

Tree Resource Assessment/ Arborist Report

Prepared for:

Pebble Beach Company

Prepared by:

Frank Ono
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1213 Miles Avenue
Pacific Grove, CA 93950

July 29, 2013

Owner:

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Pebble Beach, CA 93953

Architect:

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769 Pacific Street
Monterey, CA 93940

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SUMMARY

Construction is proposed requesting the removal of Monterey pines and Coast Live Oaks at this site. The project as presented proposes to remove 583 coast live oaks and 133 Monterey pines of varying sizes and condition. This tree resource assessment/arborist report is prepared to identify and attempts to addresses potential affects that the project may have to existing tree resources.

INTRODUCTION

This tree assessment/arborist report is prepared for The Pebble Beach Company, owner of the Del Monte Forest Land Use Plan Area D property (APN 008-041-009) located along Congress Road, Pebble Beach CA by Frank Ono, Urban Forester (member Society of American Foresters #48004) and International Society of Arboriculture (Certified Arborist #536) due to the proposed construction improvements. The proposed development is located within the Greater Monterey Land Use Plan area, Monterey County Zoning Ordinance Title 21; the ordinance identifies Coast live oak trees as native tree species requiring protection and special consideration for management.

ASSIGNMENT/SCOPE OF PROJECT

To ensure protection of the tree resources on site, the property owner, Pebble Beach Company, has requested an overall assessment of trees in proximity to the proposed development areas and an arborist report prepared (due to the size of this project this assignment does not assess individual trees but takes tree groupings as a whole through the use of sampling techniques). To accomplish this assignment, the following tasks have been completed;

- Evaluate overall health, structure and preservation suitability of trees measuring four inches in diameter or larger at 24 inches above grade. Estimates of tree numbers are gathered through the use of 10 random 1/10 acre sample plots within or adjacent to proposed development and finalized by field survey.
- Review proposed building site plans as provided by Pebble Beach Company.
- Make recommendations for methods and preconstruction treatments to facilitate tree retention.
- Create preservation specifications, as it relates to a Tree Location/Preservation Map.
- Determine the quantity of trees affected by construction that meet “Landmark” criteria as defined by the County of Monterey, Title 21 of the Monterey County Zoning Ordinance, as well as mitigation requirements for those to be affected.
- Document findings in the form of a report as required by the County of Monterey Planning Department.

LIMITATIONS

This assignment is limited to the review of plans submitted to me dated July 2013 to assess affects from potential construction to trees within or adjacent to construction activities. The assessment has been made of these plans specifically and no other plans were reviewed. Field study was used for assessment for the proposed project area as an entire stand; however no complete population inventory was made. Use of 1/10 acre plots was assigned to approximate the total number of trees in the project area. Only minor grading and erosion details are discussed in this report as it relates to tree health.

PURPOSE

This tree assessment/arborist report is prepared for this parcel due to proposed construction activities located at within area D. The purpose of the assessment is to determine the general condition of trees that may be affected by the proposed project. Coast Live oak trees are considered protected trees as defined by the County of Monterey, Title 21 Monterey County Zoning Ordinance.

GOAL

The goal of this report is to protect and maintain the Del Monte Forest forested resources through the adherence of development standards, which allow the protection, and maintenance of its forest resources. Furthermore it is the intended goal of this report to aid in planning to offset any potential effects of proposed development on the property while encouraging forest stability and sustainability, perpetuating the forested character of the property and the immediate vicinity.

SITE DESCRIPTION

- 1) Assessor's Parcel Number: 008-041-009-000
- 2) Location: Area D adjacent Congress Road, Pebble Beach CA.
- 3) Parcel size: 400+ acres. (Project area 6.2 acres)
- 4) Existing Land Use: Medium Density Residential.
- 5) Slope: The area for development is mildly sloped approximately 10% or less.
- 6) Soils: The area of the parcel where development is proposed is located on soils classified by the Monterey County Soils report as Narlon loamy fine sand, 2 to 9 percent slopes. This is a gently sloping and moderately sloping soil on dissected marine terraces. Clay subsoil is at a depth of 15 to 20 inches. Slopes are mostly 3 to 6 percent. Runoff is slow to medium, and temporary shallow ponds form in swales in wet winters. The erosion hazard is moderate. The seedling mortality is low, and the wind throw hazard is severe. This soil type has moderate productivity for Monterey pine (site index averages about 75; meaning that a 100 year old tree typically reaches a height of 75 feet). The equipment limitation ranges from moderate to severe.
- 7) Forest Condition, Vegetation and Health: The stand of trees and their health is evaluated with the use of the residual trees and those of the surrounding adjacent trees as a complete stand. Health of trees range from moderate to poor condition. The transitioning stand is composed of a mixture of dominant height Monterey pine (*Pinus radiata*) with coast live oak (*Quercus agrifolia*) as understory.

