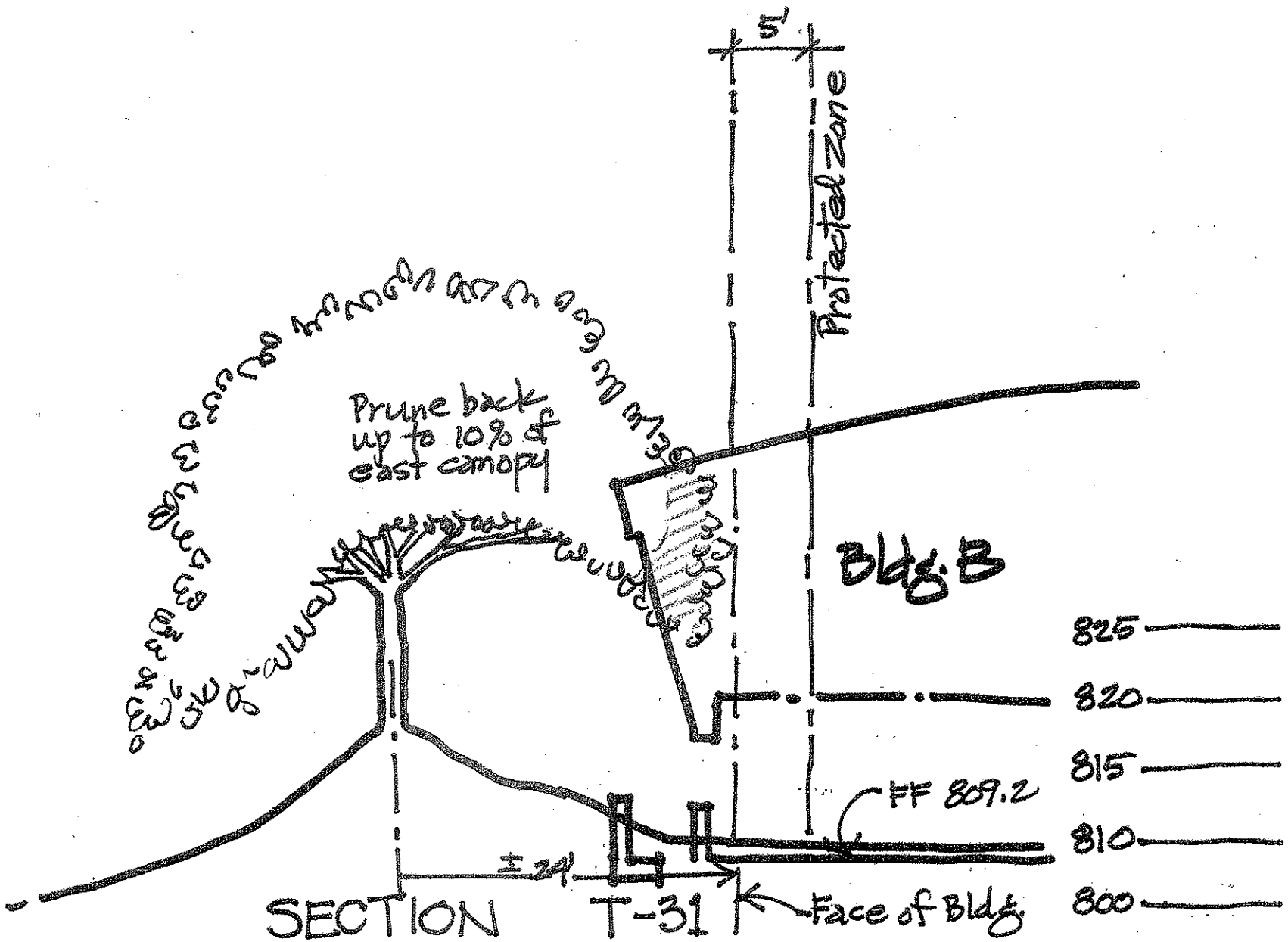


SECTION T-30a

LOOKING NORTHEAST

SCALE: 1"=10'

LIBERTY CANYON OFFICES



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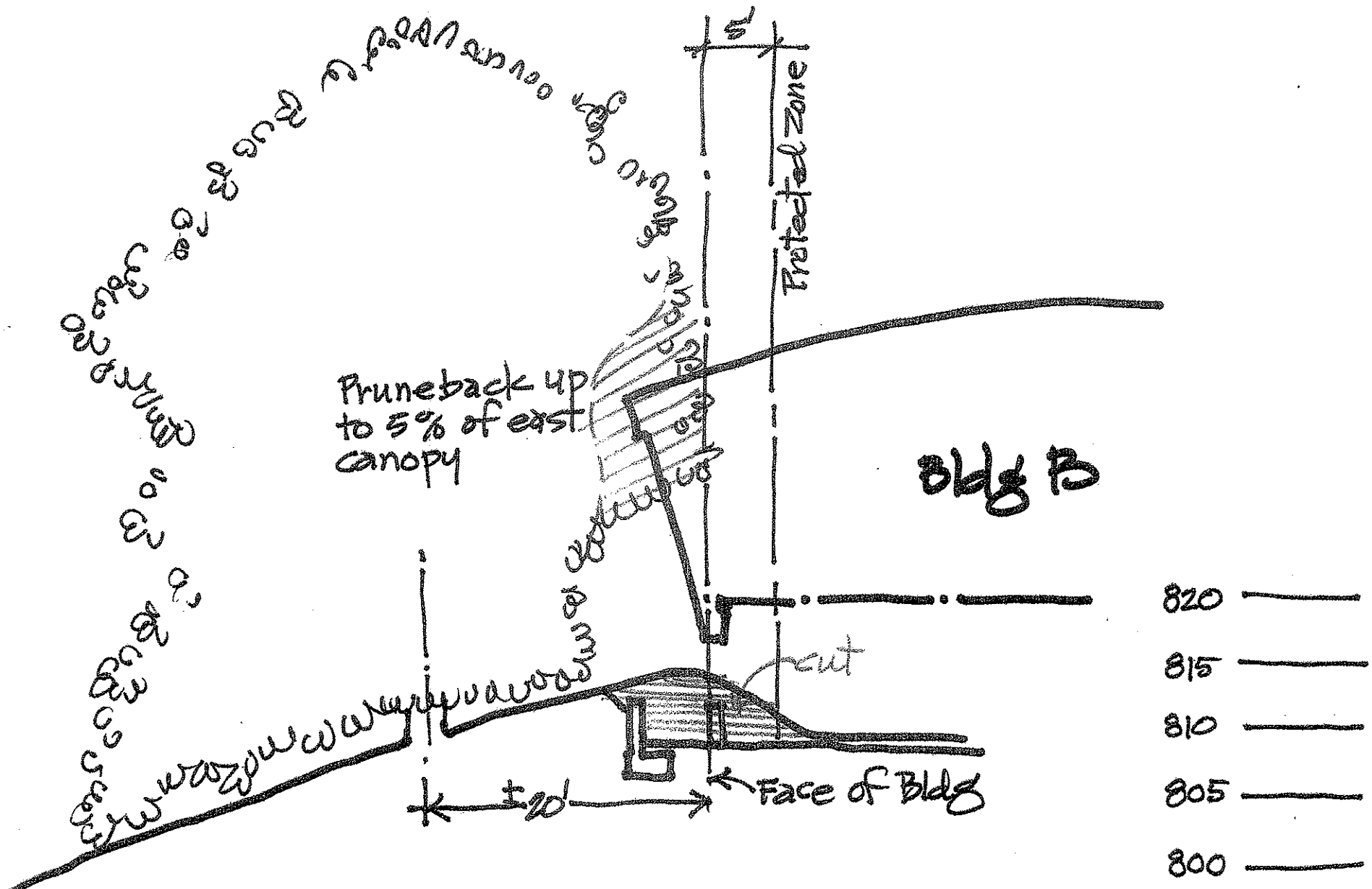
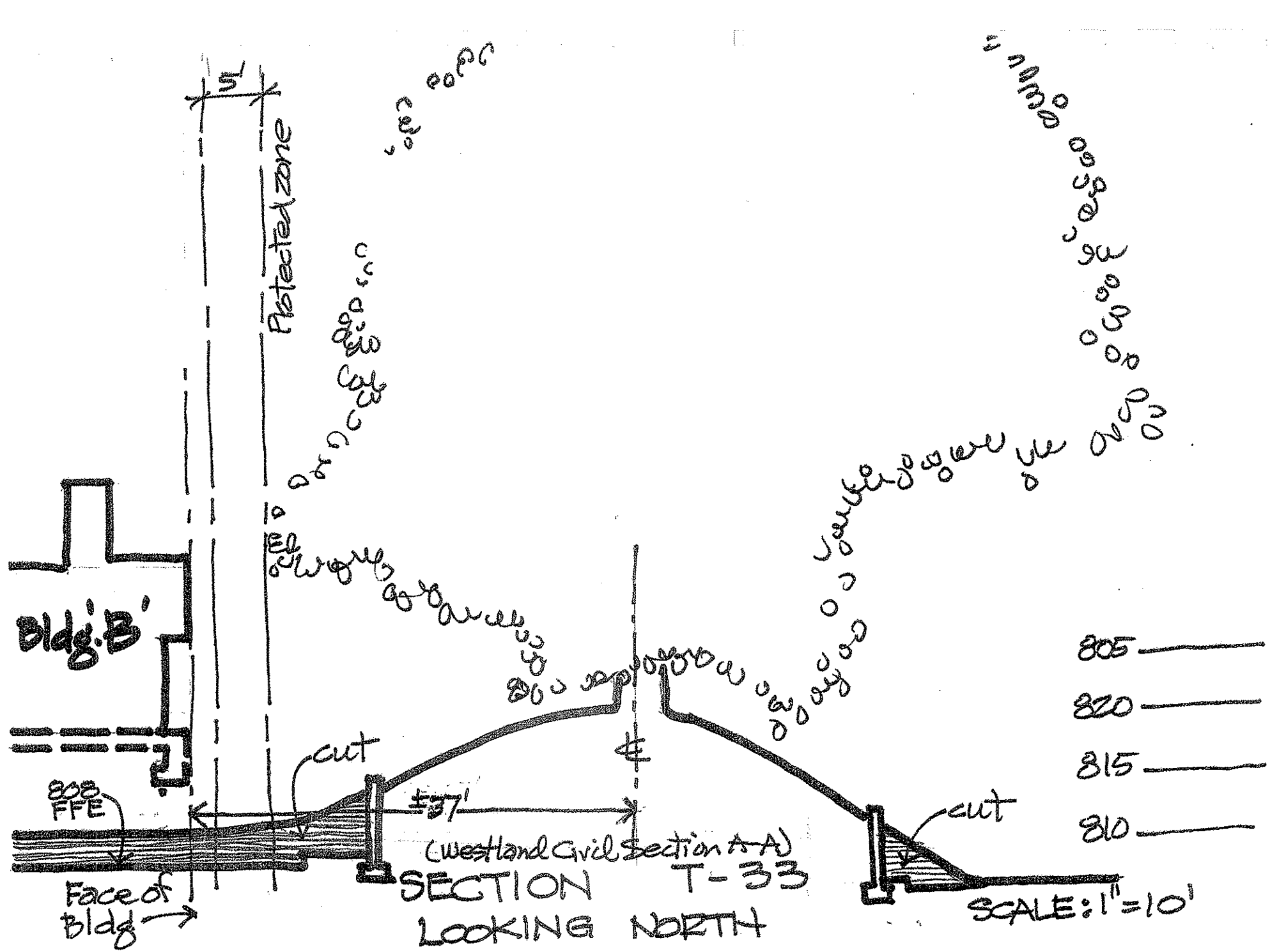


