



ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

COMMISSION MEETING DATE: July 7, 2021

NAME & NUMBER OF PROJECT: Norris Boat Dock SP-2020-0223DS

NAME OF APPLICANT OR ORGANIZATION: Stephen Hawkins, Aqua Permits, LLC

LOCATION: 1875 Westlake Dr.

COUNCIL DISTRICT: District #10

ENVIRONMENTAL REVIEW STAFF: Lindsey Sydow, P.G.

WATERSHED: Lake Austin and Bee Creek Watershed, Water Supply Rural, Drinking Water Protection Zone

REQUEST: Request to vary from LDC 25-8-251(C)(2)(b) to allow construction of a boat dock within 150 feet of a Canyon Rimrock Critical Environmental Feature (CEF).

STAFF RECOMMENDATION: Staff recommends this variance with conditions, having determined the findings of fact to have been met.

STAFF CONDITION: All construction will be completed by barge.

Staff Findings of Fact



Watershed Protection Department
Staff Recommendations Concerning Required Findings

Project Name &
Case Number: **Norris Boat Dock SP-2020-0223DS**

Ordinance Standard: **Watershed Protection Ordinance**

Variance Request: **LDC 25-8-281(C)(2)(b) - To allow construction within 150 feet of a Rimrock Critical Environmental Feature (CEF).**

Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the CityCode:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes. A variance from 25-8-281(C)(2)(b) allowing for construction of a boat dock, shoreline access, and stabilization, has been granted for similarly situated properties with approximately contemporaneous development subject to similar code.

2. The variance:

- a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes. No disturbance of the canyon rimrock critical environmental feature (CEF) is proposed, all proposed construction activities are to occur 75 feet downgradient of the rimrock CEF, and construction is to occur from the lakeside by barge. The proposed construction being performed from a barge provides greater overall environmental protection to the slope.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes. The variance is the minimum deviation from the code requirement to allow for a reasonable use of the property. The code requires a 150-foot CEF buffer. This buffer is not being reduced. The scope of the variance is limited to allowing construction activities to occur within a CEF buffer only for the proposed boat dock replacement.

- c) Does not create a significant probability of harmful environmental consequences.

Yes. The variance does not create significant harmful environmental consequences. The construction of the boat dock from barge will not disturb the canyon rimrock CEF. The limits of construction are at least 75 feet downgradient from the canyon rimrock CEF, and the disturbed area will be reseeded with native grasses.

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

Yes, the variance will result in water quality that is at least equal to the water quality achievable without the variance. The construction activities will take place >75 feet from the canyon rimrock and all access will be by barge, which will not disturb the canyon rimrock CEF. The existing stone path will not be disturbed and will continue to be used to access the new boat dock, thus preventing any construction further up the slope closer to the canyon rimrock CEF.

Staff Recommendation: Staff recommends the variance as the Findings of Fact have been met, with the staff-recommended condition that all construction be completed by barge.

- B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone Water Quality Transition Zone*), Section 25-8-368 (*Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long*), or Article 7, Division 1 (*Critical Water Quality Zone Restrictions*), after determining that:

1. The criteria for granting a variance in Subsection (A) are met;

Yes / No N/A

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

Yes / No N/A

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Yes / No N/A

Staff Recommendation: N/A.

Hydrogeologic Reviewer
(WPD)

Lindsey Sydow

Date:

Deputy Environmental Officer
(WPD)

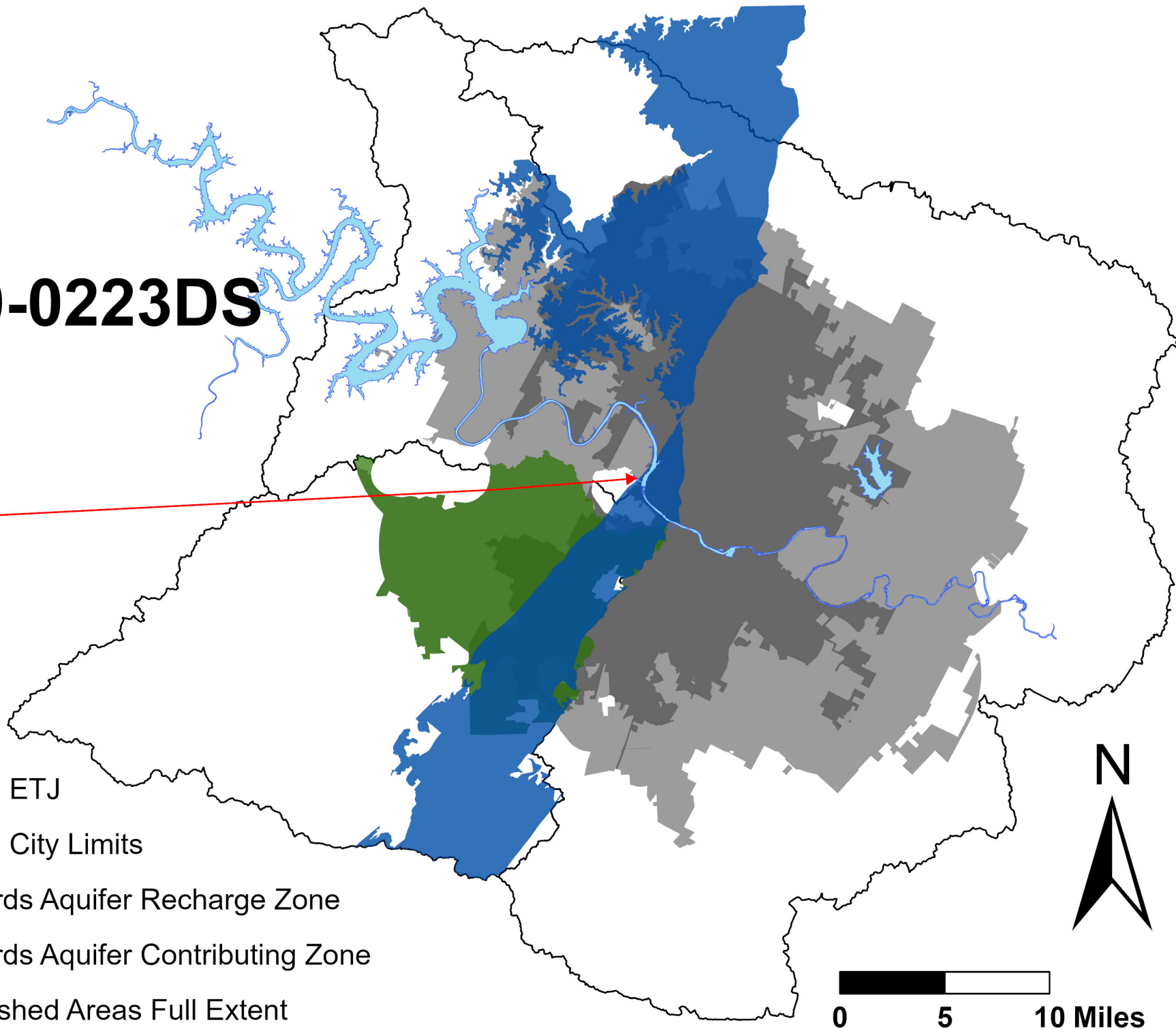
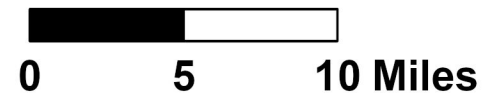
Liz Johnston

Date:

