

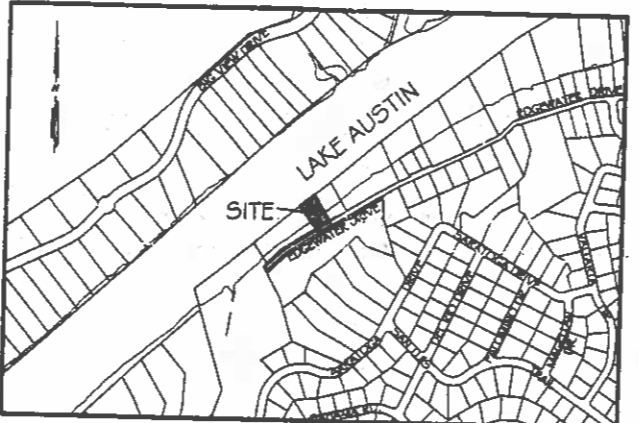
REVISIONS / CORRECTIONS

NO.	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET NO.	TOTAL # SHEETS IN PLAN SET	NET CHANGE SQ. FT.	TOTAL SITE IMP. COVER (SQ. FT.)	CITY OF AUSTIN APPROVAL DATE	DATE IMAGED

2700 EDGEWATER DRIVE

OWNERS:
 NATHAN P CHELSTROM &
 FARRAH D CHELSTROM
 1008 CASTLE ROAD UNIT B
 AUSTIN, TEXAS 78733-2508

ENGINEER:
 BRUCE S. AUPPERLE, P.E.
 AUPPERLE COMPANY
 2219 WESTLAKE DR. STE. 110
 AUSTIN, TEXAS 78746
 PHONE (512) 329-8241
 FAX (512) 263-3763



MAPSCO GRID C29
VICINITY MAP
NTS

No. SHEET TITLE

- COVER SHEET & NOTES
- SITE PLAN

APPROVED BY:

_____ Date _____

For Director - Planning & Development Review Department _____ Date _____

SP-2010-00620

Permit Number

MARCH 26, 2010

Submittal Date

MARCH 26, 2010

Project Duration Date

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.

EROSION CONTROL NOTES

- 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 Standards Notes for Tree and Natural Area Protection and the approved Grading/Tree and Natural Area Plan.
- 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 protective fencing and prior to beginning any site preparation work. The contractor shall notify the Planning & Development Review Department, (512)974-2275, 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 Arboretist as appropriate. Major revisions must be approved by the Planning & Development Review Department. Minor changes to the Erosion & 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 ensure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Site accumulation at controls must be removed when the depth reaches six (6) 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 debris shall be disposed of in approved spoil disposal sites.
- All work must stop if a void or rock substrate is discovered which is; one square foot in total area; blows air from within the substrate and/or continuously 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 below.

PERMANENT VEGETATIVE STABILIZATION

- From September 15 to March 1, seeding is considered to be temporary stabilization only. If cool season cover crops are used where permanent vegetative stabilization is desired, the grasses shall be mowed to a height of less than one-half (1/2) 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 25% germination. Bermuda 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 1/2 pound per 1000 SF.
 - Hydrumatch shall comply with Table 2, below.
 - The planted area shall be irrigated or sprayed 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.
 - Permanent erosion control shall be acceptable when the grass has grown at least 1 1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.
 - When required, native grass seeding shall comply with requirements of the City of Austin Environmental Criteria Manual.

Table 2: Hydrumatching for Permanent Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
Bonded Fiber Matrix (BFM)	50% Thermally Retard Wood 30% Tackifier	6 months	On slopes up to 2:1 and erosive soil conditions	65.3 lbs/2000 SF

11. Developer Information
OWNER: NATHAN P. & FARRAH D. CHELSTROM
PHONE #: (512) 293-3313
ADDRESS: 807 LAS CIMAS PRIVY STE. 200, AUSTIN, TX 78746-6184
OWNERS REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:
NAME: NATHAN P. & FARRAH D. CHELSTROM
PHONE #: (512) 293-3313
PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:
NAME: NATHAN P. & FARRAH D. CHELSTROM
PHONE #: (512) 293-3313
PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:
NAME: NATHAN P. & FARRAH D. CHELSTROM
PHONE #: (512) 293-3313

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

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 3.3.4 - 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. Management solutions with mycorrhizal components are highly recommended. These solutions are commonly utilized to provide remediation for trees affected by construction. The owner or general contractor shall select a fertilization contractor and waive coordination with the City Arboretist (Phone: (512)974-1676).

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. Treatments are to be applied by water injected into the soil (water 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 used to be provided to and approved by the City Arboretist 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 Arboretist. Within 7 days after fertilization is performed, the contractor shall provide documentation of the work performed to the City Arboretist, Planning & Development Review Department P.O. Box 1085, Austin, Texas 78767. This Note should be referenced as item #1 in the Sequence of Construction.