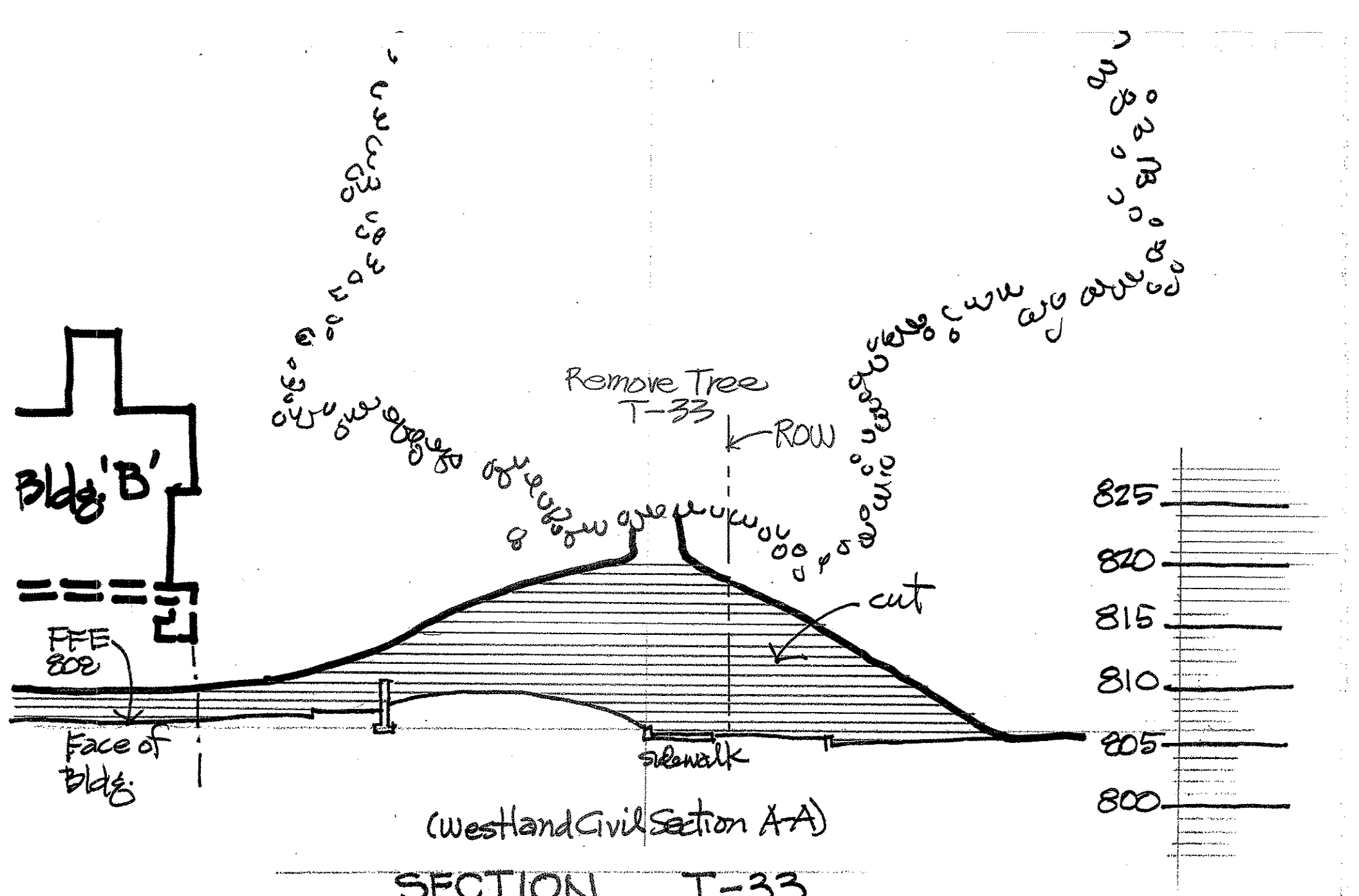
SECTION T-32
LOOKING WEST

SCALE: 1" = 10'

LIBERTY CANYON OFFICES



LIBERTY CANYON OFFICES

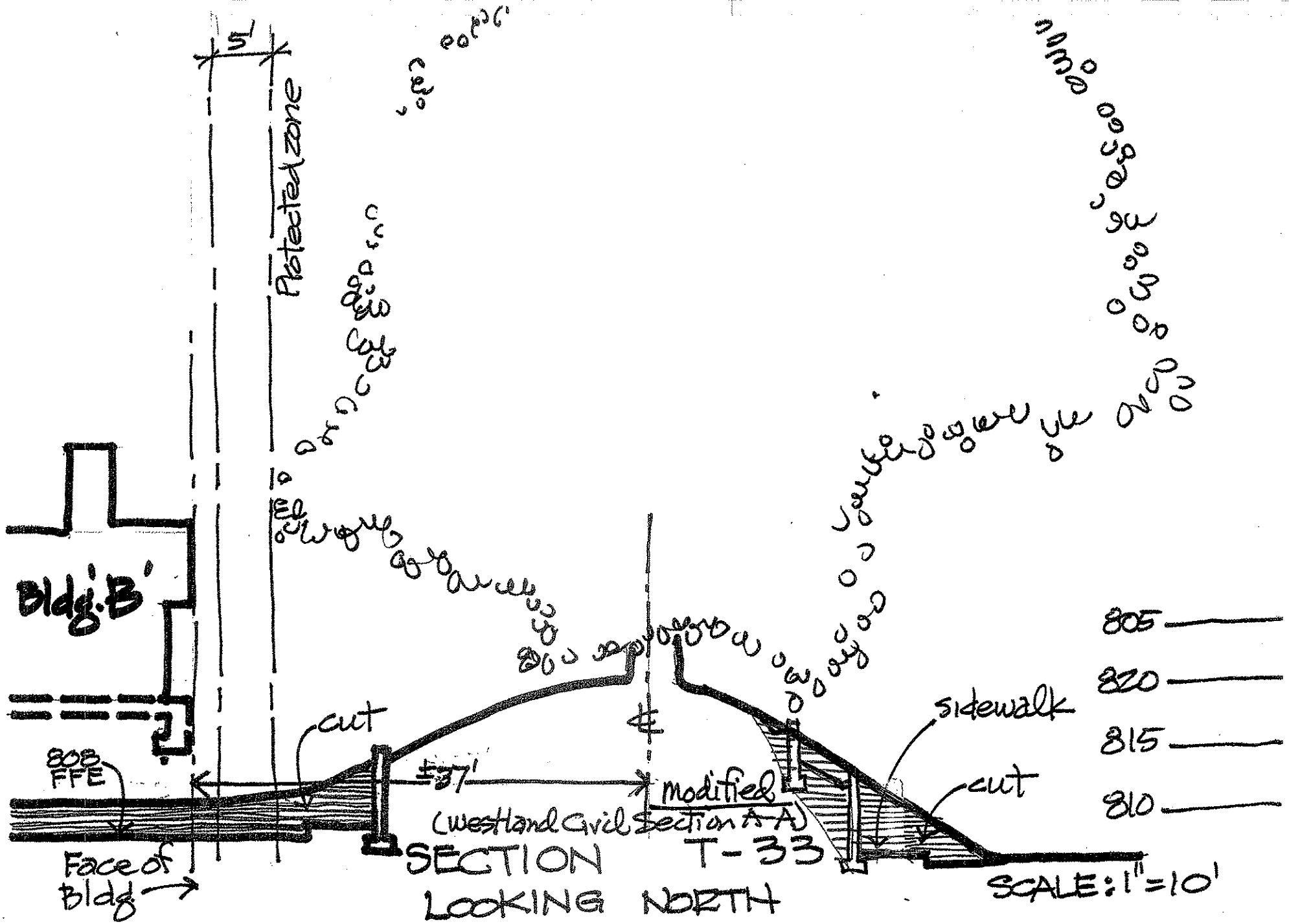


(West and Civil Section A-A)

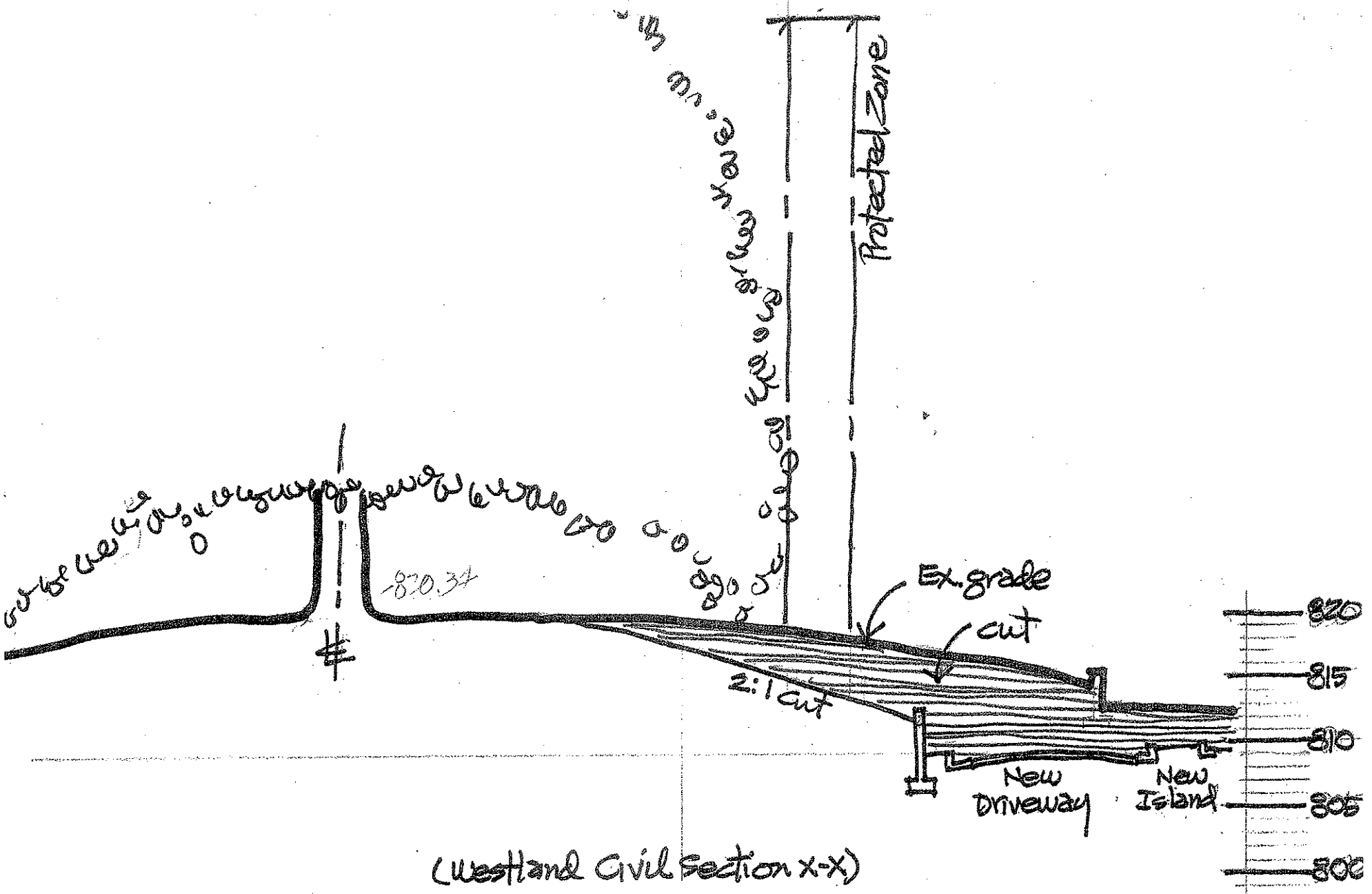
SECTION T-33
LOOKING

LIBERTY CANYON OFFICES

SCALE: 1" = 10'



