

#### **ITEM FOR ENVIRONMENTAL BOARD AGENDA**

| BOARD MEETING<br>DATE REQUESTED:      | May 6, 2015   |
|---------------------------------------|---|
| NAME & NUMBER<br>OF PROJECT:          | 3337 Far View Drive<br>SP-2014-0135D  |
| NAME OF APPLICANT<br>OR ORGANIZATION: | Aupperle Company<br>Bruce S. Aupperle, P.E., (512) 329-8241   |
| LOCATION:                             | 3337 Far View Drive   |
| <b>PROJECT FILING DATE:</b>           | April 14, 2014  |
| WPD/ERM<br>Staff:                     | Sylvia Pope, (512) 974-3429<br>sylvia.pope@austintexas.gov  |
| PDRD/ENVIRONMENTAL<br>Staff:          | Pamela Abee-Taulli, (512) 974-1879<br>pamela.taulli@austintexas.gov   |
| PDRD/<br>Case Manager:                | Christine Barton-Holmes, (512) 974- 2788<br>Christine.Barton-Holmes @austintexas.gov  |
| WATERSHED:                            | Lake Austin (Water Supply Suburban),<br>Drinking Water Protection Zone  |
| ORDINANCE:                            | Watershed Protection Ordinance (Current Code)   |
| <b>REQUEST:</b>                       | To modify the standard 150-foot width Critical Environmental Feature<br>buffer in order to allow construction of a tram 10 feet wide and 420 feet<br>long that spans 2 canyon rimrocks and a seep within a Critical<br>Environmental Feature (rimrock and seep) buffer corridor, 25-8-<br>281(C)(2)(b). |

STAFF RECOMMENDATION: Recommended, with the following conditions:

1. Per the recommendations of the geotechnical engineer, (MLAW Forensics, Inc.), footing holes should not be drilled into the limestone rock if an obvious facture exists running through the proposed drill location; and

2. A footing-separation distance of 1 foot above and 2 feet below the canyon rimrock CEF will be observed.

**REASONS FOR RECOMMENDATION:** The findings of fact have been met.



#### MEMORANDUM

| TO: | Dr. Mary Gay Maxwell, Chairperson  |
|-----|------------------------------------|
|     | Members of the Environmental Board |

- FROM: Pamela Abee-Taulli, Environmental Review Development Services Department
- **DATE:** April 15, 2014
- **SUBJECT:** 3337 Far View Drive (SP-2014-0135D) 3337 Far View Drive
- Variance Request: Variance from LDC 25-8-281(C)(2)(b) Construction within a Critical Environmental Buffer Zone.

Owner of residence is seeking a variance to modify the standard 150-foot width Critical Environmental Feature buffer in order to allow construction within a Critical Environmental Feature (rimrock and seep) buffer of a tram corridor 10 feet wide and 420 feet long that spans 2 canyon rimrocks and a seep, 25-8-281(C)(2)(b).

#### **Description of Property**

The project site is located partially within in the Edwards Aquifer Zone Buffer, within the Lake Austin Watershed, and within the city limits of the City of Austin. Surface drainage is south down steep slopes toward Lake Austin (Colorado River). Surface elevations on the tract range from approximately 493 feet at the shoreline to approximately 800 feet near Far View Drive, with an average percent slope or gradient of approximately 50%.

The project is located on Lot 1 of the river Point Subdivision, a single-family lot, situated approximately 5 miles south of the intersection of FM 2222 and City Park Road. The principal residence associated with this residential dock will be at 3337 Far View Drive.

#### Existing Topography/Soil Characteristics/Vegetation

The project site is located on slopes with a gradient more than I5 percent, is within a critical water quality zone, and is located within the I00-year flood plain of Lake Austin. It is not located over a karst aquifer or within an area draining to a karst aquifer or reservoir.

The underlying lithology consists of the Cretaceous Glen Rose Limestone.

The majority of the tract is undeveloped and dominated by dense Ashe juniper (Juniperus ashei).

#### Critical Environmental Features/Endangered Species

Staff has verified that there are two CEFs consisting of two segments of canyon rimrock that extend across the tract at approximately the 700-foot contour, and the 590-foot contour. The estimated gradient is 83% along the upper rimrock and 133% along the lower. A seep at the base of the rimrock outcrop was identified by staff.

The site is located within the endangered species area, specifically, it is located within Golden Cheeked Warbler habitat.

#### Water/Wastewater

There are no water and wastewater improvements proposed with this project.

#### Variance Requests

The variances being requested by this project are as follows:

#### Variance from LDC 25-8-281(C)(2)(b) Construction within a Critical Environmental Buffer Zone.

Proposing modification of the standard 150-foot width Critical Environmental Feature buffer in order to allow construction within a Critical Environmental Feature (rimrock and seep) buffer of a tram corridor 10 feet wide and 420 feet long that spans 2 canyon rimrocks and a seep, 25-8-281(C)(2)(b).

#### Similar Cases

The following projects had similar issues and were recommended by the Environmental Board and approved by the Planning Commission:

- 2908 Scenic Drive Tram (SP-2013-0295DS)
  - Construction of tram within 150 feet of rimrock
  - Planning Commission approval: December 19, 2014
  - 5 Humboldt Lane (SP-2013-0133D)
    - Trail, stairs, and boat dock in CEF buffer.
    - Planning Commission approval: February 25, 2014

#### **Conditions**

Staff recommends granting the variance with the following conditions:

- 1. Per the recommendations of the geotechnical engineer, (MLAW Forensics, Inc.), footing holes should not be drilled into the limestone rock if an obvious facture exists running through the proposed drill location; and
- 2. A footing-separation distance of 1 foot above and 2 feet below the canyon rimrock CEF will be observed.

If you have any questions or need additional information, please feel free to contact Pamela Abee-Taulli at 512-974-1897.

#### **Recommendations**

Staff recommends approval of the variance request because the findings of fact have been met.



#### Development Services Department Staff Recommendations Concerning Required Findings Critical Environmental Feature Buffer

| Application Name:<br>Application Case No: | 3337 Far View Drive<br>SP-2014-0135D   |
|---|--|
| Code Reference:                           | Land Development Code Section 25-8-281(C)(2)(b) Construction in a<br>Critical Environmental Feature Buffer   |
| Variance Request:                         | To modify the standard 150-foot width Critical Environmental<br>Feature buffer in order to allow construction of a tram 10 feet wide<br>and 420 feet long that spans 2 canyon rimrocks and a seep within a<br>Critical Environmental Feature (rimrock and seep) buffer corridor. |

- A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A Water Quality of the City Code:
  - 1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

Yes. There are similarly situated properties on Lake Austin that have received a similar variance to construct a shoreline access within a Critical Environmental Feature buffer for a canyon rimrock.

- 2. The variance:
  - a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

Yes. The applicant will construct the shoreline access tram and restore and revegetate the disturbed area within the canyon rimrock Critical Environmental Feature (CEF) buffer, and therefore minimize disturbance of the CEF buffer.

b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

Yes. There are other trams traversing the steep slope and limestone outcrop that is canyon rimrock on this steep shoreline of Lake Austin. The steep slope and ledges make it difficult to construct stairs or other types of shoreline access. The tram will be the only shoreline access for this lakefront property.

c) Does not create a significant probability of harmful environmental consequences; and

Yes. The proposed construction of a tram does not create a significant probability of harmful environmental consequences. Tram posts will be installed no closer than 1 foot downslope and 2 feet upslope of the canyon rimrock. The client's engineer's report states that the tram installation will not cause splitting or damage to the Glen Rose limestone or the canyon rimrock.

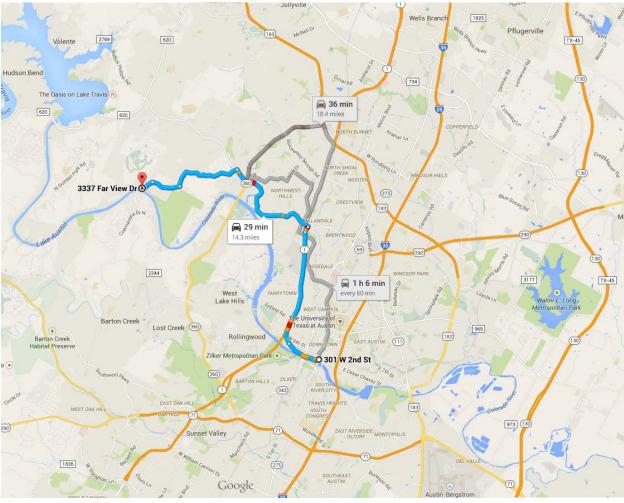
**3**. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

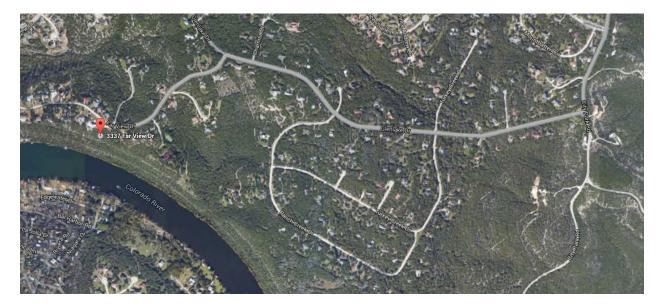
Yes. No structural water quality controls are required for single family residential construction; erosion and sedimentation controls will be used and the limits of construction will be revegetated where there is soil and a moderate slope. The resulting water quality will be the same as achievable without the variance.

| Environmental Reviewer            |                    |
|-----------------------------------|--------------------|
|                                   | Pamela Abee-Taulli |
| Environmental Program Coordinator |                    |
| C                                 | Sue Barnett        |
| Environmental Officer             |                    |
|                                   | Chuck Lesniak      |
|                                   |                    |

Staff may recommend approval of a variance after answering all applicable determinations in the affirmative (YES).

LOCATION MAP Driving directions to 3337 Far View Dr.





Drive 14.1 miles, 32 min

# Google

Directions from 301 W 2nd St to 3337 Far View Dr

## o 301 W 2nd St

Austin, TX 78701

Head west on W 2nd St/Live Oak St/W Willie Nelson Blvd toward Guadalupe St

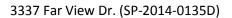
| ke | W Cesar Chavez St, Exposition Blvd, Mt Bonnell Rd and Ranch to Market 2222 W to City Park Rd |               |
|----|--|---------------|
|    |  | 9.9 mi / 23 n |
| 2  | 2. Turn left onto Guadalupe St   | 25            |
| 3  | 3. Turn right onto W Cesar Chavez St/Water Ave   | 35            |
|    | 1 Continue to follow W Cesar Chavez St   | 1.0           |
| 4  | 4. Keep <b>right</b> at the fork, follow signs for <b>TX-1 Loop N</b>                        | 1.2           |
| 5  | 5. Keep right at the fork, follow signs for Enfield Road and merge onto Newfield Ln          | 0.6           |
| 6  | 6. Slight left to stay on Newfield Ln  | 0.3           |
| 7  | 7. Turn left onto Enfield Rd   |               |
| 8  | 8. Turn right onto Exposition Blvd   | 0.6           |
| 9  | 9. Turn left onto W 35th St  | 1.5           |
| 1  | 10. Slight left onto Old Bull Creek Rd   | 0.5           |
|    |  | 0.2           |