The majority of canopy where the residences are proposed to be located is open to semi-open and degraded. The upper canopy is considered to be open, fragmented, and senescent. Mature pines are observed to appear to be in the latter years of their life cycle and have begun to die. Dieback is expected to continue. Senescent taller pines are failing either by uprooting or through mortality from pine pitch canker infestations. Although understory Coast live oak have begun filling in gaps many of these oaks look in poor to fair condition. Oaks were noted to be weakened by fungal activity (*Phytophthora*) and in many cases uprooting; there are also signs of previous oak worm leaf defoliation and a high presence of borers such as western oak bark beetle (*Pseudopityophthorus sp.*) and termite activity.

A number of pines have succumbed or appear susceptible to failure from wind throw sharing common traits such as lifted roots and corresponding leans. Overall pine tree canopies appear to consist of 30% or less live crown ratio with a considerable amount of deadwood present. Tree stem spacing of upper canopy pines appear to be at approximately 10-15 feet apart or more. Several of the upper stems of mature pines are producing excessive amounts of resin possibly from pine pitch canker infections. Typical pests of the Monterey Pine tree consist of Red turpentine beetles, (*Dendroctonus valens*) and Engraver beetles (*Ips paraconfusus*). Red turpentine beetles usually are not considered a serious pest while Engraver beetles usually are. Pine bark beetles are boring insects and considered "secondary pests" because they attack only after a plant has been weakened or killed by another stress. The severity of plant damage depends on

the number and location of insects in the plant tissue. When abundant, they can attack and overwhelm healthy trees. Adults tunnel beneath the bark constructing frass-packed egg galleries. The tunneling quickly destroys the phloem and kills the tree. One to 3 months later, the needles of the dead tree turn reddish-brown. Seven or more generations may occur each year. Bark beetles are phloem feeders destroying tissues that transport food and limit production of new wood and bark. Feeding by a few individuals may produce necrotic lesions, whereas feeding that encircles the stem may kill a branch or the entire tree.

BACKGROUND

On July 17, 2013 I met with a representative of Pebble Beach Company, regarding a proposal for inclusionary housing in this section of the forest to understand the scope of the project. The property representative requested I determine treatments for the existing tree resources located within the proposed project footprint and to conduct a tree resource analysis after which a Tree Resource Assessment would be prepared to work in conjunction with other conditions for approval of the building permit application.

OBSERVATIONS /DISCUSSION

The following list includes observations made while on site, and summarizes details discussed or observed during this stage of the planning process.

- The project intends to develop a forested site located along Congress road. Forest composition is made up of upper story Monterey pines (*Pinus radiata*) with understory primarily Coast Live Oak (*Quercus agrifolia*).
- The project area is estimated to be 2.6 acres of a 6.2 acre area. 10 sample plots were taken and the extrapolated amount of existing trees on the 6.2 acre area is estimated to be 1810 trees.
- Forested portions of the project area are considered in either fair or poor condition. The project area has large mature pines approaching the end of their safe useful life expectancy (SULE) which is approximately 80 years or less. Mature trees are observed fragmenting with considerable limb dieback, have lifted roots and evidence of potential root failure, or have experienced root failure. Root failure is attributed to shallow nutrient poor thin soils (Narlon soils) or soil that has experienced high soil compaction.
- Pine limb dieback and failures appear to have attributed to lower story oak deterioration from falling debris. Oak deterioration observed is also attributed to shallow nutrient poor soils.
- In addition to poor soils, high human uses appear to have attributed to decline of the forest in this area. Observed are excavated soil pits, jump trails for mountain bikes, and temporary encampments within shrubby brush most likely used for child forts or homeless shelter.
- The project is designed to be setback from the roadway and surrounding residential housings and will be surrounded by existing forest cover. The development appears to not be readily visible from the street or residences.
- The proposed development stays away from a drainage area located to the east carrying surface water across to the south side of Congress road.

CONCLUSION/PROJECT ASSESSMENT

Site disturbance must occur to facilitate building construction; short-term site effects would be confined to the construction envelope and immediate surroundings where trees must be removed or trimmed and root systems reduced. Whenever construction activities take place near trees, there also exists potential for trees to experience decline in the long term (long term effects on trees include a reduction of growth or dieback after pruning or grading).

According to the sample analysis there are approximately 1810 trees in the project area; many of which are in poor deteriorated conditions. Of the 1810 trees, those trees indicated for removal with this design have been indicated on the accompanying site map (prepared by L&S Engineering and Surveying, Inc.). The field survey of trees for removal consists of the following size classes:

Pines- diameter class 4-11" (8), 12-23" (60), 24" and greater (64) for a total of 132
Oaks –diameter class 4-11" (545), 12-23" (35), 24" and greater (none) for a total of 580

No landmark oaks are to be removed; the bulk of oaks removed are of smaller diameter class. Their removal will allow light to penetrate the forest floor where no development is proposed.