LIBERTY CANYON OFFICES



(Westland Civil Section X-X)

SECTION T-33a

LOOKING

LIBERTY CANYON OFFICES

SCALE: 1" = 10'

Appendix D

Drainage Study

Preliminary
DRAINAGE REPORT
FOR
LIBERTY CENTER OFFICE BUILDINGS
27489 AGOURA ROAD
Tentative PM#67397
06-PAR-003

06-SPR-009

PREPARED FOR:

27489 Agoura Road LLC
5000 North Parkway Calabasas #100
Calabasas, CA 91302
Tel: 818-223-4392
Fax: 818-332-4013

PREPARED BY:

WESTLAND CIVIL INC.
550 St. Charles Drive, Suite 208
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TEL: 805-494-1330
FAX: 805-446-9125
E-MAIL: don.waite@westlandcivil.com

JULY, 2006

Prepared under the supervision of:

7-20-2006

DONALD G. WAITE
RCE 27364

DATE

ID# AgouraLLC-Liberty
7032006

INTRODUCTION:

The proposed project is located in the City of Agoura Hills, County of Los Angeles, at the northwest intersection of Agoura Road and Liberty Canyon. The proposed site, known as "Liberty Center Office Buildings", is for office use and consists of approximately 4.17 acres. The site is partially developed with one office building and parking lot. There is an offsite watershed tributary to the proposed site. This watershed located north of the project and adjacent to the US 101 freeway drains through the site in a north/south direction via a 72" R.C.P. storm drain which outlets to an onsite existing graded open channel south of the existing building. The channel then drains into an existing reinforced box culvert at the southwest corner of the site, which runs underneath Agoura Rd. By performing research at Los Angeles County Public Works and CalTrans, Westland Civil has determined the existing 72" R.C.P. and open channel is privately owned and maintained due to records showing neither agency claiming ownership or easement rights. There are two existing storm drain lines that run onto the property. An 18" C.M.P. enters the property from the west and connects to the 72" R.C.P. The drainage area associated with the C.M.P. primarily includes an existing paved road, which used to be old Ventura Rd. The other existing storm drain enters the property from the north and connects to the 18" C.M.P. The size of the storm drain is currently unknown, but it does drain the area just south of the freeway exist ramp and the northwest portion of the site. The existing onsite drainage pattern is generally overland sheet flow towards the 72" R.C.P. and open channel. Please see Hydrology Map or Grading Plan for location of all existing or planned drainage facilities.

HYDROLOGIC ANALYSIS:

Hydraulic analysis for this project was performed in accordance with the procedures presented in Los Angeles County Flood control District Hydrology Manual. Present and developed condition runoffs were calculated for a 10, 25, and 50 year frequency storm flow. The entire project is located with Soils No. 36 classification and rainfall Zone K.

PROPOSED DRAINAGE:

The proposed drainage system will be a surface flow on the proposed parking lots and collected by catch basins. Storm water collected on drainage area's "B", "C", and "D" will outlet to existing onsite drainage facilities which drain to the entrance of an existing box culvert north of Agoura Rd.. For drainage areas "A" and "G", the flow will outlet onto Agoura Rd. via a proposed parkway drain. Then the flow will enter an existing curbside opening catch basin. Area "C" will drain into the existing Agoura Rd. catch basin (Line "F"). Drainage area "H" will flow into Santa Monica Conservancy Property and outlet on the surface to assist in wetland growth. A meeting with Conservancy was held and they are agreeable to the drainage concept. An Offsite Acceptance Letter will be obtained from the Conservancy prior to grading approval by the City.

SUMMARY & CONCLUSIONS:

The proposed total development is 4.17 acres and will increase the amount of impervious by approximately 50%.

The runoff from the proposed project will increase by 0.14 cfs for a 10 years storm event. This additional runoff is considered insignificant. The existing drainage facilities are adequate to handle the increase in runoff. Since the majority of the runoff will connect to existing non-erodeable drainage facilities, Los Angeles County box culvert at Agoura Rd. immediately to the west of the development. Detention is not warranted under the Los Angeles County SUSMP guidelines. For NPDES requirements, please refer to the project's SUSMP and report for more specific drainage measures to reduce and control storm water siltation and contamination.

All proposed storm drains were sized using Flowmaster v5.07 by Haestaf Methods, Inc. A 50 year storm analysis was performed for the development of the design flows. Thus, all proposed drainage facilities were sized for a 50 year storm event. The diameters ranged from 6" to 12". All proposed storm drainpipes shall be made of PVC material or equivalent. All proposed catch basins will be inserted with "Flo Guard" media filter or equal to reduce stormwater pollutants.

See attached for specific hydrology/hydraulic calculations.

HYDROLOGY/DRAINAGE TABULATION

RATIONAL METHOD: Q = CIA where C = runoff coeff., I = rainfall Intensity, A = Area

TOTAL AREA: 4.17 acres

SOILS NO.: 036

RAINFALL ZONE: K

See Grading Plan for drainage patterns and existing drainage conditions.

AFTER DEVELOPED CONDITION

Area of Impervious: 80% (IMP = 0.80)

$C_D = (0.9*IMP) + (1.0-IMP)C_u$

Storm Event	I (in/hr)	C_u	C_D	A(ac)	Q (cfs)	CI
10 year	3.50	0.89	0.90	4.17	13.13	3.12
25 year	4.25	0.91	0.91	4.17	16.13	3.83
50 year	4.65	0.92	0.92	4.17	17.84	4.28

BEFORE DEVELOPED CONDITION

Area of Impervious: 40% (IMP = 0.40)

$C_D = (0.9*IMP) + (1.0-IMP)C_u$

Storm Event	I (in/hr)	C_u	C_D	A(ac)	Q (cfs)	CI
10 year	3.50	0.89	0.90	4.17	12.99	3.12
25 year	4.25	0.91	0.91	4.17	16.13	3.83
50 year	4.65	0.92	0.92	4.17	17.84	4.28

Therefore, the increase in runoff for a 10 year storm event is 13.13 – 12.99 = 0.14 cfs

PROPOSED DRAINAGE AREA SUMMARY

Sub-Area	Area (Ac)	Q50 (cfs)
A	0.61	2.61
B	0.36	1.54
C	0.47	2.01
D	0.63	2.70
E	0.19	0.24
F	0.24	1.03
G	0.78	3.53
H	0.58	2.48
I	0.25	1.07
J	0.12	0.51

STORM DRAIN DESIGN SUMMARY

Line	Q50 (cfs)	Slope	Pipe Dia (in)	Drainage Area
A (Station 1 to 1+20	7.41	0.056	12"	A&G&F,E
A (Station 1+20 TO 3+40	2.85	0.056	8"	A+E
A (Station 3+40 TO 5+100	2.61	0.05	8"	A
B	1.07	0.01	8"	I
C	1.03	0.01	8"	F
D	2.20	0.1	10"	D
E	1.54	0.2	8"	B
F	2.01	0.2	8"	C

PROPOSED DRAINAGE AREA SUMMARY

Sub-Area	Area (Ac)	Q50 (cfs)
A	0.61	2.61
B	0.36	1.54
C	0.47	2.01
D	0.63	2.70
E	0.19	0.24
F	0.24	1.03
G	0.78	3.53
H	0.58	2.48
I	0.25	1.07
J	0.12	0.51

STORM DRAIN DESIGN SUMMARY

Line	Q50 (cfs)	Slope	Pipe Dia (in)	Drainage Area
A (Station 1+00 to 1+20)	7.41	0.056	12"	A&G&F,E
A (Station 1+20 to 3+40)	2.85	0.056	8"	A+E
A (Station 3+40 to 5+00)	2.61	0.05	8"	A
B	1.07	0.01	8"	I
C	1.03	0.01	8"	F
D	2.20	0.1	10"	D
E	1.54	0.2	8"	B
F	2.01	0.2	8"	C

LINE A STA 1+00 TO STA 1+20
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "A" (STA 1+00 TO 1+20)
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

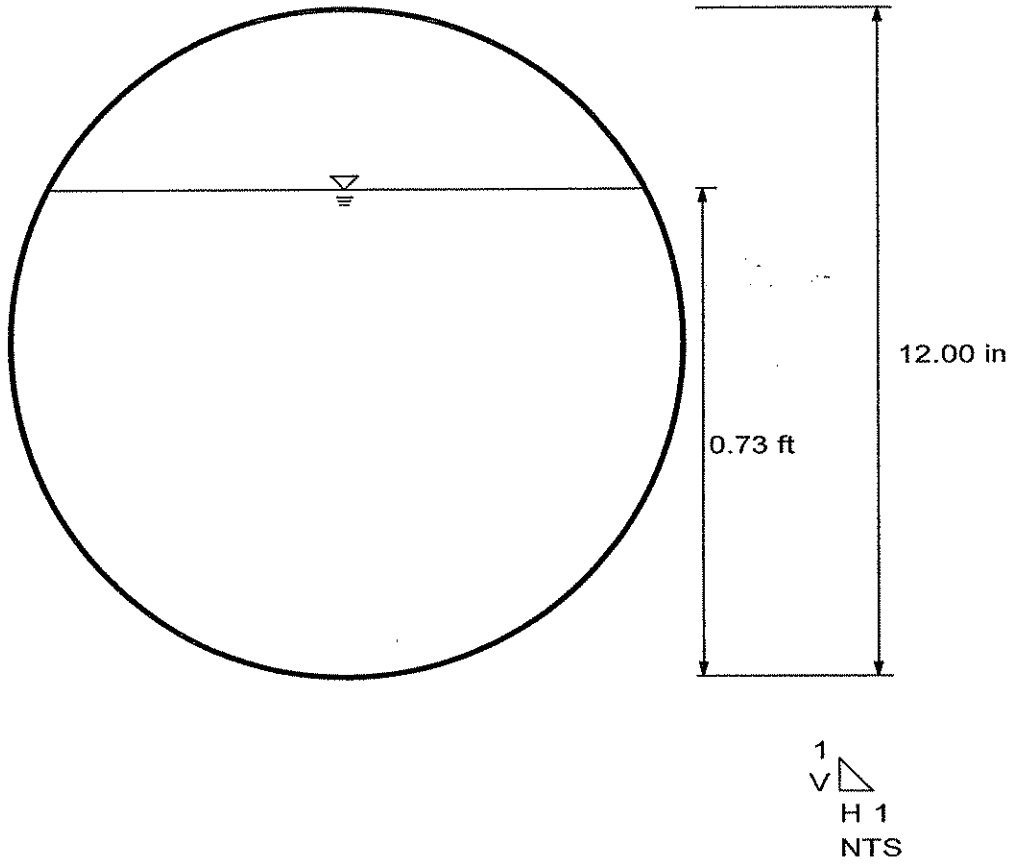
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.056000	ft/ft
Diameter	12.00	in
Discharge	7.41	cfs

Results		
Depth	0.73	ft
Flow Area	0.61	ft^2
Wetted Perimeter	2.04	ft
Top Width	0.89	ft
Critical Depth	0.98	ft
Percent Full	72.73	
Critical Slope	0.038746	ft/ft
Velocity	12.11	ft/s
Velocity Head	2.28	ft
Specific Energy	3.01	ft
Froude Number	2.58	
Maximum Discharge	9.07	cfs
Full Flow Capacity	8.43	cfs
Full Flow Slope	0.043261	ft/ft
Flow is supercritical.		