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 STANDARDS NOTES FOR TREE AND NATURAL AREA PROTECTION

- All trees and natural areas shown on plan to be preserved shall be protected during construction with temporary fencing.
- Protective fences shall be erected according to City of Austin Standards for Tree Protection.
- 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.
- 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 Arboretist;
 - Wounds to exposed roots, trunk or limbs by mechanical equipment;
 - 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:
 - 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 of the permeable paving area (prior to site grading so that the 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 building;
 - Where there are severe space constraints due to tract size, or other special requirements, contact the City Arboretist at 512-974-1676 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.

- 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 planting to a height of 8 feet (or to the limits of lower branching) in addition to the reduced fencing provided.
- Trees approved for removal shall be removed in a manner which does not impact trees to be preserved.
- 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 temperatures and minimizes water loss due to evaporation.
- Any trenching required for the installation of landscape irrigation shall be placed as far from existing trees trunks as possible.
- 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.
- Fencing to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs (trimming of branches, etc.).
- All finished paving 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 Arboretist).
- 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 dual line.
- All materials to be used on proposed build-out shall be approved by PARC.
- Dead restraints 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 requirements. Applicants will comply with all applicable City of Austin requirements.

- 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.
- 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)
- Additional electric assessments 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.

CONSTRUCTION SEQUENCE

- THE FOLLOWING IS A SEQUENCE OF CONSTRUCTION:
- CONTACT THE ENVIRONMENTAL INSPECTOR AT LEAST 72 HOURS PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING.
 - INSTALL ENVIRONMENTAL SEDIMENTATION CONTROLS (AS NEEDED).
 - INSTALL TREE PROTECTION CONTROLS (AS NEEDED).
 - INSTALL NATURAL AREA PROTECTION (AS REQUIRED).
 - HOLD PRE-CONSTRUCTION MEETING WITH ENVIRONMENTAL INSPECTOR (512) 974-2275.
 - MODIFY EXISTING BULKHEAD.
 - REVEGETATE DISTURBED AREAS.
 - SUBMIT ENGINEER CONCURRENCE LETTER TO THE CITY OF AUSTIN.
 - OBTAIN FINAL INSPECTION RELEASE ONCE VEGETATION HAS 95% COVERAGE.
 - REMOVE TEMPORARY EROSION/SEDIMENTATION AND PROTECTION CONTROLS.

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

TEMPORARY VEGETATIVE STABILIZATION:

- 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 Grass 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.
- From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 SF.
 - 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.
 - Hydrumatch shall comply with Table 1, below.
 - Temporary erosion control shall be acceptable when the grass has grown at least 1 1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.
 - When required, native grass seeding shall comply with requirements of the City of Austin Environmental Criteria Manual.

Table 1: Hydrumatching for Temporary Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
70/30 Wood Cellulose Blend	70% Wood 30% Mulchpaper 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf
Wood Fiber Mulch	96% Wood 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf

AUPPERLE COMPANY
 Engineering, Planning & Development Services
 2219 Westlake Drive #110, Austin, Texas 78746 512 329-8241
 Texas State Professional Engineers Registration Number: P-898

2700 EDGEWATER DRIVE, SP-2010-00620
 COVER SHEET & NOTES
 DESIGNED: DMM
 APPROVED: [Signature]
 SCALE: NTS
 2700 EDGEWATER DR.
 DATE: MARCH 26, 2010
 SHEET 1 of 2
 5P-2010-00620

C1

May 6, 2010

16. & Mrs. Helen C. ...
1000 Cedar Hill, Unit 11
Austin, TX 78758-2000

1616. Chisholm Wetlands
2000 Reginald Rd.
Austin, Texas

Job #: 20090701

Client: Helen & Peter

On Thursday, May 6, 2010, a representative of the above-mentioned site to observe the existing conditions in order to address the project. The wetland and riparian areas to be delineated were observed on May 6, 2010, and the results of the survey are provided herein.

Consistent with the requirements of the project, the delineation of the wetland and riparian areas is based on a visual inspection of the site, and the delineation is subject to change if additional information is provided. The delineation is based on the best available information and is subject to change if additional information is provided.

Transects, based on our observations, to be used to monitor the wetland and riparian areas are shown on the site plan. It is recommended that the transects be used to monitor the wetland and riparian areas and that any changes in the wetland and riparian areas be reported to the engineer.

Standard: 1000 Reginald Rd., Unit 11, Austin, TX 78758-2000

N 54°33'57" E 108.10'
N 54°02'03" E 109.72' PER DEP

LANDSCAPE SCHEDULE FOR WETLAND AREA PLAN

PLANTING PLAN:

The shoreline edges will be planted with appropriate wetland species including the salvaged rushes, cyperus, etc.