The following findings are based on site visits and general observations of the property

Soil Erosion: Soil erosion potential is low. Slopes are gentle or previously stabilized from prior street development along Congress. Appropriate erosion control measures required for the construction site will apply to address potential impacts.

Water Quality: The proposed tree removal for the residential construction at this site is considered unlikely to generate harmful substances that will be detrimental to plant, animal or human environment. A minimum 100 foot buffer zone is indicated away from the nearest drainage corridor.

Ecological Impacts: This site is considered severely degraded closed cone coastal pine forest (it is not oak woodland). Wildlife is conditioned by already developed adjacent residential areas. The proposed project area has in place existing intersecting streets that effectively reduce vegetative corridors to surrounding natural areas. Existing native trees adjacent to the project will be retained and may be supplemented with new planting. Other adjacent sites to the north of this site are domestic maintained landscapes with a few healthy pines.

Noise Pollution: Noise should not be a significant factor due to limited duration of construction activities contained to daytime work hours.

Forest Continuity/Sun Wind Movement: The existing canopy is fragmenting, consisting of older mature trees with small live canopy ratios providing minimal protective value from winds or shading from sun. Removal of the mature pines and oaks will not have a significant effect on the movement of air in this vicinity and removal of larger pines will allow more sunlight to reach surrounding forest floor for new seed release.

Wildlife Habitat: No impact as site is adjacent developed residences many under a high maintenance regime. Wildlife use in the area is conditioned by the surrounding residential use.

RECOMMENDATIONS

Tree Removal

Tree removal necessary with this design:

Pines- diameter class 4-11" (8), 12-23" (60), 24" and greater (64) for a total of 132

Oaks –diameter class 4-11" (545), 12-23" (35), 24" and greater (none) for a total of 580

It also appears a considerable amount of trees outside the construction area are in poor/fair condition. It is recommended that ongoing monitoring of trees for hazard tree assessment be implemented to address potential hazard tree removal not related to development.

Tree Replacement

Given the amount of available landscape area there is adequate room to meet replacement requirements on or around this property without creating an overcrowded situation. The site's undeveloped areas have enough space for re-forestation with coast live oak and Monterey pine. My understanding is that a separate replanting/landscape plan is prepared for this property and the following are recommendations for that plan.

To maintain native tree presence on the site, existing pine seedlings on the property without pitch canker symptoms should be protected or transplanted to locations where they can be safely retained and replanted after development as stated below (the majority of oaks are smaller diameter and should be replaced with new planting). In addition to potential tree banking, replanting efforts should be supplemented with a program of tree planting with native Monterey pines and coast live oak on a 1:1 basis for any tree removed; these new trees may be planted along the perimeter portions of the property and other areas that will fill in and provide screening for the property from the adjacent properties. Pines should be planted along the western borders and in open spaces for wind protection with coast live oak in the interior of the project.

The existing standing mature pine trees also act as seed trees assisting the natural regeneration process. Naturalized seedlings may be carefully dug out of the ground to be potted and grown in a greenhouse setting before any landscaping or tree work occurs, this will allow less disturbance for trees naturally acclimated to the site. After the tree canopies are thinned, seedlings or trees should be re-planted in varying sizes of one, five, and fifteen-gallon pots with the existing seedlings mixed in to create and supplement the future canopy. Any combination of planting to achieve desired results is possible. The ultimate goal is to have tree spacing of approximately 10 feet or less apart.

Typically this may be accomplished by planting one-gallon potted pines in a ratio of fifty trees per acre (20-25 trees /100 square feet), if five-gallon pots are used, they should be planted at a ratio of 25 trees per acre (10-12/ 100 square feet), and fifteen-gallon pots should be planted at a ratio of 10 trees per acre (1/100 square feet). Pruning of the canopy by thinning branches and branch end weight reduction will allow increased sunlight to penetrate the forest floor giving seedlings a higher chance for success. The existing trees cone production will add to seed production and should increase seedling numbers through landscaping and site disturbance which should release the remaining seed bank in the soil. As trees mature, the existing standing

senescent trees will begin to reach a point of necessitating removal; they may be phased out gradually in conjunction of thinning out smaller seedlings that have been outcompeted.

December through February is the optimal planting time. Potential planting sites are noted on the site drawing. Pines may be clustered in groups of up to four trees with spacing as close as 4 feet with the use of small planting stock (5 gallons or less) is recommended (studies have shown that smaller planting stock tends to adapt to the site and grow better over the medium to long run due to less water required and more root to canopy ratios). Competing vegetation should be removed within at least two feet of planted trees and maintained. Supplemental watering during the first year or two after planting is advisable, particularly from July through October. Watering should be deep and infrequent with soil allowed to go dry at least briefly between watering.