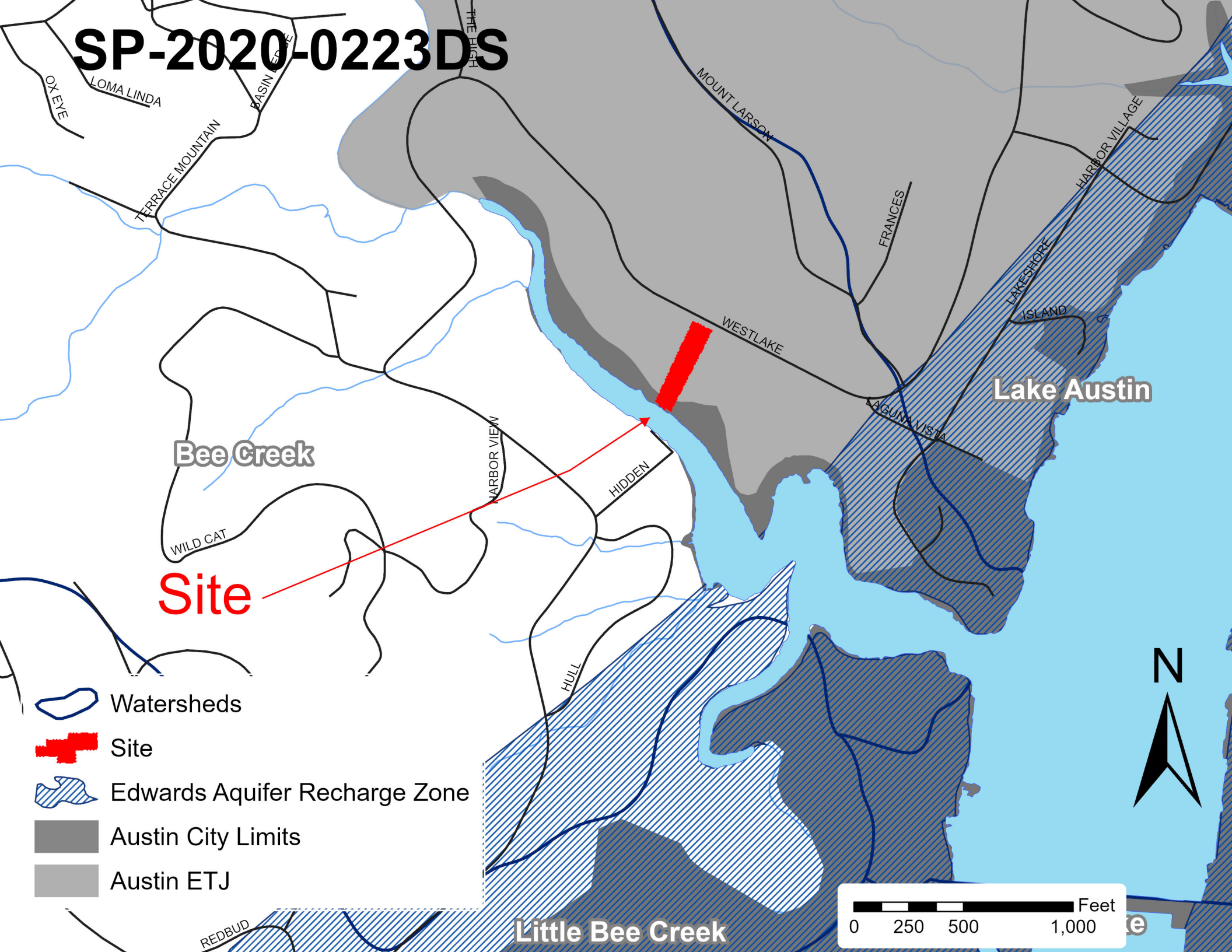
SP-2020-0223DS

Site

-  Austin ETJ
-  Austin City Limits
-  Edwards Aquifer Recharge Zone
-  Edwards Aquifer Contributing Zone
-  Watershed Areas Full Extent

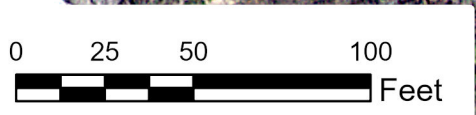


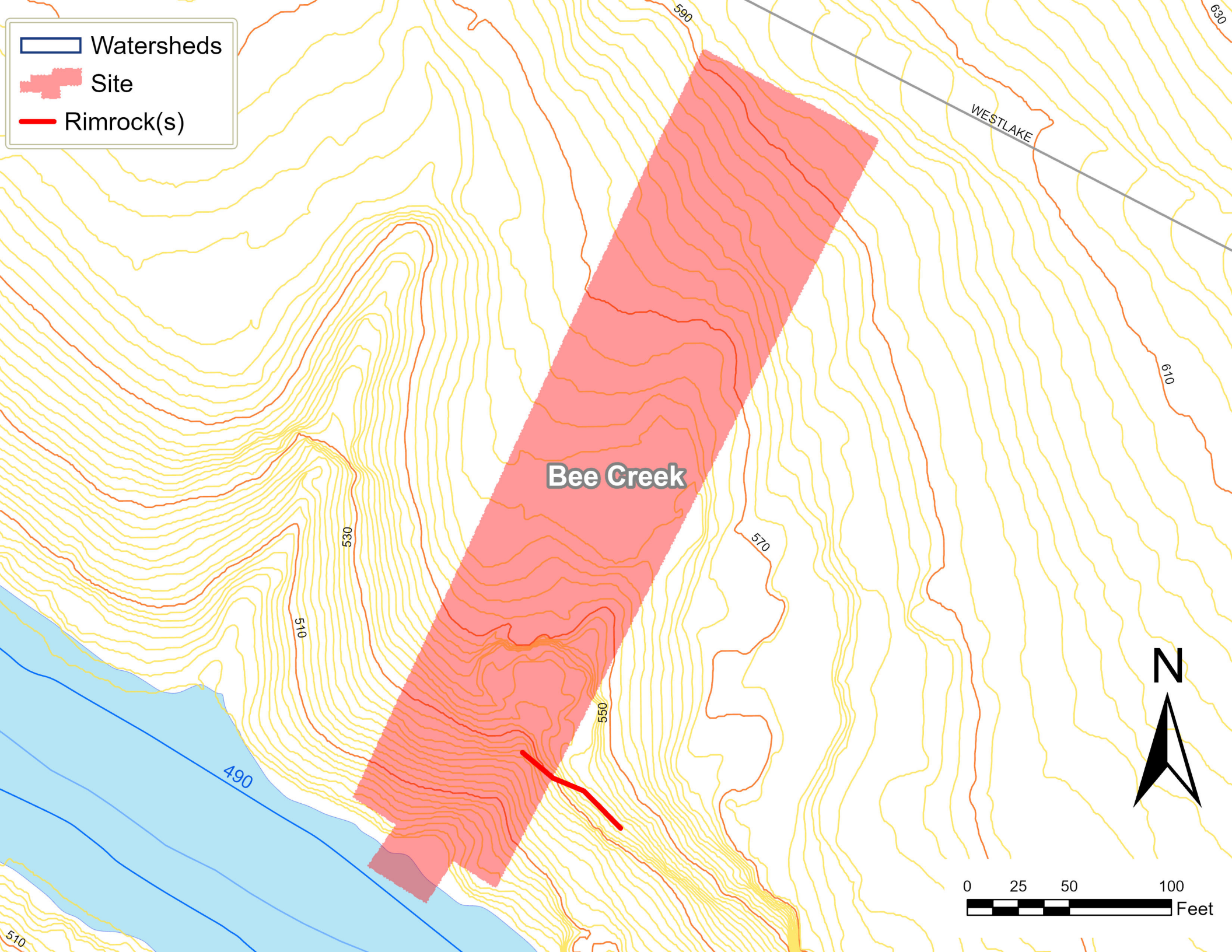
SP-2020-0223DS



Site

Rimrock(s)





Applicant Form and Findings of Fact

ENVIRONMENTAL VARIANCE REQUEST ONLY

DATE: May 18, 2021

CASE NUMBER: SP-2020-0223DS

PROJECT NAME: Norris Boat Dock

APPLICANT: David Norris S Jr, Living Trust

AGENT: Aqua Permits, LLC (Stephen Hawkins)

ADDRESS OF SITE: 1875 Westlake Drive

COUNTY: Travis

AREA: .97 acres

WATERSHED: Lake Austin

JURISDICTION: Austin Limited Purpose

EXISTING ZONING: LA

PROPOSED DEVELOPMENT:

The applicant is proposing to construct a boat dock.

