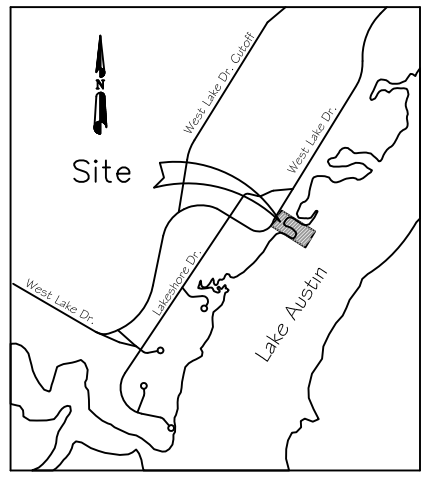
2215 WESTLAKE DRIVE

INSTALLATION of FLOATING WAVE ATTENUATION SYSTEM

OWNER:
LAKE AUSTIN MARINA I L P
2215 WESTLAKE DRIVE
AUSTIN, TEXAS 78732
(512) 329-6640

ENGINEER:
BRUCE S. AUPPERLE, P.E.
AUPPERLE COMPANY
2219 WESTLAKE DR. STE. 110
AUSTIN, TEXAS 78746
PHONE (512) 422-7838
FAX (512) 329-8241



NTS

MAPSCO GRID A31

VICINITY MAP

EROSION CONTROL NOTES
Appendix: P-1 (3/28/2011)

1. The contractor shall install erosion/sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing or excavation).
2. The placement of erosion/sedimentation controls shall be in accordance with the Environmental Criteria Manual and the approved Erosion and Sedimentation Control Plan.
3. 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 and Natural Area Plan.
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 beginning any site preparation work. The contractor shall notify the Planning and 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 Arborist as appropriate. Major revisions must be approved by the Planning and 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.
8. 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.
9. Temporary and Permanent Erosion Control: All disturbed areas shall be restored as noted below.
   A. All disturbed areas to be revegetated are required to place a minimum of six (6) inches of topsoil [see Standard Specification Item No. 601S.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 1 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 TxDOT specification Item 161). 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 (⅜") 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:

Texture class	Minimum	Maximum
Clay	5%	25%
Silt	10%	50%
Sand	30%	80%

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 ½ pound per 1000 SF.
   B. Hydromulch shall comply with Table 1, below.
   C. Temporary erosion control shall be acceptable when the grass has grown at least ½ inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.
   D. 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	Description	Longevity	Typical Applications	Application Rates
100% or any blend of wood, cellulose, straw, and/or cotton plant material (except no mulch shall exceed 30% paper)	70% or greater Wood/Straw 30% or less Paper or Natural Fibers	0-3 months	Moderate slopes; from flat to 3:1	1500 to 200 lbs per acre

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 mowed to a height of less than one-half ½) inch and the area shall be re-seeded in accordance with 2. below.
2. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 SF with a punty 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 ½ 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 ½ 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 ½ 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

Material	Description	Longevity	Typical Applications	Application Rates
Bonded Fiber Matrix (BFM)	80% Organic defibrated fibers 10% Tackifier	6 months	On slopes up to 2:1 and erosive soil conditions	2500 to 4000 lbs per acre (see manufacturers recommendations)
Fiber Reinforced Matrix (FRM)	65% Organic defibrated fibers 25% Reinforcing Fibers or less 10% Tackifier	Up to 12 months	On slopes up to 1:1 and erosive soil conditions	3000 to 4500 lbs per scre (see manufactures recommendations)

Developer Information:
Owner Lake Austin Manna I, LP Phone # (512) 329-6640
Address 2215 WESTLAKE DRIVE, Austin, Texas 78732

Owner's representative responsible for plan alterations:
Lake Austin Manna I, LP Phone # (512) 329-6640

Person or firm responsible for erosion/sedimentation control maintenance:
Lake Austin Manna I, LP Phone # (512) 329-6640

Person or firm responsible for tree/natural area protection maintenance:
Lake Austin Manna I, LP Phone # (512) 329-6640

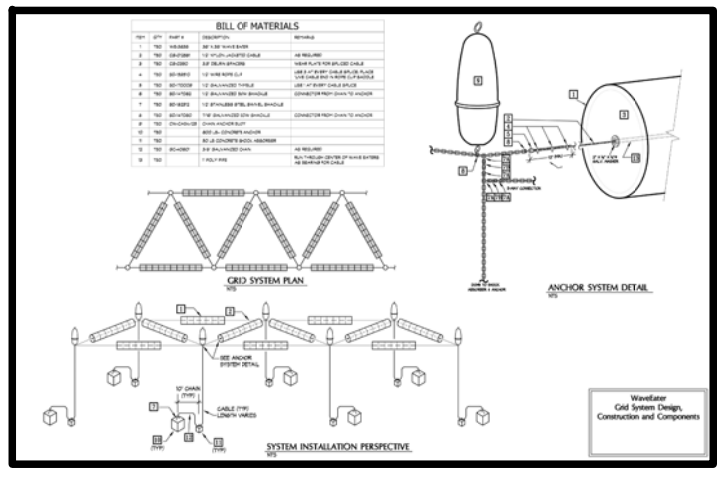
The contractor shall not dispose of surplus excavated material from the site without notifying the Planning and Development Review Department at (512) 974-2278 at least 48 hours prior with the location and a copy of the permit issued to receive the material.

CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION
Appendix: P-2 (3/28/2011)

1. All trees and natural areas shown on plan to be preserved shall be protected during construction with temporary fencing.
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 soil build-up within tree drip lines.
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 prevent the following:
   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.
6. 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 minimize root damage);
   C. Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the building;
   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 Construction 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 as possible.
11. 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.
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.



STANDARD SEQUENCE OF CONSTRUCTION
Appendix: P-4 (3/28/2011)

The following is a sequence of construction shall be used for all development.

1. Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan. Install tree protection and imtate tree mitigation measures (as needed).
2. Install natural area protection (as required).
3. The Environmental Project Manager or Site Supervisor must contact the Planning & Development Review Department, Environmental Inspection, at (512)974-2278, 72 hours prior to the scheduled date of the required on-site preconstruction meeting.
4. Hold pre-construction meeting with environmental inspector.
5. Temporary erosion and sedimentation controls will be revised, if needed, to comply with City Inspectors' directives, and revised construction schedule relative to the erosion plan.
6. Begin wave attenuation installation activities. Construction access from water.
7. Complete construction and start revegetation of the site and installation of landscaping (as needed).
8. Upon completion of the site construction and revegetation of a project site, the design engineer shall submit an engineer's letter of concurrence to the Planning & Development Review Department indicating that construction, including revegetation, is complete and in substantial conformity with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate City Inspector.
9. Obtain final inspection release once vegetation has 95% coverage.
10. After a final inspection has been conducted by the City Inspector and with approval from the City Inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls.

GENERAL NOTES:

1. This project is not located over the Edwards Aquifer recharge zone.
2. Deed restrictions or restrictive covenants are applicable to this property.
3. A business or living quarter may not be constructed on a pier or similar structure extending into or above Lake Austin, except under a license agreement approved by the council.
4. Contractor to verify utility locations and ground and flow line elevations before construction.
5. Environmental Inspector has the authority to add and/or modify erosion/sedimentation controls on site to keep project in-compliance with the City of Austin Rules and Regulations.
6. Approval of these plans by the City of Austin indicates compliance with applicable City regulations only.
7. Approval by other government entities may be required prior to the start of construction. The applicant is responsible for determining what additional approvals may be necessary.

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.
2. All signs must comply with requirements of the Land Development Code. (Section 13-2, Article VII)
3. Additional electric easements may be required at a later date.
4. All existing structures shown to be removed will require a demolition permit from the City of Austin Planning & Development Review Department.
5. A development permit must be issued prior to an application for building permit for non-consolidated or Planning Commission approved site plans.
6. For driveway construction: The owner is responsible for all costs for relocation of, or damage to utilities.
7. For construction within the right-of-way, a concrete permit is required.
8. For the building permit, a signed and sealed letter shall be submitted to the City of Austin, per the Land Development Code, 25-12-3 1612.4, certifying that the structure is in accordance with ASCE 24, Flood Resistant Design and Construction.
9. All work will occur within the limits of construction as shown on the plan, and that no materials or equipment will be delivered to the site from the landward side of this project.

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.

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

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 areas disturbed within the shoreline setback shall be restored in accordance with City of Austin specifications.

All disturbed areas shall be restored as noted in erosion control & restoration notes.

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.

SMART GROWTH ZONE: Drinking Water Protection Zone

FLOODPLAIN INFORMATION: This project is within the 100-year flood plain as shown on the F.E.M.A. panel 48453C0410H effective 26SEP2008.

LEGAL DESCRIPTION: Lots 1, 2 & 3 St. Tropez Yacht & Manna Subdivision, Bk. 86, Pg. 75D

PROJECT ADDRESS: 2215 Westlake Drive, Austin, Texas, 78746

ZONING: CR, CS, SF-3

USE: Commercial Manna/Restuarant/Retail/Office

RELATED PERMIT NUMBERS: C14-97-0009, SP-01-0415D

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 engineers.

Site Plan subject to City of Austin Watershed Protection Regulations.

Plan Sheet List

1. COVER SHEET & NOTES
2. SITE PLAN

Approved By:

Parks & Recreation Date

For Director - Planning & Development Review Department Date

SP-2011-___D
Permit Number

Sep. 21, 2011
Submittal Date

Sep. 21, 2014
Project Duration Date

STATE OF TEXAS · BRUCE S. AUPPERLE · 52027 · LICENSED PROFESSIONAL ENGINEER

AUPPERLE COMPANY
Engineering, Planning & Development Services
2219 Westlake Drive #110, Austin, Texas 78746 512 329-8241
Texas Board Of Professional Engineers Registration Number F-1994

2215 WESTLAKE DRIVE

COVER SHEET & NOTES

DESIGNED: BSA	
APPROVED:	
SCALE: NTS	
2215 Westlake Drive	
DATE: Sep. 21, 2011	
SHEET	1 of 2

1

2215 WESTLAKE DRIVE - SP-2011-___D

SP-2011-___D