Office & Fax: (512) 329-8241
Email: Aupperle@att.net
Texas Board of Professional Engineers Registration Number F-1994

Age	nda Request Transmittal	Naviga	Parks & Recreation:  Navigation Committee			
		■ Board				
From:	Bruce Aupperle, P.E.	Date:	6-Jul-10			
То:	Parks & Recreation Department, Chris Yanez	Delivery: Email				
Re:	3112 Edgewater Drive (a.k.a. 3106 Edgewater Drive), SP-2010-0092D	Pages:				
By this t	transmittal we hereby request that the referenced project be placed on the next available age	enda for [	approval.  ☐ discussion.			
□Com	e-Family Dock mercial Marina cline Modification emoval					
	Lake Hills Community Assoc., Inc. nt: Lake Hills Community Assoc., Inc.					
Site Address: 3112 Edgewater Drive (a.k.a. 3106 Edgewater Drive)						
Site Plan Case Number: SP-2010-0092D						
Variance Requested:						
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 application is primarily for a new fishing pier and bulkhead removal on the main body of Lake Austin. Please note that since there were no valid permits found in the City records for the existing dock structures, day docks and a swim platform, they are included in this application. With this application, the applicant proposes to remove a portion of the existing concrete bulkhead in favor of a new sand beach area and reinforce a portion of the existing concrete bulkhead to prevent failure. The shoreline width is 615 feet and the shoreline facilities width will be 224 feet (88 feet existing and 136 feet proposed). Thus, for this site plan application a variance to exceed 20% of the shoreline width is required. Otherwise, the project as designed is in substantial compliance with the applicable requirements of the City of Austin Development Code.

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

# REVISIONS / CORRECTIONS

NO.	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET NO.'S	TOTAL # SHEETS IN PLAN SET	NET CHANGE IMP. COVER (SQ. FT.)	TOTAL SITE IMP. COVER (SQ. FT.)%	CITY OF AUSTIN APPROVAL DATE	DATE IMAGED
Angular value and a constant v							
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W. W							

# ASSOCIATION INC. P.O. BOX 92649 AUSTIN, TEXAS 78709-2649

LAKE HILLS COMMUNITY

**ENGINEER:** BRUCE S. AUPPERLE, P.E. AUPPERLE COMPANY 2219 WESTLAKE DR. STE. 110 AUSTIN, TEXAS 78746 PHONE (512) 329-8241 FAX (512) 329-8241

# MAPSCO GRID C29 VICINITY MAP

3112 EDGEWATER DRIVE

# ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.

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

- 1. 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 fencing shall be in accordance with the City of Austin standard Notes for Tree and Natural Area Protection and the approved Grading/Tree
- 4. 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 ing 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.
- 5. 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 inadequacies. 6. 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 repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
- 7. 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 debris 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
  - A. 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(A)]. Do not add topsoil within the critical root zone of existing trees. The topsoil shall be composed of 3 parts of soil mixed with I part compost, by volume. The compost shall be Dillo 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, deleterious materials, rocks, and debris.
  - 100 % shall pass through a 0.375-inch ( $\frac{3}{6}$ ") screen. Soil Texture class to be Loam, Sandy Clay Loam, or Sandy Loam in accordance with the USDA texture triangle. Soil known locally as "red death" or Austin Sandy Loam is not an allowable soil. Textural composition shall meet the following criteria:

Maximum 25% Texture Class 10% 50%

30% Sand 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 disturbed by construction shall be as follows: TEMPORARY VEGETATIVE STABILIZATION:

- 1. From September 15 to March 1, seeding shall be with cool season cover crops (Wheat at 0.5 pounds per 1000 SF, Oats at 0.5 pounds per 1000 SF, Cereal Rye Grain at 0.5 pounds per 1000 SF) with a total rate of 1.5 pounds per 1000 SF. Cool season cover crops are not permanent erosion 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 1/2 pound per 1000 SF. Hydromulch shall comply with Table 1, below.
- C. Temporary erosion control shall be acceptable when the grass has grown at least 1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.