DESCRIPTION OF VARIANCES:

The applicant is requesting to vary from LDC 25-8-281(C)(2)(b) to allow construction of a boat dock within a 150-foot Critical Environmental Feature (CEF) buffer for a Rim rock CEF.

Stephen Hawkins
Aqua Permits, LLC
512-750-1402

Stephen Hawkins



ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

PROJECT DESCRIPTION

Applicant Contact Information

Name of Applicant	Stephen Hawkins
Street Address	6504 Betty Cook
City State ZIP Code	Austin, Texas 78723
Work Phone	512-750-1402
E-Mail Address	stephen.hawkins@aquapermits.com

Variance Case Information

Case Name	Norris Boat Dock
Case Number	SP-2020-0223DS
Address or Location	1875 WESTLAKE DR BLDG BD
Environmental Reviewer Name	Jonathan Garner
Environmental Resource Management Reviewer Name	
Applicable Ordinance	Code 25-8-281 Critical Environmental Features / Admin Variance A
Watershed Name	Lake Austin/ Boundary, Bee Creek
Watershed Classification	☐ Urban ☐ Suburban ☐ Water Supply Suburban ☒ Water Supply Rural ☐ Barton Springs Zone

Edwards Aquifer Recharge Zone	☐ Barton Springs Segment ☐ Northern Edwards Segment ☒ Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	☐ Yes ☐ No ☒
Distance to Nearest Classified Waterway	The project is to build a boat dock on Lake Austin. It is within 500 feet of Lake Austin.
Water and Wastewater service to be provided by	N/A
Request	The variance request is as follows – To allow construction on canyon rimrock CEF. This project proposes construction within the standard buffer for the canyon rimrock and is located within 500 feet of Lake Austin.

square footage: acreage: percentage:	Existing	Proposed
Provide general description of the property (slope range, elevation range, summary of vegetation / trees, summary of the geology, CWQZ, WQTZ, CEFs, floodplain, heritage trees, any other notable or outstanding characteristics of the property)	The site is uphill from all construction so no drainage will impact the CEF. The address of the boat dock project is 1875 Westlake Drive, Austin, TX. This property is 0.9710 acres at an elevation of 599. The vegetation is dominated by native vegetation classified as saplings and shrubs. No trees will be removed with this project, and the site will be fully restored per 609S specifications. The Upper Member of the Glen Rose Formation is relatively impermeable and described as the lower confining unit of the Edwards Aquifer (Small et al., 1996). It is about 350 to 500 feet thick. Stair-step topography is characteristic of the Upper Glen Rose Formation. The Upper Glen Rose Formation is described as yellowish tan, thinly bedded limestone and marl (Small et al., 1996). The top of the Upper Glen Rose is red-stained, lumpy, irregular, and bored, with oysters cemented onto the surface (Rose, 1972). The upper member of the Glen Rose Formation consists of alternating beds which include resistant beds of dolomite, mudstone, and limestone and non-resistant beds of calcareous clay.	

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)	This project proposes construction within the standard buffer for the canyon rimrock and is located within 500 feet of Lake Austin, so it will require a formal variance. This project proposes construction within the standard buffer for the canyon rimrock and is located within 500 feet of Lake Austin, so it will require a formal variance. Finding of facts for Land Use Commission variance to allow construction within a CEF buffer for a boat dock, shoreline access and shoreline modification must be submitted. The findings of facts are listed in LDC 25-8-41(A). A formal Land Use Commission variance fee will be paid before this comment will be cleared.
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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:

Ordinance:

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 available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes / No- Yes. Similarly situated properties, with a rimrock CEF buffer that extends to the shoreline frontage along Lake Austin, frequently contain boat docks and shoreline access. The adjacent properties have boat docks and shoreline access.

2. The variance:
 - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes / No- Yes. All areas of demolition and construction within the buffer will be revegetated according to City specifications. The design of this project results in

a plan that provides greater overall environmental protection than is achievable without the variance.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes / No- Yes. This buffer is not being reduced. The scope of the variance is limited to allowing construction activities to occur within a critical environmental feature buffer for only a boat dock and a pathway for shoreline access.

- c) Does not create a significant probability of harmful environmental consequences.

Yes / No-Yes. The variance does not create significant harmful environmental consequences.

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- Yes. The construction activities will minimize disturbance to terrestrial vegetation, and all disturbed areas will be revegetated according to City specifications.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-422 (Water Quality Transition Zone), Section 25-8-452 (Water Quality Transition Zone), Article 7, Division 1 (Critical Water Quality Zone Restrictions), or Section 25-8-652 (Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long):

1. The criteria for granting a variance in Subsection (A) are met;

Yes / No N/A

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

Yes / No N/A

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Yes / No N/A

June 21, 2021

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

Applicant Exhibits

Environmental Resource Inventory

For the City of Austin
 Related to LDC 25-8-121, City Code 30-5-121, ECM 1.3.0 & 1.10.0

The ERI is required for projects that meet one or more of the criteria listed in LDC 25-8-121(A), City Code 30-5-121(A).

1. SITE/PROJECT NAME: 0.97-acre property at 1875 Westlake Drive
2. COUNTY APPRAISAL DISTRICT PROPERTY ID (#'s): 119787
3. ADDRESS/LOCATION OF PROJECT: 1875 Westlake Drive, Austin, Texas
4. WATERSHED: Bee Creek / Lake Austin
5. THIS SITE IS WITHIN THE *(Check all that apply)*
 - Edwards Aquifer Recharge Zone* *(See note below)* ☐ YES ☒ No
 - Edwards Aquifer Contributing Zone* ☐ YES ☐ No
 - Edwards Aquifer 1500 ft Verification Zone* ☐ YES ☒ No
 - Barton Spring Zone* ☐ YES ☒ No

*(as defined by the City of Austin – LDC 25-8-2 or City Code 30-5-2)

Note: If the property is over the Edwards Aquifer Recharge zone, the Hydrogeologic Report and karst surveys must be completed and signed by a Professional Geoscientist Licensed in the State of Texas.

6. DOES THIS PROJECT PROPOSE FLOODPLAIN MODIFICATION?..... ☐ YES** ☒ NO
 If yes, then check all that apply:
 - ☐ (1) The floodplain modifications proposed are necessary to protect the public health and safety;
 - ☐ (2) The floodplain modifications proposed would provide a significant, demonstrable environmental benefit, as determined by a **functional assessment** of floodplain health as prescribed by the Environmental Criteria Manual (ECM), or
 - ☐ (3) The floodplain modifications proposed are necessary for development allowed in the *at risk* water **quality zone under LDC 25-8-261 or 25-8-262, City Code 30-5-261 or 30-5-262.**
 - ☐ (4) The floodplain modifications proposed are outside of the Critical Water Quality Zone in an area determined to be in poor or fair condition by a **functional assessment** of floodplain health.

**** If yes, then a functional assessment must be completed and attached to the ERI (see ECM 1.7 and Appendix X for forms and guidance) unless conditions 1 or 3 above apply.**

7. IF THE SITE IS WITHIN AN URBAN OR SUBURBAN WATERSHED, DOES THIS PROJECT PROPOSE A UTILITY LINE PARALLEL TO AND WITHIN THE CRITICAL WATER QUALITY ZONE? ☐ YES*** ☒ NO

*****If yes, then riparian restoration is required by LDC 25-8-261(E) or City Code 30-5-261(E) and a functional assessment must be completed and attached to the ERI (see ECM1.5 and Appendix X for forms and guidance).**

8. There is a total of 1 (#s) Critical Environmental Feature(s)(CEFs) on or within 150 feet of the project site. If CEF(s) are present, attach a detailed **DESCRIPTION** of the CEF(s), color **PHOTOGRAPHS**, the **CEF WORKSHEET** and provide **DESCRIPTIONS** of the proposed CEF buffer(s) and/or wetland mitigation. Provide the number of each type of CEFs on or within 150 feet of the site *(Please provide the number of CEFs)*:

_____(#s) Spring(s)/Seep(s) _____(#s) Point Recharge Feature(s) _____(#s) Bluff(s)
 1 _____(#s) Canyon Rimrock(s) _____(#s) Wetland(s)

Note: Standard buffers for CEFs are 150 feet, with a maximum of 300 feet for point recharge features. Except for wetlands, if the standard buffer is not provided, you must provide a written request for an administrative variance from LDC 25-8-281(C)(1) and provide written findings of fact to support your request. Request forms for administrative variances from requirements stated in LDC 25-8-281 are available from Watershed Protection Department.