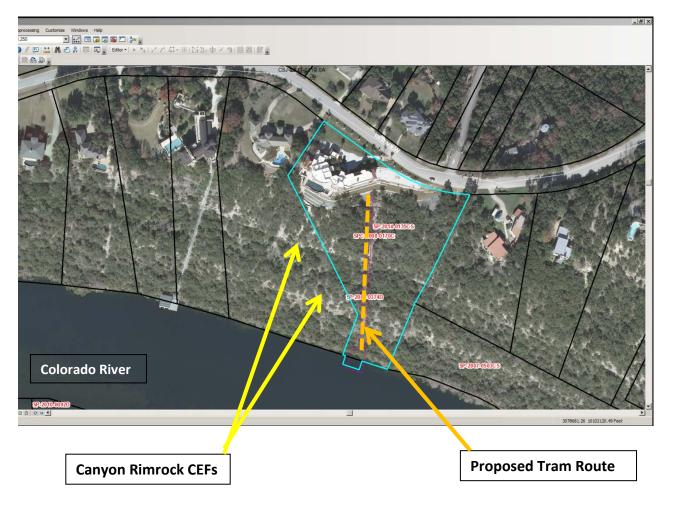
Map data ©2015 Google

| Con | ntinue on City Park Rd. Drive to Far View Dr  |            |
|-----|---|------------|
|     |   | 4.2 mi / 8 |
| ٦   | 13. Turn left onto City Park Rd               |            |
| •   | 14. Turn <b>right</b> onto <b>Glenlake Dr</b> | 2.         |
| ר   | 15. Turn left onto Far View Dr                | 1.         |
|     | (i) Destination will be on the left           |            |

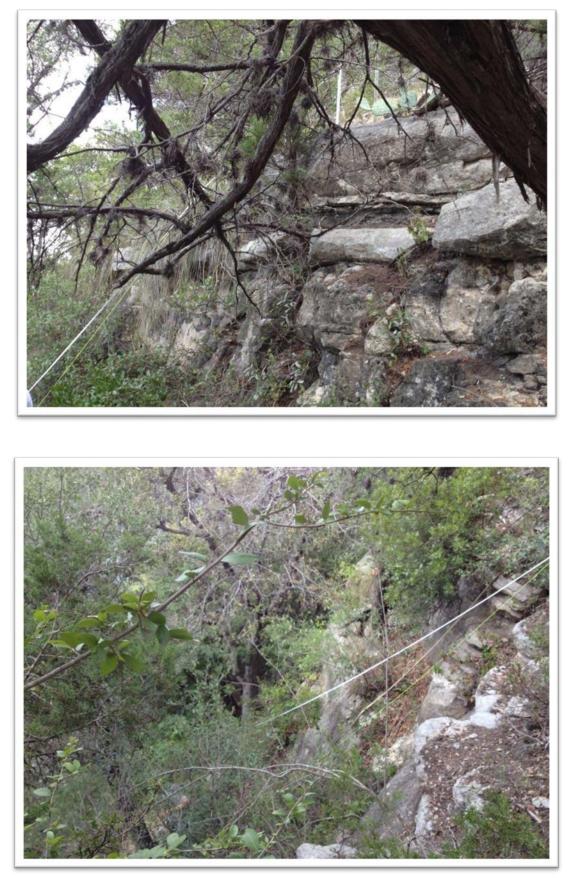
Austin, TX 78730

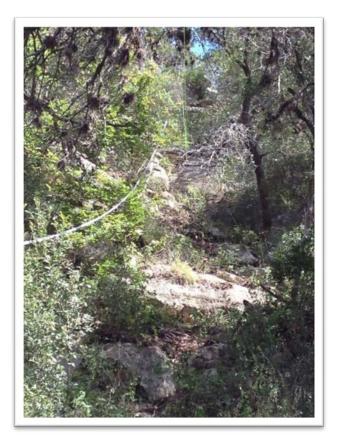
These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.



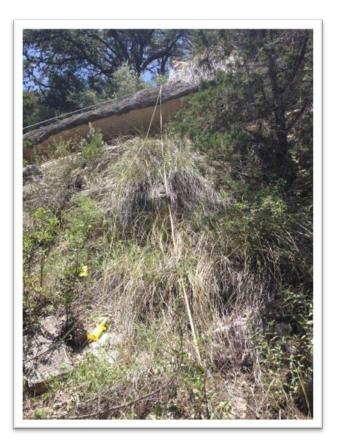


#### Staff Site Photos 3337 Far View Drive















March 31, 2015

Aupperle Company 10088 Circleview Drive, Austin, Texas 78733 Phone & Fax (512) 329-8241 Email: Aupperle@att.net

Director of Planning and Development Review City of Austin P.O. Box 1088 Austin, Texas 78767

Re: 3337 Far View Drive Revised Request for Variance to LDC Section 25-8-281(C)(2)(b) Construction within a Critical Environmental Features Buffer Zone

Director:

The proposed construction includes a two-slip boat dock, necessary access and appurtenances at the referenced address. No bulkhead construction is proposed. The site contains four critical environmental features as defined by the current Land Development Code, three rim rocks and a seep. The rim rocks and seep are located on land. The proposed boat dock and tram, i.e. necessary access, are located within 150 feet of the critical environmental features. The strict adherence of 150-foot buffer zone for the critical environmental features would prohibit most construction on this tract and all construction along the shoreline.

Please note that this subdivision, River Pointe, was not platted under the current land development code. This lot in River Pointe was platted under the Lake Austin Watershed Ordinance, which did not require setbacks or buffers for critical environmental features at the time of platting.

This letter is provided to you in support of a variance to allow construction within the critical environmental feature buffer zone. For the referenced project we submit the following support arguments in the format associated with Appendix U of the City of Austin Environmental Criteria Manual.

1. Are there special circumstances applicable to the property involved where strict application deprives such property owner of privileges or safety enjoyed by other similarly situated property with similarly timed development? YES/-NO

This application is requesting to construct a safe method of shoreline access and a dock within a CEF setback. The proposed construction is over very steep slopes to gain access to the Lake Austin shoreline and a dock thereon. There are currently many docks and shoreline accesses that traverse CEF setback areas as defined by Code that were either grandfathered or were granted this variance administratively. Without adequate and safe shoreline access the property owners would not have the enjoyment of their lot's shoreline area or a dock facility. The proposed shoreline access construction is necessary and is an appurtenances to the dock and the shoreline area and as is permitted in the CWQZ. 2. Does the project demonstrate minimum departures from the terms of the ordinance necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use, and which will not create significant probabilities of harmful environmental consequences? YES/-NO

This application proposes to construct shoreline access in order to safely access to the shoreline. The construction methodology has a minimum footprint, disturbed areas will be re-vegetated and properly screened as required by Code with herbaceous and woody plants.

3. The proposal does not provide special privileges not enjoyed by other similarly situated properties with similarly timed development, and is not based on a special or unique condition which was created as a result of the method by which a person voluntarily subdivided land. YES/-NO

A variance to construct shoreline access and dock within a CEF buffer is created by the topography and geology of the site, not be the nature of the subdivision.

4. Does the proposal demonstrate water quality equal to or better than would have resulted had development proceeded without the variance? YES/ NO This application proposes to re-vegetate any disturbed areas and the impervious cover is nominal. The resulting water quality will not be degraded.

5. For a variance from the requirements for development within the Critical Water Quality Zone and/or Water Quality Transition Zone: Does the application of restrictions leave the property owner without any reasonable, economic use of the entire property? YES/NO

The proposed construction is allowed by Code in the CWQZ and there is no WQTZ for Lake Austin.

Your support of the requested variance will be greatly appreciated. Please call if you have any questions.

Very truly yours,

Aupperle Company

m-le

Bruce S. Aupperle, P.E.



## **ENVIRONMENTAL BOARD VARIANCE APPLICATION TEMPLATE**

Insert Applicant Variance Request Letter here.

#### **PROJECT DESCRIPTION**

**Applicant Contact Information** 

| Name of Applicant                | Steve Dobbs  |  |  |
|----------------------------------|--|--|--|
| Street Address                   | 3337 Far View Drive  |  |  |
| City State ZIP Code              | Austin, TX 78730   |  |  |
| Work Phone                       | 713-501-2721   |  |  |
| E-Mail Address                   | stevebdobbs@gmail.com  |  |  |
| Variance Case Information        |  |  |  |
| Case Name                        | 3337 Far View Drive  |  |  |
| Case Number                      | SP-2014-0135D  |  |  |
| Address or Location              | 3337 Far View Drive  |  |  |
| Environmental Reviewer<br>Name   | Pamela Abee-Taulli   |  |  |
| Applicable Ordinance             | 25-8-281(C)(2)(b)  |  |  |
| Watershed Name                   | Lake Austin  |  |  |
| Watershed Classification         | Urban       Suburban         Water Supply Rural       Barton Springs Zone  |  |  |
| Edwards Aquifer Recharge<br>Zone | <ul> <li>Barton Springs Segment</li> <li>Northern Edwards Segment</li> <li>Not in Edwards Aquifer Zones</li> </ul> |  |  |

City of Austin | Environmental Board Variance Application Guide 1

| Edwards Aquifer<br>Contributing Zone            | 🗆 Yes 🛄 No   |
|---|--|
| Distance to Nearest<br>Classified Waterway      | Zero   |
| Water and Waste Water service to be provided by | N/A  |
| Request   | The variance request is as follows (City code references): Variance to LDC Section 25-8-281(C)(2)(b) Construction within a Critical Environmental Features Buffer Zone |

| Impervious cover<br>square footage:<br>acreage:<br>percentage:<br>Provide general  | Existing<br>N/A<br>N/A<br>N/A           | Proposed<br>N/A<br>N/A<br>N/A |
|--|---|-------------------------------|
| description of the<br>property (slope<br>range, elevation<br>range, summary of<br>vegetation / trees,<br>summary of the<br>geology, CWQZ,<br>WQTZ, CEFs,<br>floodplain, heritage<br>trees, any other<br>notable or<br>outstanding<br>characteristics of the<br>property) | See attached Engineer's Summary Letter. |                               |

| Clearly indicate in what<br>way the proposed project | Construction of two-slip dock, shoreline access and appurtenances will |
|--|--|
|--|--|

| does not comply with<br>current Code (include<br>maps and exhibits) | cross CEF setback. |
|---|--------------------|
|   |                    |

#### FINDINGS OF FACT

As required in LDC Section 25-8-41, in order to grant a variance the Land Use Commission must make the following findings of fact:

Include an explanation with each applicable finding of fact.

Project: 3337 Far View

Ordinance: 25-8-281(C)(2)(b)

- A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:
  - 1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

Yes/No This application is requesting to construct a safe method of shoreline access a boat dock within a CEF setback. The proposed access construction is over very steep slopes to gain access to the Lake Austin shoreline and a dock thereon. There are currently many shoreline accesses that traverse CEF setback areas as defined by Code that were either grandfathered or were granted this variance administratively.

- 2. The variance:
  - a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

Yes/<del>No</del> This subdivision, River Pointe, was not platted under the current land development code. This lot in River Pointe was platted under the Lake Austin Watershed Ordinance, which did not require setbacks or buffers for critical environmental features at the time of platting.

b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

Yes/No This application proposes to construct shoreline access with boat dock in order to safely access the shoreline. Without adequate and safe shoreline access the property owners would not have the enjoyment of their lot's shoreline area or a dock facility. The proposed shoreline access construction is necessary and is an appurtenances to the dock and the shoreline area and as is permitted construction within the CWQZ.

c) Does not create a significant probability of harmful environmental consequences; and

Yes/<del>No</del> The construction methodology has a minimum footprint, does not propose to remove any trees greater than 8" diameter, disturbed areas will be re-vegetated and properly screened as required by Code with herbaceous and woody plants.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes/<del>No</del> This application proposes to re-vegetate any disturbed areas and the impervious cover is nominal. The resulting water quality will not be degraded.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):
  - 1. The criteria for granting a variance in Section A are met;

Yes/No [summary of basis for determination]

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

Yes/No [summary of basis for determination]

3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

Yes/No [summary of basis for determination]

\*\*Variance approval requires all above affirmative findings.



April 28, 2014

Director of Planning and Development Review City of Austin P.O. Box 1088 Austin, Texas 78767

Re: Environmental Assessment Report, Engineer's Floodway Encroachment Certification and Summary Letter for a Single-Family Boat Dock on Lake Austin at 3337 Far View Drive, Austin Texas

Dear Director:

This project proposes to construct a new boat dock, tram and appurtenances. A general description of the proposed project follows.