Replant Success Criteria and Monitoring

A qualified professional should monitor newly planted trees for a period of one year (more if the county requires). To ensure the survivability and proper growth of the replacement of trees, success criteria should be defined to meet a 100% survival rate and implemented as follows.

- Tree health and growth rates of new planting must be assessed by a qualified forester or certified arborist. A written report with photographic evidence submitted to the governing body (RMA), documenting compliance and ongoing monitoring and maintenance.
- Trees suffering poor growth rates or declining health are to be identified and documented as to reason it was not successful.
- Invigoration treatments if feasible will be recommended and implemented.
- Dead trees or trees identified in an irreversible state of decline will be replaced after a written recommendation is made by a qualified forester or certified arborist identifying type and location of new replacement. Trees found that need replacement will be replaced on a 1:1 ratio. Replant material shall be minimum container grown five gallon-size.
- Tree relocation/removal contractor shall communicate methods and practices to the project forester or arborist regarding tree removal or re-location and a record kept chronicling any changes, deviations, or methods not included in this report.
- Near the monitoring period, the status of the new or relocated plantings will be again assessed to make certain that success criteria has been met and all mitigation trees planted are performing well.
- A report shall be prepared by a qualified forester or certified arborist and submitted to the Planning Department for review and approval of the Director of Planning describing reforestation activities, success rates and adjustments for previous failures or unsuccessful transplanting.

The following are Best Management Practices (BMPs) to insure protection of existing tree resources:

Tree Pruning

It is to be understood that the pruning of retained trees will be expected for this site. Pine trees remaining on site will need to be monitored and may need to be phased out within the next five to ten years for safety and risk abatement. Oak trees should not require pruning except for hygiene and occasional maintenance.

Pruning must include the larger canopied trees that have deadwood or are exhibiting some minor structural defect or minor disease that must be compensated. Currently, any pine tree within 25 feet of structures and roadways should be pruned for crown thinning to reduce wind resistance and weight of the canopy.

Trees should be monitored on for health and vigor after pruning but more importantly for stability and safety. Those trees that will require pruning and possible monitoring are the closest to the road ways, driveway and future structures. Should the health and vigor of any tree decline it will be treated as appropriately recommended by a certified arborist or qualified forester.

The following are offered as guidelines when pruning and conform to American National Safety Institute (ANSI) Standards:

- In general the trees will be pruned first for safety, next for health, and finally for aesthetics.
- Type of pruning is determined by the size of branches to be removed. General guidelines for branch removal are:
 1. Fine Detail pruning- limbs under 2 inch diameter are removed
 2. Medium Detail Pruning – Limbs between 2 and 4 inch diameter
 3. Structural Enhancement – limbs greater than 4 inch diameter.
 4. Broken and cracked limbs-removed will be removed in high traffic areas of concern.

Crown thinning is the cleaning out of or removal of dead diseased, weakly attached, or low vigor branches from a tree crown

- All trees will be assessed on how a tree will be pruned from the top down.
- Branches with strong, U- shaped angles of attachment will be retained favoring branches with weak, V-shaped angles of attachment and/or included bark for removal.
- Lateral branches will be evenly spaced on the main stem of young trees and areas of fine pruning.
- Branches that rub or cross another branch will be removed where possible.
- Lateral branches will be no more than one-half to three-quarters of the diameter of the stem to discourage the development of co-dominant stems where feasible.

- In most cases trimmers will not remove more than one- quarter of the living crown of a tree at one time. If necessary to remove more foliage, it will be done over successive years.

Crown-raising removes the lower branches of a tree to provide clearance for buildings, vehicles, pedestrians and vistas.

- Live branches on at least two-thirds of a tree's total height will be maintained wherever possible. The removal of many lower branches will hinder the development of a strong stem.
- All basal sprouts and vigorous epicormic sprouts will be removed where feasible.

Crown reduction is used to reduce the height and/or spread of trees and is used for maintaining the structural integrity and natural form of a tree.

- Crown reduction pruning will be used only when absolutely necessary. Pruning cuts will be at a lateral branch that is at least one-third the diameter of the stem to be removed wherever possible.
- When it is necessary to remove more than half of the foliage from a branch it may be necessary remove the entire branch.

Crown restoration is used to improve the structure and appearance of trees that have been topped or severely pruned by the use of heading cuts. One of three sprouts on main branch stubs should be selected to reform a natural appearing crown. Selected vigorous sprouts may need to be thinned to ensure adequate attachment for the size of the sprout. Restoration may require several years of pruning.

Tree Protection

Prior to the commencement of construction activities:

- Trees located adjacent to the construction area shall be protected from damage by construction equipment by the use of temporary fencing and through wrapping of trunks with protective materials. Protective materials shall remain in place until landscape installation.
- Fencing shall consist of chain link, snowdrift, plastic mesh, hay bales, or field fence. Fencing must remain in place and not be allowed to collapse.
- Fencing shall be rigidly supported and shall stand a minimum of height of four feet above grade utilizing supports such as metal, wire or rope cross support to prevent collapsing. Fencing is not to be attached to the tree but free standing or self-supporting so as not to damage trees.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials should not be allowed adjacent to trees on the property especially within fenced areas.
- Fenced areas and the trunk protection materials should remain in place during the entire construction period.

