



ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

BOARD MEETING

DATE REQUESTED: SEPTEMBER 2, 2015

**NAME & NUMBER
OF PROJECT:** MAYES BOAT DOCK
SP-2014-0182D

**NAME OF APPLICANT
OR ORGANIZATION:** Permit Partners
David Cancialosi, 512-593-5368

LOCATION: 3715 Westlake Dr

PROJECT FILING DATE: May 15, 2014

**DSD/ENVIRONMENTAL
STAFF:** Mike McDougal, 512-974-6380
mike.mcdougal@austintexas.gov

**WPD/ENVIRONMENTAL
STAFF:** Scott Hiers, P.G. 512-974-1916
scott.hiers@austintexas.gov

**PDR/
CASE MANAGER:** Christine Barton-Holmes, 512-974-2788
christine.barton-holmes@austintexas.gov

WATERSHED: Lake Austin Watershed / Water Supply Rural
Classification / Drinking Water Protection Zone

ORDINANCE: Watershed Protection Ordinance (pre-2014 Lake Austin
Ordinance)

REQUEST: Variance requests are as follows:

1. To allow construction of a boat dock, shoreline access, and shoreline stabilization within a CEF buffer for a canyon rimrock [LDC 25-8-281(C)(2)(b)]; and
2. To allow fill up to 8 feet [LDC 25-8-342(A)]

STAFF RECOMMENDATION: Variance 1: recommended with conditions.
Variance 2: no recommendation.

**REASONS FOR
RECOMMENDATION:** Variance 1: Findings of fact have been met.
Variance 2: Findings of fact have not been met.



ENVIRONMENTAL BOARD VARIANCE APPLICATION FORM

PROJECT DESCRIPTION

Applicant Contact Information

Name of Applicant	David Cancialosi c/o Permit Partners LLC
Street Address	105 W. Riverside Dr #225
City State ZIP Code	Austin Texas 78704
Work Phone	512-593-5361
E-Mail Address	david@permit-partners.com

Variance Case Information

Case Name	Mayes Boat Dock
Case Number	SP-2014-0182D
Address or Location	3715 Westlake Dr.
Environmental Reviewer Name	Mike McDougal
Applicable Ordinance	LDC 25-8-281(C)(2)(b)
Watershed Name	Lake Austin
Watershed Classification	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input checked="" type="checkbox"/> Water Supply Rural <input type="checkbox"/> Barton Springs Zone
Edwards Aquifer Recharge Zone	<input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment <input checked="" type="checkbox"/> Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Distance to Nearest Classified Waterway	0'
Water and Waste Water service to be provided by	360 Water Supply COA / Travis County OSSF
Request	The variance request is as follows (Cite code references: LDC 25-8-281(C)(2)(b) to allow construction within a CEF buffer

Impervious cover	Existing	Proposed
square footage:	9,789	8,858
acreage:	.225	.203
percentage:	17.3	15.7
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)	<p>Site consists of approx. 1.3 acres of land between Westlake Drive and Lake Austin.</p> <p>Elevation is from 571' at Westlake Drive to 493.6 at the bulkhead along Lake Austin.</p> <p>There are 112 surveyed trees on the lot of 6" caliper or greater with 8 heritage trees.</p> <p>The lot is sloping with areas of 0-15% along Westlake and the center of the site with a bluff line of great than 35% approximately 50' from the shoreline. There is an existing CEF 81.3' to the north of the property. CWQZ is the 75' shoreline setback along Lake Austin.</p>	

Clearly indicate in what way the proposed project does not comply with	The project will require a fill of over 4' to build a construction and pedestrian path to the proposed boathouse and bulkhead reconstruction project.	
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current Code (include maps and exhibits)	The entirety of the existing bulkhead will be replaced with a new natural stone bulkhead conforming to current City of Austin standards. There is an exposed rim rock CEF condition 81.3' feet to the north of the property.	
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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: Mayes Boat Dock

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 or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

Yes. The property owner is proposing to utilize the property in a fair and reasonable manner that will implement greater environmental protections than what is currently in place. What the property owner is requesting will not provide privileged use but, will enhance the safety of the property and it's occupants by allowing the owner to fix a substantially failed bulkhead, install a walking path on cut and fill greater than 4' on a severely sloped lot, and allow construction within the CEF setback for features found on adjacent property whose location is out of property owner's control. The hyper-technical application of the aforementioned LDC code sections will deprive the property owner of a safe and necessary improvement to a property that has not been developed since the 1970's and thus, is in need of repair beyond the constraints of current COA LDC regulations.

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;

No. The property owner has gone to great lengths to redevelop the SF-2 zoned residential property in manner that is in keeping with the spirit and intent of various codes to the best of his ability and in the most practical manner. Further, the variances will allow the development to provide greater environmental protection than what has been on site since the property was initially developed prior to annexation into the COA jurisdiction.

- 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. The owner is proposing the absolute minimum necessary to complete the project and enable the property's ability function in a reasonable manner while substantially improving overall environmental protection to the site, the adjacent sites, and the adjacent waterway as a whole. Without the variances, this is not achievable and the site will remain in a substandard, failed state of constant erosion and dangerous conditions. The bulkhead will be built a reduced footprint from its known original footprint. The cut and fill for the walking path will be the minimum necessary to stabilize the slope and will be topped with non-concrete paver stones, and the CEF's are upstream from the site having negligible, if any, effect on them.

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

No. The proposed improvements will substantially impede any potential harmful environmental consequences, if any consequences exist at all.

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

Yes. Water quality controls will be in place and will be far better than the current absence of controls currently in place. The variances will allow the bulkhead to be repaired and will stop the soil erosion, the cut and fill to capture or divert run off, and are down stream from the specific CEF's in question.

- 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; N/A

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

N/A

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

N/A

**Variance approval requires all above affirmative findings.





ENVIRONMENTAL BOARD VARIANCE APPLICATION FORM

PROJECT DESCRIPTION

Applicant Contact Information

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Street Address	105 W. Riverside Dr #225
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Variance Case Information

Case Name	Mayes Boat Dock
Case Number	SP-2014-0182D
Address or Location	3715 Westlake Dr.
Environmental Reviewer Name	Mike McDougal
Applicable Ordinance	LDC 25-8-342
Watershed Name	Lake Austin
Watershed Classification	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input checked="" type="checkbox"/> Water Supply Rural <input type="checkbox"/> Barton Springs Zone
Edwards Aquifer Recharge Zone	<input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment <input checked="" type="checkbox"/> Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Distance to Nearest Classified Waterway	0'
Water and Waste Water service to be provided by	360 Water Supply COA / Travis County OSSF
Request	The variance request is as follows (Cite code references: LDC 25-8-342 to allow excess of 4' fill