#### Overview

This project is located on Lot 1 of the River Pointe Subdivision, a single-family lot, situated approximately 5 miles south of the intersection of FM 2222 and City Park Road. The plat is recorded in Travis County Deed Records, Volume 86, Pages 98B-D. The property is located within the city limits of the City of Austin. The principal residence associated with this residential dock will be at 3337 Far View Drive. The project site is located within the Lake Austin watershed. The new dock width will be 26 feet or 20% of the shoreline width. Access for construction activities will be by water and land. All dock piles will be 6-5/8" driven steel piles. All dock piles will be driven to 0.5" refusal per blow. There will be no shoreline improvements. The dock improvements will be built this coming summer.

#### Environmental Resource Inventory (a.k.a Environmental Assessment)

The project site is not located over a karst aquifer, is not within an area draining to a karst aquifer or reservoir, is not within a water quality transition zone, is within a critical water quality zone, is located on slopes with a gradient more than 15 percent, and is located within the 100-year flood plain of Lake Austin. The F.E.M.A. flood plain information is attached and F.I.R.M information is included on the cover sheet. Photographs of the site and shoreline area are attached.

*Hydrogeologic Element:* See attached report prepared by SWCA dated April 18, 2014. The project is 100% over Lake Austin and runoff from the dock should not propose any harm to the quality or quantity of recharge at significant point recharge features.

*Vegetation Element*: The proposed construction preserves to the greatest extent practicable the significant trees and other vegetation at the single-family site. No trees greater than eight inches in diameter within the limits of construction will be removed for the proposed dock and tram.

#### April 28, 2014 Director of Planning and Development Review

Page 2 of 2

*Wastewater Element*: No wastewater or water service is proposed for this project. Therefore, justifications, explanations, descriptions, techniques, standards or calculations regarding wastewater service are not included herein.

#### Engineer's Certification - Floodway Encroachment - LDC 25 -12 G103.5

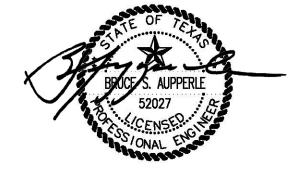
The proposed dock will not increase the rate of storm runoff within the Colorado River watershed. The openness and profile of the proposed dock will not adversely obstructive flood flows relative to the existing shoreline protrusions and improvement and will not increase the level of the design flood of the adjacent Colorado River.

#### Variances, Waivers & Conclusions

The dock construction is located with the critical water quality zone, but a variance to construct the dock facilities in the CWQZ is not required. The dock width does not exceed 20% of the shoreline width. The dock will not extend beyond the 30' shoreline. The dock will not encroach into the 10-foot side yard setback. The tram will cross CEF setbacks and variance letter is attached requesting a variance to Section 25-8-281. The dock project as designed is in compliance with the applicable requirements of the City of Austin Development Code. There will be no adverse impact on the natural and traditional character of the land or waterways. If you have any questions, please feel free to call.

Very truly yours,

Bruce S. Aupperle, P.E.



#### APPENDIX P-1 - 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).
- 2. The placement of erosion/sedimentation controls shall be in accordance with the Environmental Criteria Manual and the approved Erosion and Sedimentation Control Plan. The COA ESC Plan shall be consulted and used as the basis for a TPDES required SWPPP. If a SWPPP is required, it shall be available for review by the City of Austin Environmental Inspector at all times during construction, including at the Pre-Construction meeting. The checklist below contains the basic elements that shall be reviewed for permit approval by COA EV Plan Reviewers as well as COA EV Inspectors.
- 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 owner or owner's representative shall notify the Planning and Development Review Department, 974-2278, at least three days prior to the meeting date. COA approved ESC Plan and TPDES SWPPP (if required) should be reviewed by COA EV Inspector at this time.
- 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 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.
- 5. The contractor is required to provide a certified inspector with either a Certified Professional in Erosion and Sediment Control (CPESC), Certified Erosion, Sediment and Stormwater-Inspector (CESSWI) or Certified Inspector of Sedimentation and Erosion Controls (CISEC) certification 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. 6015.3(A)]. Do not add topsoil within the critical root zone of existing trees. The topsoil shall be composed of 4 parts of soil mixed with 1 part compost, by volume. The compost shall meet the definition of compost as defined by TxDOT Specification Item IGI. The soil shall be locally available native soil that meets the following specifications:

Shall be free of trash, weeds, deleterious materials, rocks, and debris.

- IOO% shall pass through a 1.5-inch (38-mm) screen.
- Soil to be a loamy material that meets the requirements of the table below in accordance with the USDA textural triangle. Soil known locally as "red death" is not an allowable soil. Textural composition shall meet the following criteria:

| Texture class | Minimum | Maximum |
|---------------|---------|---------|
| Clay          | 5%      | 50%     |
| Silt          | 10%     | 50%     |
| Sand          | 15%     | 67%     |

• An owner/engineer may propose use of onsite salvaged topsoil which does not meet the soil texture class required above by providing a soil analysis and a written statement from a qualified professional in soils, landscape architecture, or agronomy indicating the onsite topsoil will provide an equivalent growth media and specifying what, if any, soil amendments are required.

· Soil amendments shall be worked into the existing onsite topsoil with a disc or tiller to create a well-blended material. Topsoil salvaged from the existing site may often be used, but it should meet the same standards as set forth in these

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

#### EMPORARY VEGETATIVE STABILIZATION:

standards.

. 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 Rve 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.

D. When required, native grass seeding shall comply with requirements of the City of Austin Environmental Criteria Manual.

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.

B. Hydromulch shall comply with Table1, below.

C. 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.

 Table 1: Hydromulching for Temporary Vegetative Stabilization

| Material  | Description  | Longevity  | Typical<br>Applications                 | Application<br>Rates         |  |
|---|--|------------|---|------------------------------|--|
| 100% or any blend of wood,<br>cellulose, straw, and/or cotton<br>plant material (except no mulch<br>shall exceed 30% paper) | 70% or greater<br>Wood/Straw 30%<br>or less Paper or<br>Natural Fibers | 0-3 months | Moderate<br>slopes; from<br>flat to 3:1 | l 500 to 200<br>Ibs per acre |  |

#### ERMANENT VEGETATIVE STABILIZATION:

- . 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 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.
- 2. 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 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  $\frac{1}{2}$  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 1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist. E. When required, native grass seeding shall comply with requirements of the City of Austin Environmental
- Criteria Manual.

| Table 2: Hydromulching for Permanent Vegetative Stabilization |  |                    |   |  |  |  |  |  |  |
|---|--|--------------------|---|--|--|--|--|--|--|
| Material  | ded<br>Aatrix fibers 10% Tachtler  |                    | Typical Applications                                  | Application Rates  |  |  |  |  |  |
| Bonded<br>Fiber Matrix<br>(BFM)                               |  |                    | On slopes up to 2:1<br>and erosive soil<br>conditions | 2500 to 4000 lbs per ac<br>(see manufacturers<br>recommendations)  |  |  |  |  |  |
| Fiber<br>Reinforced<br>Matrix (FRM)                           | 65% Organic defibrated<br>fibers 25% Reinforcing<br>Fibers or less 10% Tackifier | Up to 12<br>months | On slopes up to 1:1<br>and erosive soil<br>conditions | 3000 to 4500 lbs per scre<br>(see manufactures<br>recommendations) |  |  |  |  |  |

10. Developer Information:

Owner: STEVE DOBBS Phone: #713-501-2721

Address: 3337 Far VIEW

Owner's representative responsible for plan alterations:

Owner: STEVE DOBBS Phone: #713-501-2721

Person or firm responsible for erosion/sedimentation control maintenance:

Owner: STEVE DOBBS Phone: #713-501-2721

Person or firm responsible for tree/natural area protection Maintenance:

Owner: STEVE DOBBS Phone: #713-501-2721

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

## **OWNER:**

STEPHEN & DEBORAH DOBBS 3337 Far VIEW DRIVE AUSTIN, TEXAS 78730

**ENGINEER:** 

BRUCE S. AUPPERLE, P.E. AUPPERLE COMPANY 10088 CIRCLEVIEW DRIVE AUSTIN, TEXAS 78733 PHONE (512) 422-7838 FAX (512) 329-8241

### CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

| Ι. | All trees and natural areas shown on plan to be   |
|----|---|
|    | temporary fencing.                                |
| 2. | Protective fences shall be erected according to   |
| 3. | Protective fences shall be installed prior to the |

- grading), and shall be maintained throughout all phases of the construction project.
- 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 order to prevent the following:
- A. Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;
- reviewed and authorized by the City Arborist; C. Wounds to exposed roots, trunk or limbs by mechanical equipment;
- 6. Exceptions to installing fences at tree drip-lines may be permitted in the following cases:
- Where permeable paving is to be installed within a tree's drip-line, erect the fence at the outer
- 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;

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 onstruction line will be permitted.

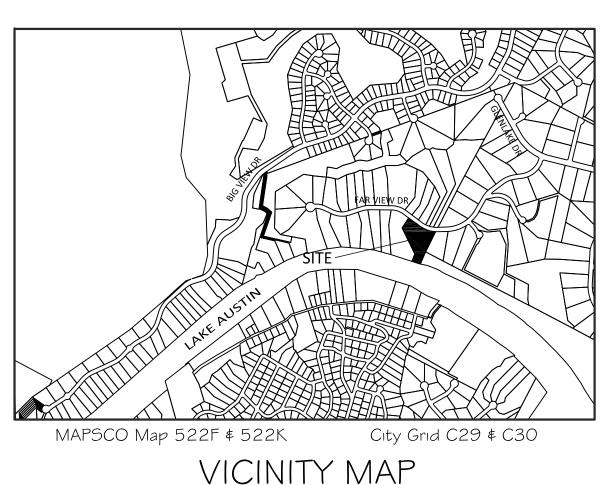
- to the reduced fencing provided.
- preserved.
- due to evaporation tree trunks as possible
- No soil is permitted on the root flare of any tree.
- damage occurs (ripping of branches, etc.).
- from the City Arborist). non-compliance or if a tree sustains damage as a result.

Appendix: P-4 (3/28/2011)

The following is a sequence of construction shall be used for all development. Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan. Install tree protection and initiate tree mitigation measures. (as needed)

- Install natural area protection and floating silt screen. (as required) the required on-site preconstruction meeting.
- (512-974-2550) is required prior to any site disturbance.
- Inspectors' directives, and revised construction schedule relative to the erosion plan.
- Begin boat dock and tram construction activities.
- 9. All loose soil and rock shall either be removed from the site or consolidated, stabilized and revegetated.
- Inspectoran and ERM hydogeologist reviewer (512-974-2550).
- 12. Obtain final inspection release once vegetation has 95% coverage. revegetation resulting from removal of the controls.

# 3337 Far View Drive



Appendix: P-2 (3/28/2011) be preserved shall be protected during construction with

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

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

of branches (drip line), for natural areas, protective fences shall follow the Limit of Construction line, in

Root zone disturbances due to grade changes (greater than 6 inches cut or fill), or trenching not

Other activities detrimental to trees such as chemical storage, cement truck cleaning, and fires.

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;

limits off the permeable paving area (prior to site grading so that this area is graded separately

Where there are severe space constraints due to tract size, or other special requirements,

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

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

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

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

11. No landscape topsoil dressing greater than 4 inches shall be permitted within the drip-line of trees.

12. Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before

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

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

STANDARD SEQUENCE OF CONSTRUCTION

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

4. A pre-construction meeting with Environmental Inspector and an ERM hydogeologist reviewer Temporary erosion and sedimentation controls will be revised, if needed, to comply with City

Dock construction access from water and tram construction access from land.

### WPD ERM staff must inspect the tram post locations following construction. Please contact hydrogeologist review staff at 512-974-2550 and the environmental inspector to conduct final tram post inspection.

10. Complete construction and start revegetation of the site and installation of landscaping.

II. 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

13. 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

#### REMEDIAL TREE CARE NOTES AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS Appendix: P-6 (12/20/2002)

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 quidelines. 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 and 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  $\frac{1}{2}$  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 and Development Review Department P.O. Box 1088, Austin, Texas 78767. This Note should be referenced as item #1 in the Sequence of Construction.