9. The following site maps are attached at the end of this report (Check all that apply and provide):

All ERI reports must include:

- ☒ **Site Specific Geologic Map with 2-ft Topography**
- ☒ **Historic Aerial Photo of the Site**
- ☒ **Site Soil Map**
- ☒ **Critical Environmental Features and Well Location Map on current Aerial Photo with 2-ft Topography**

Only if present on site (Maps can be combined):

- ☐ **Edwards Aquifer Recharge Zone with the 1500-ft Verification Zone**
(Only if site is over or within 1500 feet the recharge zone)
- ☒ **Edwards Aquifer Contributing Zone**
- ☐ **Water Quality Transition Zone (WQTZ)**
- ☒ **Critical Water Quality Zone (CWQZ)**
- ☐ **City of Austin Fully Developed Floodplains for all water courses with up to 64-acres of drainage**

10. **HYDROGEOLOGIC REPORT** – Provide a description of site soils, topography, and site specific geology below (Attach additional sheets if needed):

Surface Soils on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups*. If there is more than one soil unit on the project site, show each soil unit on the site soils map.

Soil Series Unit Names, Infiltration Characteristics & Thickness		
Soil Series Unit Name & Subgroup**	Group*	Thickness (feet)
BrF Brackett soils and Urban land,	C	0 to 4
TeF-Eckrant soils and Urban land,	C	0.3 to 1.2

***Soil Hydrologic Groups Definitions (Abbreviated)**

- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

**Subgroup Classification – See Classification of Soil Series Table in County Soil Survey.

Description of Site Topography and Drainage *(Attach additional sheets if needed):*

The fully developed residential lot on the Lake Austin shoreline sits upgradient of the proposed lakefront dock project. The property slopes significantly from the residence to Lake Austin, and has a gradual slope from Westlake Drive to the residence. The subject site is within the Lake Austin Watershed, as classified by the City of Austin (COA, 2009). Topographically, the site ranges from approximately 492 to 592 feet above mean sea level. Drainage occurs primarily by overland sheet flow from north to south. Overland sheet flow flows into the Lake Austin. Part of the subject site is within the 100-year floodplain (FEMA, 2006).

List surface geologic units below:

Geologic Units Exposed at Surface		
Group	Formation	Member
Trinity	Kgr - Lower Glen Rose Limestone	

Brief description of site geology *(Attach additional sheets if needed):*

The Upper Member of the Glen Rose Formation is relatively impermeable and described as the lower confining unit of the Edwards Aquifer (Small et al., 1996). It is about 350 to 500 feet thick. Stair-step topography is characteristic of the Upper Glen Rose Formation. The Upper Glen Rose Formation is described as yellowish tan, thinly bedded limestone and marl (Small et al., 1996). The top of the Upper Glen Rose is red-stained, lumpy, irregular, and bored, with oysters cemented onto the surface (Rose, 1972). The upper member of the Glen Rose Formation consists of alternating beds which include resistant beds of dolomite, mudstone, and limestone and non-resistant beds of calcareous clay.

Wells – Identify all recorded and unrecorded wells on site (test holes, monitoring, water, oil, unplugged, capped and/or abandoned wells, etc.):

There are 0 (#) wells present on the project site and the locations are shown and labeled
0 (#s) The wells are not in use and have been properly abandoned.
0 (#s) The wells are not in use and will be properly abandoned.
0 (#s) The wells are in use and comply with 16 TAC Chapter 76.
0 (#s) wells that are off-site and within 150 feet of this site.

THE VEGETATION REPORT – Provide the information requested below:

Brief description of site plant communities *(Attach additional sheets if needed):*

The subject site is situated within the Live oak-Ashe Juniper Woods vegetation region of Texas and Edwards Plateau vegetation region of Texas. Vegetation is characterized as partially wooded and landscaped residential property. Canopy species consist of mainly plateau live oak (*Quercus fusiformis*) with scattered cedar elm (*Ulmus crassifolia*) and Texas Oak occur in wooded areas on the uplands and slope leading down to the edge of Lake Austin (Bee Creek arm). Understory plants include wax leaf *Ligustrum* (*Ligustrum* sp.), turks cap (*Malvaviscus arboreus* var. *drummondii*), poison ivy (*Toxicodendron radicans*), nandina (*Berberidaceae*), virginia creeper, and greenbriar (*Smilax bona-nox*). Ovalleaf cliffbreak (*Pellaea ovata*) is found along the vertical face of the rock outcrop at the top of the steep slope facing Lake Austin. A couple of sycamore trees (*Platanus occidentalis*) are found along the bank of Lake Austin, approximately 15 feet east of a partially constructed dock at the water's edge. Several volunteer sycamore saplings are found along the water's edge including one at the northwest corner of the dock. Other species found adjacent to the water's edge include minor amounts of facultative uplands (FACU) sea oats (*Uniola paniculata* L.), turks caps (*Malvaviscus arboreus* var. *drummondii*), and hercules club (*Zanthoxylum clava-herculis* L.). Other than the Sycamore trees and shrubs, no wetland species were identified. No clearing of trees is planned.

There is woodland community on site ☒ YES ☐ NO *(Check one).*

If yes, list the dominant species below:

Woodland species	
Common Name	Scientific Name
plateau live oak	<i>Quercus fusiformis</i>
cedar elm	<i>Ulmus crassifolia</i>
Ashe juniper	<i>Juniperus ashei</i>

There is grassland/prairie/savanna on site ☐ YES ☒ NO *(Check one).*

If yes, list the dominant species below:

Grassland/prairie/savanna species	
Common Name	Scientific Name
N/A	N/A

There is hydrophytic vegetation on site ☒ YES ☐ NO *(Check one).*

If yes, list the dominant species in table below *(next page):*

Hydrophytic plant species		
Common Name	Scientific Name	Wetland Indicator Status
Sycamore	Platanus occidentalis	OBL

A tree survey of all trees with a diameter of at least eight inches measured four and one-half feet above natural grade level has been completed on the site.

☒ YES ☐ NO (Check one).

11. WASTEWATER REPORT – Provide the information requested below.

Wastewater for the site will be treated by (Check of that Apply):

- ☐ On-site system(s)
☒ City of Austin Centralized sewage collection system
☐ Other Centralized collection system

Note: All sites that receive water or wastewater service from the Austin Water Utility must comply with City Code Chapter 15-12 and wells must be registered with the City of Austin

The site sewage collection system is designed and will be constructed to in accordance to all State, County and City standard specifications.

☒ YES ☐ NO (Check one).

Calculations of the size of the drainfield or wastewater irrigation area(s) are attached at the end of this report or shown on the site plan.

☐ YES ☐ NO ☒ Not Applicable (Check one).

Wastewater lines are proposed within the Critical Water Quality Zone?

☐ YES ☒ NO (Check one). If yes, then provide justification below:

Is the project site is over the Edwards Aquifer?

☐ YES ☒ NO (Check one).

If yes, then describe the wastewater disposal systems proposed for the site, its treatment level and effects on receiving watercourses or the Edwards Aquifer.