Cross Section LINE A STA 1+00 TO STA1+20
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "A" (STA 1+00 TO 1+20)
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.056000	ft/ft
Depth	0.73	ft
Diameter	12.00	in
Discharge	7.41	cfs



LINE A STA 1+20 TO 3+40
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "A" (STA 1+20 TO 3+40)
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

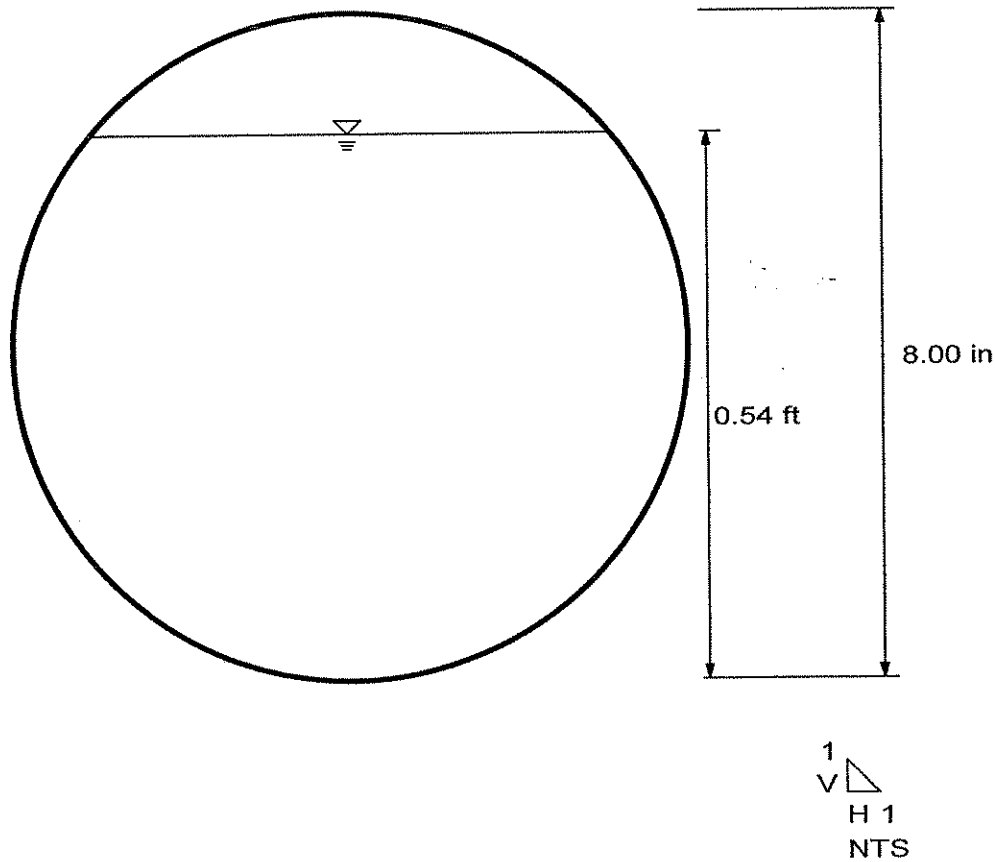
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.056000	ft/ft
Diameter	8.00	in
Discharge	2.85	cfs

Results		
Depth	0.54	ft
Flow Area	0.31	ft^2
Wetted Perimeter	1.50	ft
Top Width	0.52	ft
Critical Depth	0.66	ft
Percent Full	81.66	
Critical Slope	0.050308	ft/ft
Velocity	9.34	ft/s
Velocity Head	1.36	ft
Specific Energy	1.90	ft
Froude Number	2.14	
Maximum Discharge	3.08	cfs
Full Flow Capacity	2.86	cfs
Full Flow Slope	0.055630	ft/ft
Flow is supercritical.		

STA 1+20 T0 3+40
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "A" (STA 1+20 TO 3+40)
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.056000	ft/ft
Depth	0.54	ft
Diameter	8.00	in
Discharge	2.85	cfs



LINE A STA 3+40 TO 5+00
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "A" STA 3+40 TO 5+00
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

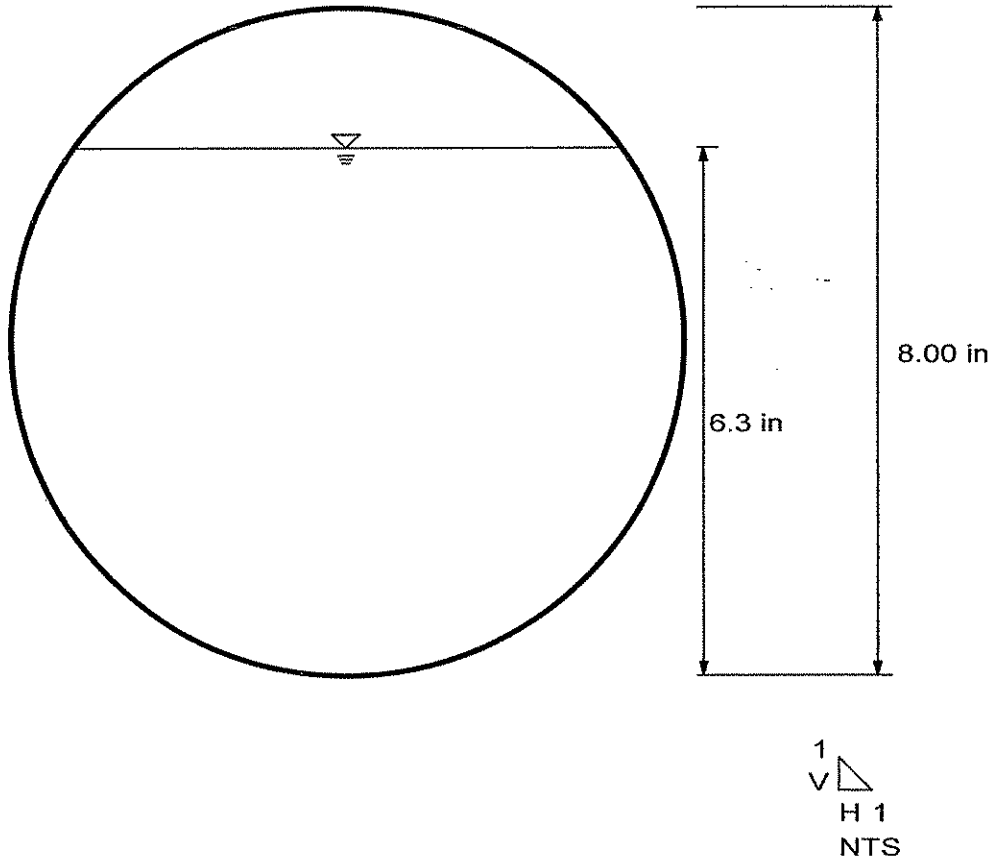
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.050000	ft/ft
Diameter	8.00	in
Discharge	2.60	cfs

Results		
Depth	6.3	in
Flow Area	0.29	ft^2
Wetted Perimeter	1.46	ft
Top Width	0.55	ft
Critical Depth	0.65	ft
Percent Full	78.76	
Critical Slope	0.041233	ft/ft
Velocity	8.82	ft/s
Velocity Head	1.21	ft
Specific Energy	1.73	ft
Froude Number	2.11	
Maximum Discharge	2.91	cfs
Full Flow Capacity	2.70	cfs
Full Flow Slope	0.046298	ft/ft
Flow is supercritical.		

LINE A STA 3+40 TO 5+00
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "A" STA 3+40 TO 5+00
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.050000	ft/ft
Depth	6.3	in
Diameter	8.00	in
Discharge	2.60	cfs



LINE B
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "B"
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

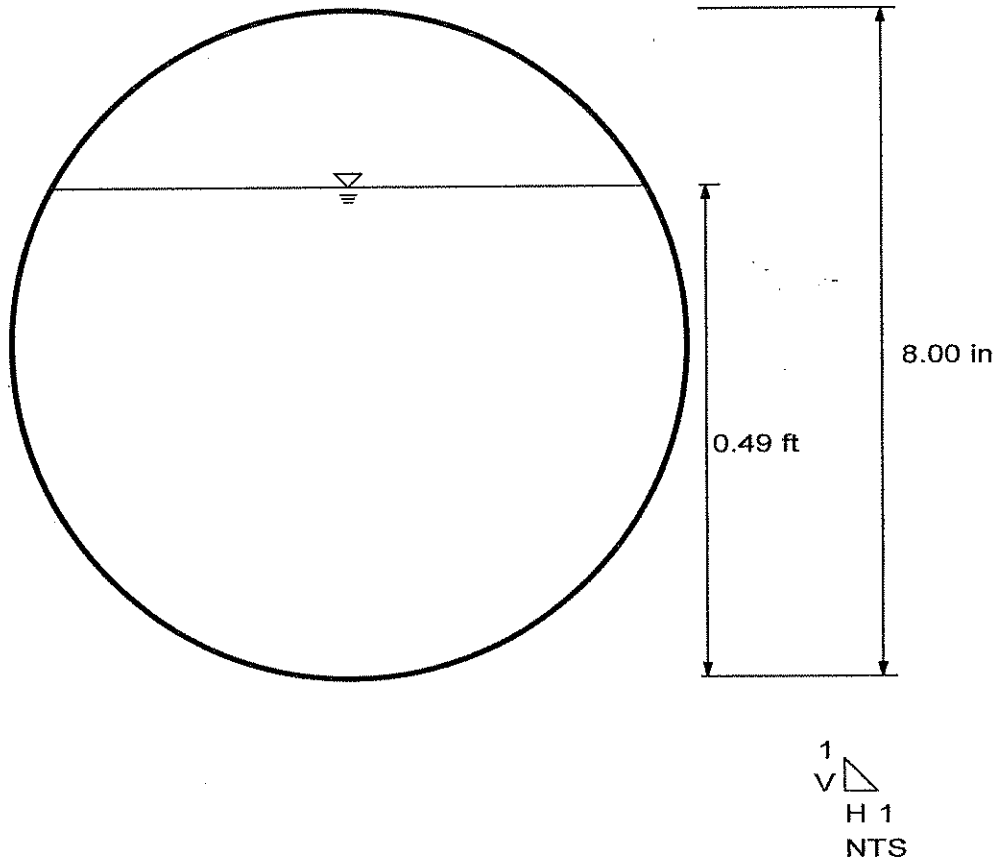
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.010000	ft/ft
Diameter	8.00	in
Discharge	1.07	cfs

Results		
Depth	0.49	ft
Flow Area	0.27	ft^2
Wetted Perimeter	1.37	ft
Top Width	0.59	ft
Critical Depth	0.49	ft
Percent Full	73.17	
Critical Slope	0.009852	ft/ft
Velocity	3.91	ft/s
Velocity Head	0.24	ft
Specific Energy	0.73	ft
Froude Number	1.01	
Maximum Discharge	1.30	cfs
Full Flow Capacity	1.21	cfs
Full Flow Slope	0.007841	ft/ft
Flow is supercritical.		