TREE LIST

TAG NO.	COMMON NAME	SIZE
40	PECAN	10"
42	PECAN	32"
74	PECAN	16"
75	PECAN	19"
78	PECAN	20"
80	PECAN	26"

WETLAND AREA RESTORATION PROCESS:

1. Plant the following: 1g (1 per 10 s.f.) or 5g (1 per 25 s.f.) species native to riparian areas of the eastern hill country, including wetland vegetation from locations nearby.
2. Seeding of grasses and forbs.
3. Management of exotic species.

The following plants are potential species to be sourced, and planted or seeded:

GRASSES:
 gamma grass (*Trisetum corymbosum*)
 midland grass (*Sorghastrum nutans*)
 sedoata grama (*Diochloa curypanensis*)
 little bluestem (*Schizanthus scoparium*)
 bushy bluestem (*Andropogon glomeratus*)
 inland sea oats (*Chasmodon latifolium*)
 Canada wildrye (*Elymus canadensis*)

FORBS:
 meadow sunflower (*Helianthus maximiliani*)
 claspwing coneflower (*Rudbeckia arthropalea*)
 pink evening primrose (*Oenothera speciosa*)
 frostweed (*Helianthemum canadense*)
 tropical sage (*Salvia coccinea*)

AQUATIC:
 bacopa (*Bacopa monnina*)
 cyperus (*Cyperus sp.*)
 yellow water lily (*Nymphaea odorata*)
 bulrush (*Scirpus californicus*)
 pickerweed (*Potamogeton zosterifolius*)
 pondweed (*Potamogeton pectinatus*)
 four-square sparganium (*Sagittaria arifolia*)
 arrowhead (*Sagittaria latifolia*)
 star grass (*Dichromena colorata*)

LEGEND

- - - 905 - - DOTTING GRADING CONTOUR
- — — PROPERTY LINE
- - - LOC - - LIMITS OF CONSTRUCTION
- - - SLOC - - SILT FENCE + LOC
- - - OE - - OVERHEAD ELECTRIC
- - - TP - - TREE FENCE PROTECTION
- - - CWQZ - - CRITICAL WATER QUALITY ZONE
- - - ZONING DISTRICTS
- (125) - - PER APRIL 6, 1996 SURVEY

CHAIN LINK FENCE

TRENCH CROSS SECTION

STANDARD SYMBOL FOR SILT FENCE (SF)

CRITICAL ROOT ZONE

NOTES:

1. SILT FENCE POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A MINIMUM OF 10 FT SPACING. EACH POST MUST BE EMBEDDED A MINIMUM OF 300 mm (11") IN THE GROUND.
2. THE TOP OF THE SILT FENCE SHALL BE TYPED WITH A SHADE OR COLOR TO BE VISIBLE FROM THE AIR. THE TOP OF THE SILT FENCE SHALL BE TYPED WITH A SHADE OR COLOR TO BE VISIBLE FROM THE AIR. THE TOP OF THE SILT FENCE SHALL BE TYPED WITH A SHADE OR COLOR TO BE VISIBLE FROM THE AIR.
3. THE TRENCH MUST BE A MINIMUM OF 120 mm (4.75") DEEP AND 150 mm (6") WIDE. THE TRENCH SHALL BE BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHALL BE SECURELY FASTENED TO PACKED SILT FENCE POSTS.
5. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR RE-INSTALLMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY DRY OR WHEN THE TRENCH IS NO LONGER NEEDED TO PREVENT FLOODING OR EROSION.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6") OR MORE. SILT SHALL NOT BE DISCHARGED INTO ANY ADJACENT WATER BODY.

CITY OF AUSTIN
UNDESIGNED PROFESSIONAL ENGINEERING
REGISTERED PROFESSIONAL ENGINEER
11/1/2009
M. J. PATRICK, M.E.P.E.
10001

TRIE PROTECTION FENCE
TYPE A - CHAIN LINK

CITY OF AUSTIN
UNDESIGNED PROFESSIONAL ENGINEERING
REGISTERED PROFESSIONAL ENGINEER
11/1/2009
M. J. PATRICK, M.E.P.E.
10001

SILT FENCE

CITY OF AUSTIN
UNDESIGNED PROFESSIONAL ENGINEERING
REGISTERED PROFESSIONAL ENGINEER
11/1/2009
M. J. PATRICK, M.E.P.E.
10001

HOUSE F.F.E. 505.0'

OPEN AREA UNDER HOUSE

HOUSE SLAB EL. 495.5'