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

Material 70/30 Wood/ Cellulose Blend	Description 70% Wood 30% Mulchpaper 3% Tackifier	Longevity 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 STABLIZATION

- 1. From September 15 to March 1, seeding is considered to be temporary stabilization only. If cool season cover crops exist where permanent vegetative stabilization is desired, the grasses shall moved to a height of less than one-half (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 season grass and is considered permanent erosion control.
- A. 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.
- B. Hydromulch shall comply with Table 2, below. C. 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 1/2 inch or more shall postpone the watering schedule for one week.
- D. Permanent erosion control shall be acceptable when the grass has grown at least  $1\frac{1}{2}$
- 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 Criteria Manual. Table 2: Hydromulching for Permanent Vegetative Stabilization

# Bonded Fiber Matrix Bonded Fiber Matrix Bonded Fiber Matrix Bonded Fiber Matrix (BFM)

Wood 30% Tackifier

Typical Applications
On slopes up to 2: I and
On slopes up to 2: I and erosive soil conditions 80.3 lbs/10005F

11. Developer Information

OWNER LAKE HILLS COMMUNITY ASSOCIATION INC. PHONE # (512) 288-2376 ADDRESS P.O. BOX 92649 AUSTIN, TEXAS 78709-2649 OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

PHONE # (512) 288-2376 PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE: LAKE HILLS COMMUNITY ASSOCIATION INC., JOE GIMENEZ PHONE # (512) 288-2376

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE: LAKE HILLS COMMUNITY ASSOCIATION INC., JOE GIMENEZ PHONE # (512) 288-2376

12. The contractor shall not dispose of surplus excavated material from the site without notifying the Planning \$ Development Review Department at (512)974-2278 at least 48 hours prior with the location and a copy of the permit issued to receive the material.

# REMEDIAL TREE CARE NOTES AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS Appendix: P-6

# 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 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 Arborist ((512)974-1876) prior to application. The owner or general contractor shall select a fertilization contractor and insure coordination with the City Arborist (Phone. (512)974-1876).

Treatment 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 Nutrient Mix Specifications need to be provided to and approved by the City Arborist 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 1/2 recommended rates. Alternative organic fertilizer materials are acceptable when approved by the City Arborist. Within 7 days after fertilization is performed, the contractor shall provide documentation of the work performed to the City Arborist, Planning & Development Review Department P.O. Box 1088, Austin, Texas 78767. This Note shouldbe 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.

> All responsibility for the adequacy of these plans remain with the engineer who prepared them. In approving these plans, the City of Austin must rely upon the adequacy of the work of the design engineer.

# 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 temporary
- 2. Protective fences shall be erected according to City of Austin Standards for Tree Protection. 3. Protective fences shall be installed prior to the start of any site preparation work (clearing, grubbing or
- grading), and shall be maintained throughout all phases of the construction project. 4. Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in
- 5. 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
- A. Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;
- B. Root zone disturbances due to grade changes (greater than 6 inches cut or fill), or trenching not reviewed and authorized by the City Arborist;
- C. Wounds to exposed roots, trunk or limbs by mechanical equipment; D. Other activities detrimental to trees such as chemical storage, cement truck cleaning, and fires.
- G. Exceptions to installing fences at tree drip-lines may be permitted in the following cases: A. 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;
- B. 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
- C. Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the
- D. Where there are severe space constraints due to tract size, or other special requirements, contact the City Arborist at 512-974-1876 to discuss alternatives.

SPECIAL NOTES: For the protection of natural areas, no exceptions to installing fences at the Limit of Construciton line will be permitted.

- 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 greaater than 4 inches shall be permitted within the drip-line of trees. No soil is permitted on the root flare of any tree
- 12. Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs (ripping of branches, etc.).
- 13. 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 or if a tree sustains damage as a result.