LINE B
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "B"
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.010000	ft/ft
Depth	0.49	ft
Diameter	8.00	in
Discharge	1.07	cfs



LINE C
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "C"
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

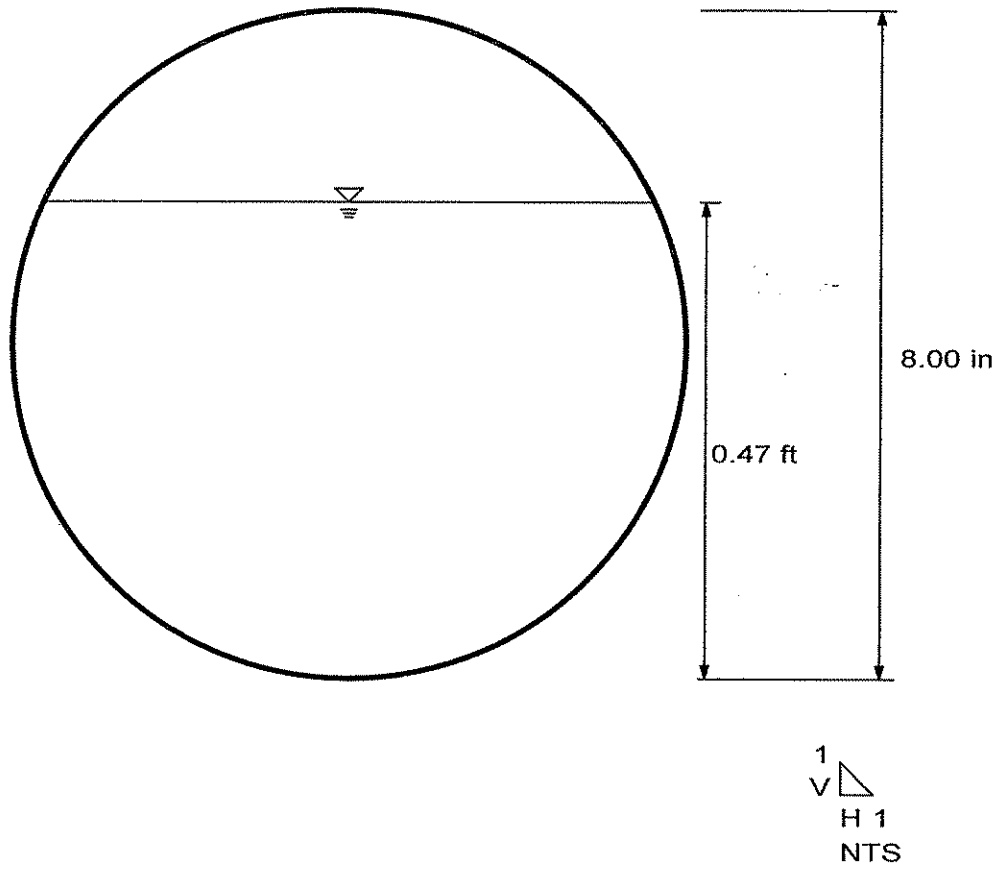
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.010000	ft/ft
Diameter	8.00	in
Discharge	1.03	cfs

Results		
Depth	0.47	ft
Flow Area	0.26	ft^2
Wetted Perimeter	1.34	ft
Top Width	0.61	ft
Critical Depth	0.48	ft
Percent Full	70.98	
Critical Slope	0.009563	ft/ft
Velocity	3.89	ft/s
Velocity Head	0.23	ft
Specific Energy	0.71	ft
Froude Number	1.04	
Maximum Discharge	1.30	cfs
Full Flow Capacity	1.21	cfs
Full Flow Slope	0.007266	ft/ft
Flow is supercritical.		

LINE C
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "C"
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.010000	ft/ft
Depth	0.47	ft
Diameter	8.00	in
Discharge	1.03	cfs



LINE D
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "D"
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

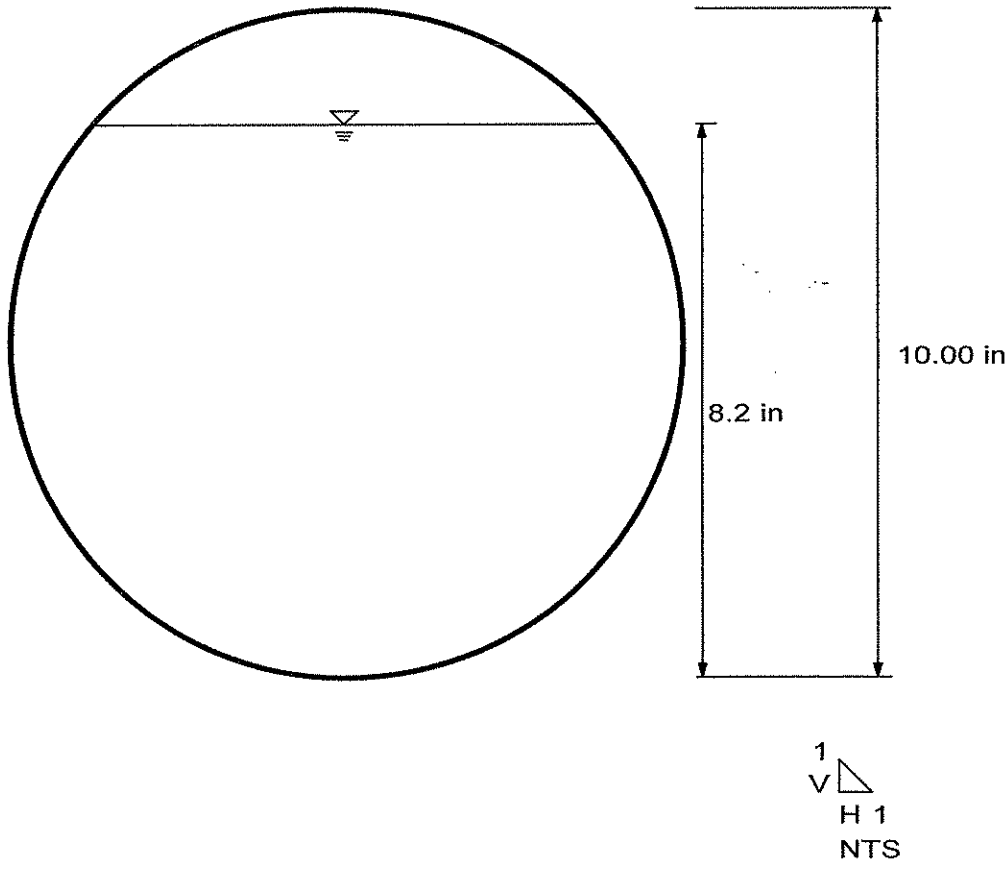
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.010000	ft/ft
Diameter	10.00	in
Discharge	2.20	cfs

Results		
Depth	8.2	in
Flow Area	0.48	ft²
Wetted Perimeter	1.90	ft
Top Width	0.64	ft
Critical Depth	0.66	ft
Percent Full	82.35	
Critical Slope	0.010652	ft/ft
Velocity	4.58	ft/s
Velocity Head	0.33	ft
Specific Energy	1.01	ft
Froude Number	0.93	
Maximum Discharge	2.36	cfs
Full Flow Capacity	2.19	cfs
Full Flow Slope	0.010083	ft/ft
Flow is subcritical.		

LINE D
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE "D"
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.010000	ft/ft
Depth	8.2	in
Diameter	10.00	in
Discharge	2.20	cfs



LINE E
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE E
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

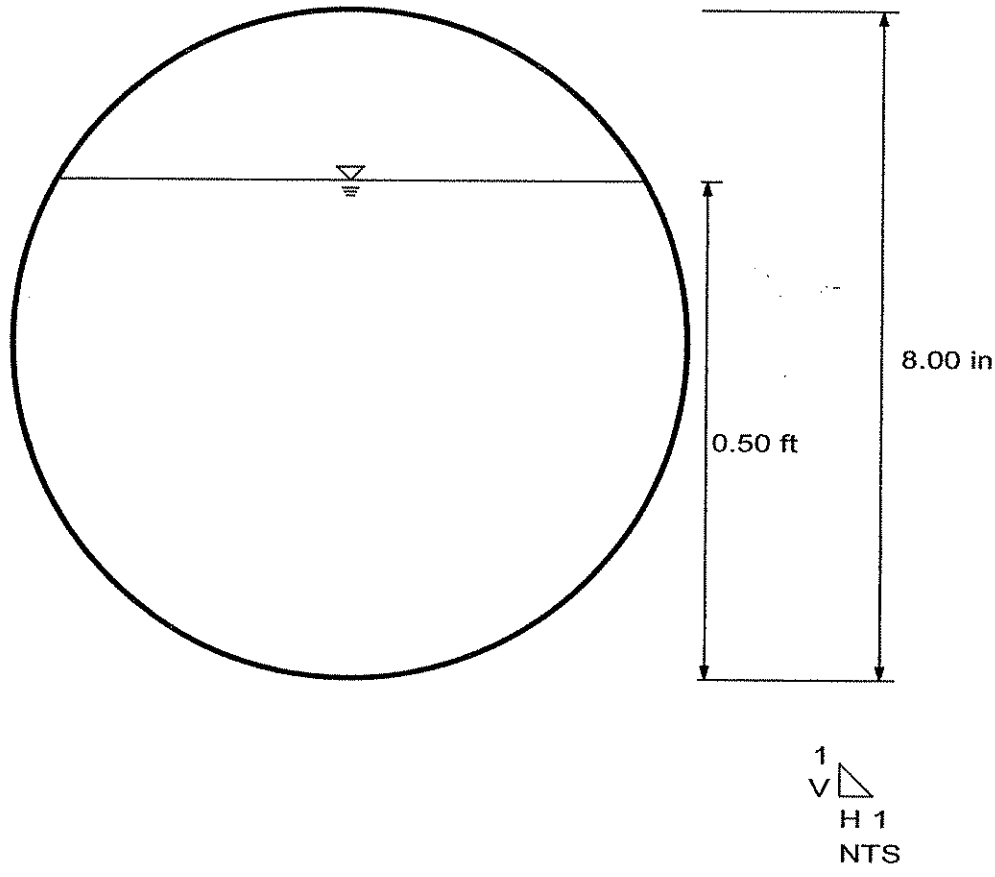
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.020000	ft/ft
Diameter	8.00	in
Discharge	1.54	cfs

Results		
Depth	0.50	ft
Flow Area	0.28	ft^2
Wetted Perimeter	1.38	ft
Top Width	0.58	ft
Critical Depth	0.58	ft
Percent Full	74.25	
Critical Slope	0.014865	ft/ft
Velocity	5.54	ft/s
Velocity Head	0.48	ft
Specific Energy	0.97	ft
Froude Number	1.41	
Maximum Discharge	1.84	cfs
Full Flow Capacity	1.71	cfs
Full Flow Slope	0.016243	ft/ft
Flow is supercritical.		