WETLAND VEGETATION

CAPSTONE W/4" OVERHANG

EX. FAILED CONCRETE BULKHEAD TO REMAIN

HISTORIC FILL

LANDSCAPE EDGING, METAL OR MASONRY

EX. 8" CONC. BLOCK BULKHEAD REDUCED HEIGHT

WATER LEVEL 492.8'

8"-12" ROCK RIP RAP

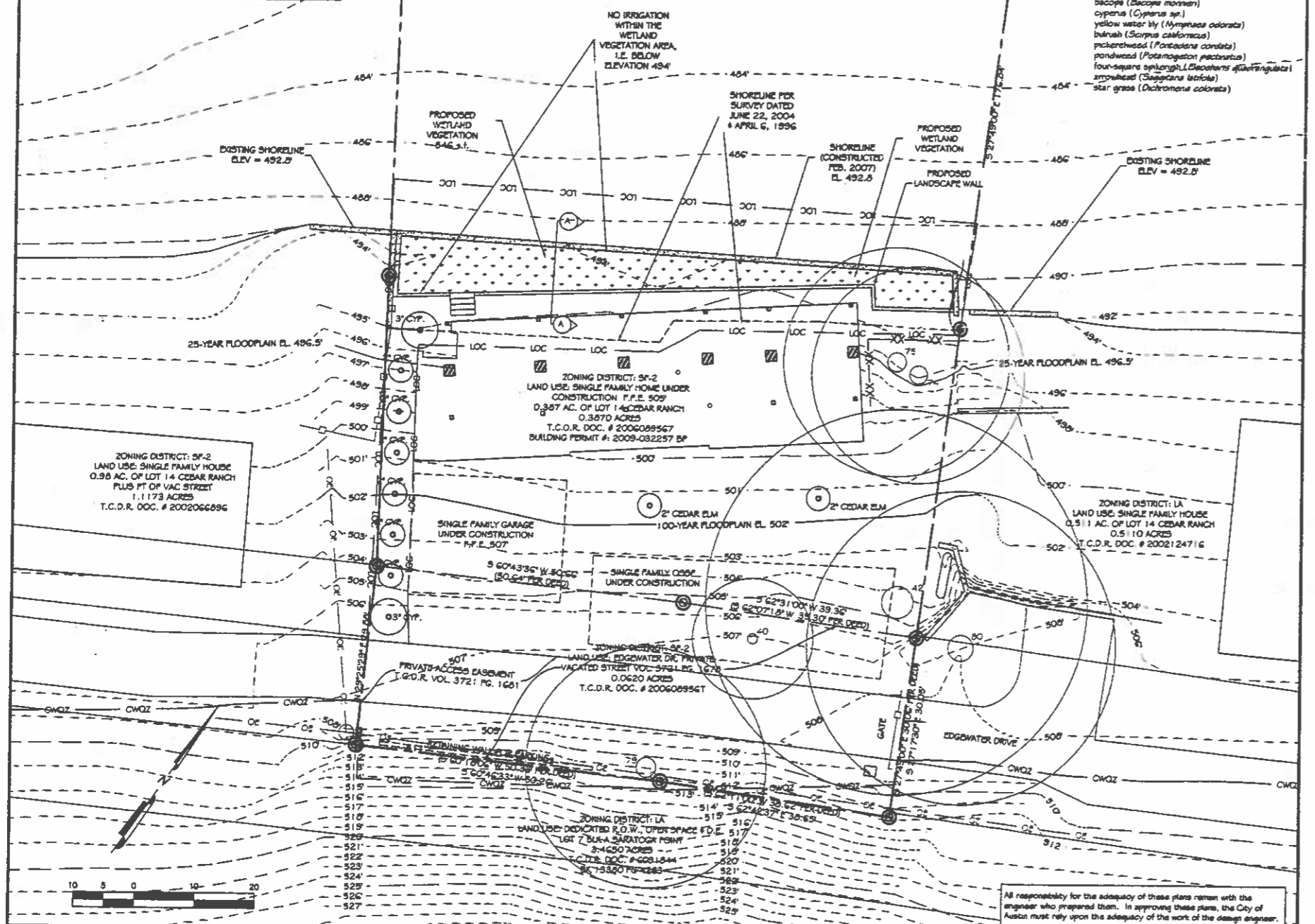
1.7' MAX

1.0' MAX

45°

Bulkhead Section A-A

NTS



UPPERLE COMPANY
Engineering, Planning & Development Services
2219 Westlake Drive #110, Austin, Texas 78746 512 326-8241
Texas Board Of Professional Engineers Registration Number 8-979

2700 EDGEWATER DRIVE

SITE PLAN

DESIGNED: DMH
APPROVED:
SCALE:
2700 EDGEWATER DRIVE
DATE: FEBRUARY 17, 2009
SHEET 2 OF 2

2

5P-2010-0082D

e11