12. One (1) hard copy and one (1) electronic copy of the completed assessment have been provided.

Date(s) ERI Field Assessment was performed: 7/10/2020
Date(s)

My signature certifies that to the best of my knowledge, the responses on this form accurately reflect all information requested.

Kristin Miller, P.G.

512-415-6986

Print Name

Kristin M. Miller

Telephone

kristin@escarpmentenv.com

Signature

Email Address

Escarpment Environmental

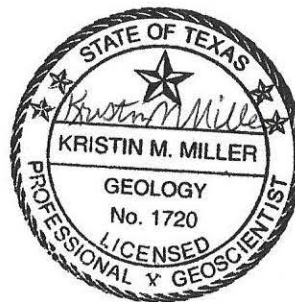
7/10/2020

Name of Company

Date

For project sites within the Edwards Aquifer Recharge Zone, my signature and seal also certifies that I am a licensed Professional Geoscientist in the State of Texas as defined by ECM 1.12.3(A).

The seal appearing on this document was authorized by Kristin M. Miller, P.G. # 1720 on 7/10/2020.



P.G.
Seal

Attachment 1

Critical Environmental Feature (CEF) worksheet

City of Austin Environmental Resource Inventory - Critical Environmental Feature Worksheet

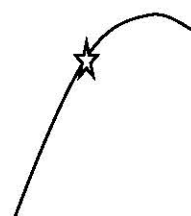
1	Project Name:	0.97-acre property
2	Project Address:	1875 Westlake Drive
3	Site Visit Date:	June 28, 2020
4	Environmental Resource Inventory Date:	July 10, 2020

5	Primary Contact Name:	Kristin M. Miller, P.G.
6	Phone Number:	512-415-6986
7	Prepared By:	Kristin Miller, Escarpment Environmental
8	Email Address:	kristin@escarpmentenv.com

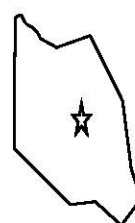
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City of Austin Use Only	
CASE NUMBER:	

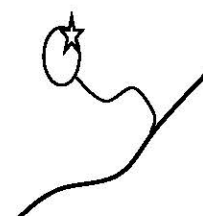
For rimrock, locate the midpoint of the segment that describes the feature.



For wetlands, locate the approximate centroid of the feature and the estimated area.



For a spring or seep, locate the source of groundwater that feeds a pool or stream.



Please state the method of coordinate data collection and the approximate precision and accuracy of the points and the unit of measurement.

Method

Accuracy

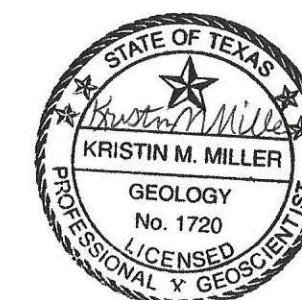
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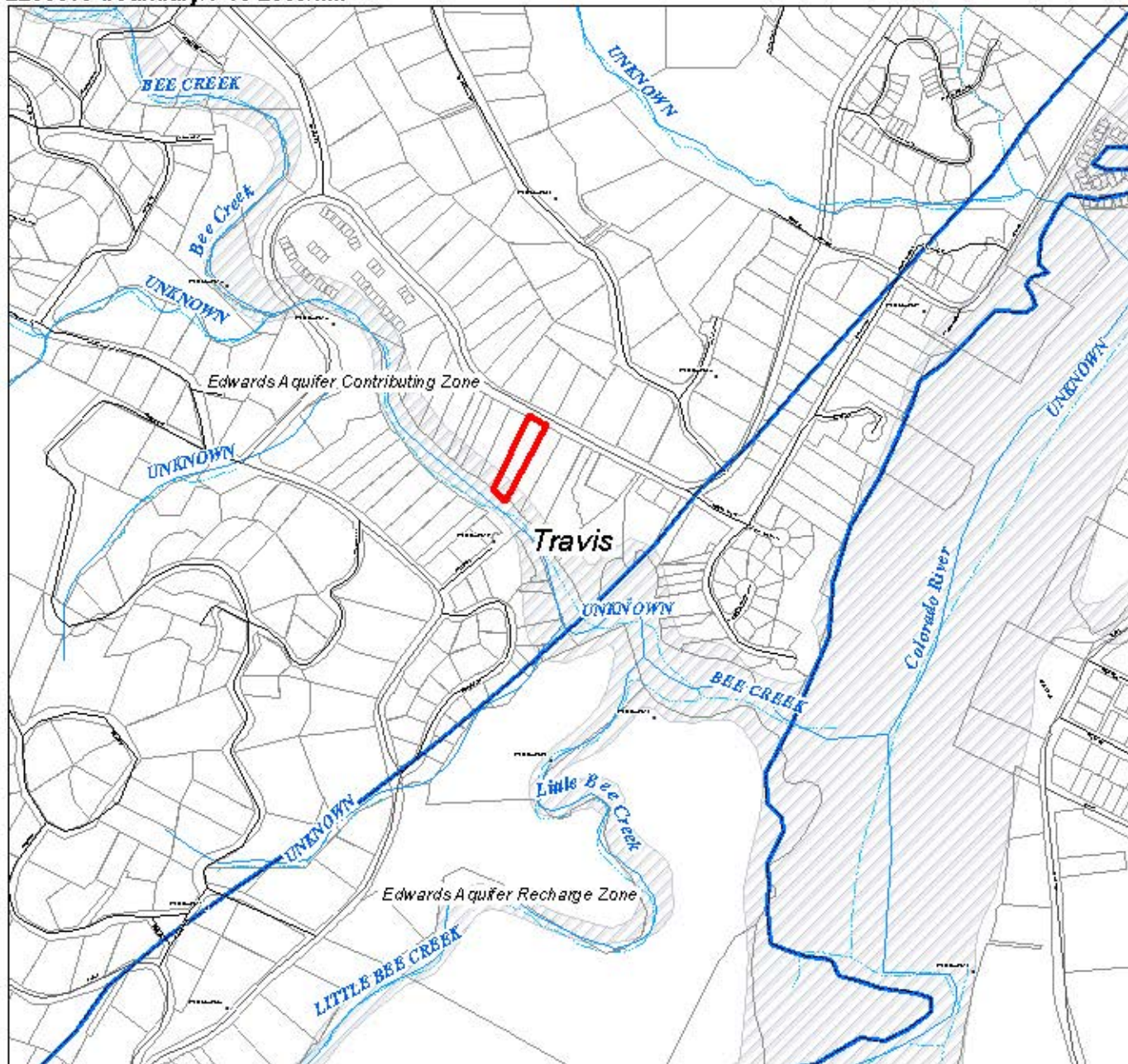
Professional Geologists apply seal below

The seal appearing on this document was authorized by Kristin M. Miller, P.G. # 1720 on July 10, 2020