LINE E
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE E
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.020000	ft/ft
Depth	0.50	ft
Diameter	8.00	in
Discharge	1.54	cfs



LINE F
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE F
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

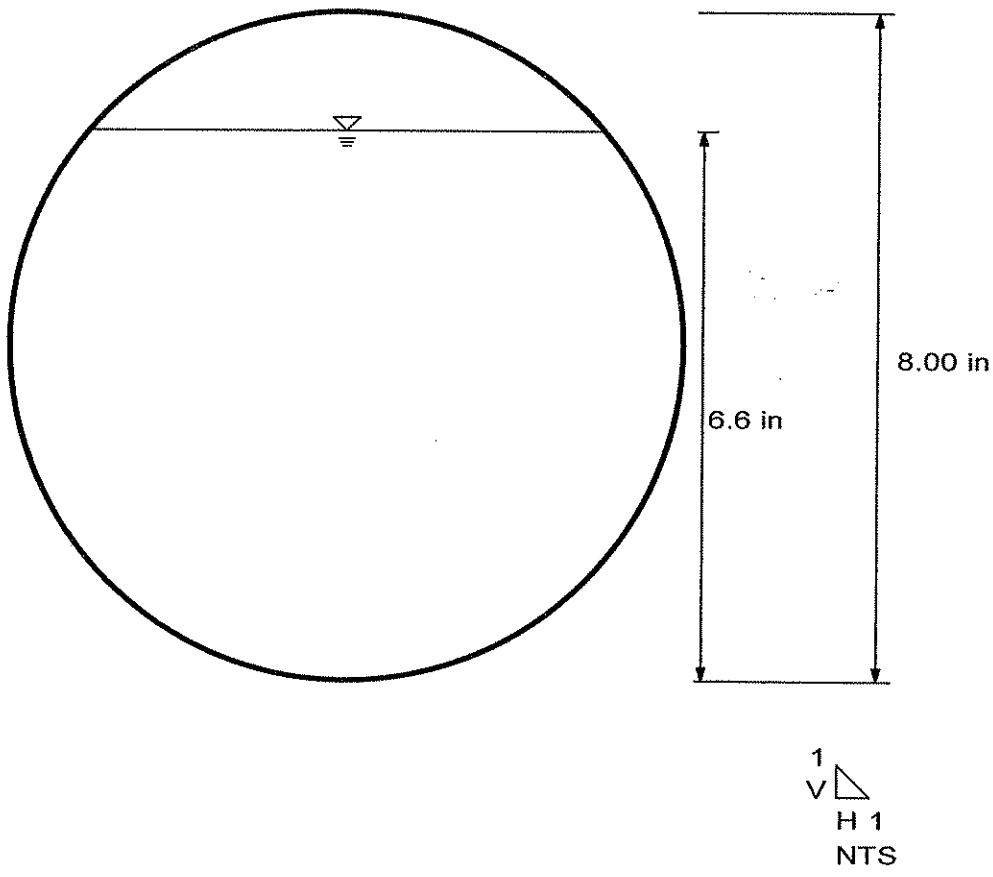
Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.027395	ft/ft
Diameter	8.00	in
Discharge	2.00	cfs

Results		
Depth	6.6	in
Flow Area	0.31	ft²
Wetted Perimeter	1.51	ft
Top Width	0.51	ft
Critical Depth	0.63	ft
Percent Full	81.96	
Critical Slope	0.023676	ft/ft
Velocity	6.53	ft/s
Velocity Head	0.66	ft
Specific Energy	1.21	ft
Froude Number	1.49	
Maximum Discharge	2.15	cfs
Full Flow Capacity	2.00	cfs
Full Flow Slope	0.027395	ft/ft
Flow is supercritical.		

LINE F
Cross Section for Circular Channel

Project Description	
Project File	c:\haestad\fmw\agourllc.fm2
Worksheet	LINE F
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Channel Depth

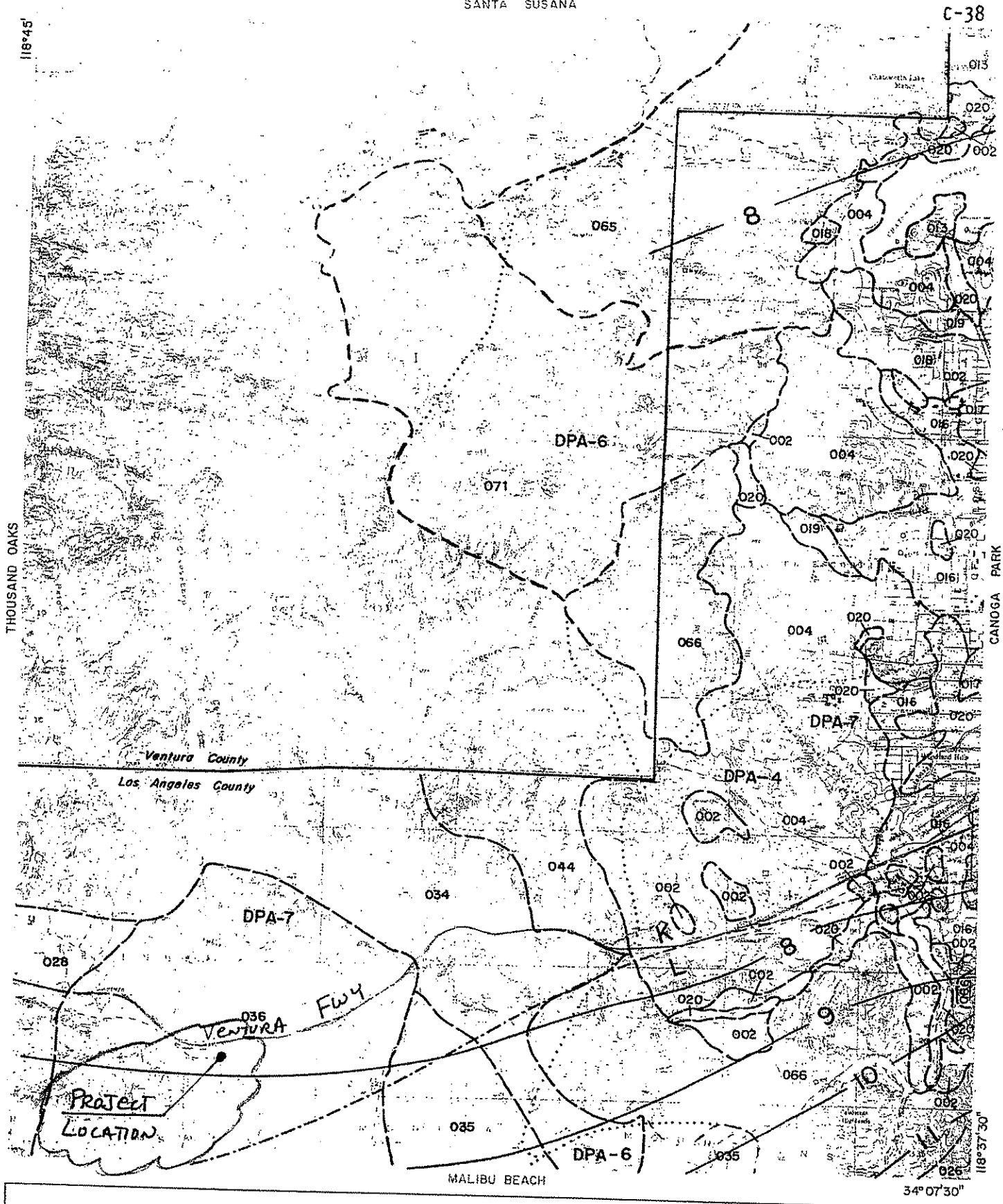
Section Data		
Mannings Coefficient	0.013	
Channel Slope	0.027395	ft/ft
Depth	6.6	in
Diameter	8.00	in
Discharge	2.00	cfs



APPENDIX

HYDROLOGY / HYDRAULIC

CHARTS AND MAPS



LEGEND

SOIL CLASSIFICATION AREA

DEBRIS POTENTIAL AREA

RAINFALL ZONE

12 50-YEAR ISOHYET (MAX. 24-HOUR AMOUNT)

LACFCD hydrology manual

CALABASAS 1952 hydrologic map

Appendix E

Noise Study and Calculations

C:\LARDAV\SLMUTIL\14JAN_09.bin Run/Stop Data

Meas Site	History Location	Number	Date	Time	Type	Cause	Time Record
0		0	14Jan 08	9:15:51	Run	Key	94
0		0	14Jan 08	9:35:51	Stop	Intv	216

ROADWAY TRAFFIC NOISE

Project: Liberty Canyon Project No. 07-62150
Date: 18-Jan-08

Roadway: Agoura Road, west of Liberty Canyon Road

PROJECT DATA and ASSUMPTIONS

Vehicle Reference Energy Mean Emission Levels (FHWA 1977, TNM®, or CALVENO):	TNM	
Distance to Receptor:	50	feet
Site Condition (Hard or Soft):	Soft	
Upgrade longer than 1 mile:	0	%
Existing Total Traffic Volume (ADT):	4,760	vehicles
Ambient Growth Factor:	0.0%	
Future Year :	2009	
Total Project Volume (ADT):	550	vehicles
Total Cumulative Growth Volume (ADT):	170	vehicles

Source of Traffic Data: ATE

Daily Vehicle Mix

	Existing	*Project*	*Future*
Automobile	90.0%	90.0%	90.0%
Medium Truck	5.0%	5.0%	5.0%
Heavy Truck	5.0%	5.0%	5.0%

Source: Assumed given land use and road characteristics

Percentage of Daily Traffic

Existing and Future

	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	77.5%	12.9%	9.6%
Medium Truck	84.8%	4.9%	10.3%
Heavy Truck	86.5%	2.7%	10.8%

Source: Default Assumption

Project

	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	100.0%	0.0%	0.0%
Medium Truck	100.0%	0.0%	0.0%
Heavy Truck	100.0%	0.0%	0.0%