Impervious cover	Existing	Proposed
square footage:	9,789	8,858
acreage:	.225	.203
percentage:	17.3	15.7
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)	<p>Site consists of approx. 1.3 acres of land between Westlake Drive and Lake Austin.</p> <p>Elevation is from 571' at Westlake Drive to 493.6 at the bulkhead along Lake Austin.</p> <p>There are 112 surveyed trees on the lot of 6" caliper or greater with 8 heritage trees.</p> <p>The lot is sloping with areas of 0-15% along Westlake and the center of the site with a bluff line of great than 35% approximately 50' from the shoreline. There is an existing CEF 81.3' to the north of the property. CWQZ is the 75' shoreline setback along Lake Austin.</p>	

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)	<p>The project will require a fill of over 4' to build a construction and pedestrian path to the proposed boathouse and bulkhead reconstruction project.</p> <p>The entirety of the existing bulkhead will be replaced with a new natural stone bulkhead conforming to current City of Austin standards.</p>
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	There is an exposed rim rock CEF condition 81.3' feet to the north of the property.
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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: Mayes Boat Dock

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 or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

Yes. The property owner is proposing to utilize the property in a fair and reasonable manner that will implement greater environmental protections than what is currently in place. What the property owner is requesting will not provide privileged use but, will enhance the safety of the property and it's occupants by allowing the owner to fix a substantially failed bulkhead, install a walking path on fill greater than 4' on a severely sloped lot, and reduce the CEF setback for features found on adjacent property whose location is out of property owner's control. The hyper-technical application of the aforementioned LDC code sections will deprive the property owner of a safe and necessary improvement to a property that has not been developed since the 1970's and thus, is in need of repair beyond the constraints of current COA LDC regulations.

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;

No. The property owner has gone to great lengths to redevelop the SF-2 zoned residential property in manner that is in keeping with the spirit and intent of various codes to the best of his ability and in the most practical manner. Further, the variances will allow the

development to provide greater environmental protection than what has been on site since the property was initially developed prior to annexation into the COA jurisdiction.

- 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. The owner is proposing the absolute minimum necessary to complete the project and enable the property's ability function in a reasonable manner while substantially improving overall environmental protection to the site, the adjacent sites, and the adjacent waterway as a whole. Without the variances, this is not achievable and the site will remain in a substandard, failed state of constant erosion and dangerous conditions. The bulkhead will be built a reduced footprint from its known original footprint. The fill for the walking path will be the minimum necessary to stabilize the slope and will be topped with non-concrete paver stones, and the CEF's are upstream from the site having negligible, if any, effect on them.

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

No. The proposed improvements will substantially impede any potential harmful environmental consequences, if any consequences exist at all.

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

Yes. Water quality controls will be in place and will be far better than the current absence of controls currently in place. The variances will allow the bulkhead to be repaired and will stop the soil erosion, the fill to capture or divert run off, and are down stream from the specific CEF's in question.

- 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; N/A

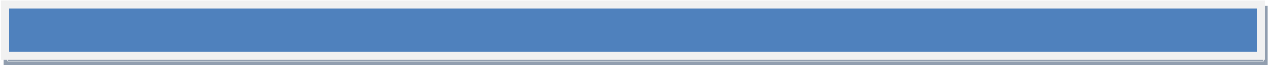
2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

N/A

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

N/A

**Variance approval requires all above affirmative findings.





MEMORANDUM

TO: Chair Maxwell and Members of the Environmental Commission

FROM: Scott Hiers, P.G., Hydrogeologist
Watershed Protection Department

Mike McDougal, Environmental Review Specialist Senior
Development Services Department

DATE: September 2, 2015

SUBJECT: Mayes Boat Dock SP-2014-0182D

On the September 2, 2015 agenda is a request for the consideration of two variances to allow a construction of a boat dock, shoreline access, and shoreline stabilization within a Critical Environmental Feature rimrock (CEF) buffer [LDC 25-8-281(C)(2)(b)] and to allow fill up to 8 feet [LDC 25-8-342(A)].

Property Location

The property is located at 3715 Westlake Drive (Exhibit 1 Location Map and Exhibit 2 Site Aerial). Adjacent use is residential.

Watershed Data

The 1.37 acre property is located within the Lake Austin Watershed (classified as Water Supply Rural) and is not located within the Edwards Aquifer Recharge Zone. Surface water generally drains from the west to east / northeast. (Exhibit 3 Topography and Critical Water Quality Zone Map). City of Austin GIS shows a Critical Water Quality Zone associated with Lake Austin (Exhibit 3 Topography and Critical Water Quality Zone Map).

Jurisdictional Data

The property is within the City of Austin full purpose jurisdiction and is zoned SF-2.

Trees / CEFs

A rimrock Critical Environmental Feature is located offsite (on the property immediately north of the subject property). A portion of the 150 foot Critical Environmental Feature buffer extends onto the

subject tract (Exhibit 4 – CEF Map). Vegetation and Critical Environmental Features are described in the attached Environmental Resource Inventory (Exhibit 5 COA Environmental Resource Inventory).

Variance Request

An existing single family residence and boat dock with bulkhead is located on the property. The applicant seeks to remove the existing boat dock, construct a new boat dock, and install a new bulkhead in front (lakeside) of the existing bulkhead. A portion of the proposed bulkhead construction and the proposed boat dock construction are located within this Critical Environmental Feature buffer.

The applicant also seeks to remove a walkway and steps accessing the existing (to be removed) boat dock. In addition, the applicant seeks to install a new walkway and steps accessing the new boat dock. A portion of the proposed walkway (located at the southeast portion of the property) will require fill up to 8 feet (Exhibit 6 Proposed Fill). This fill will not exceed an area of 225 square feet.

Therefore, the following variances to the Land Development Code (LDC) have been requested:

- 1 – To allow construction of a boat dock, shoreline access, and shoreline stabilization within a CEF buffer for a canyon rimrock [LDC 25-8-281(C)(2)(b)]; and
- 2 – To allow fill up to 8 feet [LDC 25-8-342(A)].

Site Photographs

Site photographs are provided in Exhibit 7.

Conditions for Staff Approval

Staff recommends approval of the CEF variance (variance 1) provided that 609S.6 vegetation will be planted and maintained by the applicant where the limit of construction enters into the Critical Water Quality Zone.

There is no Staff recommendation for the fill variance request (variance 2). Review staff and the applicant were not aware that the proposed fill variance did not meet the findings of fact until very late in the review process due to a mis-communication with the Environmental Officer. As a result, the Environmental Officer agreed to take this variance forward with no recommendation.

Recommendation

The Findings of Fact have been met for the CEF variance. Staff recommends approval of the CEF variance with the above conditions. As noted above, there is no staff recommendation on variance two.