During grading and excavation activities:

- All trenching, grading or any other digging or soil removal that is expected to encounter tree roots should be monitored by a qualified arborist or forester to ensure against drilling or cutting into or through major roots.
- The project architect and qualified arborist should be on site during excavation activities to direct any minor field adjustments that may be needed.
- Trenching for the retaining wall and driveway located adjacent to any tree should be done by hand where practical and any roots greater than 3-inches diameter should be bridged or pruned appropriately.
- Any roots that must be cut should be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.
- Any roots damaged during grading or excavation should be exposed to sound tissue and cut cleanly with a saw.

If at any time potentially significant roots are discovered:

- The arborist/forester will be authorized to halt excavation until appropriate mitigation measures are formulated and implemented.
- If significant roots are identified that must be removed that will destabilize or negatively affects the target trees negatively, the property owner will be notified immediately and a determination for removal will be assessed and made as required by law for treatment of the area that will not risk death decline or instability of the tree consistent with the implementation of appropriate construction design approaches to minimize affects, such as hand digging, bridging or tunneling under roots, etc..

Remedial pruning should occur prior to construction. Following construction, any above ground tree pruning/trimming should be delayed until one year after completion of construction. Following construction, a qualified arborist should monitor trees adjacent to the improvements area and if any decline in health that is attributable to the construction is noted, additional trees should be planted on the site.

BMP Standards to Observe

The trees preserved around the construction site will have the greatest chance of success if the following practices are adhered to:

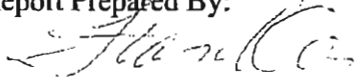
The health of trees remaining should not be affected if the following practices are adhered to:

- A) Do not deposit any fill around trees, which may compact soils and alter water and air relationships. Avoid depositing fill, parking equipment, or staging construction materials near existing trees. Covering and compacting soil around trees can alter water and air relationships with the roots. Fill placed within the drip-line may encourage the development of oak rot fungus (*Armillaria mellea*). As necessary, trees may be protected by boards, fencing or other materials to delineate protection zones.
- B) Pruning shall be conducted so as not to unnecessarily injure the tree. General-principals of pruning include placing cuts immediately beyond the branch collar, making clean cuts by

scoring the underside of the branch first, and for live oak, avoiding the period from February through May.

- C) Native live oaks are not adapted to summer watering and may develop crown or root rot as a result. Do not regularly irrigate within the drip line of oaks. Native, locally adapted, drought resistant species are the most compatible with this goal.
- D) Root cutting should occur outside of the springtime. Late June and July would likely be the best. Pruning of the live crown should not occur February through May.
- E) Tree material greater than 3 inches in diameter remaining on site more than one month that is not cut and split into firewood should be covered with black plastic that is dug in securely around the pile. This will discourage infestation and dispersion of bark beetles.
- F) A mulch layer up to approximately 4 inches deep should be applied to the ground under selected trees following construction. Only 1 to 2 inches of mulch should be applied within 1 to 2 feet of the trunk, and under no circumstances should any soil or mulch be placed against the root crown (base) of trees. The best source of mulch would be from chipped material generated on site.
- G) If trees along near the development are visibly declining in vigor, a Professional Forester or Certified Arborist should be contacted to inspect the site to recommend a course of action.

Report Prepared By:



Frank Ono, SAF member #48004 and ISA Certified Arborist #536

July 30, 2013

Date

TREE CHART OF PLOTTED TREES

Plot Tree Count by Species						
Plot	Oaks	Pines	Snags	Stumps	Leaning Trees	
1	18	5	2	0	0	
2	18	1	2	1	0	
3	13	12	0	0	2	
4	30	6	0	0	0	
5	48	4	0	0	0	
6	20	0	1	0	1	
7	15	2	3	0	1	
8	25	5	0	0	0	
9	22	4	4	0	1	
10	22	1	2	0	1	Total Trees / 1 acre
Totals	231	40	14	1	6	292
6.2 acres total						Estimated tree total
expanded tree count for entire property	Oaks	Pines	Snags	Stumps	Leaning Trees	on property
	1432	248	87	6	37	1810

PHOTOGRAPHS – The following are photographs of sample plots

View of canopy from Congress looking east.