Source: Default Assumption

Average Speed

Existing

	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	35	35	35
Medium Truck	35	35	35
Heavy Truck	35	35	35

Source: Assumed average speed

Future

	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	35	35	35
Medium Truck	35	35	35
Heavy Truck	35	35	35

Source: Assumed average speed

ROADWAY TRAFFIC NOISE

Project: Liberty Canyon Project No. 07-62150
Date: 18-Jan-08

Roadway: Agoura Road, west of Liberty Canyon Road

Vehicle Noise Emission Levels*: TNM

RESULTS

DAY-NIGHT AVERAGE LEVEL (Ldn)	Ldn at Site 50 feet from road centerline	Distance to dBA Contour Line from roadway centerline, feet 75	70	65	60	55
Existing	64.2 dBA	#N/A	#N/A	42	95	205
Existing + Project	64.5 dBA	#N/A	#N/A	44	99	213
Future with Ambient Growth	64.2 dBA	#N/A	#N/A	42	95	205
Future with Ambient Growth and Project	64.5 dBA	#N/A	#N/A	44	99	213
Future with Ambient Growth and Cumulative Projects	64.4 dBA	#N/A	#N/A	43	98	210
Future with Ambient, Cumulative, and Project Growth	64.6 dBA	#N/A	#N/A	46	101	218
Change in Noise Levels						
Due to Project	0.3 dBA					
Due to Ambient Growth	0.0 dBA					
Due to Ambient and Cumulative	0.2 dBA					
Due to All Future Growth	0.4 dBA					

COMMUNITY NOISE EXPOSURE LEVEL (CNEL)	CNEL at Site 50 feet from road centerline	Distance to dBA Contour Line from roadway centerline, feet 75	70	65	60	55
Existing	64.5 dBA	#N/A	#N/A	45	100	216
Existing + Project	64.8 dBA	#N/A	#N/A	47	104	224
Future with Ambient Growth	64.5 dBA	#N/A	#N/A	45	100	216
Future with Ambient Growth and Project	64.8 dBA	#N/A	#N/A	47	104	224
Future with Ambient Growth and Cumulative Projects	64.7 dBA	#N/A	#N/A	47	103	221
Future with Ambient, Cumulative, and Project Growth	64.9 dBA	#N/A	#N/A	49	106	229
Change in Noise Levels						
Due to Project	0.2 dBA					
Due to Ambient Growth	0.0 dBA					
Due to Ambient and Cumulative	0.2 dBA					
Due to All Future Growth	0.4 dBA					

*NOTES: Based on algorithms from the Federal Highway Administration "Traffic Noise Model ®", FHWA-PD-96-010, January, 1998.

#N/A = Not Applicable

ROADWAY TRAFFIC NOISE

Project: Liberty Canyon Project No. 07-62150
Date: 18-Jan-08

Roadway: Liberty Canyon Road, south of Agoura Road

PROJECT DATA and ASSUMPTIONS

Vehicle Reference Energy Mean Emission Levels (FHWA 1977, TNM®, or CALVENO):	TNM	
Distance to Receptor:	50	feet
Site Condition (Hard or Soft):	Soft	
Upgrade longer than 1 mile:	0	%
Existing Total Traffic Volume (ADT):	3,280	vehicles
Ambient Growth Factor:	0.0%	
Future Year :	2009	
Total Project Volume (ADT):	330	vehicles
Total Cumulative Growth Volume (ADT):	410	vehicles

Source of Traffic Data: Fehr & Peers/Kaku

Daily Vehicle Mix

	Existing	*Project*	*Future*
Automobile	90.0%	90.0%	90.0%
Medium Truck	5.0%	5.0%	5.0%
Heavy Truck	5.0%	5.0%	5.0%

Source: Assumed given land use and road characteristics

Percentage of Daily Traffic

	Existing and Future		
	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	77.5%	12.9%	9.6%
Medium Truck	84.8%	4.9%	10.3%
Heavy Truck	86.5%	2.7%	10.8%

Source: Default Assumption

	Project		
	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	100.0%	0.0%	0.0%
Medium Truck	100.0%	0.0%	0.0%
Heavy Truck	100.0%	0.0%	0.0%

Source: Default Assumption

Average Speed

	Existing		
	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	35	35	35
Medium Truck	35	35	35
Heavy Truck	35	35	35

Source: Assumed average speed

	Future		
	Day (7 am-7 pm)	*Evening (7-10 pm)*	*Night (10 pm - 7 am)*
Automobile	35	35	35
Medium Truck	35	35	35
Heavy Truck	35	35	35

Source: Assumed average speed

ROADWAY TRAFFIC NOISE

Project: Liberty Canyon Project No. 07-62150
Date: 18-Jan-08

Roadway: Liberty Canyon Road, south of Agoura Road

Vehicle Noise Emission Levels*: TNM

RESULTS

DAY-NIGHT AVERAGE LEVEL (Ldn)	Ldn at Site 50 feet from road centerline	Distance to dBA Contour Line from roadway centerline, feet 75	70	65	60	55
Existing	62.6 dBA	#N/A	#N/A	29	74	160
Existing + Project	62.8 dBA	#N/A	#N/A	30	77	166
Future with Ambient Growth	62.6 dBA	#N/A	#N/A	29	74	160
Future with Ambient Growth and Project	62.8 dBA	#N/A	#N/A	30	77	166
Future with Ambient Growth and Cumulative Projects	63.1 dBA	#N/A	#N/A	32	80	173
Future with Ambient, Cumulative, and Project Growth	63.3 dBA	#N/A	#N/A	34	83	179
Change in Noise Levels						
Due to Project	0.2 dBA					
Due to Ambient Growth	0.0 dBA					
Due to Ambient and Cumulative	0.5 dBA					
Due to All Future Growth	0.7 dBA					

COMMUNITY NOISE EXPOSURE LEVEL (CNEL)	CNEL at Site 50 feet from road centerline	Distance to dBA Contour Line from roadway centerline, feet 75	70	65	60	55
Existing	62.9 dBA	#N/A	#N/A	31	78	169
Existing + Project	63.1 dBA	#N/A	#N/A	32	81	174
Future with Ambient Growth	62.9 dBA	#N/A	#N/A	31	78	169
Future with Ambient Growth and Project	63.1 dBA	#N/A	#N/A	32	81	174
Future with Ambient Growth and Cumulative Projects	63.4 dBA	#N/A	#N/A	35	85	182
Future with Ambient, Cumulative, and Project Growth	63.6 dBA	#N/A	#N/A	36	87	188
Change in Noise Levels						
Due to Project	0.2 dBA					
Due to Ambient Growth	0.0 dBA					
Due to Ambient and Cumulative	0.5 dBA					
Due to All Future Growth	0.7 dBA					

*NOTES: Based on algorithms from the Federal Highway Administration "Traffic Noise Model ®", FHWA-PD-96-010, January, 1998.

#N/A = Not Applicable

Appendix F

Comments and Responses

COMMENTS and RESPONSES

This appendix contains all of the written comments received in response to the Draft MND during the 30-day public review period that concluded on April 18, 2008. Each comment received during the comment period by the City of Agoura Hills (City) has been included within this section. Responses to the comments have been prepared to address the environmental concerns raised by the commenters and to indicate where and how the MND addresses these environmental issues. Any textual changes within the document are indicated by a vertical line in the page margin. Each letter is presented first, with the responses following.

Commenters on the Draft EIR

The City received three (3) written comment letters on the Draft MND during the comment period. These letters are listed as follows and will be used for referencing in this section.

Response ID	Commenter	Date	Page Number
1	Dave Singleton, Program Analyst, Native American Heritage Commission	4/2/08	2
2	Edmund J. Pert, Regional Manager, South Coast Region, California Department of Fish and Game	4/15/08	7
3	Gina M. Natoli, Supervising Regional Planner, Los Angeles County Department of Regional Planning	4/1/08	24

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

(1)

April 2, 2008

Ms. Valerie Darbouze, Associate Planner
CITY OF AGOURA HILLS
30001 Ladyface Court
Agoura Hills, CA 91301

Re: SCH#2008031072; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Liberty Canyon Office Expansion Project; City of Agoura Hills; Los Angeles County, California

Dear Ms. Darbouze:

The Native American Heritage Commission is the state agency designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c (CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

√ Contact the appropriate California Historic Resources Information Center (CHRIS) for possible 'recorded sites' in locations where the development will or might occur. Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ http://www.ohp.parks.ca.gov. The record search will determine:

- If a part or the entire APE has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.

√ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

√ Contact the Native American Heritage Commission (NAHC) for:

- A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section:.

- The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s).

√ Lack of surface evidence of archeological resources does not preclude their subsurface existence.

- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
- A culturally-affiliated Native American tribe may be the only source of information about a Sacred Site/Native American cultural resource.
- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

1 cont.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. . Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

√ Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

Native American Contacts
Los Angeles County
April 2, 2008

1 cont.

Charles Cooke
32835 Santiago Road
Acton , CA 93510
(661) 733-1812 - cell
suscol@intox.net

Chumash
Fernandeno
Tataviam
Kitanemuk

Patrick Tumamait
992 El Camino Corto
Ojai , CA 93023
yanahea2@aol.com
(805) 640-0481
(805) 216-1253 Cell

Chumash

Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks , CA 91362
(805) 558-1154 - cell
805 492-7255

Chumash
Tataviam
Fernandeño

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles , CA 90020
(213) 351-5324
(213) 386-3995 FAX

Fernandeno Tataviam Band of Mission Indians
William Gonzalaes, Cultural/Environ Depart
601 South Brand Boulevard, Suite 102
San Fernando , CA 91340
ced@tataviam.org
(818) 837-0794 Office
(818) 581-9293 Cell
(818) 837-0796 Fax

Fernandeno
Tataviam

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez
981 N. Virginia
Covina , CA 91722
(626) 339-6785

Yowlumne
Kitanemuk

Julie Lynn Tumamait
365 North Poli Ave
Ojai , CA 93023
jtumamait@sbcglobal.net
(805) 646-6214

Chumash

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838
Newhall , CA 91322
tsen2u@msn.com
(661) 753-9833 Office
(760) 885-0955 Cell
(760) 949-1604 Fax

Fernandeño
Tataviam
Serrano
Vanyume
Kitanemuk

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed, SCH#2008031072; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Liberty Canyon Office Expansion Project; City of Agoura Hills; Los Angeles County, California.

Native American Contacts
Los Angeles County
April 2, 2008

1 cont.

Randy Guzman - Folkes
1931 Shadybrook Drive
Thousand Oaks , CA 91362
ndnrandy@hotmail.com
(805) 905-1675 - cell

Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

Coastal Band of the Chumash Nation
Janet Garcia,Chairperson
P.O. Box 4744
Santa Barbara , CA 93140
805-964-3447

Chumash

Carol A. Pulido
165 Mountainview Street
Oak View , CA 93022
805-649-2743 (Home)

Chumash

Melissa M. Para-Hernandez
119 North Balsam Street
Oxnard , CA 93030
805-988-9171

Chumash

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed, SCH#2008031072; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Liberty Canyon Office Expansion Project; City of Agoura Hills; Los Angeles County, California.