**Watershed Protection Department
Staff Recommendations Concerning Required Findings
Water Quality Variances**

Project:	Mayes Boat Dock- SP-2014-0182DS
Ordinance Standard:	Land Development Code Section 25-8-281(C)(2)(b)
Variance Request:	To allow construction of a boat dock, shoreline access and shoreline stabilization within a Critical Environmental Feature (CEF) buffer for a canyon rimrock.

Justification:

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. Properties with frontage along Lake Austin frequently contain boat docks and neighboring properties adjacent to the subject property have boat docks.

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 construction of boat dock, which is typical a construction activity for shoreline properties along the lake, is occurring down gradient and to the side of the rimrock critical environmental feature that is located off-site on the adjacent property to the north.

- 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. The applicant is not requesting to exceed the allowable 20% of the shoreline frontage.

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

Yes. The construction of a boat dock, shoreline stabilization, and shoreline access will not create a significant probability of harmful environmental consequences. The construction activities required is occurring down gradient and to the side of rimrock critical environmental feature that is located on the adjacent property. The construction activities will not cause significant discharge of sediment into lake.

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 construction activities required for the boat dock, shoreline access and shoreline stabilization would result in at least equal or greater water quality, because the proposed construction activity is occurring down gradient and to the side of the rimrock critical environmental feature. As a result, there will be no increase sediment-laden runoff over the rimrock or impacts to the rimrock.

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 above criteria for granting a variance are met;

N/A.

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

N/A.

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

N/A.

Environmental Officer:



Chuck Lesniak

Date: August 25, 2015

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



**Development Services Department
Staff Recommendations Concerning Required Findings
Water Quality Variances**

Project: Mayes Boat Dock- SP-2014-0182DS
Ordinance Standard: Land Development Code Section 25-8-342(A)
Variance Request: To allow fill up to 8 feet for the construction of a walkway to access the boat dock.

Justification:

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.

No. There are alternatives to the variance that would allow the necessary access to the boat dock.

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;

No. Boat dock access is necessary; however, access can be provided without fill in excess of 4 feet. Specifically, access can be provided on the steeper portions of the property by constructing a boardwalk type structure and on less steep portions of the property, the access can be constructed with cut and fill of 4 feet or less. Proposed fill up to 8 feet does not provide greater overall environmental protection than is achievable via a construction of a boardwalk type structure.

- 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;

No. The applicant has minimized the footprint of the proposed fill over 4 feet; however, access to the boat dock can be provided while maintaining grading amounts of 4 feet or less. Fill in excess of 4 feet does not represent 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.

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

Yes. The fill will be structurally contained by a retaining wall prior to the commencement of fill activities. Sediment will be contained before and after vegetative stabilization is achieved.

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 fill will be structurally contained by a retaining wall to be built prior to the placement of fill over 4 feet. Sediment will be contained before and after vegetative stabilization is achieved.

- 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 above criteria for granting a variance are met;

N/A.

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

N/A.

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

N/A.

Environmental Reviewer:


Mike McDougal

Environmental Program Coordinator:


Sue Barnett

Environmental Officer:


Chuck Lesniak

Date: August 25, 2015

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

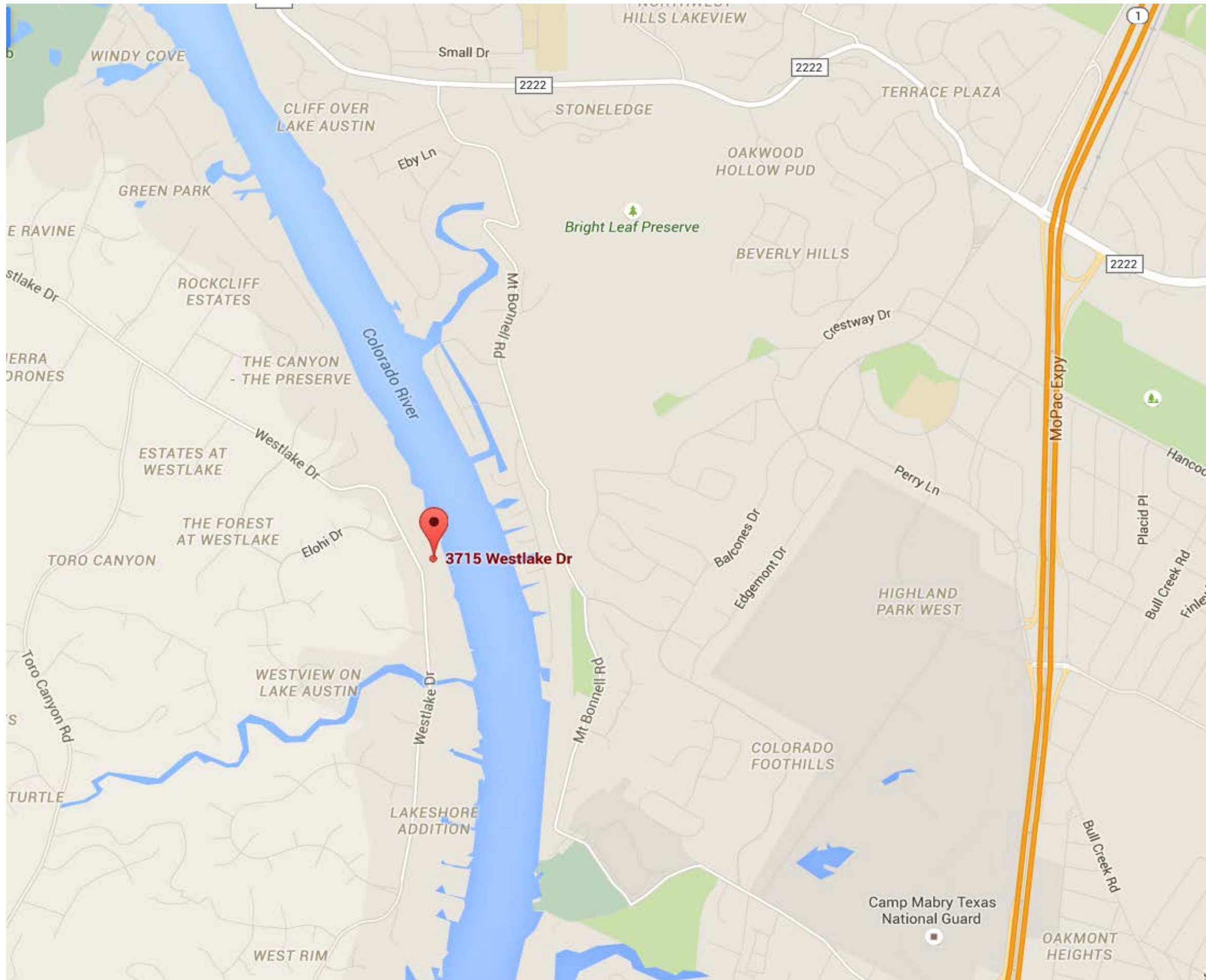


Exhibit 1 - Location Map

▲
North
Not to Scale



Exhibit 2 - Site Aerial

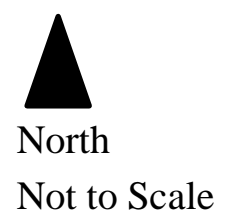




Exhibit 3 - Topography and Critical Water Quality Zone Map

North
Not to Scale

CEF Setback

INDEX:
4198H INDICATES HERITAGE TREE
4198 INDICATED TREE TO BE REMOVED

TAG	NO.	DESCRIPTION	TAG	NO.	DESCRIPTION
4191	25' ELM		4311	10" OAK	
4192H	22' 22" & 19" BALD CYPRESS (RATED)		4317	12" CEDAR	
4193	19' ELM		4319	12" CEDAR	
4194	24' ELM		4320	8" CEDAR	
4195	21' BALD CYPRESS		4321	8" CEDAR	
4211	4" ELM		4322	15" CEDAR	
4218	21" OAK		4323	8" CEDAR	
4212	18" OAK		4324	10" & 7" CEDAR (RATED)	
4215	13" CEDAR		4326	12" CEDAR	
4216	6" CHAPE MYRTLE		4330	8" CEDAR	
8" CEDAR			4331	14" CEDAR	
4220	8" CEDAR		4333	12" CEDAR	
4226	6" CEDAR		4334	6" CEDAR	
4231	6" OAK		4335	8" HACKBERRY	
4234	6" CEDAR		4336	7" CEDAR	
4236	6" CEDAR		4337	6" CEDAR	
4240	6" CEDAR		4338	14" CEDAR	
4244	10" LEOSTRUM		4339	24" OAK	
4245	7" HACKBERRY		4342	5" & 3" CEDAR (RATED)	
4246	6" SPANISH OAK		4343	5" CEDAR	
4247	21" OAK		4344	5" CEDAR	
4248	18" OAK		4345	7" CEDAR	
4249	14" ELM		4346	9" OAK	
4250	7" OAK		4347	10" CEDAR	
4251	14" & 19" ELM (RATED)		4348	9" OAK	
4252	28" ELM		4349	5" CEDAR	
4255	16" OAK		4350	4" & 3" HACKBERRY (RATED)	
4256	8" HACKBERRY		4351	5" HACKBERRY	
4259	17" OAK		4353	14" CEDAR	
4258	7" OAK		4354	28" CEDAR	
4259	10" CEDAR		4355	21" & 17" OAK (RATED)	
4260	6" HACKBERRY		4356	13" OAK	
4261H	32" OAK		4357	13" & 11" OAK (RATED)	
4262	6" HACKBERRY		4358	11" ELM	
4267H	29" OAK		4360H	30" OAK	
4270	19" OAK		4363	13" OAK	
4271	13" OAK		4368	18" OAK	
4272	16" & 11" OAK (RATED)		4371	13" OAK	
4274	14" OAK		4373	8" CEDAR	
4275	12" & 5" OAK (RATED)		4375	8" OAK	
4276	8" OAK		4376	11" CEDAR	
4277	7" OAK		4377	12" OAK	
4280	9" OAK		4378	6" CEDAR	
4284	5" OAK		4379	8" OAK	
4285	6" OAK		4380	12" OAK	
4286	6" CEDAR		4381	18" & 11" & 9" CEDAR (RATED)	
4288	14" OAK		4382	10" OAK	
4289	25' & 5" OAK (RATED)		4383	10" OAK	
4290	11" OAK		4384	10" OAK	
4291	13" & 11" OAK (RATED)		4385	10" OAK	
4293H	32" OAK		4386	12" ELM	
4294	16" OAK		4387	12" ELM	
4296	10" OAK		4388	18" OAK	
4297	17" OAK		4389	18" & 14" OAK (RATED)	
4300	7" OAK		4390	7" ELM	
4302	9" CEDAR				
4303H	36" & 24" OAK (RATED)				
4306H	28" OAK				

Exhibit 4 - CEF Map

Case No.:

(City use only)

Exhibit 5 Environmental Resource Inventory

For the City of Austin

Relating to the Land Development Code (LDC) Section 25-8, Title 30-5, ECM 1.3.0 & 1.10.0
Effective October 28, 2013

1. SITE/PROJECT NAME: 3715 Westlake Drive
2. COUNTY APPRAISAL DISTRICT PROPERTY ID (#'s): 123442
3. ADDRESS/LOCATION OF PROJECT: 3715 Westlake Drive
4. WATERSHED: 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 Springs Zone* ☐ YES ☒ NO

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

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, or
- ☐ (3) The floodplain modifications proposed are necessary for development allowed in the critical water **quality zone under Section 25-8-261 or 25-8-262 of the LDC.**
- ☐ (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 Section 1.7 and Appendix X in the Environmental Criteria Manual 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 Section 25-8-261(E) of the LDC and a functional assessment must be completed and attached to the ERI (see Section 1.5 and Appendix X in the Environmental Criteria Manual 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):

1 (#s) Spring(s)/Seep(s) (#s) Point Recharge Feature(s) (#s) Bluff(s)
 (#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 Section 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 Hydrologic Groups Definitions (Abbreviated)
Soil Series Unit Name & Subgroup**	Group*	Thickness (feet)	
Tarrant soils & Urban land, 5-18% slopes (TeE)	C	0.3-1.2	<p>A. Soils having a <u>high infiltration</u> rate when thoroughly wetted.</p> <p>B. Soils having a <u>moderate infiltration</u> rate when thoroughly wetted.</p> <p>C. Soils having a <u>slow infiltration</u> rate when thoroughly wetted.</p> <p>D. Soils having a <u>very slow infiltration</u> rate when thoroughly wetted.</p> <p>**Subgroup Classification – See <u>Classification of Soil Series</u> Table in County Soil Survey.</p>
Tarrant soils & Urban land, 8-40% slopes (TeE)	C	0.3-1.2	

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

Site topography ranges from 492 to 570 feet above mean sea level (MSL). Drainage on the Property occurs via overland sheet flow down to Lake Austin.