View of canopy looking west



Plot #1



Plot #2



Plot #3



Plot #4



Plot #5



Plot #6



Plot #7



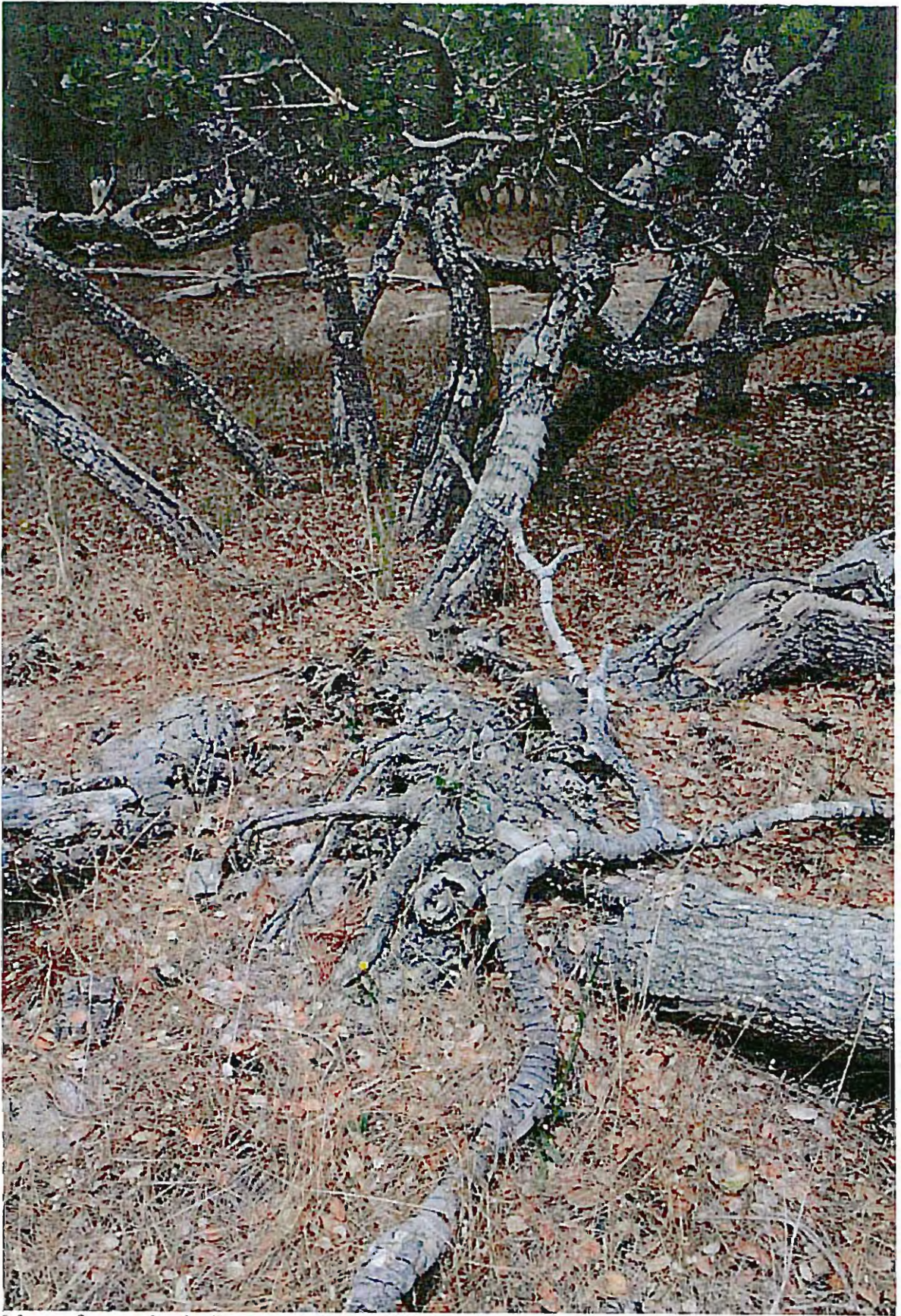
Plot #8



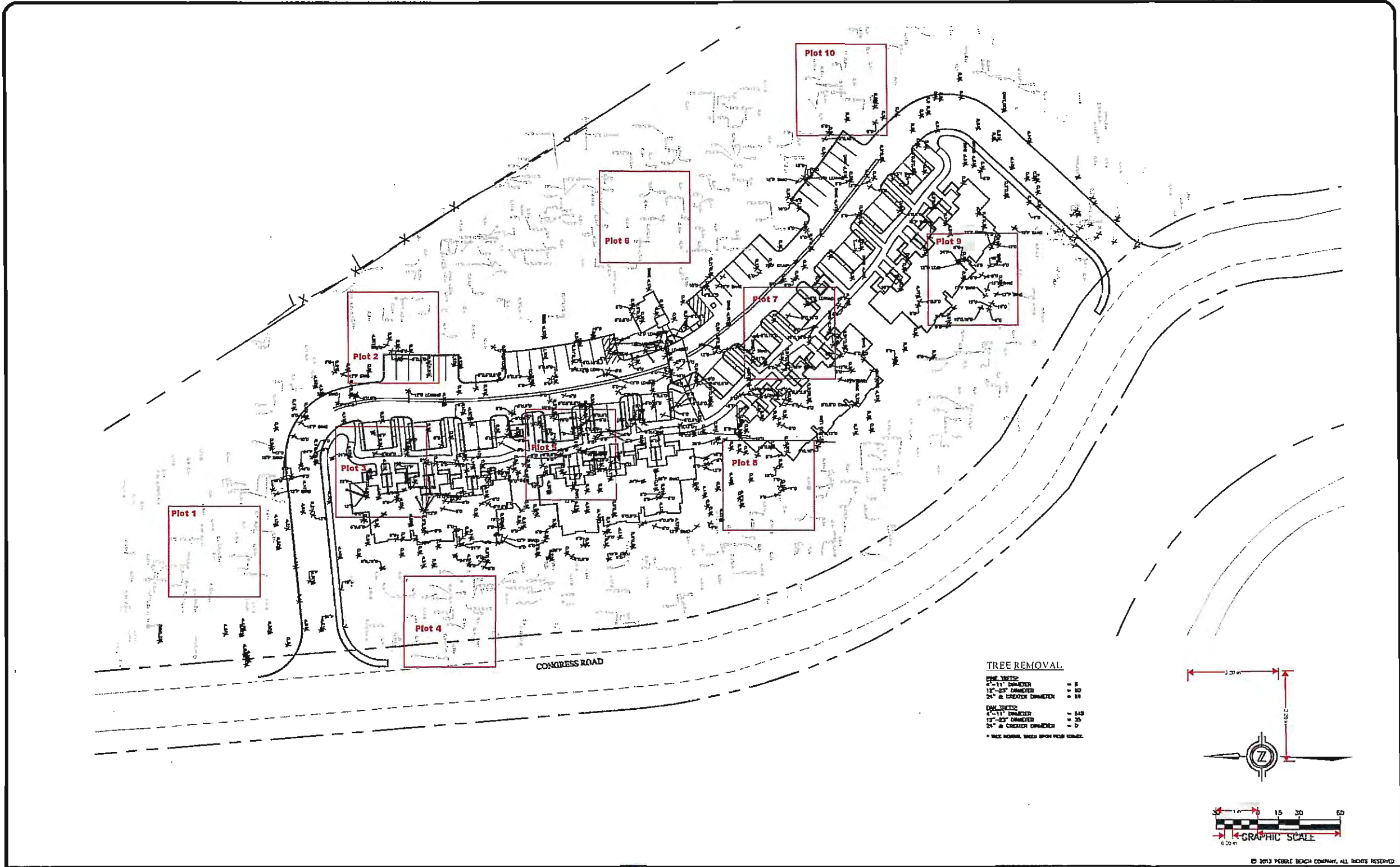
Plot #9



Plot 10



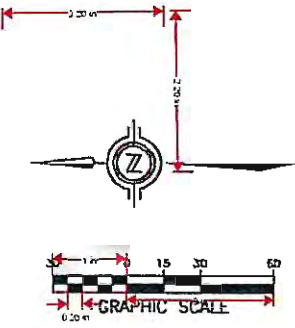
Many of stems (typical) appear to be multiples originating from one main stem that are now fragmenting and uprooting



TREE REMOVAL

DIAM. (INCHES)	HEIGHT (FEET)
4"-11" DIAMETER	= 8
12"-24" DIAMETER	= 20
24" & GREATER DIAMETER	= 25
DIAM. (INCHES)	HEIGHT (FEET)
4"-11" DIAMETER	= 5-8
12"-24" DIAMETER	= 20
24" & GREATER DIAMETER	= 25

* TREE HEIGHTS BASED UPON FIELD SURVEY



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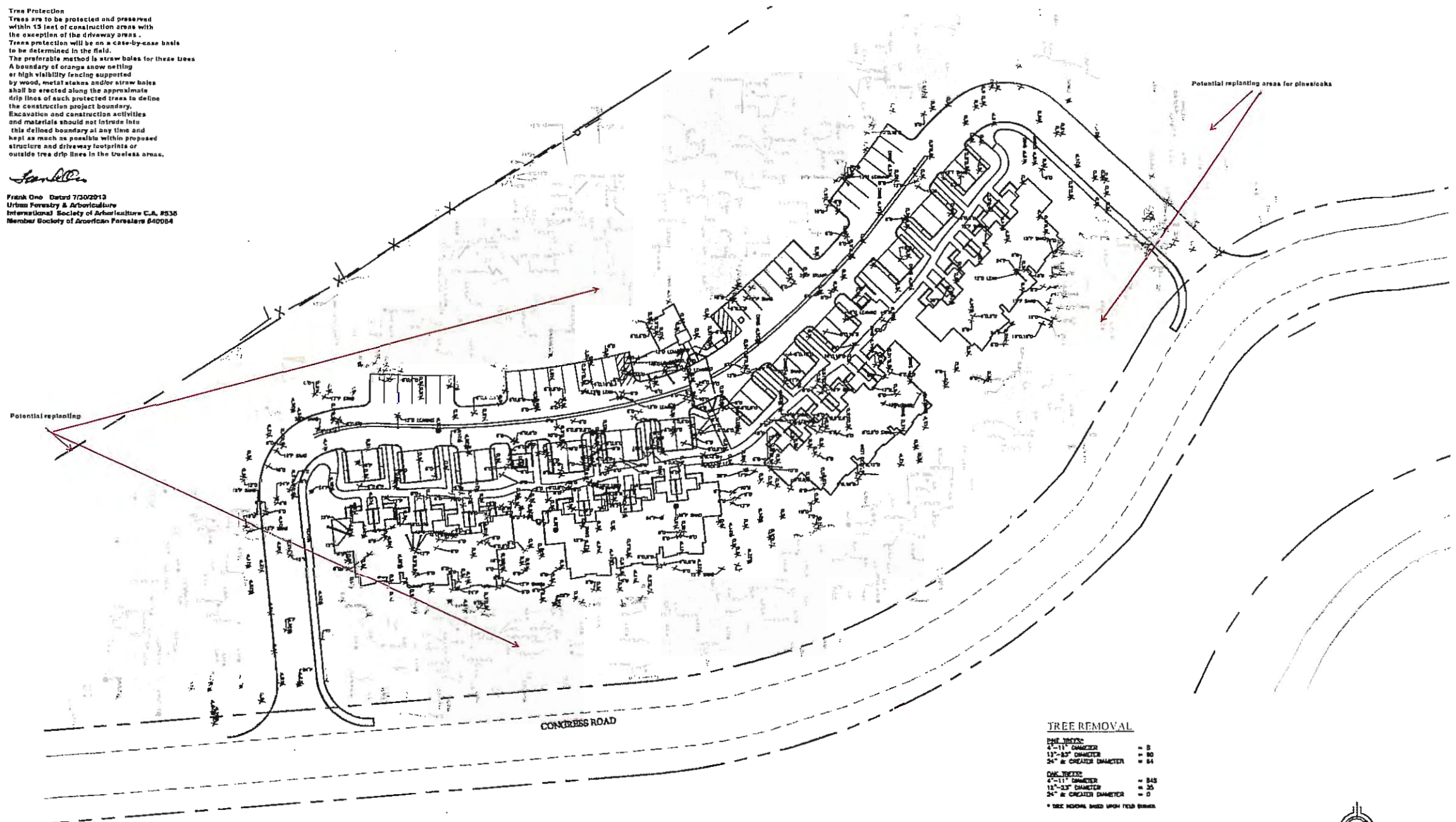
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INFORMATION: PARCEL & VOLUME 18, CITIES AND TOWNS, PAGE 53

AREA D
DEL MONTE FOREST PRESERVATION AND DEVELOPMENT PLAN
AREA D INCLUSIONARY HOUSING
TREE REMOVAL PLAN

IH 5.2
DATE: MAY 26, 2013

Tree Protection
 Trees are to be protected and preserved within 15 feet of construction areas with the exception of the driveway areas. Tree protection will be on a case-by-case basis to be determined in the field. The preferable method is straw bales for these trees. A boundary of orange snow netting or high visibility fencing supported by wood, metal stakes and/or straw bales shall be erected along the approximate drip lines of such protected trees to define the construction project boundary. Excavation and construction activities and materials should not intrude into this defined boundary at any time and kept as much as possible within proposed structure and driveway footprints or outside tree drip lines in the treeless areas.

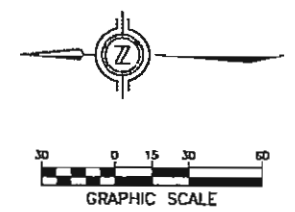
Frank One
 Frank One Dated 7/30/2013
 Urban Forestry & Arboriculture
 International Society of Arboriculture C.A. #536
 Member Society of American Foresters 640084



TREE REMOVAL

TREE SPECIES	REMOVAL
4"-11" DIAMETER	= 0
12"-23" DIAMETER	= 50
24" & GREATER DIAMETER	= 54
DAK TREES	
4"-11" DIAMETER	= 54S
12"-23" DIAMETER	= 55
24" & GREATER DIAMETER	= 0

* TREE REMOVAL BASED UPON FIELD SURVEY



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 INFORMATION: PRICE & VOLUME 13, CREEK AND TUNNEL, PAGE 10

AREA D
 DEL MONTE FOREST PRESERVATION AND DEVELOPMENT PLAN
 AREA D INCLUSIONARY HOUSING
 TREE REMOVAL PLAN

IH 5.2
 DATE: MAY 28, 2013