#### GENERAL NOTES

This project is not located over the Edwards Aquifer recharge zone. 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 City Council [Section
- 25-2-1176(H)]. 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. 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. 8. The proposed boat dock must comply with all requirements of LDC 25-2-1174 (Structural
- Requirements), and must comply with Chapter 25-12, Article I (Uniform Building Code) and the Building Criteria Manual. 9. All loose soil and rock will be removed from the site or consolidated, stabilized and revegetated prior
- to acceptance.

#### 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 easements may be required at a later date.

approval.

- 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.
- All work will occur within the limits of construction as shown on the plan. 10. Approval of this Site Plan does not include Building and Fire Code approval nor building permit

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)<br>ADD (A)<br>VOID (V)<br>SHEET NO.'S |  | NET<br>CHANGE<br>IMP. COVER<br>(SQ. FT.) | TOTAL SITE<br>IMP. COVER<br>(SQ. FT.)% | CITY OF AUSTIN<br>APPROVAL DATE | DATE<br>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 for which a site plan exemption has been approved prior to vegetation removal. 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 75' SHORELINE SETBACK shall be restored in accordance with City of Austin 6095 specifications.

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

WATERSHED STATUS: This site is located in PANTHER HOLLOW and LAKE AUSTIN watersheds, 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. 48453CO430H effective 26SEP2008. Floodplain Elevation = 501.3'

LEGAL DESCRIPTION: LOT I, River Point Subd., Doc. #201300003

ADDRESS: 3337 Far View Drive, Austin, Texas 78730

ZONING: RR

USE: Accessory Use to Principal Single-Family Residence at 3337 Far View Drive, Austin, Texas 78730

**RELATED PERMIT NUMBERS:** 

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

COVER SHEET & NOTES EXISTING CONDITIONS

- 3. SITE PLAN DOCK AREA
- 4. DOCK PLAN & ELEVATIONS
- 5. SITE PLAN TRAM AREA 6. TRAM PROFILE & DETAILS
- 7. SUBDIVISION PLAT

PROJECT DESCRIPTION: New 2-slip dock 2-story 26x30' dock, gangway, tram and appurtenances.



Planning Commission

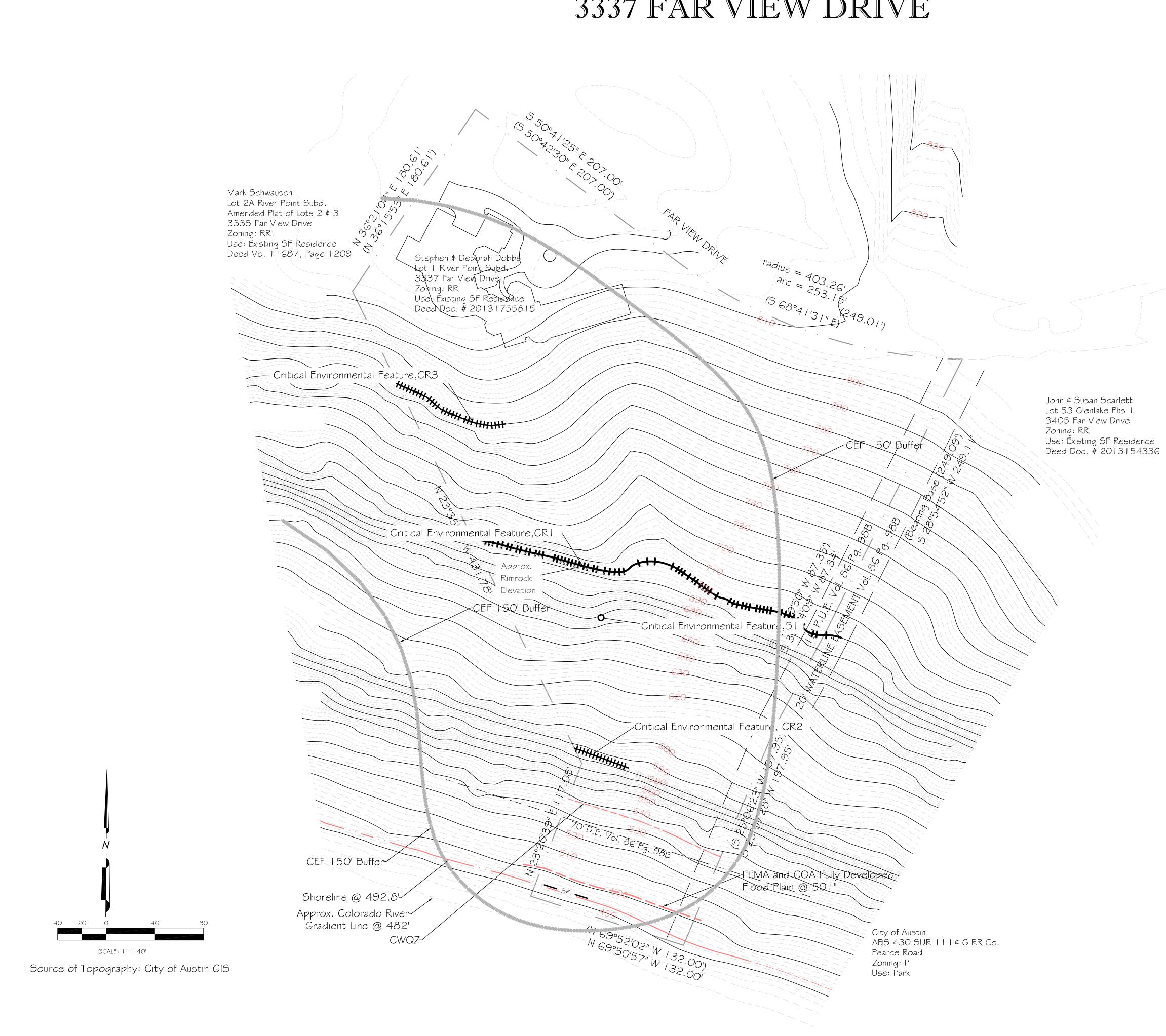
Date

Date

For Director - Planning & Development Review Department

SP-2014-0135D Permit Number

April 7, 2014 Submittal Date



# 3337 FAR VIEW DRIVE

| APPVD  |
|--|
|  |
| REVISION   |
|  |
| DATE   |
| NO NO  |
| SSAPTE OF 754<br>SSAPTE OF 754<br>BAUGE 8. AUPTERIE<br>52027<br>Mar. 9, 2015   |
| AUPPERLE COMPANY<br>Engineering, Planning & Development Services<br>10088 Circleview Drive, Austin, Texas 78734 512 329-8241<br>Texas Board Of Professional Engineers Registration Number F-1994 |
| 3337 FAR VIEW DRIVE<br>EXISTING CONDITIONS   |
| DESIGNED: BSA<br>APPROVED:<br>SCALE: NTS<br>3337 Far View Dr.<br>DATE: Mar. 5, 2015<br>SHEET 2 of 7<br>2<br>DP-2014-0135D  |



Shoreline @ 492.8'

Approx. Colorado River-Gradient Line @ 482' CWQZ-

37 L.F. Mulch Sock @ Shoreline/

Tram Terminates @-Upper Deck @ 508'.

Navigation Lights 2-Story, 2\_Slip 26' x 30' Dock-/

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.

LOC

 $10^{1}$ 

NOTES:

I. A DOCK MUST BE CONTINUOUSLY LIGHTED WITH AMBER LIGHTS BETWEEN SUNSET AND SUNRISE EACH DAY.

2. A DOCK MUST HAVE AT LEAST TWO LIGHT STATIONS. THE LIGHT STATION MUST BE LOCATED ON THE END OF THE DOCK AND ON THE SIDE THAT IS FARTHEST FROM AND PARALLEL TO THE SHORELINE. THE LIGHT MUST BE VISIBLE TO A PROPERLY APPROACHING WATERCRAFT.

3. NAVIGATION LIGHTS MUST HAVE A TWO-BULB FIXTURE, WITH TWO WORKING LIGHT BULBS RATED BETWEEN 7-1/2 AND 25 WATTS INCLUSIVE. LIGHT BULBS OR BULB COVERS MUST BE AMBER, AND WHITE LIGHT MAY NOT RADIATE FROM THE FIXTURE. WEATHERPROOF LAMP HOLDERS AND JUNCTION BOXES ARE REQUIRED. EACH LIGHT FIXTURE MUST BE WIRED WITH A SWITCH OPERATED BY A PHOTOELECTRIC CELL SO THAT THE LIGHTS WILL OPERATE AUTOMATICALLY DURING THE HOURS THAT THE DOCK IS REQUIRED TO BE LIGHTED.

4. ALL WORK SHALL OCCUR WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLAN, AND MATERIALS OR EQUIPMENT MAY BE DELIVERED TO THE SITE FROM THE LANDWARD SIDE OF THIS PROJECT. 5. NO SHORELINE IMPROVEMENTS, EXCEPT GANGWAY & STAIR ACCESS OVER SHORELINE EDGE, ARE AUTHORIZED WITH THIS SITE PLAN. SHORELINE EDGE TO REMAIN UNDISTURBED. 6. NO TREES GREATER THAN 8" IN DIAMETER WILL BE IMPACTED BY THE PROPOSED DOCK CONSTRUCTION.

7. CONTAINERS OF HAZARDOUS MATERIALS, FUEL, OIL, HERBICIDES, INSECTICIDES, FERTILIZERS OR OTHER POLLUTANTS MAY NOT BE STORED ON DOCKS EXTENDING INTO OR ABOVE LAKE AUSTIN. 8. THE PROPOSED BOAT DOCK MUST COMPLY WITH ALL REQUIREMENTS OF LDC 25-2-1174 (STRUCTURAL REQUIREMENTS), AND MUST COMPLY WITH CHAPTER 25-12, ARTICLE 1 (UNIFORM BUILDING CODE) AND THE BUILDING CRITERIA MANUAL.

9. THE PROPOSED BOAT DOCK IS AN ACCESSORY USE TO THE PRINCIPAL SINGLE-FAMILY RESIDENCE AT 3337 FAR VIEW DRIVE, AUSTIN TX.