List surface geologic units below:

Geologic Units Exposed at Surface		
Group	Formation	Member
Trinity	Glen Rose (Kgr[u])	Upper
N/A	Quaternary Terrace Deposits (Qt)	N/A

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

The upper member of the Glen Rose Limestone is relatively impermeable and described as the lower confining unit of the Edwards Aquifer. It has a maximum thickness of about 350 to 500 feet. Stair-step topography is characteristic of the upper member of the Glen Rose Limestone. The Upper Glen Rose Limestone is described as yellowish-tan, thinly bedded limestone and marl. The upper member of the Glen Rose Limestone is relatively more thinly bedded, more dolomitic, and less fossiliferous than the lower member of the Glen Rose Limestone. The top of the upper member of the Glen Rose Limestone is red-stained, lumpy, irregular, and bored, with oysters cemented onto the surface.

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

- (#s)The wells are not in use and have been properly abandoned.
- (#s)The wells are not in use and will be properly abandoned.
- (#s)The wells are in use and comply with 16 TAC Chapter 76.

There are 0 (#s) wells that are off-site and within 150 feet of this site.

11. **THE VEGETATION REPORT** – Provide the information requested below:

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

Upland canopy species consist of Chinese tallow, Ashe juniper plateau live oak , hackberry cedar elm. St. Augustine is the predominant ground cover.

Wetland species include bald cypress , sycamore , and black willow.

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

If yes, list the dominant species below:

Woodland species	
Common Name	Scientific Name
Chinese tallow	<i>Triadica sebifera</i>
Ashe juniper	<i>Juniperus ashei</i>
plateau live oak	<i>Quercus fusiformis</i>
hackberry	<i>Celtis laevigata</i>
cedar elm	<i>Ulmus crassifolia</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

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
bald cypress	<i>Taxodium distichum</i>	OBL
sycamore	<i>Platanus occidentalis</i>	FAC
black willow	<i>Salix nigra</i>	FACW

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).

12. 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 Chapter 15-12 of Austin City Code 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.

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

Date(s) ERI Field Assessment was performed: 27 March 2014
Date(s)

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

Mr. Shannon Dorsey, PWS #1760

512.328.2430

Print Name

Telephone

Signature

sdorsey@horizon-esi.com

Horizon Environmental Services, Inc.

Email Address

15 April 2014

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).

P.G.
Seal

Attachments



Environmental Services, Inc.

ATTACHMENT A

CEF DESCRIPTION AND REFERENCES

140057 ERI_Attachments.docx

CORPORATE HEADQUARTERS

1507 South IH 35 ★ Austin, Texas 78741 ★ 512.328.2430 ★ Fax 512.328.1804 ★ www.horizon-esi.com
Certified WBE/HUB/DBE/SBE

1.0 CRITICAL ENVIRONMENTAL FEATURES

The City of Austin definition of a critical environmental feature (CEF) includes caves, sinkholes, springs, wetlands, bluffs, canyon rimrock, water wells within the Edwards Aquifer, and significant recharge features located over the Edwards Aquifer Recharge Zone. One potential CEF, as defined by the City of Austin, was found within 150 feet from the subject site. One rimrock CEF (CEF 1) was located 50 feet north of the subject site. No other CEFs were found on or within 150 feet from the subject site. CEF feature dimensions and location are provided on the City of Austin CEF worksheet.

If the subject site is proposed for future development, the City of Austin generally requires 150-foot buffer zones be placed on all CEFs.