Letter 1

COMMENTER: Dave Singleton, Program Analyst, Native American Heritage Commission

DATE: April 2, 2007

RESPONSE:

The commenter states that the City is required to assess whether the proposed project would have an adverse impact on a historical and/or archaeological resource, and if so, to mitigate that effect. The commenter recommends several actions be taken to prevent impacts to historical and cultural resources. As noted in Section V, *Cultural Resources*, an existing two-story office building is located on the project site and the rest of project site is vacant and therefore lacking known historical resources. Further, the City's General Plan does not identify the project site as having a historic resource, known archaeological resources, or human remains onsite. In the event that previously undiscovered archeological resources or human remains are unearthed, Mitigation Measures CR-1 and CR-2 would reduce impacts to unknown cultural resources and human remains to a less than significant level. No further response is necessary.

State of California - The Resources Agency ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
South Coast Region
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201

2

April 15, 2008

Ms. Valerie Darbouze
City of Agoura Hills
30001 Ladyface Court
Agoura Hills, CA 91301

Notice of Completion of a Mitigated Negative Declaration for The Liberty Canyon Office Expansion Project, City of Agoura Hills, Los Angeles County, SCH# 2008031072

Dear Ms. Darbouze:

The Department of Fish and Game (Department) has reviewed the Notice of Completion (NOC), which included an Initial Study (IS), Draft Mitigated Negative Declaration (DMND), and Biological Constraints Analysis (BCA) for the above-referenced project. The project is located at the northwest corner of Liberty Canyon Road and Agoura Road in Agora Hills. Scott Creek Canyon traverses the project site. This project consists of the proposed Vesting Tentative Parcel Map 67397, which would merge six parcels over 4.18-acres. The site currently supports an existing 24,540 square foot building and two parking lots. The proposed project consists of the construction of a two-story office building measuring 9,658 square feet, and a two-story medical office building measuring 20,002 square feet, in addition to reconfiguring parking lots and adding a new parking lot to the west of the project site to provide 215 parking spots. A

We prepared the following statements and comments pursuant to our authority as Trustee Agency with jurisdiction over natural resources affected by the project under the California Environmental Quality Act (CEQA Section 15386), and Responsible Agency (Section 15381) over those aspects of the proposed project that come under the purview of Fish and Game Code Section 1600 et seq. regarding impacts to streams and lakes.

Impacts to Biological Resources

1. Assessment - A complete, recent assessment of botanical resources within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats (see Attachment 1 and Attachment 2) needs to be conducted. This should include a complete floral and faunal species compendium of the entire project site, undertaken at the appropriate time of year.

    * The provided Biological Constraints Evaluation (BCA) report indicates field work was completed on October 26, 2006 and concludes from this survey that the site has no potential to support any rare, threatened, or endangered (RTE) plant species. This statement is not backed by any supporting documentation in the BCA, and the BCA fails, at a minimum, to list the sensitive plant species this determination is being made for. This habitat assessment was conducted outside of the appropriate season to detect most sensitive plant species. Additionally, the BCA indicates that the site supports native plants such as *Eriogonum fasciculatum* (Ca. buckwheat), *Juglans californica ssp. californica* B

2 cont.

(Ca. walnut, which is a special status species), as well as three native oak species (*Quercus agrifolia, Q. chrysolepis, and Q. lobata*), which are appropriate habitat types to support numerous RTE species. Furthermore, several plant species that have the potential to occur on-site, including *Erodium macrophyllum* (round-leaved filaree), are known to occur in fields dominated by non-native grasses such as *Bromus* sp. and *Brassica* sp. Presence or domination by non-native plant species is not a reason to discount the potential presence of most RTE plant species. B

- The DMND states that prior to grading activities associated with this project, focused surveys for sensitive plants and wildlife will occur, and if found on-site, a mitigation plan will be developed and appropriate mitigation measures will be implemented. The surveys should be conduced prior to the finalization of any CEQA documents and the biological resources on-site should be clearly identified with specific mitigation measures proposed to reduce any impacts to these species. If the impacts are not disclosed in the CEQA document, and specific mitigation measures are not listed, the Department is not able to concur with the findings that impacts to biological resources resulting from this project are less than significant. A mitigation monitoring plan also needs to be included in the CEQA document. C

- CEQA provides protection not only for state listed species, but for any species which can be shown to meet the criteria for State listing (CEQA Section 15380). The Department recognizes that Lists 1A, 1B and 2 of the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California consist of plants that, in a majority of cases, would qualify for listing. Focused surveys for all special status plants listed as 1A, 1B and 2 should be conducted on the project site. Focused surveys should be conducted during the time of year to maximize detection, which is normally during the flowering season for many species. Additionally, visits to a known reference population are recommended as species flowering times vary within the known window. Many sensitive species, including round leaved filaree, a 1B listed plant species, are very small (1 inch to 6 inches) and will be missed using the transect methodology. Please ensure all biological consultants follow the DFG protocol when assessing the site for botanical resources. The Department does not consider biological assessments over one year old and botanical assessment over two years old as valid for the purposes of impact analysis and for the development of avoidance and mitigation measures under CEQA. A thorough, recent assessment of rare natural communities, following the Department's Guidelines for Assessing Impacts to Rare Plants and Rare Natural Communities (see Attachment 2) needs to be completed. If species are not identified correctly, impacts cannot be addressed properly under CEQA. D E

- The DMND indicated that many special status wildlife species have the potential to occur on the project site. These species include bats, which are listed as State Species of Concern, as well as coast horned lizard (*Phrynosoma coronatum* [blainvillii population], Santa Monica grasshopper (*Trimerotropis occidentiloides*), two-striped garter snake (*Thamnophis hammondii*), Cooper's hawk (*Accipiter cooperii*), western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus blossevillii*) and mountain lion (*Puma concolor*). However, focused surveys were not completed for incorporation into the DMND. The DMND indicates on page 30 that a pre-construction bat survey should occur, but provides no mitigation measures if they are detected in the abandoned F

2 cont.

building on-site. Additionally, the DMND states on Pages 29-30 that prior to construction, focused surveys for sensitive wildlife species with potential to occur on-site shall occur prior to construction but provides no specific survey methodology or mitigation measures if they are found, other than compliance with a Department Take Permit and the development of a mitigation plan. Focused surveys for any wildlife species with the potential to occur on the project site should be completed and the results disclosed in the DMND. If any of these species are present, appropriate mitigation measures should be specified to reduce any impacts to these species to a below significant level. The IS does not describe in enough detail how impacts to special status species will be mitigated sufficiently to justify a MND. Furthermore, mitigation measures appear to rely on last minute pre-grading field surveys of unspecified detail and salvage of special status species. Without knowing if special status species occur on a project site, it would be difficult to plan for avoidance and appropriate mitigation measures once the project has been designed and grading is about to commence. F

- To reduce unavoidable impacts to special status species and their habitats below a significant level under CEQA, mitigation measures must be considered and adopted in a Mitigated Negative Declaration. The Lead Agency must incorporate the adopted mitigation measures into a Mitigation Monitoring or Reporting Plan (MMRP). (CEQA Section 15097). The MMRP should specify mitigation target dates to assure adopted mitigation measures are completed before discretionary approvals are granted for the project. Impacts to State listed species would require further consultation with the Department under the California Endangered Species Act (CESA) prior to project approval. G

- Occupied lost habitat for special status species should be mitigated in kind and preserved in perpetuity from further development under a conservation easement deeded to a local land Conservancy. The Department does not consider salvage and translocation of special status species a viable mitigation measure as this method has demonstrated very low success in maintaining a viable population of the translocated species. Seed salvage should only be used as a last resort, in addition to other mitigation measures that preserve habitat occupied by the species on or off-site, and should only be used as a means to preserve the genetic record in a herbarium for the on-site population that will be destroyed. H

- The potential impacts the project may have on the Liberty Canyon Wildlife Corridor are not clearly listed in this document. The document states in some places there will be no impact to the drainage, yet in other places states there may be impacts and mitigation will be proposed at a later date including a wildlife corridor restoration plan. The DMND needs to disclose exactly what impacts will occur to the wildlife corridor, and how specific mitigation measures will bring those impacts to less than significant levels. Please include specific information regarding building setback requirements from this wildlife corridor. I

- The DEIR states that 12 oak trees will be removed and that 27 oak trees will be encroached upon (page 22). Mitigation measure BIO-8 states that 48 oak trees shall be planted on-site to mitigate for impacts to oak trees. It is not clear where these trees will be planted and it appears they will be located adjacent to the proposed building and hardscape as ornamental features. The Department does not consider the use of oak trees planted as landscaping in association with a development as adequate mitigation for loss of oak woodland. Please include more detail as to where the oak tree impacts will occur and where the plantings J

2 cont.

will occur, and specifically how this provides adequate biological mitigation for the removal and impacts to the native oak trees on-site.

2. Department Jurisdictional Drainages - The DMND states that the project site contains a riparian channel, which may be under the jurisdiction of the Department. No information is provided about the size, habitat, and ecology of this channel in the DMND or the BCA. The DMND states "if it is determined that work adjacent to or in the drainage is necessary, including the connection of storm drain facilities, the following mitigation measures BIO-4 and BIO-5 will be required" BIO-4 states a jurisdiction delineation shall be conducted and appropriate permits from regulatory agencies shall be obtained. BIO-5 states that a habitat mitigation and monitoring plan shall be prepared if permits are required from the Department, and shall occur at a minimum 1:1 ratio.

   - The DMND should fully disclose any potential impacts to Waters of the State, and include specific mitigation measures to bring any potential impacts to a less than significant level. The DMND does not provide adequate information on the riparian resources present on the project site, nor does it discuss any impacts or specific mitigation measures, but only states if impacts should occur, mitigation will be prepared at a later time. It should be known at the DNMD stage whether or not the applicant will need to impact Waters of the State to complete the development of this project. This issue is very important to analyze due to the function of Liberty Canyon as a major wildlife corridor. Additionally, mitigation measure BIO-3, which states if impacts to jurisdictional riparian resources should occur on this project a 10-foot buffer from the top of the bank, or five feet outside the riparian canopy, should bring potential impacts to a less than significant level. The Department does not agree that leaving a five-foot construction buffer around a riparian corridor that functions as a major wildlife corridor is adequate mitigation. It is unclear how installation of a storm drain facility, which will daylight into the riparian area, will not impact this resource. Please fully analyze all impacts, both direct and indirect, from infrastructure, fuel modification, introduction of urban runoff, lighting, etc. which will impact this resource.

   - The Department requires a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant prior to any direct or indirect impact (including preliminary geotechnical activities) of a lake or streambed, bank or channel or associated riparian resources. The Department's issuance of a SAA is considered a project that is subject to CEQA. To facilitate our issuance of the Agreement, the Department as a responsible agency under CEQA may consider the local jurisdiction's (lead agency) document for the project. To minimize additional requirements by the Department under CEQA the document should fully identify the potential impacts to any lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the Agreement. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources.

3. Native Bird Avoidance - The project site supports nesting habitat for native birds. Mitigation measure 2 in the MND recommends preconstruction bird surveys 30 days prior to construction to assist in the avoidance of nesting bird species.

   - The surveys should continue on a weekly basis with the last survey being

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