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Texas Board of Professional Engineers Registration Number F-1994

Agei	nda Request Transmittal		Parks & Recreation: Navigation Committee Board	
From:	Bruce Aupperle, P.E.		Date : 05-Oct-10	
То:	Parks & Recreation Department, Chris Yanez		Delivery: Hand	
Re:	2900 Westlake Cove, SP-2010-0175D		Pages:	
By this t	transmittal we hereby request that the referenced pr	roject be placed on the next available ager	nda for □ approval. □ discussion.	
Project 7		Charling MadiCastian		
Residential Dock Residential Dock Cluster		■Shoreline Modification □Silt Removal		
□Marin		□Other:		
Owner:	Patrick M. and Jannette Keating			
	nt: Patrick M. and Jannette Keating			
Site Address: 2900 Westlake Cove				
Site Plan Case Number: SP-2010-0175D				
Variance Requested:				
□Excee	□Exceed 20% Shoreline Width			
□Exceed 30' Depth Into Lake				
Encroach Into 10' Sideyard Setback				
□Exceed 20% of Channel Width				

Description of Project and Variance Request:

This project proposes to remove an existing boat dock and construct new docks and bulkhead. The new bulkhead will predominantly follow the alignment of the existing bulkhead. The proposed bulkhead will protect approximately 467 linear feet of shoreline. The existing bulkhead is approximately 461 linear feet. Approximately 45 linear feet of new bulkhead will be realigned to accommodate the northern dock. The realignment of the bulkhead will add approximately 165 square feet of surface area to the waterbody of Lake Austin. The site currently has an existing two slip boat dock which is proposed to be removed. The current boat dock utilizes approximately 50 linear feet of shoreline, or 11% of the 461 linear feet existing shoreline. The proposed docks will utilize approximately 84 linear feet of shoreline or 18 percent of the 467 linear feet of proposed shoreline. The existing northern dock is currently within the 10-foot side yard setback area, the proposed northern dock will also be within the 10-foot side yard setback area.

Attachments:	
Site Plan.	
Location Map	
□Plat	
Other Documents:	



MAPSCO GRID G26

VICINITY MAP

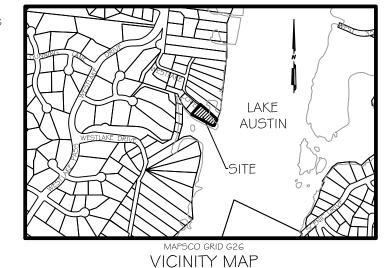
NTS

2900 WESTLAKE COVE

PATRICK M. \$ JANNETTE KEATING 2900 WESTLAKE COVE AUSTIN, TEXAS 78746-196 PHONE (408) 910-3388

BRUCE S. AUPPERLE, P.E. AUPPERLE COMPANY 2219 WESTLAKE DR. STE. 110

ALISTIN TEXAS 78746 PHONE (5 | 2) 422-7838 FAX (512) 329-8241



ALL AREAS DISTURBED WITHIN THE SHORELINE SETBACK SHALL BE RESTORED IN ACCORDANCE WITH CITY OF AUSTIN SPECIFICATIONS.

ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.

- EROSION CONTROL NOTES

 Appendix: P-I

 The contractor shall install erosion/sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing or excavation).

 The placement of erosion/sedimentation controls shall be in accordance with the Environmental Criteria Manual and the approved Erosion and Sedimentation Control Plan.

 The Placement of tree/natural area protective fearing shall be in accordance with the City of
- The Placement of tree/natural area protective fencing shall be in accordance with the City of Austin standard Notes for Tree and Natural Area Protection and the approved Grading/Tree
- pre-construction conference shall be held on-site with the contractor, design
- A pre-construction conference shall be held on-site with the contractor, design Engineer/permit applicant and Environmental Inspector after installation of the erosion/sedimentation controls and tree/natural area protection measures and prior to beginning any site preparation work. The contractor shall notify the Planning & Development Review Department, (512)974-2278, at least three days prior to the meeting date. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the reviewing Engineer, Environmental Specialist or City Aborist as appropriate. Major revisions must be approved by the Planning & Development Review Department. Minor changes to be made as field revisions to the Erosion and Sedimentation Control Plan may be required by the Environmental Inspector during the course of construction to correct control inadeauages.
- to the Erosion and Sedimentation Control Plan may be required by the Environmental Inspector during the course of construction to correct control inadequacies.

 The contractor is required to inspect the controls and fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary regains to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (G) inches.

 Prior to final acceptance by the City, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debns shall be disposed of in approved spoil disposal sites.
- shall be disposed of in approved spoil disposal sites
- All work must stop if a void in the rock substrate is discovered which is; one square foot in total area; blows air from within the substrate and/or consistently receives water during any rain event. At this time it is the responsibility of the Project Manager to immediately contact a city of Austin Environmental Inspector for further investigation.

 Temporary and Permanent Erosion Control: All disturbed areas shall be restored as noted
- - elow.

 All disturbed areas to be revegetated are required to place a minimum of six (6) inches of topsoil [see Standard Specification Item No. 6015.3(Å)]. Do not add topsoil within the critical root zone of existing trees. The topsoil shall be composed of 3 parts of soil mixed with 1 part compost, by volume. The compost shall be pillo Dirt or an equal approved by the Engineer, or designated representative. The approved equal, if used, shall meet the definition of compost (as defined by the U.S. Composting Council). The soil shall be locally available native soil that meets the following specifications:

 Shall be free of trash, weeds, deletenous materials, rocks, and debns.

 - Shall be tree of trash, weeds, deleterious materials, rocks, and debns.

 100 % shall pass through a 0.375-inch (\frac{\frac{1}{2}}{\frac{1}{2}}\sigma\frac{1}{2

Clay	5%	25%
Silt	10%	50%
Sand	30%	80%
and calmaged for	on the evicting cite m	av often he use

Sand 30% BO%

Topsoil salvaged from the existing site may often be used, but it should meet the same standards as set forth in these standards.

The vegetative stabilization of areas disburbed by construction shall be as follows:

TEMPORARY VEGETATIVE STABILIZATION:

I. From September 15 to March 1, seeding shall be with cool season cover crops (Wheat at 0.5 pounds per 1000 SF, Cereal Rye Grain at 0.5 pounds per 1000 SF, Colabs at 0.5 pounds per 1000 SF. Cool season cover crops are not remainert exposure control.

- 2. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pounds per 1000 SF.

 A. Fertilizer shall be water soluble with an analysis of 15-15-15 to be applied once at
- planting and once during the period of establishment at a rate of \cancel{k} pound per 1000 SF. Hydromulch shall comply with Table 1, below.
- C. Temporary enosing control shall be acceptable when the grass has grown at least I/2 inches high with 95% coverage, provided no bare spots larger than I 6 square feet exist.

 D. When required, native grass seedling shall comply with requirements of the City of Austin
- Table 1: Hydromulching for Temporary Vegetative Stabilization

Material 70/30 Wood/ Cellulose Blend	70% Wood 30% Mulchpaper 3% Tackifier	O-3 months	Typical Applications Moderate slopes; from flat to 3:1	Application Rates 45.9 lbs/1000 sf
Wood Fiber Mulch	96% Wood 3% Tackifer	O-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf

PERMANENT VEGETATIVE STABILIZATION

- desired, the grasses shall mowed to a height of less than one-half $(\!\!\ell_{\!\!2})$ inch and the area shall be re-seeded in accordance with 2. below.
- From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 SF with a purity of 95% with 85% germination. Bermuda grass is a warm seasor
- per 1000 SF with a purity of 95% with 85% germination. Berminda grass is a warm season grass and is considered permanent erosion control. Fertilizer shall be a water soluble with an analysis of 15-15-15 to be applied once at planting and once during the period of establishment at a rate of $\frac{1}{2}$ pound per 1000 SF. Hydromulch shall comply with Table 2, below. The planted area shall be irrigated or sprinkled in a manner that will not erode the topsoil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at daily
- intervals (minimum) during the first two months. Rainfall occurrences of k inch or more shall postpone the watering schedule for one week.
- Shall postpone the watering schedule for one week.

 D. Permanent erosion control shall be acceptable when the grass has grown at least I/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.

 E. When required, native grass seeding shall comply with requirement of the City of Austin Environmental Critera Manual.

 Table 2: Hydromulching for Permanent Vegetative Stabilization

Material Bonded Fiber Matrix (BFM)	Description 80% Thermally Refined Wood 30% Tackifier	Longevity 6 months	Typical Applications On slopes up to 2:1 and erosive soil conditions	Application Rates 68.9 lbs/SF to 80.3 lbs/1000S
11.	Developer Information			
	OWNER PATRICK M. \$ JANN	NETTE KEATING		

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: NAME PHONE # PATRICK M. \$ JANNETTE KEATING (408) 910-3388

PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE: NAME PATRICK M. & JANNETTE KEATING
PHONE # (408) 910-3388

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:
NAME PATRICK M. \$ JANNETTE KEATING
PHONE # [408] 910-3388

12. The contractor shall not dispose of surplus excavated material from the site without notifying the Planning 4 Development Review Department at (512)974-2278 at least 46 hours pnor with the location and a copy of the perimt issued to receive the material.

REMEDIAL TREE CARE NOTES AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN

Trees will be Aerated and Provided Nutrients Prior to any Construction Activity

As a condition of final acceptance of the site, and in conformance with Environmental Criteria Manual section As a condition of final acceptance of the site, and in conformance with Environmental Cinteria Manual section 3.5.4 - All preserved trees within the limits of construction will be Aerated and provided with Supplemental Nutrients per the following guidelines. Macro and MicroNutrients are required, Humate/nutrient solutions with mycorrhizae components are highly recommended. These solutions are commonly utilized to provide remediation for trees affected by construction. Materials and methods are to be approved by the City Arbonst (512)974-1876) prior to application. The owner or general contractor shall select a fertilization contractor and insure coordination with the City Arbonst (Phone. (512)974-1876).

Treatment is to commence prior to the beginning of construction activities and again after the completion of all Ireatment is to commence prior to the beginning of construction activities and again after the completion of all construction. Areas to be treated include the entire critical root zone of trees as depicted on the City approved plans. Trees are to be aerated by water injected into the soil (under pressure via a soil probe at 50-125 pounds per square inch) or by other method as approved by Planning & Development Review Department. The Proposed Nutnent Mix Specifications need to be provided to and approved by the City Arbonst Prior to application (Fax # (512)974-3010). Applicants may also specify soil injection of Doggett X-L injecto 32-7-7 or equivalent at recommended rates. Construction which will be completed in less than 90 days should use materials at \underline{N} recommended rates. Alternative organic fertilizer materials are acceptable when approved by the City Arbonst. Within 7 days after fertilization is performed, the contractor shall provide documentation of the work performed to the City Arbonst, Planning & Development Review Department P.O. Box 1088, Austin, Texas 78767. This Note should be referenced as item #1 in the Sequence of

No vegetation within the shoreline setback area shall be removed before the issuance of a building permit except as may be required for surveying and testing. Areas cleared for surveying or testing shall be no more than 15 feet wide and no trees of six inches or more in diameter shall be removed for surveying or testing

ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY FROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT INCOMPLIANCE WITH THE CITY OF AUSTIN RULES AND

I responsibility for the adequacy of these plans remain with the engineer who epared them. In approving these plans, the City of Austin must rely upon the lequacy of the work of the design engineer.

APPROVED BY:

2. SITE PLAN

No. SHEET TITLE 1. COVER SHEET \$ NOTES

For Director - Planning & Development Review Department

3. BOAT DOCK ELEVATIONS & PLAN VIEW

Permit Number

JUNE 18, 2010 Submittal Date

> JUNE 18, 2013 Project Duration Date

CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. All trees and natural areas shown on plan to be preserved shall be protected during construction with

Protective fences shall be installed prior to the start of any site preparation work (cleaning, grubbing or

Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in

Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in soil build-up within tree drip lines.

Protective fences shall surround the trees or group of trees, and will be located at the outermost limit of branches (drip line), for natural areas, protective fences shall follow the Limit of Construction line, in order to prevent the following:

Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;

Root zone disturbances due to grade changes (greater than 6 inches cut or fill), or trenching not reviewed and authorized by the City Arbonst;

Wounds to exposed roots, trunk or limbs by mechanical equipments:

Wounds to exposed roots, trunk or limbs by mechanical equipments.

Exceptions to installing tences at tree drip-lines may be permitted in the following cases: Where there is to be an approved grade change, impermeable paving surface, tree well, or other such site development, erect the fence approximately 2 to 4 feet beyond the area disturbed; Where permeable paving is to be installed within a tree's drip-line, erect the fence at the outer limits off the permeable paving area (prior to site grading so that this area is graded separately prior to paving installation to minimize root damage); Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the buildings.

Where there are severe space constraints due to tract size, or other special requirements, contact the City Arbonst at (512) 974-1876 to discuss alternatives.

SPECIAL NOTES: For the protection of natural areas, no exceptions to installing fences at the Limit of Construction

7. Where any of the above exceptions result in a fence being closer than 4 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 8 feet (or to the limits of lower branching) in addition to the reduced fencing provided.

8. Trees approved for removal shall be removed in a manner which does not impact trees to be preserved.

9. Any roots exposed by construction activity shall be pruned flush with the soil. Backfill root areas with good quality top soil as soon as possible. If exposed root areas are not backfilled within 2 days, cover them with organic material in a manner which reduces soil temperature and minimizes water loss due to evaporation.

10. Any trenching required for the installation of landscape irrigation shall be placed as far from existing tree trunks

11. No landscape topsoil dressing greater than 4 inches shall be permitted within the drip-line of trees. No soil is No landscape topsoil dressing greater than 4 inches shall be permitted within the drip-line of trees. No soil is permitted on the root flare of any tree.
 Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs (ripping of branches, etc.).
 All finished pruning shall be done according to recognized, approved standards of the industry (Reference the National Arborist Association Pruning Standards for Shade Trees available on request from the City Arborist).

14. Deviations from the above notes may be considered ordinance violations if there is substantial non-compliance

Site Plan Release Notes: The following site plan release notes are included in accordance with the City of Austin's request. Applicant will comply with all applicable City of Austin requirements.

1. All improvements shall be made in accordance with the released site plan. Any additional improvements will require site plan amendment and approval of the Planning & Development Review Department.

All signs must comply with requirements of the Land Development Code. (Section 13-2, Article VII)
 Additional electric essements may be required at a later date.
 All existing structures shown to be removed will require a demolition permit from the City of Austin Planning & Development Review Department.
 A development permit must be issued prior to an application for building permit for non-consolidated or Planning Commission approved site plans.
 For driveway construction: The owner is responsible for all costs for relocation of, or damage to utilities.
 For construction within the right-of-way, a concrete permit is required.

NSTRUCTION SEQUENCE: FOLLOWING IS A SEQUENCE OF CONSTRUCTION: INSTALL TREE PROTECTION CONTROLS AND AERATION / NUTRIENT REQUIREMENTS (AS NEEDED).

INSTALL NATURAL AREA PROTECTION (AS REQUIRED).
CONTACT THE ENVIRONMENTAL INSPECTOR AT LEAST 72 HOURS PRIOR TO SCHEDULING THE

PRE-CONSTRUCTION MEETING

HOLD PRE-CONSTRUCTION MEETING WITH ENVIRONMENTAL INSPECTOR (512) 974-2278.