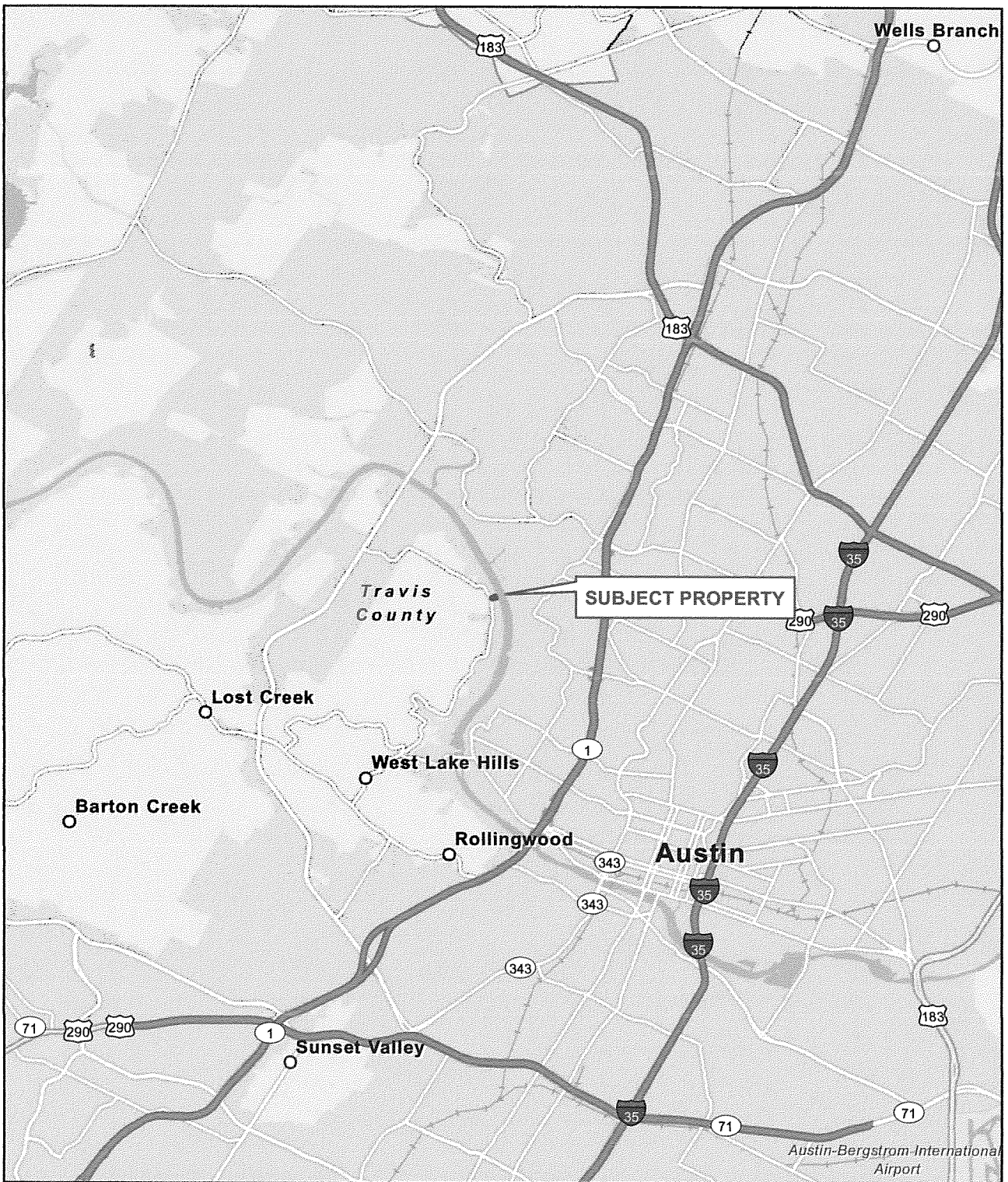
2.0 REFERENCES

- (COA) City of Austin. *City of Austin GIS Data Sets*. Year 2003 2-foot contours of the City of Austin and ETJ only <ftp://ftp.ci.austin.tx.us/GIS-Data/Regional/coa_gis.html>. 2003.
- _____. *City of Austin GIS Data Sets*. Watershed Regulation Areas. <ftp://ftp.ci.austin.tx.us/GIS-Data/Regional/coa_gis.html>. 30 October 2012.
- _____. *City of Austin GIS Data Sets*. Water Quality Creek Buffers. <ftp://ftp.ci.austin.tx.us/GIS-Data/Regional/coa_gis.html>. 7 November 2013.
- _____. *City of Austin GIS*. Development Web Map <<http://www.austintexas.gov/GIS/developmentwebmap/Viewer.aspx>>. Accessed 2 April 2014.
- (ESRI) Environmental Systems Research Institute, Inc. Street Map North America Data Layer. ESRI, Redlands, California. 2012.
- Garner, L.E., and K.P. Young. *Environmental Geology of the Austin Area: An Aid to Urban Planning*. Report of Investigations 86. The University of Texas at Austin, Bureau of Economic Geology. 1976.
- (NRCS) Natural Resources Conservation Service (formerly the Soil Conservation Service) US Department of Agriculture. Web Soil Survey, <<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>. Accessed 2 April 2014.
- Rose, P.R. *Edwards Group, Surface and Subsurface, Central Texas*. Report of Investigations 74. The University of Texas at Austin, Bureau of Economic Geology. 1972.
- (USDA) US Department of Agriculture. National Agriculture Imagery Program, Farm Service Agency, Aerial Photography Field Office. Travis County, Texas. 2012.
- (USGS) US Geological Survey. Digital Orthophoto Quarter-Quadrangle, Austin West, Texas. 1995.

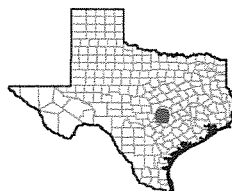
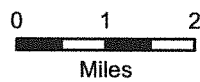
(UT-BEG) University of Texas Bureau of Economic Geology, C.V. Proctor, Jr., T.E. Brown, J.H. McGowen, N.B. Waechter, and V.E. Barnes. *Geologic Atlas of Texas*, Austin Sheet, Francis Luther Whitney Memorial Edition. 1974; reprinted 1995.

Werchan, Leroy E., A.C. Lowther, and Robert N. Ramsey. *Soil Survey of Travis County, Texas*. US Department of Agriculture, Natural Resources Conservation Service (formerly Soil Conservation Service), in cooperation with the Texas Agricultural Experiment Station. 1974.

ATTACHMENT B
FIGURES

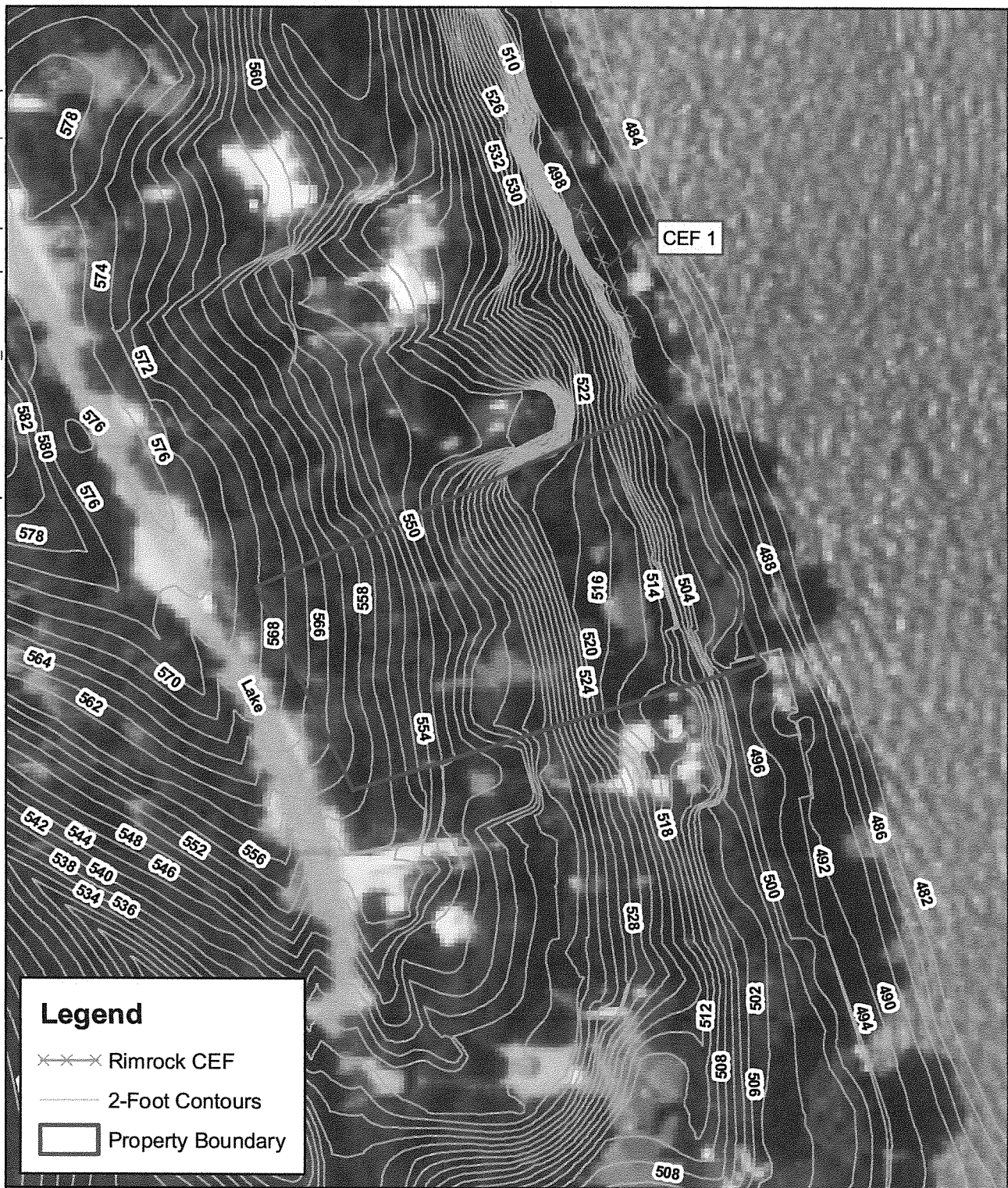


MAP SOURCE: ESRI, 2012.



VICINITY MAP
3715 WESTLAKE DRIVE
WESTLAKE, TRAVIS COUNTY, TEXAS

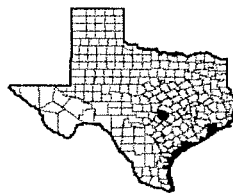
Horizon
Environmental Services, Inc.



MAP SOURCE: COA, 2003; USDA, 2012.

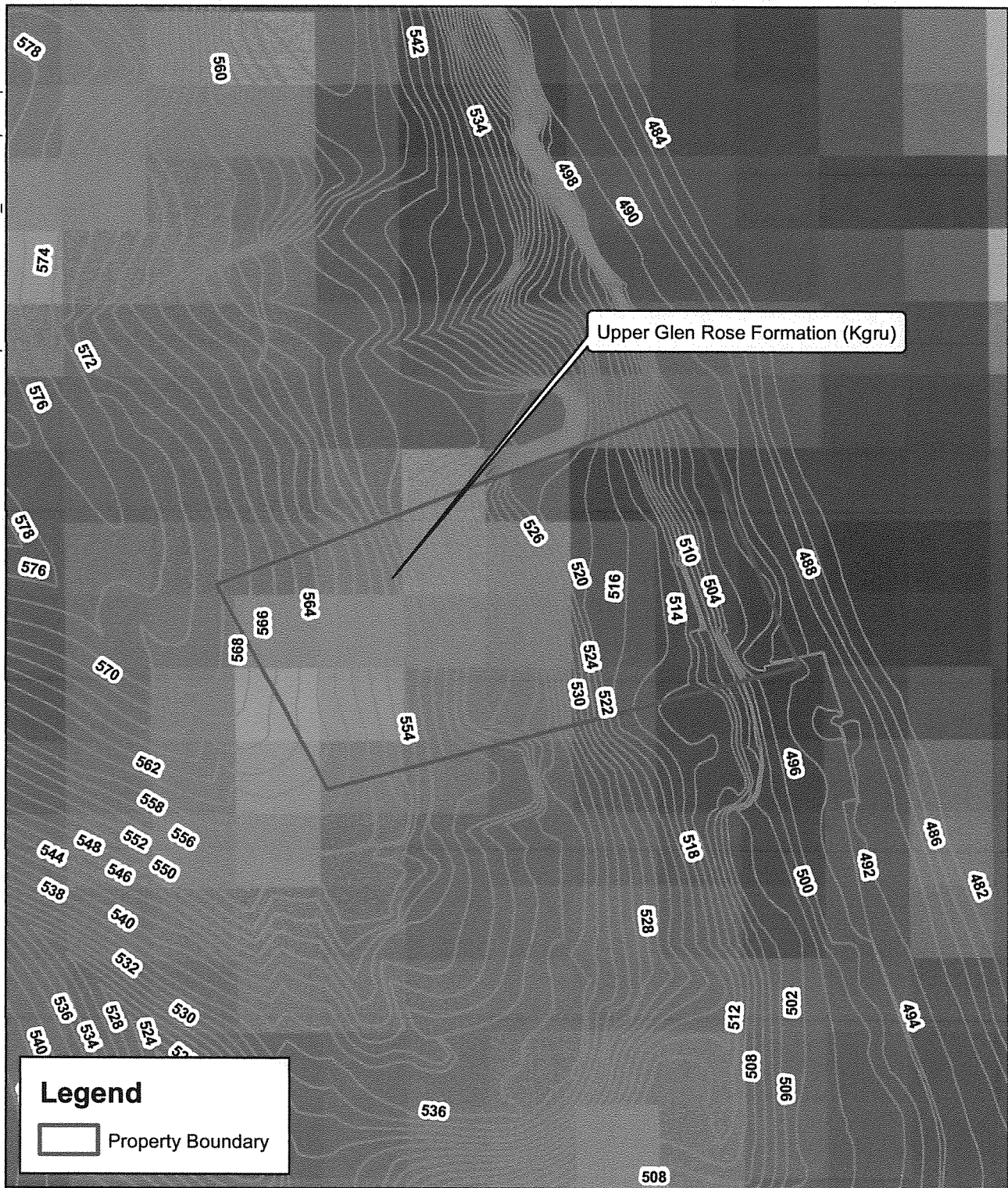


0 50 100
Feet




CRITICAL ENVIRONMENTAL FEATURES
AND WELL LOCATION MAP
3715 WESTLAKE DRIVE
WESTLAKE, TRAVIS COUNTY, TEXAS

Horizon
Environmental Services, Inc.



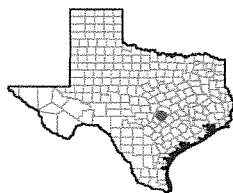
Legend

 Property Boundary

MAP SOURCE: UT-BEG, 1995; COA, 2003.



0 50 100
Feet




SITE SPECIFIC GEOLOGIC MAP WITH 2-FT TOPOGRAPHY
3715 WESTLAKE DRIVE
WESTLAKE, TRAVIS COUNTY, TEXAS

Horizon
Environmental Services, Inc.



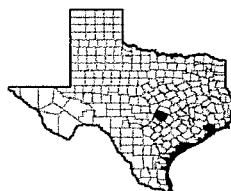
Legend

 Property Boundary

MAP SOURCE: USGS, 1995.



0 50 100
Feet






HISTORIC AERIAL PHOTO OF THE SITE
3715 WESTLAKE DRIVE
WESTLAKE, TRAVIS COUNTY, TEXAS

Horizon
Environmental Services, Inc.



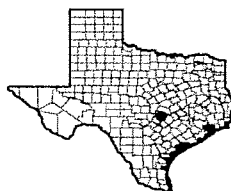
Legend

-  Property Boundary
-  TeE - Tarrant soils and Urban land, 5-18% slopes
-  TeF - Tarrant soils and Urban land, 8-40% slopes

MAP SOURCE: NCRS, 2014; USDA, 2012..



0 50 100
Feet



Horizon
Environmental Services, Inc.

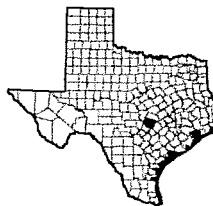
SITE SOIL MAP
3715 WESTLAKE DRIVE
WESTLAKE, TRAVIS COUNTY, TEXAS



MAP SOURCE: COA, 2013; USDA, 2012.