10. DREDGING IS NOT PROPOSED FOR THIS PROJECT.

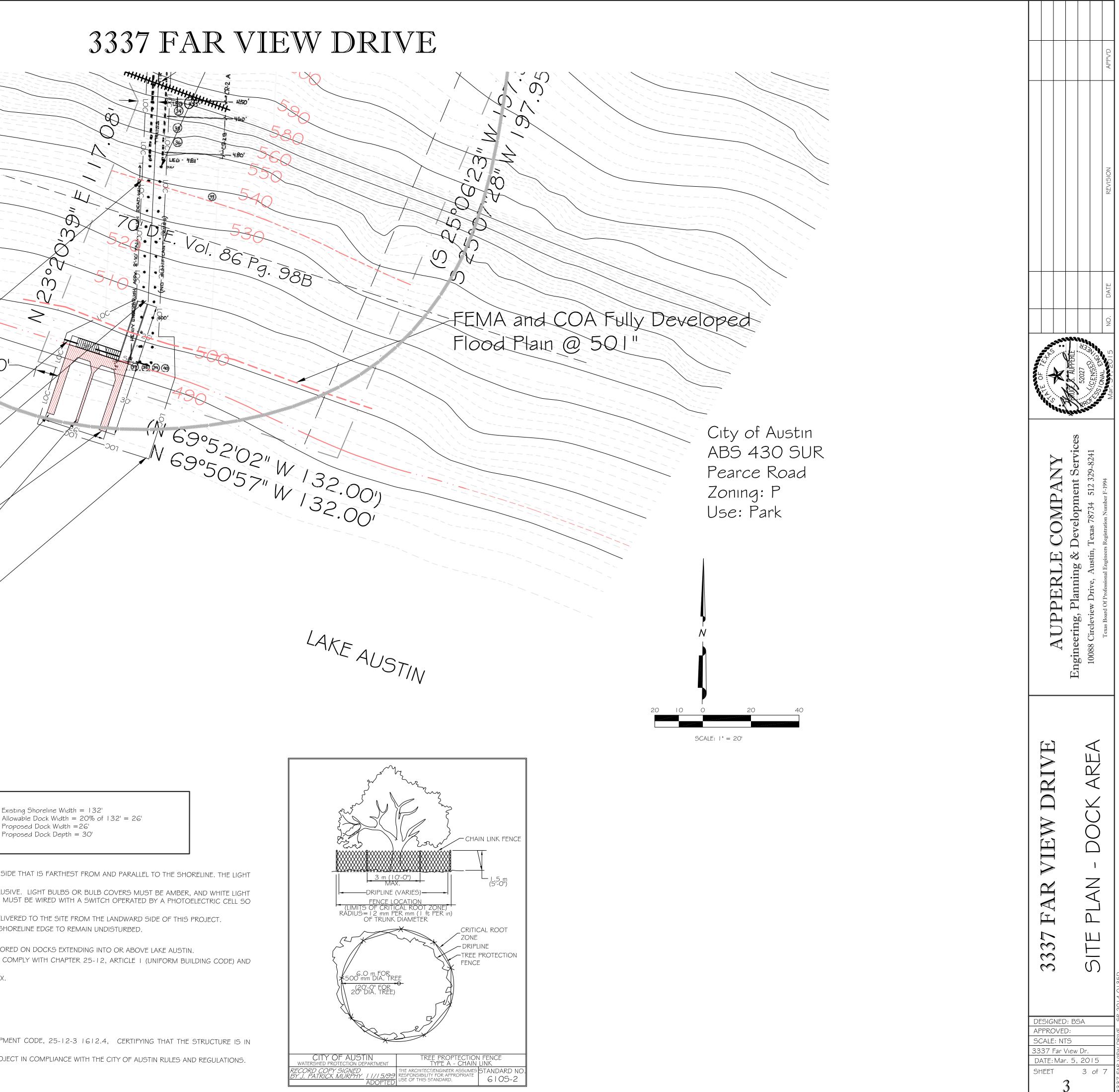
II. WATER AND WASTEWATER UTILITIES ARE NOT PROPOSED FOR THIS PROJECT.

ATTENTION INSPECTOR NOTES:

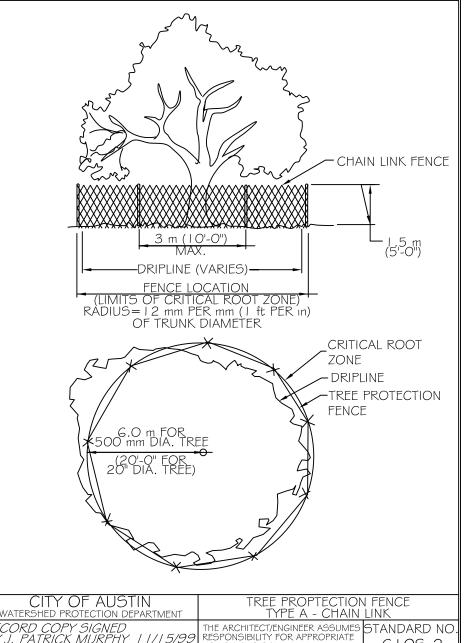
I. COMPLIANCE WITH BUILDING CODE IS REQUIRED AND IS TO BE REVIEWED FOR COMPLIANCE DURING BUILDING CODE REVIEW.

2. 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.

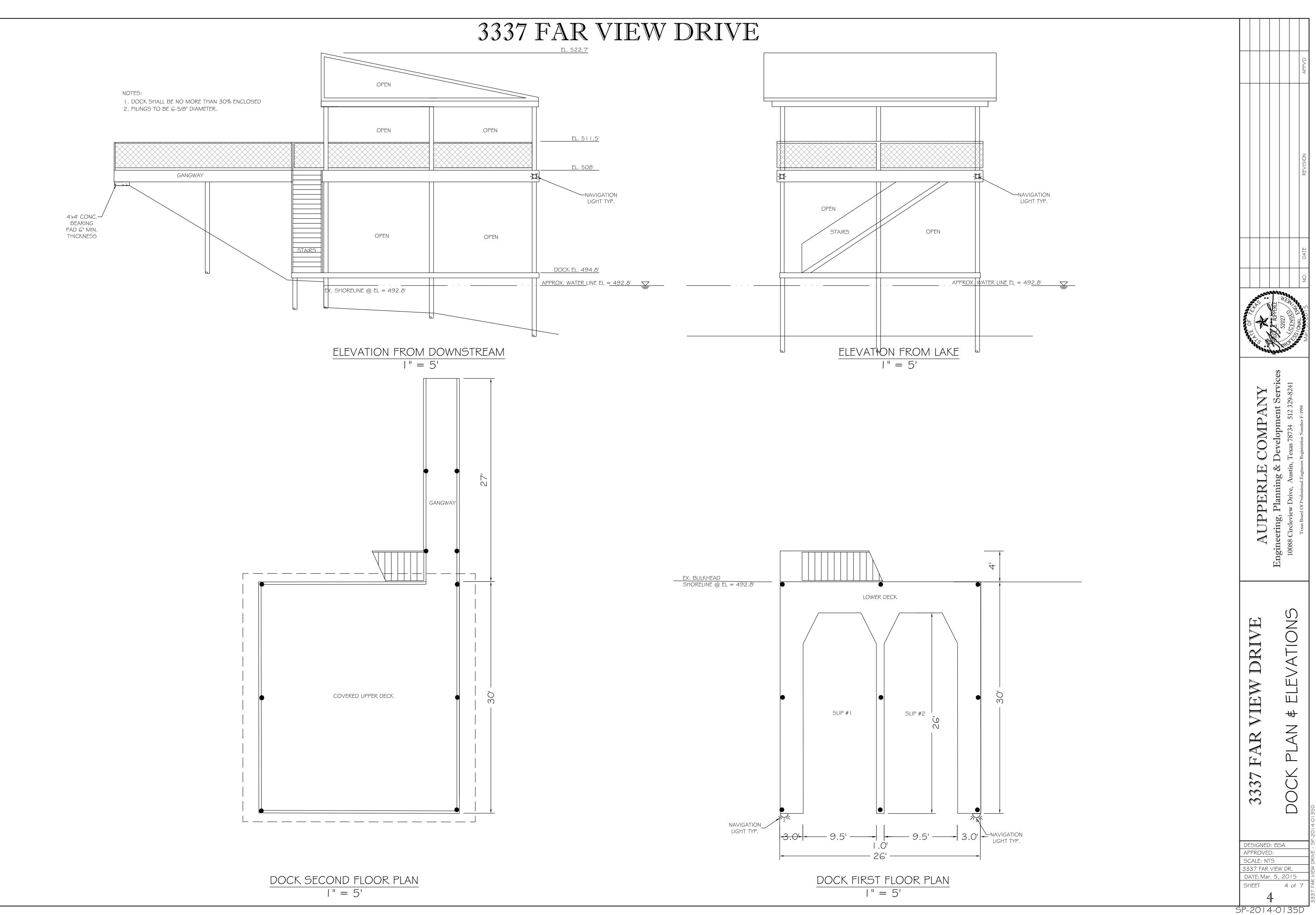
3. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS.