Attachment 2

Figures and Maps



Basemap: USGS, Austin West Quadrangle, 1987

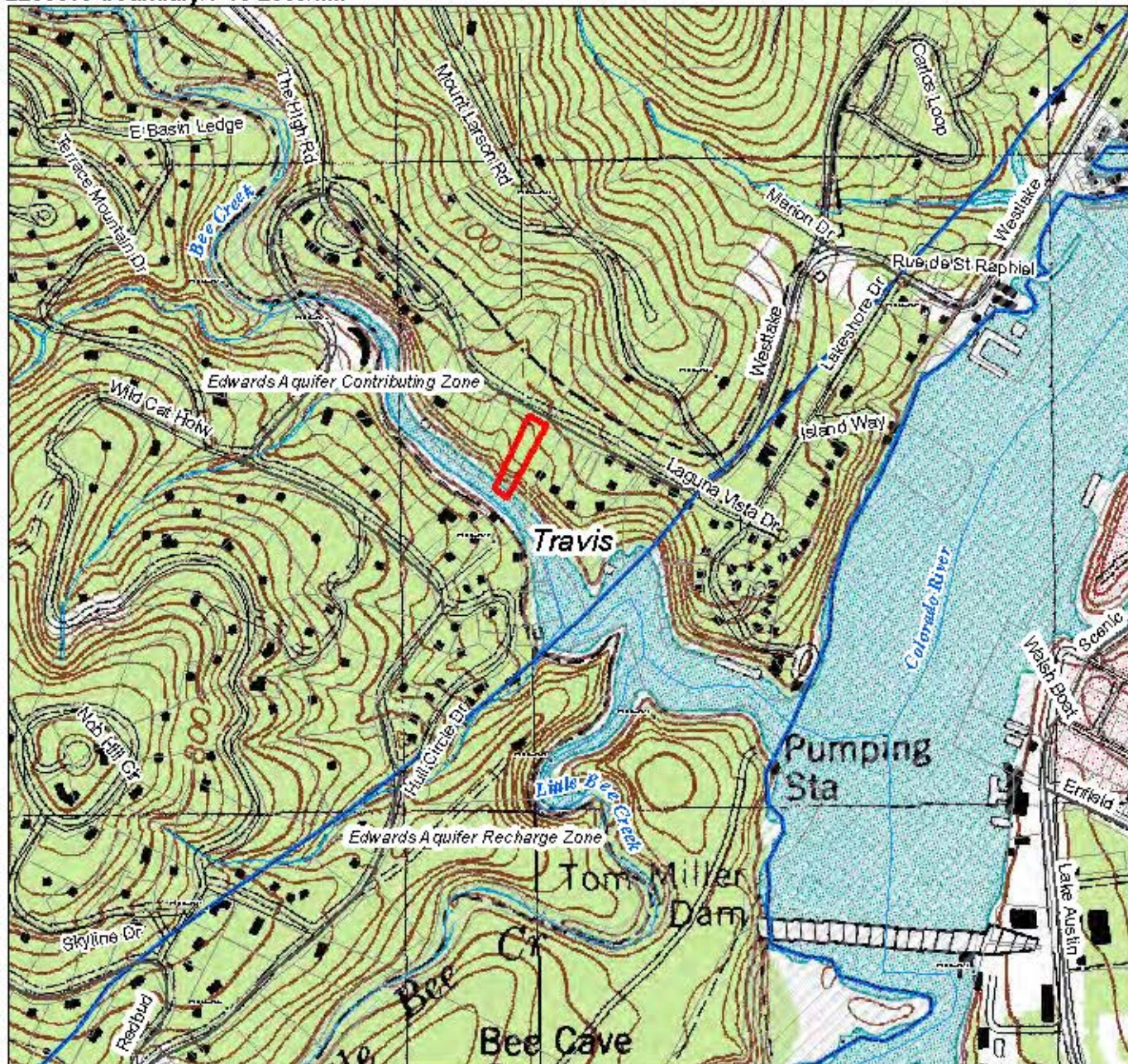
Legend

- Project Boundary
- Edwards Aquifer Contributing and Recharge Zones (2006)
- Floodplain (FEMA, 1996)

1 inch = 800 feet
 0 400 800
 Feet



Figure 1
 Location Map
 0.97-acre property
 1875 Westlake Drive
 Austin, Texas



Basemap: USGS, Austin West Quadrangle, 1987

Legend

- Project Boundary
- Edwards Aquifer Contributing and Recharge Zones (2006)
- Floodplain (FEMA, 1996)

1 inch = 800 feet
 0 400 800
 Feet

Travis



Figure 2
Boundary Map
 0.97-acre property
 1875 Westlake Drive
 Austin, Texas



Historic Aerial Photo, Austin West Quadrangle, TNRS, 1996

Soil: NRCS Soil Survey Staff, 2006

Legend

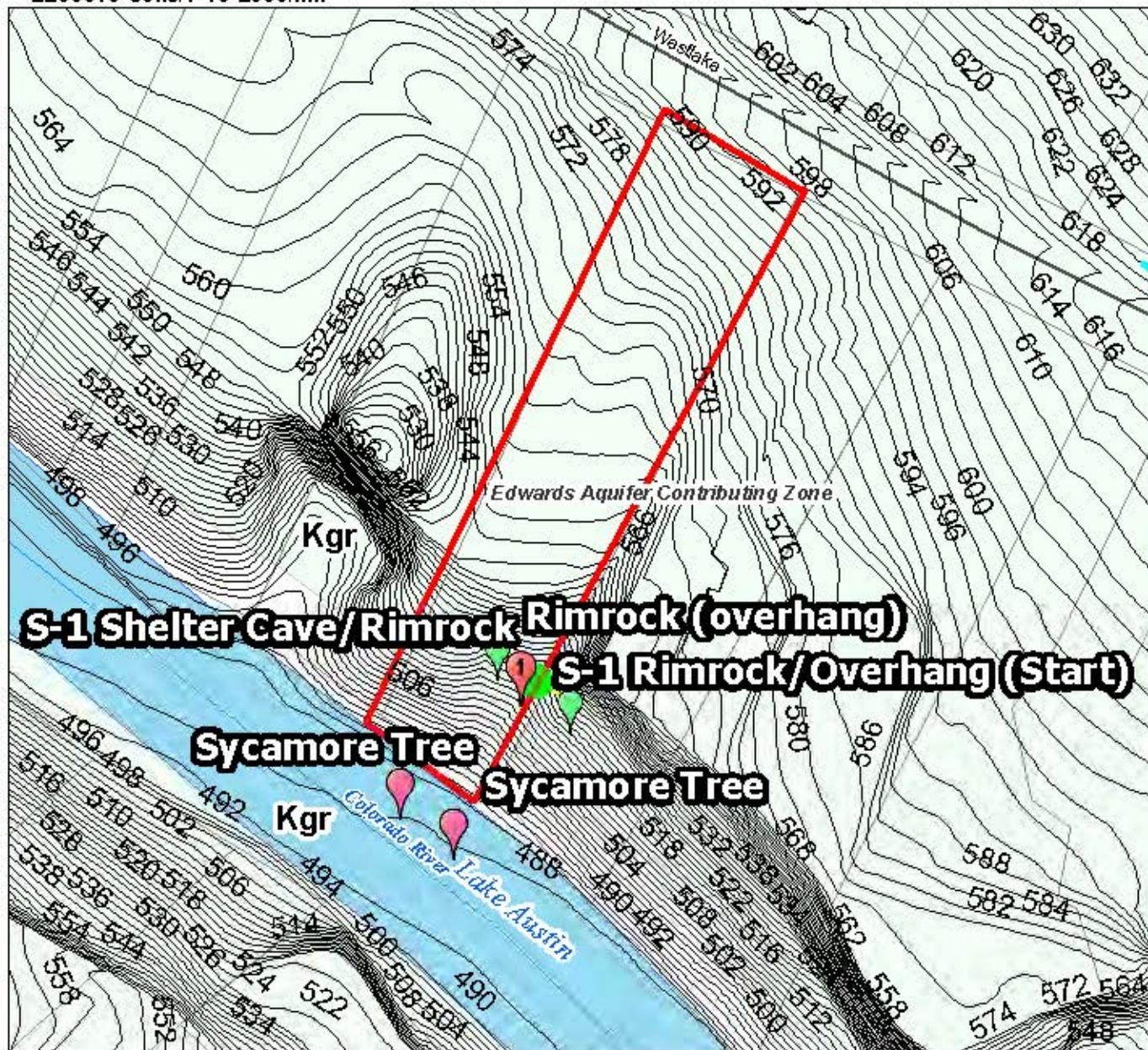
- Project Boundary
- Soil Association (NRCS, 1994)
- Soil Type (NRCS, 2009)

NRCS Soil Types:

BrF - Brackett soils and Urban land, 12 to 30 % slopes

TeF = Eckrant soils and Urban land, 18 to 40 percent slopes



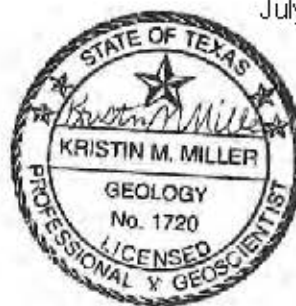


Historic Aerial Photo, Austin West Quadrangle, TNRIS, 1996
Soil: NRCS Soil Survey Staff, 2006

The seal appearing on this document was authorized by Kristin M. Miller, P.G. # 1720 July 10, 2020.