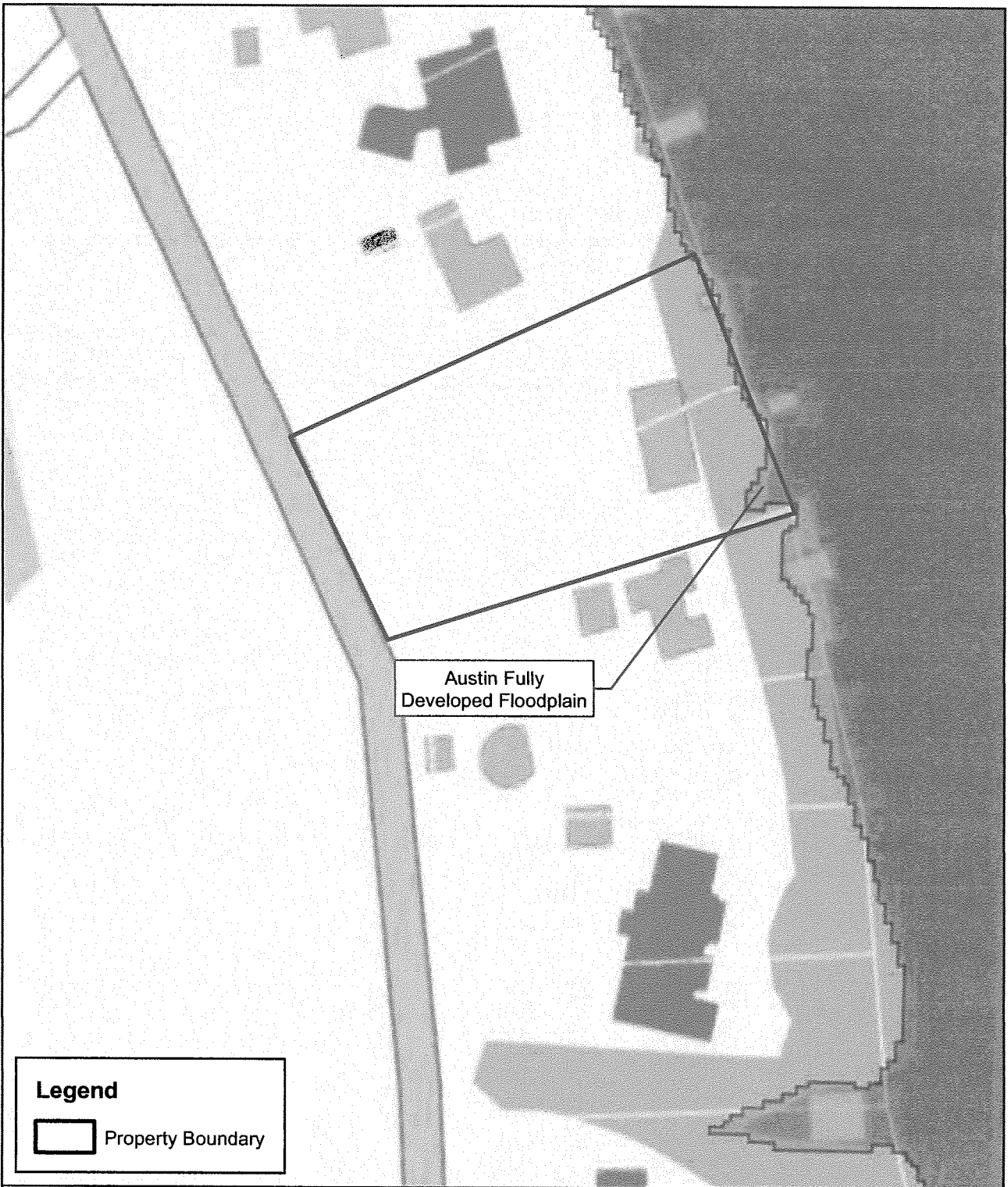


0 50 100
Feet



CRITICAL WATER QUALITY ZONE
3715 WESTLAKE DRIVE
WESTLAKE, TRAVIS COUNTY, TEXAS

Horizon
Environmental Services, Inc.



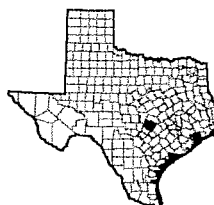
Legend

 Property Boundary

MAP SOURCE: COA, 2014.



0 50 100
Feet



Horizon
Environmental Services, Inc.

AUSTIN FULLY DEVELOPED
FLOODPLAIN MAP
3715 WESTLAKE DRIVE
WESTLAKE, TRAVIS COUNTY, TEXAS

ATTACHMENT C
SITE PHOTOGRAPHS

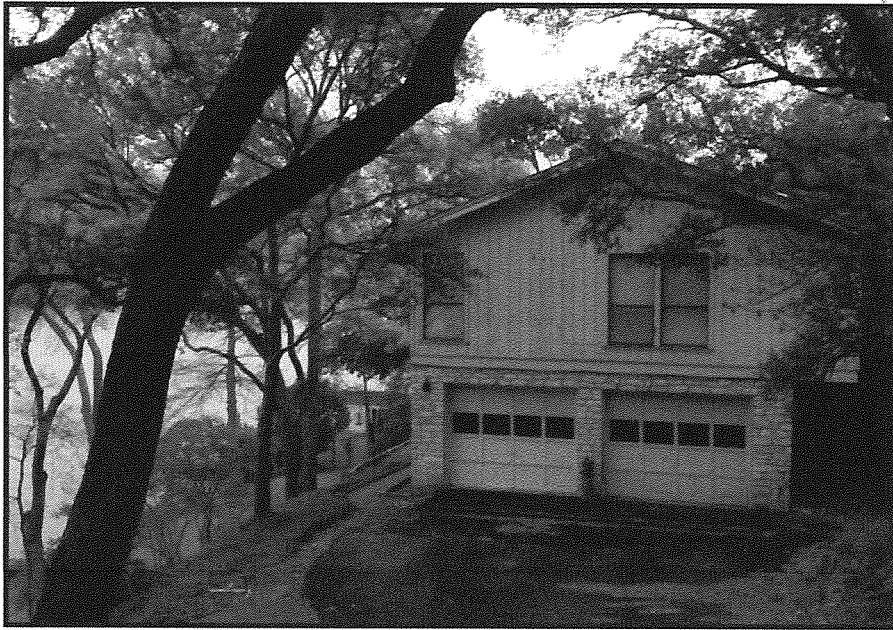


PHOTO 1
View of SFR located on the subject site



PHOTO 2
View of Lake Austin, located on the east side of the subject site



Exhibit 7 - Site Photographs

Mayes Residence 3715 Westlake Drive
SP-2014-0182D



Mayes Residence 3715 Westlake Drive
SP-2014-0182D

Site Photos



Mayes Residence 3715 Westlake Drive
SP-2014-0182D

Site Photos