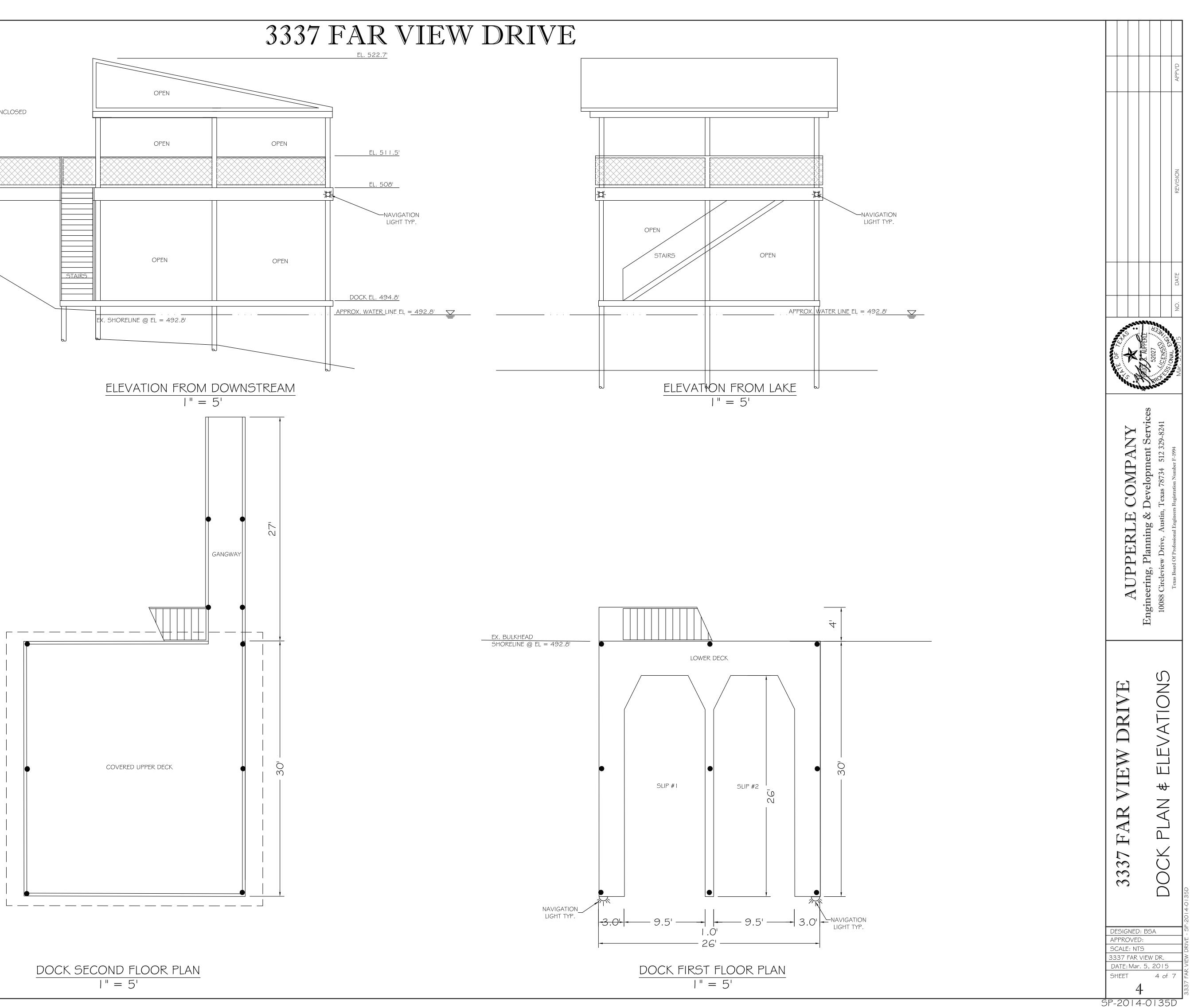


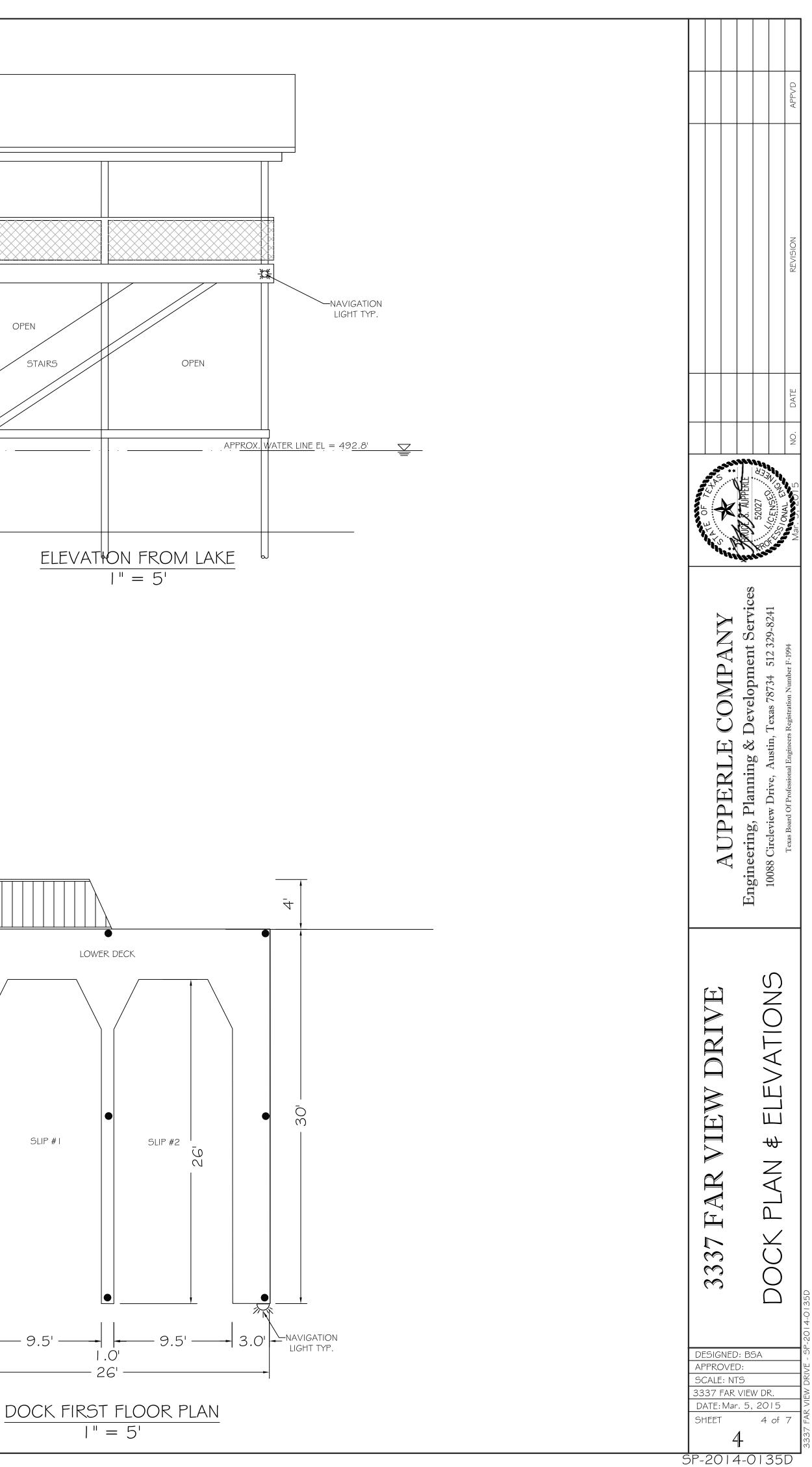
Existing Shoreline Width = 132'Allowable Dock Width = 20% of 132' = 26'Proposed Dock Width = 26'

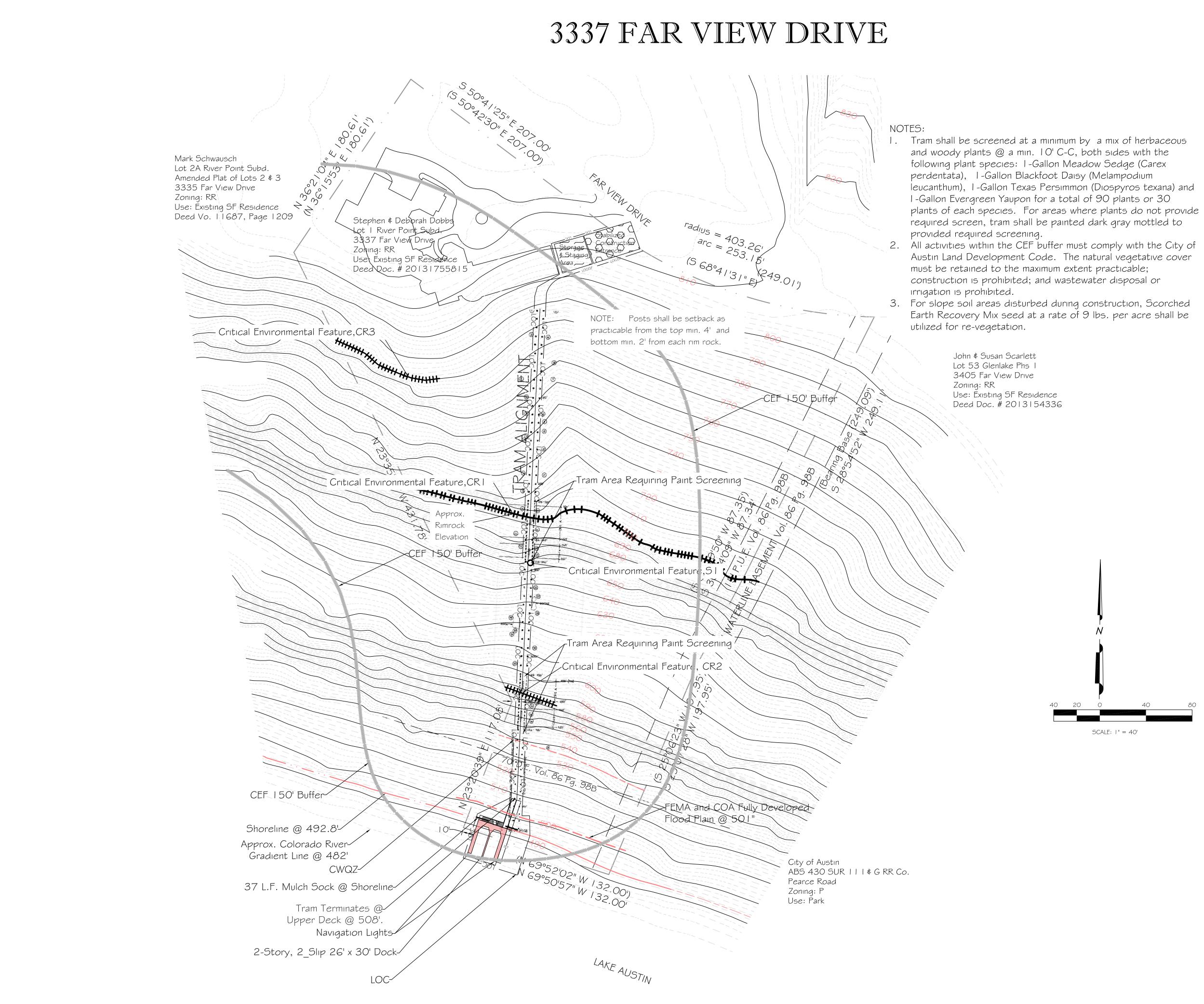


SP-2014-0135D



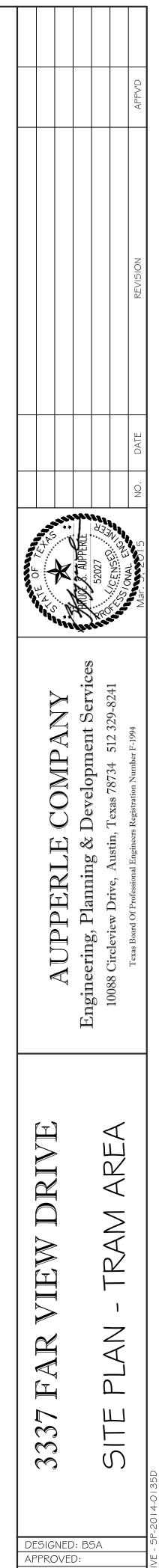




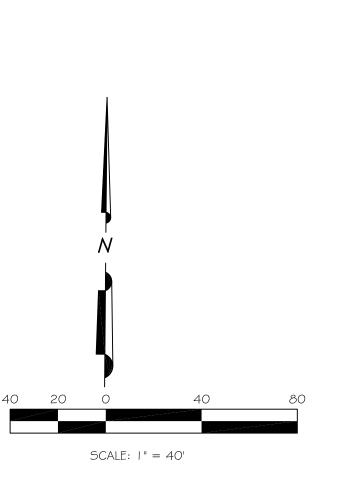


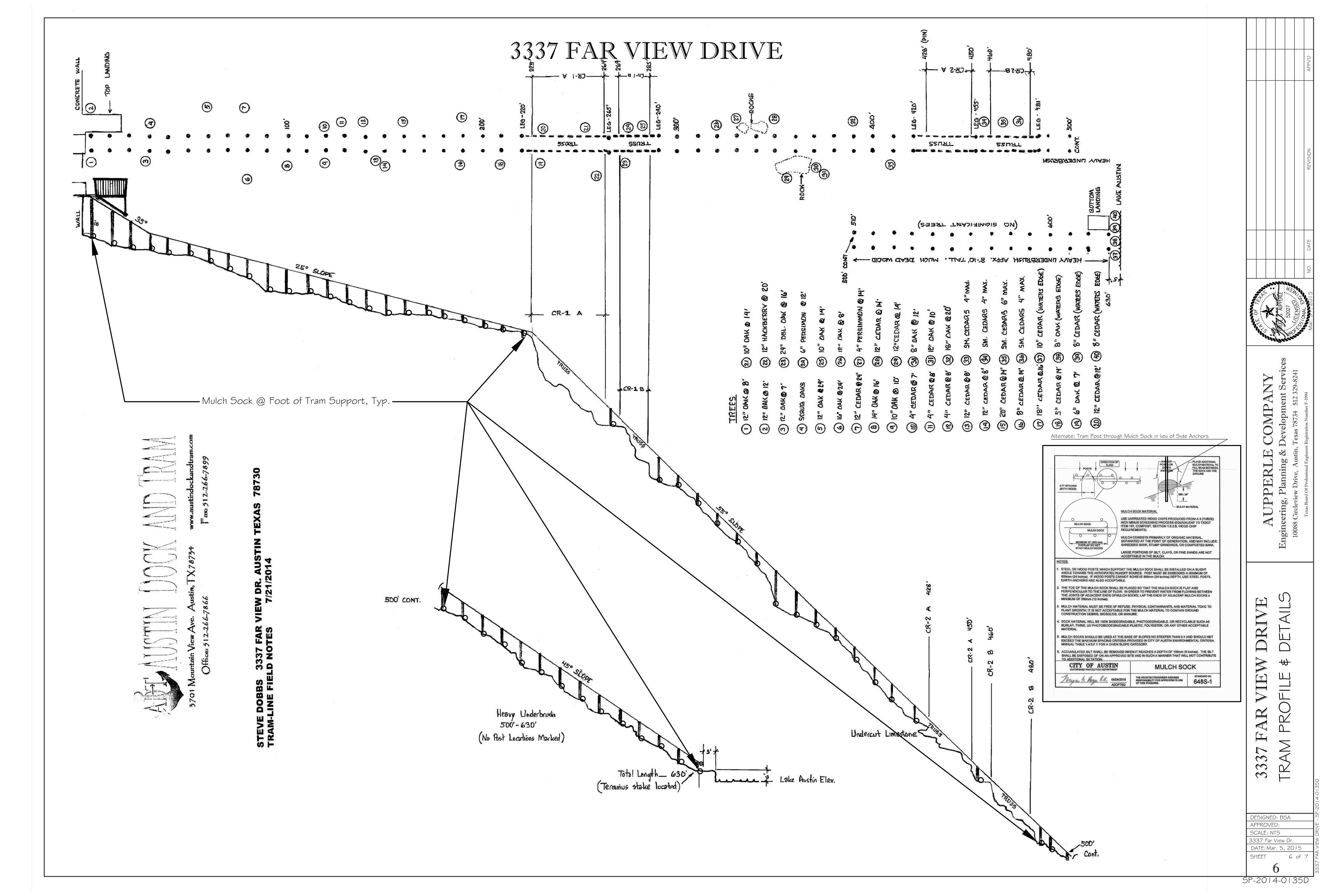
All responsibility for the adequacy of these plans remain with the engineer who prepared them. In approving these plans, the City of Austin must rely upon the adequacy of the work of the design engineer

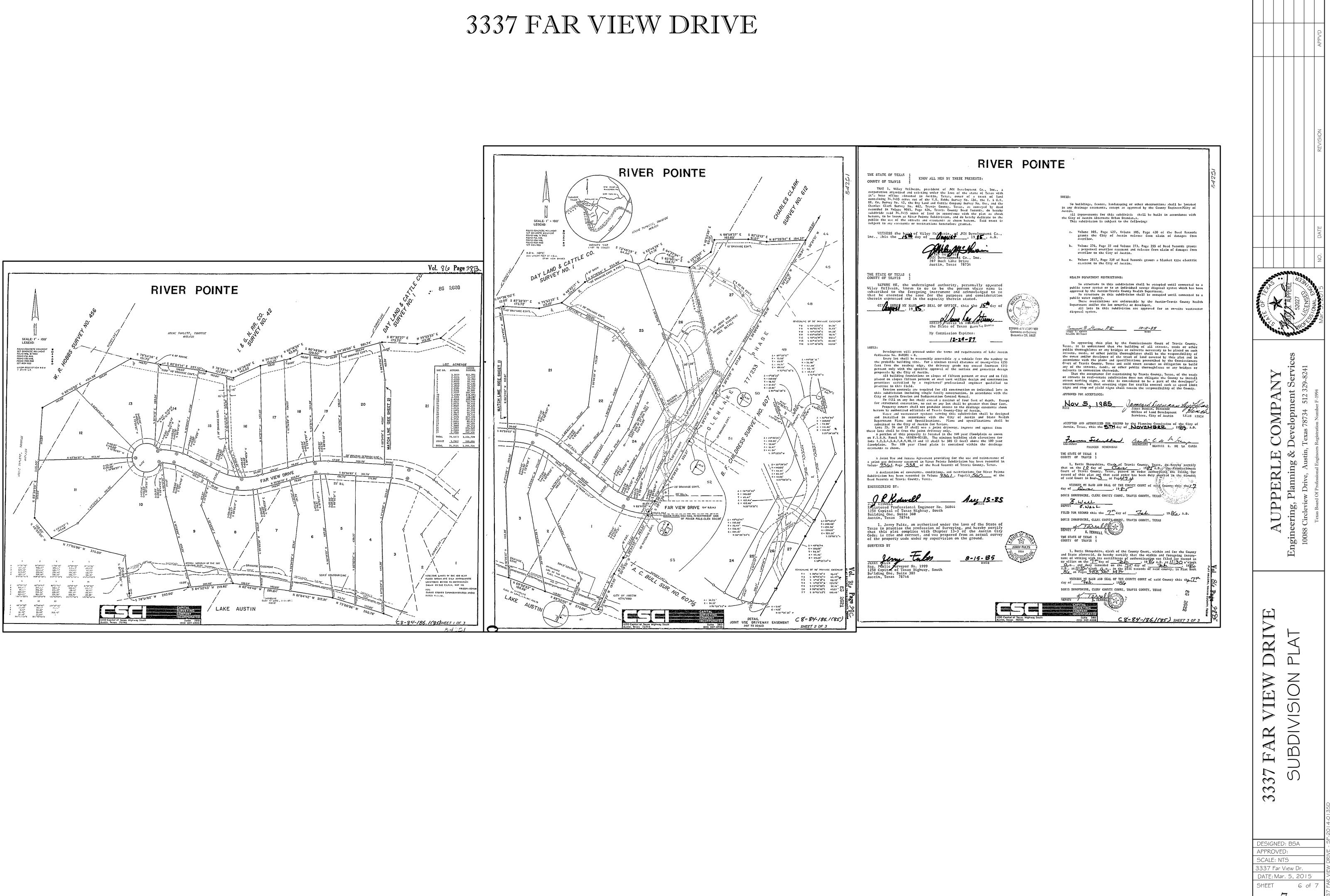
TREES (1) 12" OAK @ 8' (2) 10" DAK @ 14' 2) 12" DAK @ 12' 22 12" HACKBERRY @ 20' (3) 12" DAK @ 7' (23) 24" DBL. DAK @ 16' (4) SCRUB DAKS (24) 6" PERSIMDN @ 12' 5 12" OAK @ 24' 25 10" DAK @ 14' 6 16" DAK @24' 20 12" DAK @ 8' ⑦ 12" CEDAR @ 24' ② 4" PERSIMMON @ 14' (1) 14" DAK @ 16' @ 12" CEDAR @ 14" ④ 10" DAK @ 10' @ 12"CEDAR @ 14' 1 4" CEDAR @ 7' 3 8" DAK @ 12' 1 4" LEDAR 28 3 12" DAK @ 10' @ 4" CEDAR 26' 32 18" DAK 220' (3) 12" CEDAR @8' (3) SM. CEDARS 4" MAX. (1) 12" LEDAR @ 8' (3) SM. CEDARS 4" MAX. (5) 20" CEDAR @ 14" (35) SM. CEDARG 6" MAX. (6) 8" CEDAR @ 14' 36) SM. CEDARS 4" MAX. 19 18" CEDAR DING 10" CEDAR (WATERS EDGE) 18 5" LEDAR @ 14" 38 B" DAK (WATERS EDGE) () 6" DAK @ 7' (3) 8" CEDAR (WATERS EDGE) 20 12" CEDAR @12" 40 8" CEDAR (WATERS EDGE)



SP-2014-0135D







SP-2014-0135D



Austin Office 4407 Monterey Oaks Boulevard Building 1, Suite 110 Austin, Texas 78749 Tel 512.476.0891 Fax 512.476.0893 www.swca.com

18 April 2014

#### RE: Site Environmental Investigation of 3337 Far View Drive, Austin, Texas 78746

Mr. Aupperle,

On 8 October 2013, an SWCA Registered Professional Geoscientist (Texas License # 10791) and an environmental specialist conducted a field investigation of the 3337 Far View Drive residential tract in Austin, Texas (Figure 1). The purpose of the site visit was to gather information on Critical Environmental Features (CEF) for inclusion with the City of Austin environmental assessment documents you are preparing. SWCA's survey area was limited to the corridor of the proposed tram, and 100 feet of either side of the centerline. The City of Austin Land Development Code (LDC § 25-8-1) defines CEFs as "features that are of critical importance to the protection of environmental resources, and include bluffs, canyon rimrocks, caves, sinkholes and recharge features, springs, and wetlands." Please refer to the LDC for CEF definitions.

The majority of the tract is undeveloped and dominated by dense Ashe juniper (*Juniperus ashei*). A single residence exists in the north-northwestern corner near Far View Drive (Figures 2–3). The tract is located in the Edwards Aquifer Contributing Zone, and is within the Lake Austin Watershed. The underlying lithology consists of the Cretaceous Glen Rose Limestone<sup>1</sup>. Surface drainage is south down the steep slopes toward Lake Austin (Colorado River). Surface elevations on the tract range from approximately 493 feet at the shoreline to approximately 800 feet near Far View Drive (Figure 2, map provided by client), with an average percent slope or gradient of approximately 50%.

Due to the steep topography on the tract, SWCA was not able to fully complete the pedestrian survey of the proposed tram corridor. The survey was initiated at the top of the tract, and continued down slope until topography became too steep for safe access. SWCA identified two CEFs consisting of two segments of rimrock that extend across the tract at approximately the 700-foot contour, and the 590-foot contour (inferred from Figure 2). The estimated gradient is 83% along the shaded area identified as "CR1" on Figure 2, and the estimated gradient is 133% for the shaded area identified as "CR2". An additional feature on the map is labeled "S1" and this may be a seep at the base of the rimrock outcrop. SWCA was not able to directly observe feature S1.

Please feel free to contact Melanie Gregory at SWCA at any time with any questions at (512) 476-0891.

Sincerely,

Craig Crawford, P.G.



<sup>&</sup>lt;sup>1</sup> Garner, L.E., and Young, K.P., 1976, Environmental Geology of the Austin Area: An Aid to Urban Planning, Bureau of Economic Geology Report of Investigations No. 86, The University of Texas at Austin

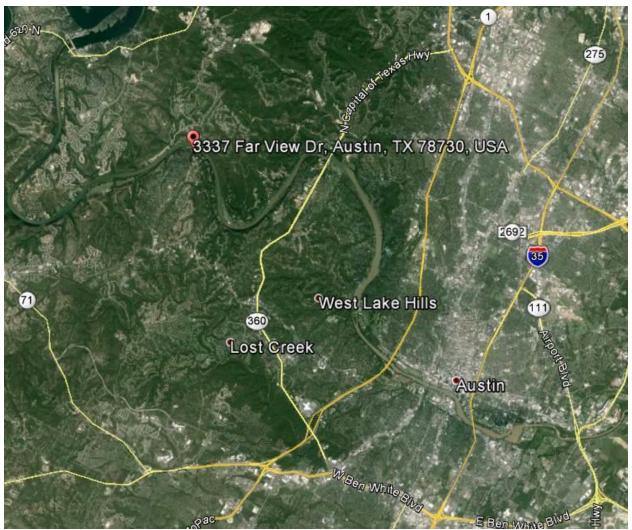


Figure 1. Location of the 3337 Far View Drive Tract

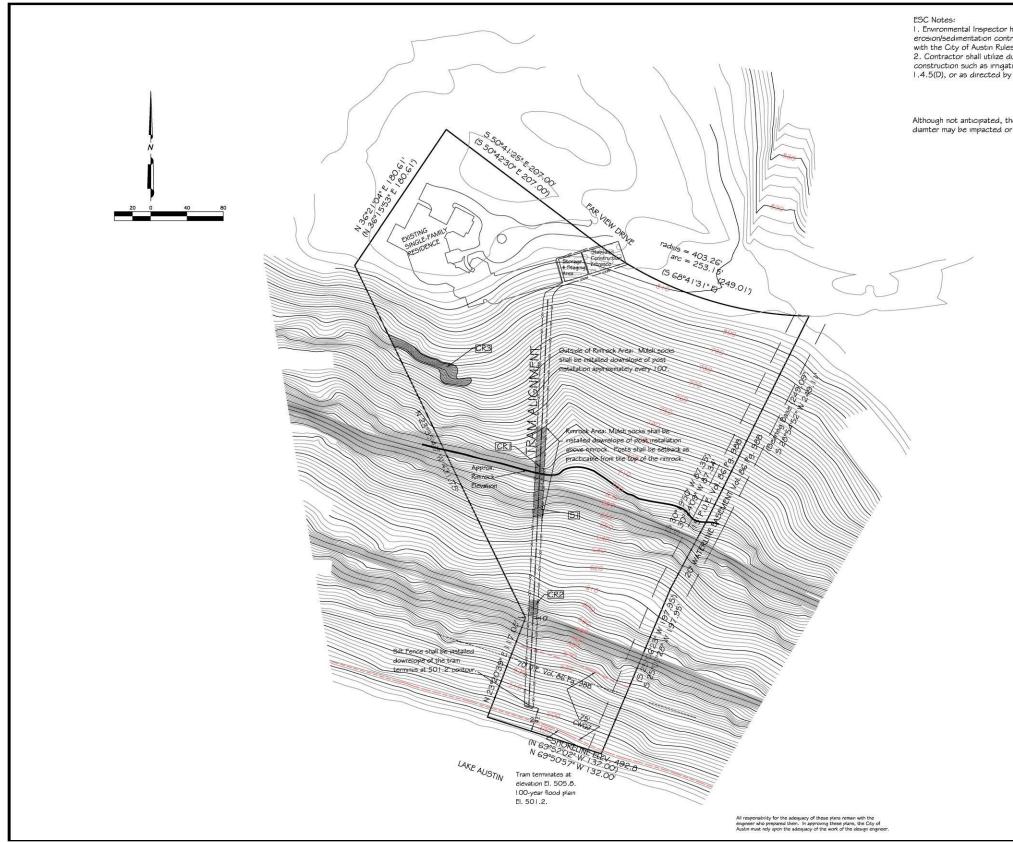


Figure 2. Site Plan and Erosion Control Plan for 3337 Far View Drive

| has the authority to add and/or modify<br>trols on site to keep project in compliance<br>es and Regulations.<br>dust control measures during site<br>ation trucks and mulching as per ECM<br>by the Environmental Inspector. |                                       | GAAdav   |
|--|---------------------------------------|--|
| the following trees larger than 19" in<br>or removed for the installation of the tram:   |                                       | REVISION   |
|  |                                       | DATE   |
|  | A A A A A A A A A A A A A A A A A A A | BRUCE S, AUPPERLE<br>BRUCE S, AUPPERLE<br>BRUCE SAST<br>BRUCE SA |
|  | AUPPERLE COMPANY                      | Engineering, Planning & Development Services<br>2219 Westlake Drive #110 Austin, Texas 78746 512-329-8241  |
|  | 3337 FAR VIEW DRIVE                   | Site Plan ≰ Erosion Control Plan   |
|  | Scale: 1"                             | 30, 2008<br>= 40<br>View Drive<br>2 of 5<br>C2   |

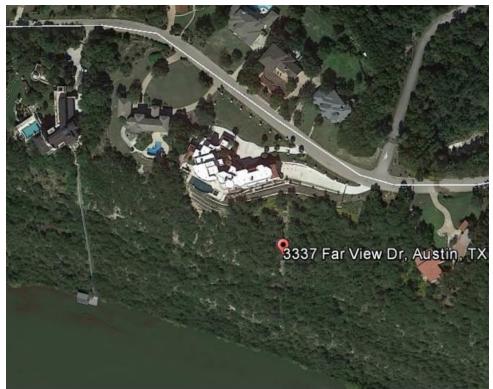


Figure 3. Aerial view of 3337 Far View Drive



Figure 4. Oblique view of 3337 Far View Drive

#### Exhibit VI

#### City of Austin Site Review Critical Environmental Feature Worksheet

|   |  | Project Name: 3337 Far View  |                    |          |  | Primary Contact Name:                  | Druc                                   | 0 1100          | orlo     |                 |                |
|---|--|--|--------------------|----------|--|--|--|-----------------|----------|-----------------|----------------|
| 1 | Project Name:<br>Project Address:  |  |                    |          | 5<br>6   | Primary Contact Name:<br>Phone Number: | (512                                   | 1422-7          | 838      |                 |                |
| 2 | Project Address:<br>Date:  | October 8, 2013  |                    |          | 6<br>7   |  | (512) 422-7838<br>Craig Crawford, P.G. |                 |          |                 |                |
| 3 |  | April 18, 2014   |                    |          | -  |  | Yes                                    | Clawi           | 01ú, P.C | ).              |                |
| 4 | Environmental Assessment Date:   | April 16, 2014   |                    |          | 8  | CEFS Located? {yes,no} :               | res                                    |                 |          |                 |                |
|   |  |  | FEATURE LONGITU    |          |  | FEATURE LATITUDE                       |  |                 | LAND     |                 | ROCK           |
| 9 | FEATURE TYPE<br>{Wetland,Rimrock,Recharge Feature,Seep,Spring}                 | FEATURE ID<br>(eg S-1)   | (WGS 1984 in Meter | · ·      |  | (WGS 1984 in Meters)                   |  | DIMENSIONS (ft) |          | DIMENSIONS (ft) |                |
|   |  | -  | coordinate         | notation |  | coordinate                             | notation                               | Х               | Y        |                 | Avg Height     |
|   | Rimrock  | CR1  | -97.8557           | dd       |  | 30.3556                                | dd                                     |                 |          | 280+            | 20'            |
|   | Rimrock  | CR2  | -97.8558           | dd       |  | 30.3551                                | dd                                     |                 |          | 140+            | 10'            |
|   |  |  |                    |          |  |  |  |                 |          |                 |                |
|   |  |  |                    |          |  |  |  |                 |          |                 |                |
|   |  |  |                    |          | -  |  |  |                 |          |                 |                |
|   |  |  |                    |          |  |  |  |                 |          |                 |                |
|   |  |  |                    |          |  |  |  |                 |          |                 |                |
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|   |  |  |                    |          |  |  |  |                 |          |                 |                |
|   |  |  |                    |          |  |  |  |                 |          |                 |                |
|   | City of Austin Use Only  |  |                    |          |  |  |  |                 |          |                 |                |
|   | WPDRD CASE NUMBER:   |  |                    |          |  |  |  |                 |          |                 |                |
|   |  |  |                    |          |  |  |  | 1               | TATEO    | FTEXAS          |                |
|   | For simple, to only the private interface of the second set                    |  |                    | -        |  |  |  | 4               | 31       |                 | P.,            |
|   | For rimrock, locate the midpoint of the segment<br>that describes the feature. | of the segment For wetlands, locate the approximate<br>centroid of the feature and the estimated |                    |          | For a spring or seep, locate the<br>source of groundwater that feeds a |  |  |                 |          |                 |                |
|   |  | area.  |                    |          | strear   |  |  |                 | CRAIG CI | RAWFORD         | 3              |
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|   | ×  |  |                    |          |  | $\sim$                                 |  | 1               | NO.      | 10791           |                |
|   |  |  |                    |          |  |  |  | 1               | SSI LICE | NSED            | Ŧ              |
|   |  | $\searrow$   |                    |          | /  |  |  |                 | ONAL     | A GLO           | , <sup>1</sup> |
|   |  | $\sim$   |                    |          |  |  |  |                 | 41       | 18 201          | 4              |
|   |  |  |                    |          |  |  |  | ]               | (†       |                 |                |
|   |  |  |                    |          |  |  |  |                 |          |                 |                |



December 22, 2014

E-MAIL & MAIL

Steven Dobbs 3337 Far View Drive Austin, Texas 78730

Re: Geotechnical Evaluation 3337 Far View Drive – Dobbs Residence Austin, Texas 78730 Engineer's Job #1419000150.9000

Dear Mr. Dobbs:

At your request, MLAW Forensics has performed a geotechnical evaluation of the footing establishment conditions for the proposed tram at the referenced address. Our evaluation consisted of the following:

- Site observations and a review of photographs of the proposed tram path. photographs,
- A review of site geology,
- Observations of similar tram installations near the referenced site,
- A review of the installation equipment for the footings
- A review of construction plans for the tram structural components (including footings) signed and sealed by Bruce S. Aupperle, P.E. on September 16, 2014. The plans provide site topography based on City of Austin GIS and identified two Critical Environmental Features which will be crossed by the proposed tram. Critical Environmental Features, CR-1 and CR-2, were noted between the elevations of 646 and 732 (CR-1) and 580 and 598 (CR-2).
- Observations of the tram at 3311 Far View in operation. While in operation, no significant vibrations were felt and no soil, rock or vegetation movement was observed.

The site consists of a steep slope of the Glen Rose limestone extending to Lake Austin. The Glen Rose consists of alternating hard to soft limestone which is generally stable at the slopes found at this site and no major slope instability is anticipated. The lower reaches of the site are likely composed of alluvium, however, the proposed tram construction is planned to stop short of this zone. It should be noted that the geologic conditions for the proposed site is similar to those at 3307, 3311 and 3319 Far View Drive which had trams of similar construction installed by Austin Dock & Tram.

Letter Report dated 12-22-14 3337 Far View Drive Austin, Texas Engineer's Job#1419000150.9000 Page 2 of 2

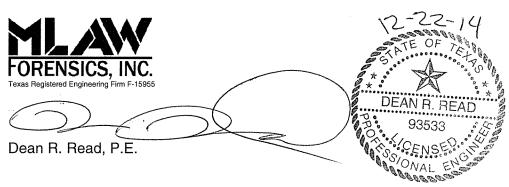
The bearing capacity for footings established a minimum of 1.5 feet into intact limestone will be 6,000 PSF for end bearing and 750 PSF for side friction computed over the penetration depth (ignoring the first foot). The intact portion of the Glen Rose is capable of supporting much higher loads than these and therefore these recommendations are considered conservative and sufficient for the lightly loaded footings anticipated as a result of the tram. If less than 2 feet of soil is encountered then the footings should be established in the rock. Where rock is not encountered, the footings can be established in the soil using an allowable end bearing value of 2,500 PSF and an allowable skin friction (excluding upper foot) of 500 PSF per foot of depth.

The proposed installation techniques and equipment were discussed with Mr. Engelhardt of Austin Dock & Tram. To penetrate the soil overlying the rock, an impact driver (similar to one used for fence post installation) will be used. Where penetration into rock is required, a tungsten carbide tipped non-impact drill to advance into the rock will be used. Penetration into the rock should not be done by impact hammering and no significant impact forces should be placed on the surface of the rock after driving through soil. Pipe footings in drilled rock holes should be grouted into the rock using a cementitious grout. Footing holes should not be drilled into the limestone rock if an obvious fracture exists running through the proposed drill location.

#### Conclusions:

- 1. The proposed tram footing installation techniques and equipment discussed above will not cause splitting or damage to the Glen Rose formation or to the Canyon Rimrock (other than the placement of holes for the footings).
- 2. Based on observations of the tram at 3311 Far View, the proposed tram will not cause vibrations sufficient to damage the rock or move soil.

Sincerely,



#### Exhibit VI

#### City of Austin Site Review Critical Environmental Feature Worksheet

| 1 | Project Name:                                   | 3337 Far Viev   |   |                   | 5     | Primary Contact Name:                    | Bruc         | Bruce Aupperle, P.E. |   |                |            |
|---|---|---|---|-------------------|-------|--|--------------|----------------------|---|----------------|------------|
| 2 | Project Address:                                | 3337 Far Viev   | V                                       |                   | 6     | Phone Number:                            | 512-422-7838 |                      |   |                |            |
| 3 | Date:   |   |   |                   | 7     | Prepared By:                             |              |                      |   |                |            |
| 4 | Environmental Assessment Date:                  | 10-30-2008  |   |                   | 8     | CEFS Located? {yes,no} :                 | yes          |                      |   |                |            |
| _ |   |   |   |                   |       |  |              | -                    |   |                |            |
|   | FEATURE TYPE                                    | FEATURE ID  | FEATURE LONGITUE<br>(WGS 1984 in Meters |                   |       | FEATURE LATITUDE<br>(WGS 1984 in Meters) |              | DIMENS               |   | RIMF<br>DIMENS |            |
| 9 | {Wetland,Rimrock,Recharge Feature,Seep,Spring}  | (eg S-1)  | coordinate                              | s)<br>notation    |       |  | notation     | X                    | Y |                | Avg Height |
|   | Rim Rock  | CR-1  | 97d 51' 22"                             | notation          | 3     | 0d 21' 21"                               | notation     | ^                    | 1 | 117'           | 18'        |
|   | Rim Rock  | CR-2  | 97d 51' 21"                             |                   | -     | 0d 21' 19"                               |              |                      |   |                | 16'        |
|   | Rim Rock  | CR-3  | 97 d 51' 23"                            |                   |       | 30d 21' 21'                              |              |                      |   | 135'<br>100'   | 12'        |
|   |   | S-1   | 97d 51' 23                              |                   |       | 30d 21' 20"                              |              |                      |   | 100            | 12         |
|   | Seep  | 0-1   | 970 51 21                               |                   |       | 500 21 20                                |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
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|   |   |   |   |                   |       |  |              |                      |   |                |            |
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|   |   |   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
|   | City of Austin Use Only                         |   |   |                   |       |  |              |                      |   |                |            |
|   | WPDRD CASE NUMBER                               |   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              | 1                    |   |                |            |
|   | For rimrock, locate the midpoint of the segment | For wetlands, locate the a  |   | For a s           | pring | or seep, locate the                      |              |                      |   |                |            |
|   | that describes the feature.                     | that describes the feature. centroid of the feature and the estimated area. |   | source<br>pool or |       | oundwater that feeds a                   |              |                      |   |                |            |
|   |   | alta.   |   |                   | (     | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  |              |                      |   |                |            |
|   | × ×   | × /   |   |                   | (     | $\sim$                                   |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
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|   | · · · · · · · · · · · · · · · · · · ·           | ~   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |
|   |   |   |   |                   |       |  |              |                      |   |                |            |