# GENERAL NOTES:

- . Tree protection fence should be chain link.
- 2. All materials to be used on proposed bulkhead shall be approved by PARD. 3. Deed restrictions or restrictive covenants are applicable to this property.
- Site Plan Release Notes: The following site plan release notes are included in accordance with the City of Austin's request. Some of these notes pertain to related permits or site plans, but do not specifically apply to the bulkhead site plan. 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.
- 3. All signs must comply with requirements of the Land Development Code. (Section 13-2, Article VII) 4. Additional electric easements may be required at a later date. 5. All existing structures shown to be removed will require a demolition permit from the City of Austin Planning \$
- Development Review Department. 6. A development permit must be issued prior to an application for building permit for non-consolidated or Planning
- 7. For driveway construction: The owner is responsible for all costs for relocation of, or damage to utilities. 8. For construction within the right-of-way, a concrete permit is required.

# CONSTRUCTION SEQUENCE

- THE FOLLOWING IS A SEQUENCE OF CONSTRUCTION: I. CONTACT THE ENVIRONMENTAL INSPECTOR AT LEAST 72 HOURS PRIOR TO SCHEDULING THE
- PRE-CONSTRUCTION MEETING. 2. INSTALL ENVIRONMENTAL SEDIMENTATION CONTROLS (AS NEEDED).
- 3. INSTALL TREE PROTECTION CONTROLS (AS NEEDED).
- 4. INSTALL NATURAL AREA PROTECTION (AS REQUIRED) 5. HOLD PRE-CONSTRUCTION MEETING WITH ENVIRONMENTAL INSPECTOR (512) 974-2278.
- 6. BUILD PROPOSED BULKHEAD AND BOARDWALK.
- REVEGETATE DISTURBED AREAS.
- 8. SUBMIT ENGINEER CONCURRENCE LETTER TO THE CITY OF AUSTIN. 9. OBTAIN FINAL INSPECTION RELEASE ONCE VEGETATION HAS 95% COVERAGE.
- 10. REMOVE TEMPORARY EROSION/SEDIMENTATION AND PROTECTION CONTROLS.

# No. SHEET TITLE

- CI COVER SHEET \$ NOTES
- C2 SITE PLAN
- SI BOARDWALK & RETAINING WALL STRUCTURAL DETAILS

# APPROVED BY:

Parks # Recreation Date For Director - Planning & Development Review Department SPC-2010-0092D Permit Number MARCH 31, 2010 Submittal Date MARCH 31, 2013

Project Duration Date

1. This project is not located over the Edwards Aquifer recharge zone.

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

- . 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 Evridge 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. 4. Warning signs must be placed under the overhead transmission lines to make all personnel aware of the
- 5. No dumpsters, staging or spoils areas allowed within or 20 feet adjacent to the transmission Prior to mobilizing tall equipment such as cranes, call Jean Evridge at 512.322.6050, to coordinate
- Property owner is to provide free and easy access 24 hours a day to the transmission easement. 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.

WATERSHED STATUS: This site is located in LAKE AUSTIN watershed, is classified as a WATER SUPPLY RURAL watershed and shall be developed, constructed and maintained in conformance with Chapter 25 of the Land Development Code.

FLOODPLAIN INFORMATION: PART OF THIS PROJECT IS WITHIN THE 100-YEAR FLOOD PLAIN AS SHOWN ON THE F.E.M.A. FEMA Panel 48453CO43OH

LEGAL DESCRIPTION: LOT 4 CEBAR RANCH LAKEVIEW ACRES

PROJECT ADDRESS: 3112 EDGEWATER DRIVE, AUSTIN, TEXAS 78733

# ZONING: SF-2 # LA

USE: COMMUNITY RECREATION (PRIVATE)

RELATED PERMIT NUMBERS: SP-1992-0133CS, 2004-002135 PR, 2004-014359 BP # 2004-014359 EP

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.