REMOVE EXISTING BOAT DOCK AND OTHER NOTED EXISTING IMPROVEMENTS.

BUILD PROPOSED BULKHEAD AND BOAT DOCKS.

REVECETATE DISTURBED AREAS.

SUBMIT ENGINEER CONCURRENCE LETTER TO THE CITY OF AUSTIN.

O DETAIN FINAL INSPECTION RELEASE ONCE VEGETATION HAS 95% COVERAGE.

REMOVE TEMPORARY EROSION/SEDIMENTATION AND PROTECTION CONTROLS.

INSTALL ENVIRONMENTAL SEDIMENTATION CONTROLS (AS NEEDED).

Approval of this Site Plan does not include Building and Fire Code approval nor building permit approval. All signs must comply with requirements of the Land Development Code. (Section 13-2, Article VII)

Tree protection fence should be chain link.
 All materials to be used on proposed bulkhead shall be approved by Parks and Recreation Department.
 Deed restrictions or restrictive covenants are applicable to this property.

or if a tree sustains damage as a result.

GENERAL NOTES:

Tree protection fence should be chain link.

PRE-CONSTRUCTION MEETING.

tective fences shall be erected according to City of Austin Standards for Tree Protectio

Other activities detrimental to trees such as chemical storage, cement truck cleaning, and fires. Exceptions to installing fences at tree drip-lines may be permitted in the following cases:

grading), and shall be maintained throughout all phases of the construction project.

Contractor to verify utility locations and ground and flow line elevations before construction.

- ELECTRIC TRANSMISSION NOTES:

 A pre-construction safety meeting is required with Austin Energy 48 hours before commencement of construction. Failure to do so will result in the project being shutdown. Call Jean Evndge at 512.322.6050 to set up a tailgate safety meeting.

 Barricades must be erected 10 feet from Austin Energy transmission structures during construction.

 Any relocations or outages caused by this project will be charged to the contractor/owner.

 Warning signs must be placed under the overhead transmission lines to make all personnel aware of the electrical bazard.

- 6. No dumpsters, staging or spoils areas allowed within or 20 feet adjacent to the transmission easement
- 7. Prior to mobilizing tall equipment such as cranes, call Jean Evridge at 512.322.6050, to coordinate
- 8. Property owner is to provide free and easy access 24 hours a day to the transmission easement.
- WATERSHED STATUS: This site is located in LAKE AUSTIN watershed is classified as a WATER SUPPLY

FLOODPLAIN INFORMATION: PART OF THIS PROJECT IS WITHIN THE LOO-YEAR FLOOD PLAIN AS SHOWN

PROJECT ADDRESS: 2900 WESTLAKE COVE, AUSTIN, TEXAS 78746-1961

ZONING: LA

USE: SINGLE FAMILY HOME

Release of this application does not constitute a verification of all data, information and calculations supplied by the applicant. The engineer of record is solely responsible for the completeness, accuracy and adequacy of his/her submittal, whether or not the application is reviewed for Code compliance by City

Site Plan subject to City of Austin Watershed Protection Regulations

This boat dock is an accessory use for a principal residence and should be used as such.

- Land owner is responsible for dust controls for insulators and to prevent flashing. Owner is responsible for all outages cause by the dust from this project.

- LEGAL DESCRIPTION: LOT 10, AMENDED PLAT OF LOT 10 LAGA VILLA, ACCORDING TO THE MAP OR PLAT THEREOF, RECORDED IN VOLUME 90, PAGE 316, PLAT RECORDS, TRAVIS COUNTY, TEXAS

RELATED PERMIT NUMBERS: 1996-016191 BP, 1996-016191 EP, 1996-016191 MP, 1996-016191 PP, 1997-008909 BP, 1997-008909 EP, 1997-008909 MP, 1997-008909 PP, 2010-001046 PR, 2010-001049 BP, 2010-026608 PR, 2010-026646 BP \$ 2010-026647 BP

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Engineering, 2219 Westlake D

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