Legend

- Project Boundary
- Kgr, Glen Rose Fm



1 inch = 100 feet
0 50 100
Feet

Figure 4
Area Geologic Map
0.97-acre property
1875 Westlake Drive
Austin, Texas

1875 Westlake Drive

City of Austin ERI
Feature Location Map
Aerial: 2020

Legend

-  1875 Westlake
-  Feature 1
-  S-1 Rimrock
-  S-1 Shelter Cave/Rimrock
-  S-2 Sycamore Tree

Rimrock (overhang)

S-1 Shelter Cave/Rimrock

S-1 Rimrock Aproximate End Off-Site

Sycamore Tree

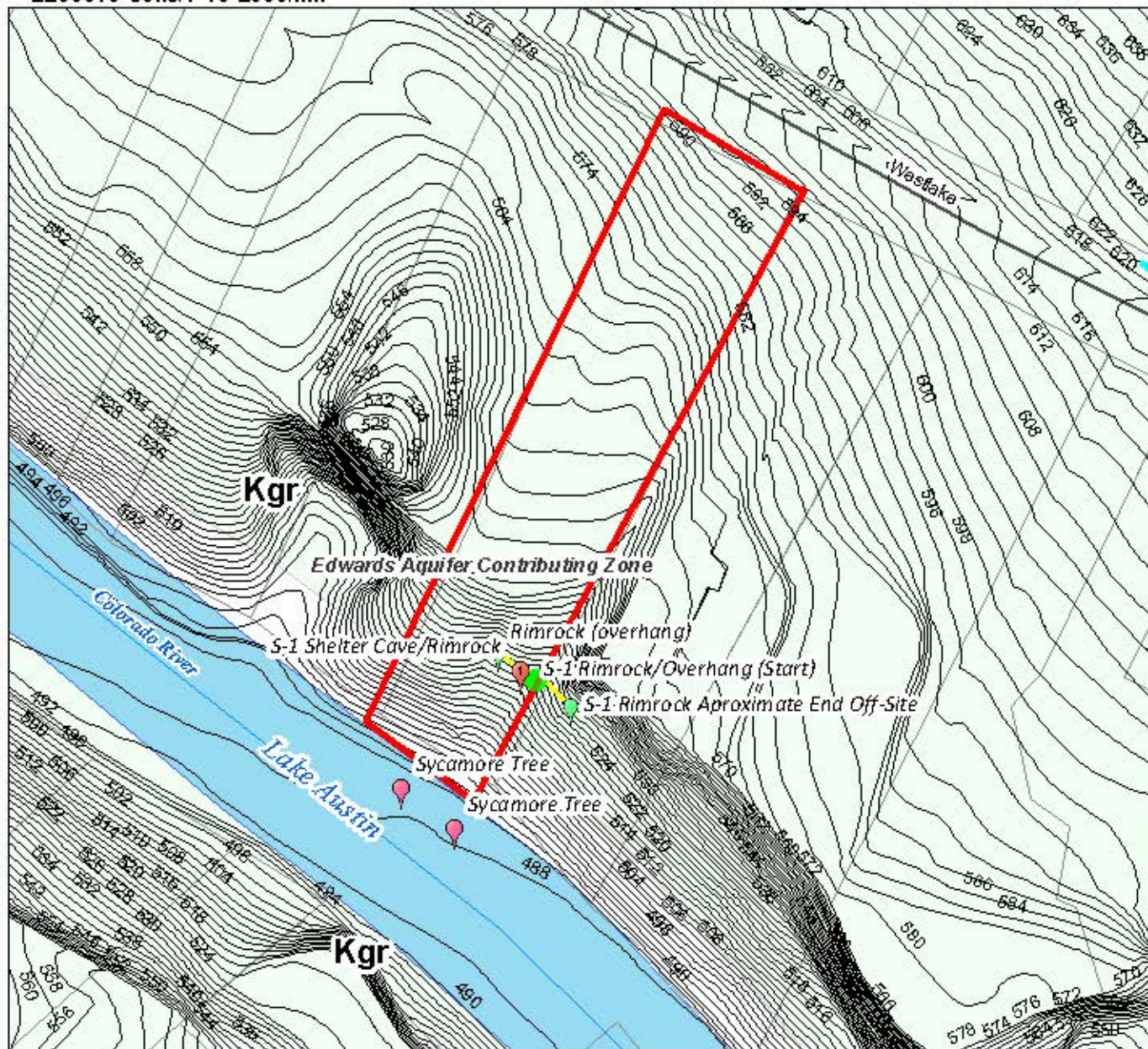
Sycamore Tree



100 ft

Attachment 3

Site Geologic Map

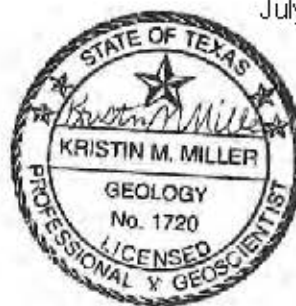


Historic Aerial Photo, Austin West Quadrangle, TNRIS, 1996
Soil: NRCS Soil Survey Staff, 2006

The seal appearing on this document was authorized by Kristin M. Miller, P.G. # 1720 July 10, 2020.

Legend

- Project Boundary
- Kgr, Glen Rose Fm



1 inch = 100 feet
0 50 100
Feet

Figure 4
Area Geologic Map
0.97-acre property
1875 Westlake Drive
Austin, Texas

Attachment 3

Photographs

Photo 1: Feature S-1 Shelter Cave/Rimrock Feature



Photo 2: Feature S-1 Rimrock/Overhang



Photo 3: Feature S-1 Rimrock looking west.