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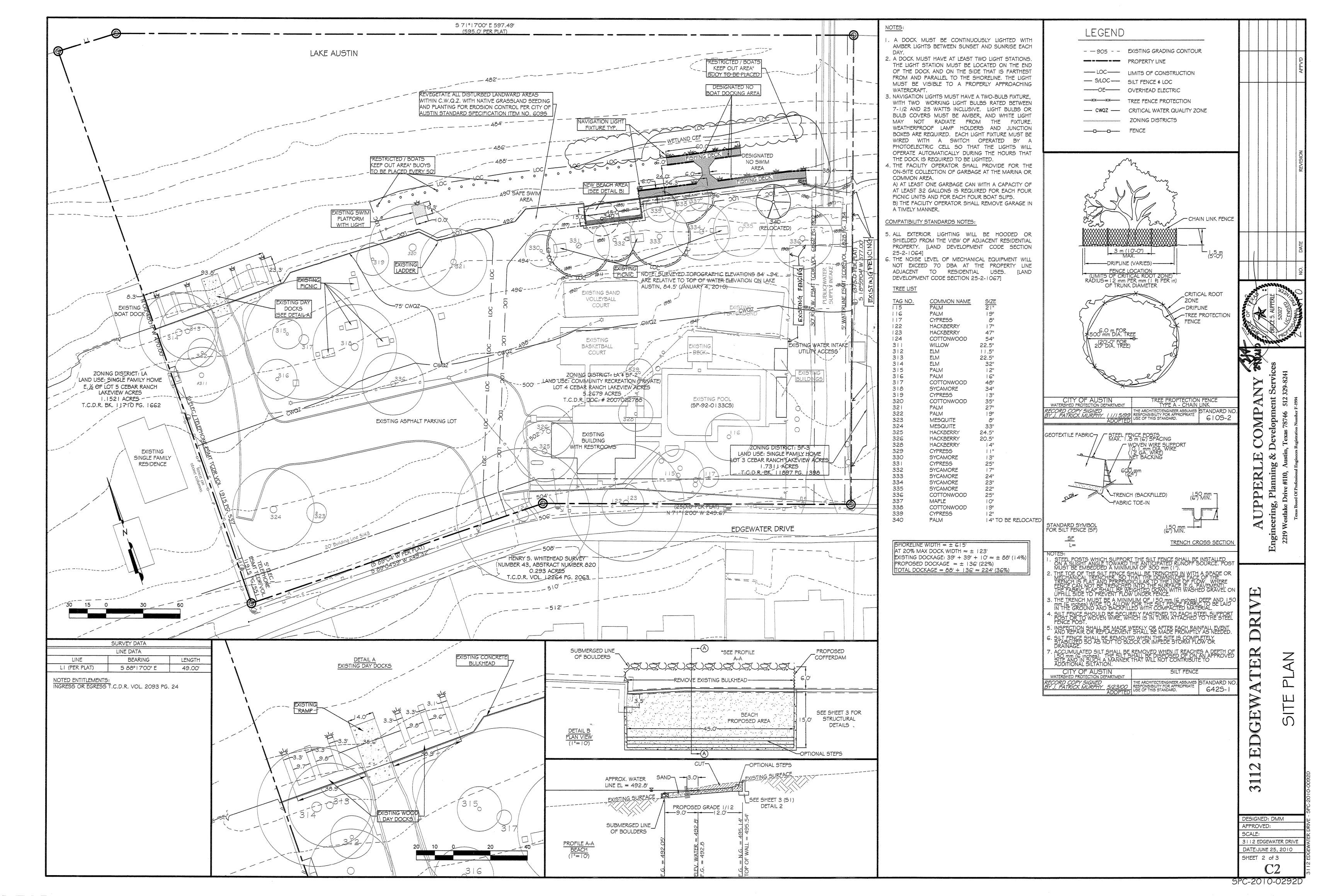
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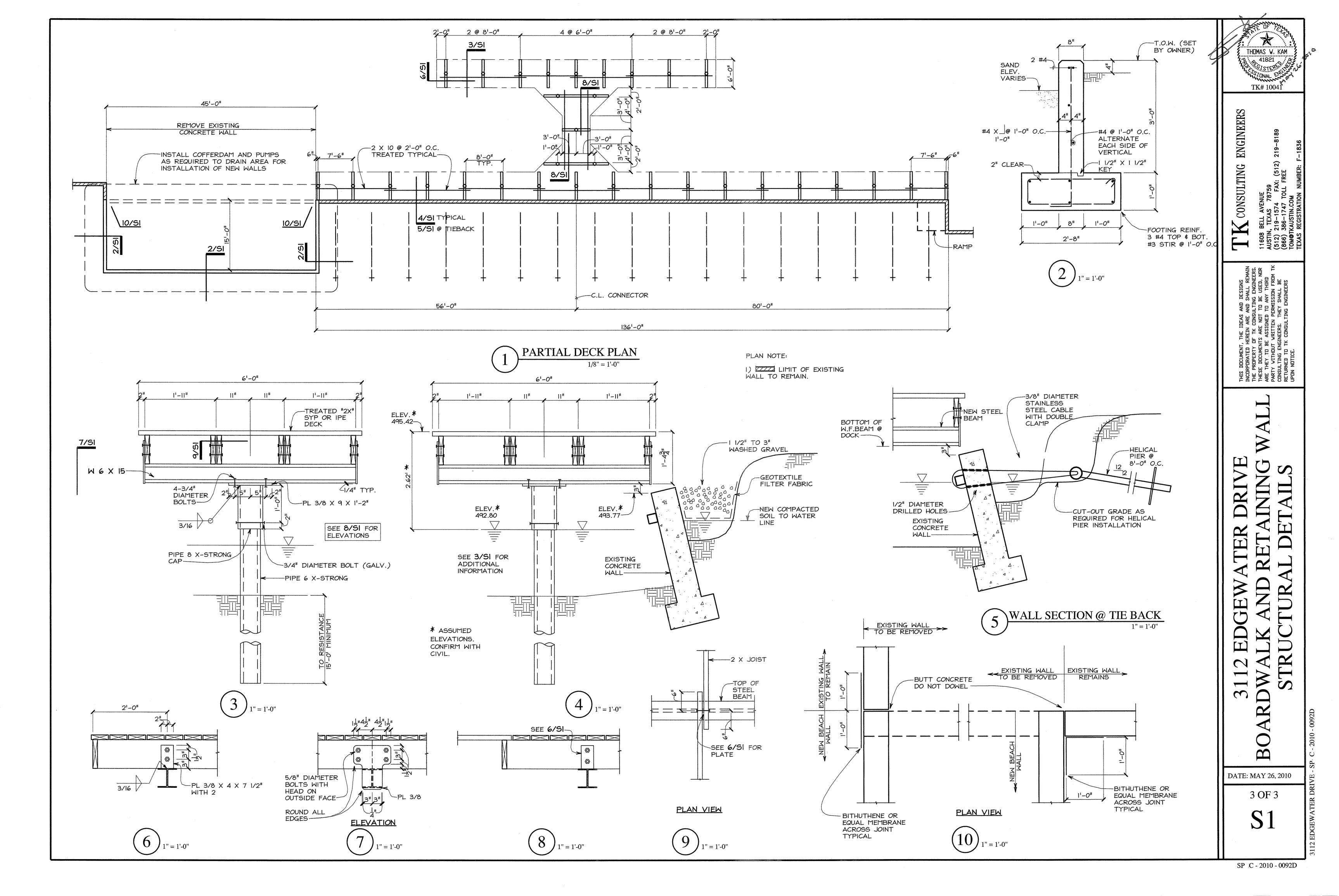
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DESIGNED: DMM APPROVED: SCALE: NTS 3112 EDGEWATER DR DATE: JUNE 21, 2010 SHEET 1 of 3

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MAPSCO GRID C29

VICINITY MAP

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