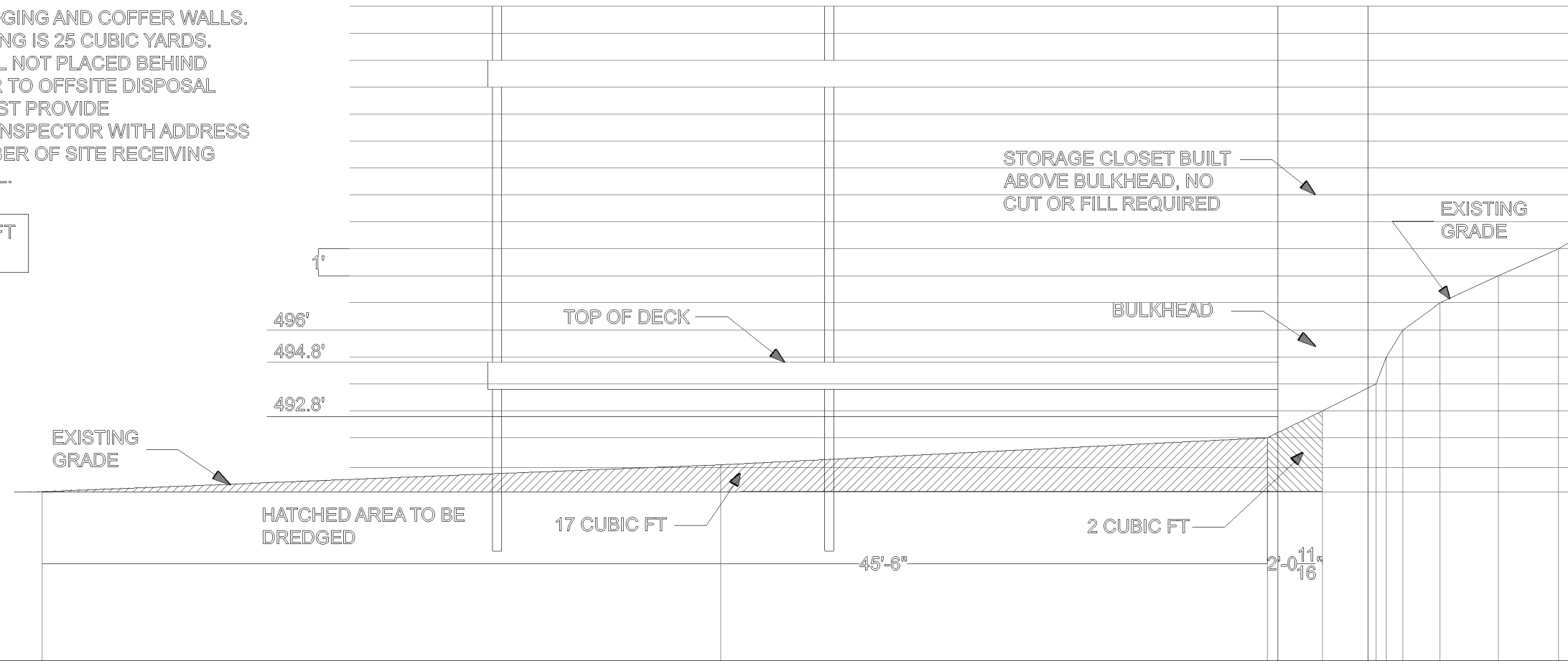


Photo 4: Lakefront proposed project area.



- 1) Cover Sheet
- 2) Demo & Proposed Site Plans
- 3) Dock Plans
- 4) Dock Elevations

17 + 2 = 19 CUBIC FT
DREDGING TOTAL



HIGHLAND LACES ENGINEERING
BOX 1164 KINGSLAND, TEXAS 78659
817-637-9584 TX REG F-9209



2021/21/2021

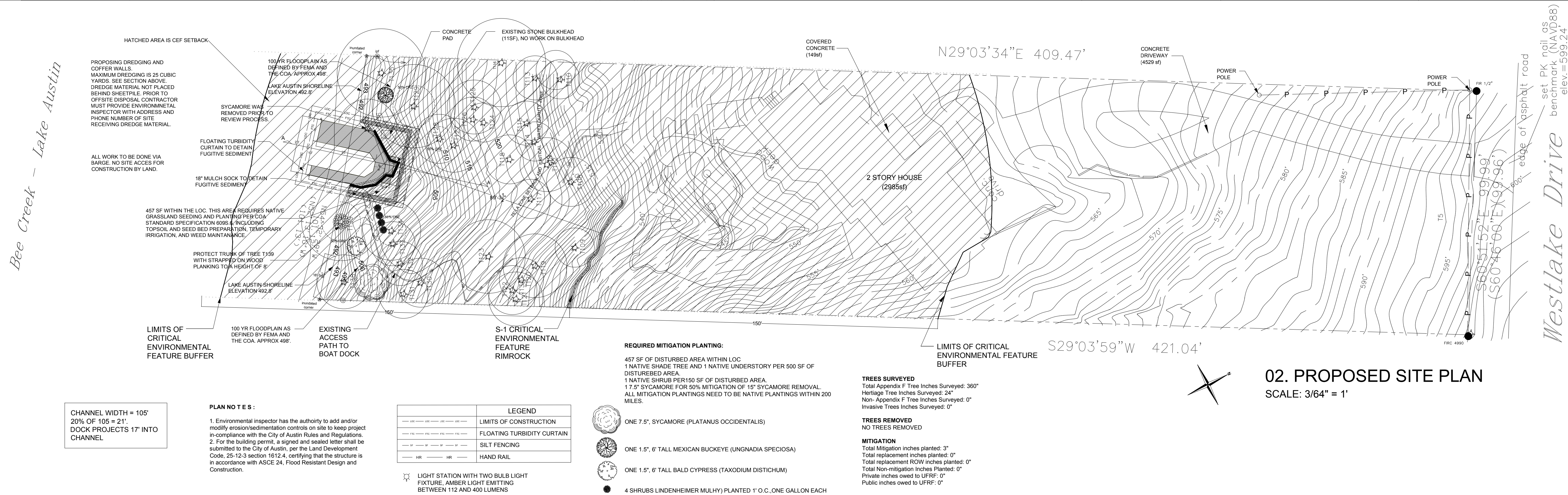
T1108: 10" Cedar
 T1109: 8" Elm
 T1110: 8" Cedar
 T1111: 8" Cedar
 T1112: 11" Cedar
 T1113: 9" Cedar
 T1114: 8" Cedar
 T1115: 9" Cedar
 T1116: 18" Cedar
 T1117: 8" Live Oak
 T1118: 7" Hackberry
 T1119: 9" Cedar
 T1120: 9" Elm
 T1121: 11" Elm
 T1122: 10" Elm
 T1123: 10" 10" Elm
 T1124: 8" Cedar
 T1125: 11" Elm
 T1126: 9" Cedar
 T1127: 11" Cedar
 T1128: 10" Cedar
 T1129: 12" Spanish Oak
 T1130: 10" Cedar
 T1131: 10" Cedar
 T1132: 9" Cedar
 T1133: 9" Cedar
 T1134: 12" Cedar
 T1135: 13" Cedar
 T1136: 12" Live Oak
 T1138: 11" Spanish Oak
 T1139: 9" 8" 7" Spanish Oak

Diagram illustrating the components of a floating filter system:

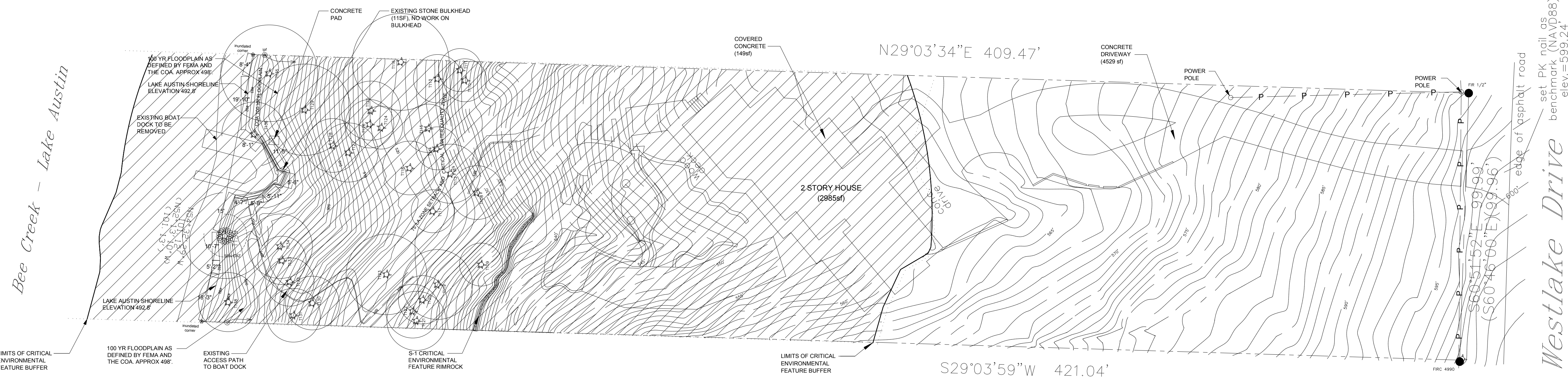
- Floatation
- Water Surface
- Filter Cloth Skirt (Variable Depth)
- Ballast Chain
- Channel Bottom
- 12' (min)

AQUA PERMITS

D:/AquaPermits/AP logo.png



SCALE: 3/64" = 1'



SCALE: 3/64" = 1'

SITE PLAN

SP-2020-0223DS

Revision: A
Description:

Description:

Description:

Date: 3/17/2021

Drawn By: