



ITEM FOR ENVIRONMENTAL BOARD AGENDA

BOARD MEETING

DATE REQUESTED: July 16, 2008

**NAME & NUMBER
OF PROJECT:** WEBB ESTATES
C8J-2008-0082

**NAME OF APPLICANT
OR ORGANIZATION:** Longaro & Clarke, L.P.
(Contact: James McCann- 306-0228)

LOCATION: City Park Road

PROJECT FILING DATE: April 23, 2008

**WPDR/ENVIRONMENTAL
STAFF:** Craig Carson, 974-7690
craig.carson@ci.austin.tx.us

**WPDR/
CASE MANAGER:** Don Perryman, 974-2786
don.perryman@ci.austin.tx.us

WATERSHED: West Bull Creek Watershed (Water Supply Suburban)
Turkey Creek Watershed (Water Supply Rural)
Drinking Water Protection Zone

**ORDINANCE:
REQUEST:** Comprehensive Watershed Ordinance (current Code)
Variance requests are as follows:

1. To allow construction of roads and driveways on slopes greater than 15% [LDC Section 30-5-301(A), and,
2. To allow construction of buildings on slopes greater than 25% [LDC Section 30-5-302(B)], and,
3. To allow cut up to 18 feet and fill up to 20 feet [LDC Section 30-5-341/342].

STAFF RECOMMENDATION: Recommend approval.

**REASONS FOR
RECOMMENDATION:** Findings of fact have been met.



MEMORANDUM

TO: Betty Baker, Chairperson
Members of the Zoning and Platting Commission

FROM: Craig Carson, Senior Environmental Reviewer
Watershed Protection and Development Review Department

DATE: July 16, 2008

SUBJECT: Webb Estates C8J-2008-0082

Variance Request:

Variance from LDC 30-5-301(A)- Construction of Roadway/Driveway on slopes > 15%.

Variance from LDC 30-5-302(B) – Construction of buildings on slopes > 25%.

Variance from LDC 30-5-341/342- Cut/fill greater than 4 feet.

The applicant is proposing to construct a 76 lot single family subdivision with roadways, utilities, and 4 detention ponds on approximately 167.49 acres. This project is located on the west side of City Park Road, approximately 1000 feet north of the intersection of City Park Road and Westminster Glen Avenue and is within the City of Austin's Limited Purpose Jurisdiction.

Approximately half of the tract drains south to the Turkey Creek Watershed, which is classified as Water Supply Rural and the other half drains north to the West Bull Creek Watershed, which is classified as Water Supply Suburban. This site is located on the Northern Edwards Aquifer. The topography of the tract is typical west Travis County hill country, with flatter and steeper sections on the hill sides and incised drainage ways.

This site is part of the Balcones Canyonland Preserve and is known to contain nesting ground for the Golden Cheeked Warbler. The conservation areas effectively divide the tract into two distinct sections. The owners of Webb Estates have provided 46.78 acres of preserve area, which represents approximately 28% of the entire tract. This preserve area will remain in a natural undisturbed state.

Through a transfer of development intensity [LDC 30-5-455(A)(5)], the applicant is allowed to add an additional five residential houses to the tract. In this case, the applicant is allowed to transfer 11.03 acres of impervious cover for establishing buffer areas surrounding critical

environmental features (CEFs) located on the Turkey Creek Watershed portion of the tract to the Uplands.

In the Turkey Creek Watershed portion of the site, the applicant proposes a total impervious cover (including roads, homes, and driveways) of 13.40 acres (or 583,704 square feet, or 12.8% gross site area/ 19.8% net site area). This meets the density and lot size requirements allowed by City Code.

In the West Bull Creek Watershed portion of this site, the applicant proposes a total impervious cover of 13.58 acres (or 591,544.8 square feet, or 21.4% gross site area/ 29.9% net site area). This is under the allowed 30% impervious cover limit allowed by City Code.

The applicant's subdivision complies with the density requirement and because the total impervious cover is below 20%, there are no water quality ponds proposed. The applicant is proposing 4 detention ponds to ensure storm water run-off rates remain at pre-development conditions.

Description of Project Area

This is a 167.49 acre tract that is roughly bounded by the Westminster Glen Phase 1 Subdivision to the south, River Place Section 8 to the west, City Park Road to the east, and City owned conservation areas to the north. Existing development on this tract consists of one single family house with horse stables and related improvements.

This site is comprised of rolling terrain with incised drainage ways typical of the West Travis County Hill Country. Topographically the site ranges in elevation from approximately 770 to 1042 above mean sea level. The site is approximately divided by a ridgeline that defines the boundary between the Turkey Creek Watershed (Water Supply Rural) and the West Bull Creek Watershed (Water Supply Suburban). Due to naturally occurring rolling terrain all slope categories can be found on site; 54.7% of the total site falls in the 0-15% slope category, 27.2% of the total site falls within the 15-25% slope category, and 18.1% of the site has slopes in excess of 25%. No portion of this site falls within the 100 year flood plain, however there is a critical water quality zone that is located in the conservation easement along the west side of the property. This site is located on the Northern Edwards Aquifer.

Vegetation

The site is located within the Edwards Plateau vegetational area of Texas. The vegetation on this tract is predominately Ashe juniper, Live oak, Texas oak, Yaupon, Flame-leaf sumac, Evergreen sumac, Twisted-leave yucca, Texas prickly pear, Poison ivy, Texas mountain laurel and native grasses.

Typical wetland vegetation observed in existing drainage ways include: Spikerush, Cattail, black Willow, and Maiden Fern.

Critical Environmental Features

Twenty Critical Environmental Features were identified in the Horizon Environmental Report. They identified 13 seeps, 3 rim rock features, 1 twenty foot diameter cave, 1 wetland, 1 sinkhole, and 1 water well. The City's Environmental Resource Management staff reviewed

the site and allowed 50 foot setbacks for one seep (Seep F5) and the 20 foot long solution fracture, and required 150 foot buffers for all of the other CEFs.

Water/Wastewater

Water service shall be provided by the River City Municipal Utility District. Wastewater for all lots will be individual on-site septic systems.

Variance Requests

The variances being requested by this project are as follows:

1. Variance from City Code Section 30-5-301(A)- Construction of roadway and driveways on slopes > than 15%.

This variance is required to allow construction of portions of the two roads accessing the subdivision and driveways on lots where the driveway must cross slopes over 15%.

Both of the proposed roads cross slopes greater than 35%. Since a watershed boundary literally traverses across this property, it is located at the very top of two watersheds. At the top of these Hill Country watersheds, most drainage ways are narrow steep sided ravines carved into the weathered limestone. Both of the proposed roads cross several of these narrow steep sided ravines to gain access to proposed lots. Additionally, the location of these roads is somewhat restricted due to topography of the land and the locations of the CEFs.

The applicant is also requesting this variance to allow for construction of driveways on lots where the driveways must cross slopes greater than 15% to access the building site. The lots for which this variance is requested are Lots 1-5, 7-20, 22-25, 34, 36, 38, 39, 42, 43, 46-51, 53, 55-64, 66-76.

2. Variance from City Code Section 30-5-302(B)- Construction of a building on slopes greater than 25%.

This variance is requested to allow for homes to be constructed on Lots 1-5, 7-20, 22-25, 34, 36, 38, 39, 42, 43, 46-51, 53, 55-64, 66-76, all of which have building areas with slopes greater than 25%. Most of these lots are composed of the typical stair-step topography found in the western Travis County Hill Country, and have small areas with slopes greater than 25% in the areas best suited for building placement.

3. Variance from City Code Section 30-5-341- Cut greater than 4 feet. Variance from City Code Section 30-5-342-Fill greater than 4 feet.

This cut/fill variance is requested to allow the applicant to construct the detention ponds and roadways, and to later on allow the lot owners the ability to construct driveways and suitable building sites.

The applicant will need a maximum cut/fill of 9 feet to construct the four detention ponds.

The applicant will need this cut/fill variance to complete the central sections of both roads accessing the lots in this subdivision. On Webb Mountain Drive, the maximum proposed cut/fill is 12 feet. On Eula Gardens Cove, the maximum fill proposed is 20 feet.

Cut/fill will be necessary to construct driveways and/or single family residential buildings on individual lots where either the driveway must cross steep slopes, or on building sites which are located on the steeper bands of this Hill Country topography. Because home builders, not the applicant, will be locating and building the homes and associated driveways in this subdivision, the applicant is not certain of the exact location of each home. As a result, the applicant has estimated the cut/fill necessary for those lots that will require cut/fill to build the home. The applicant shows that Lots 2, 5, 7, 9-17, 22-24, 51, 53, 55-63, 66-76 need cut/fill greater than four feet to construct the home. The maximum cut/fill of 18 feet is requested for Lots 7, 22, 63, and 75.

Similar Cases

The following project had similar construction issues and received recommendations from the Environmental Board that were subsequently approved by the Zoning and Platting Commission:

Palisades West SP-02-0456D: Variance requests to:

1. Allow cut and fill over 4 feet (LDC 25-8-341 and 342); and
2. Allow construction on slopes (LDC 25-8-302(A)(1); and
3. To exclude approximately 6000 square feet of a fire lane from impervious cover calculations [LDC 25-8-454(D)(1)(a) and LDC 25-8-424(C)(1)].

The EV Board recommended approval 7-0-0-1 on September 20, 2006 with the following conditions:

1. Implementation of an IPM program; and
2. Green Building at 2 star level and/or LEEDs certification; and
3. Additional water conservation measures; and
4. Landscape screening of the water quality pond on FM 2244 with native species; and
5. Tree mitigation for Class 1 trees at the standard rate; and Utilize permeable pavers on the fire lane and gate area.

Recommendations

Staff recommends approval of the variance requests with conditions because the findings of fact have been met.

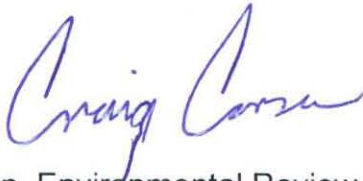
Conditions

Staff recommends granting the variances with the following conditions:

- 1 All slopes greater than 33% shall be stabilized with a permanent structure, unless it is a stable rock face;
- 2 All disturbed areas shall be revegetated with City of Austin 609-S specification;

- 3 Provide enhanced erosion controls for the site. Including: sedimentation basins used off-line of the drainage channels; phased clearing and grading, with temporary stabilization; storing all spoils any concentrated flow of water; and enhanced perimeter controls;
- 4 Mitigate 100% for all 19 inch caliper trees taken down for construction of the road or utilities. All trees used for mitigation will be Class I native trees;
- 5 Implement a City approved Integrated Pest Management Plan;
- 6 Any fill greater than 4 feet will be structurally contained;
- 7 Provide slope related building setbacks on each lot to further protect the steeper portions of each property;
- 8 The applicant will work with staff to reduce construction on slopes further by looking at the use of joint access driveways on adjoining lots which have steep slopes;
- 9 For all lots in which construction occurs on slopes greater than 25%, flow spreaders will be used to ensure storm water leaves the site in sheet flow conditions.

If you have any questions or need additional information, please feel free to contact me at 974-2711.



Craig Carson, Environmental Review Specialist
Watershed Protection and Development Review

Environmental Program Manager: _____
Ingrid McDonald

Environmental Officer:  _____
J. Patrick Murphy



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

Application Name:	Webb Estates
Application Case No:	C8J-2008-0082
Code Reference:	Land Development Code Section 30-5-301(A) Construction of a roadway or driveway on slopes.
Variance Request:	To allow construction of roadways and driveways on slopes greater than 15%.

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. The variance will not be providing a special privilege to the applicant. Due to the property's shape, overall "stair-step" topography, conservation tracts, and CEF setbacks, there are no continuous areas within the slope category of 0 to 15% that allow access to all lots. Additionally, the surrounding subdivisions (Westminster Glen, Phase 1 and River Place, Section 8) are built on the same type of topography and received similar considerations in their development.

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. Although the site's topography, shape, conservation tract dedication, and CEF and related setbacks partially drive the locations of the roads and driveways on slopes greater than 15%, constructing the roadway to properly drain storm run-off into detention ponds also requires the construction on slopes. Allowing these roads and driveways to be built on slopes greater than 15% ensures that run-off is held to pre-construction amounts, thus providing better environmental protection.

- 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. Although the applicant is requesting a variance to construct roads and driveways on slopes greater than 15%, they have minimized the areas where roadways and driveways cross over these slopes while still being able to provide access to all lots.

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

Yes. The applicant's design has minimized the construction of the roadways and driveways on slopes greater than 15%. Additionally, enhanced temporary and permanent erosion controls will be in place to ensure the drainage ways are protected from erosion and sedimentation. All fill over 4 feet will be structurally contained, which will further protect the fill from erosion, while preserving more natural area by containing it instead of sloping it.

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 applicant proposes to keep the total impervious cover well below 20%, provides the required buffers for all CEFs to provide protection from runoff, and proposes to establish building setbacks on each lot to ensure that construction on each lot takes place off of the steeper areas of the lot. Additionally, the applicant is proposing the installation of 4 detention ponds to ensure that storm water runoff leaves the site at pre-construction flow rates.

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;

Not applicable.

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

Not applicable.

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

Not applicable.

Reviewer Name: Craig Carson

Reviewer Signature: 

Date: July 7, 2008

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



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

Application Name: Webb Estates
Application Case No: C8J-2008-0082
Code Reference: Land Development Code Section 30-5-302(B) Construction of a building or parking area on slopes.
Variance Request: To allow construction of single family residential structures to be built on slopes greater than 25%.

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. The variance will not be providing a special privilege to the applicant. Due to the property's steep nature and overall "stair-step" topography there are numerous bands of narrow, steep weathered limestone which run across most of the lots in this subdivision. On Lots 1-5, 7-20, 22-25, 34, 36, 38, 39, 42, 43, 46-51, 53, 55-64, 66-76, the areas planned to construct the homes have small areas of slopes greater than 25% located in them. Additionally, the surrounding subdivisions (Westminster Glen, Phase 1 and River Place, Section 8) are built on the same type of topography and received similar considerations in their development.

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 roads were located on the flatter areas of the property to minimize construction impact to the site. This combined with the site's topography, shape, conservation tract dedication, and CEF and related setbacks leave some lots with small areas of slopes greater than 25% in the proposed building location. In an attempt to minimize impacts on steeper slopes, the applicant has agreed to building setbacks for the steeper slopes on each lot. In setting up these building setbacks, construction on the steepest slopes of each property will be avoided. These setbacks along with erosion and sedimentation controls will minimize impacts to the steepest slopes and prevent erosion and sedimentation occurring in the natural areas.

- 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. Although the applicant is requesting a variance to construct single family residential buildings on slopes greater than 25%, they have minimized these areas, while also avoiding construction on the steepest slopes of each property by establishing building setbacks.

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

Yes. By establishing slope building setbacks for each property and requiring the use of properly installed erosion and sedimentation controls, the applicant is protecting the naturally undisturbed areas of each property from the probability of harm.

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 combination of building setbacks to protect the steeper portions of each lot and the use of erosion and sedimentation controls should provide water quality protection that is equal to the water quality achievable without the variance.

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;

Not applicable.

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

Not applicable.

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

Not applicable.

Reviewer Name: Craig Carson

Reviewer Signature: 

Date: July 7, 2008

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



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

Application Name:	Webb Estates
Application Case No:	C8J-2008-0082
Code Reference:	Land Development Code Section 30-5-341/342
Variance Request:	To allow cuts up to 12 for the road and 18 feet for building construction. To allow fill up to 20 feet for the road and 20 feet for building construction.

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, Due to the property's shape, overall "stair-step" topography, conservation tracts, and CEF setbacks due to the site's topographic constraints, cut/fill over 4 feet will be required to construct; the roadways, the ponds, and on Lots 2, 5, 7, 9-17, 22-24, 51, 53, 55-63, 66-76, driveways and building foundations. The surrounding subdivisions (Westminster Glen, Phase 1 and River Place, Section 8) are built on the same type of topography and received similar considerations in their development.

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. Although the site's topography, shape, conservation tract dedication, and CEF and related setbacks partially drive the need for cut/fill greater than 4 feet, the grading necessary to properly drain storm run-off from a watershed divide into detention ponds and the construction of the detention ponds themselves require cut/fill over 4 feet.

- 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 cut/fill related to the roadways is the minimum necessary to ensure the roadways are graded and constructed properly to ensure storm water run-off is properly controlled and detained. The cut/fill related to Lots 2, 5, 7, 9-17, 22-24, 51, 53, 55-63, 66-76 are the

maximums thought necessary to construct a single family residential building and associated driveway.

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

Yes, by allowing the cut/fill variance, the roadways and driveways can be graded so that they properly drain into the detention ponds, thus ensuring that increased run-off causing increased erosion does not occur. During construction, enhanced erosion controls will be in place, such as sediment traps (not in drainages), continuous lower perimeter controls, and the use of mulch logs on longer steep slopes to further slow down storm water run-off. Additionally, all fill over 4 feet will be structurally contained, therefore minimizing erosion potential of the fill.

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

Yes, once the cut/fill is in place, the detention ponds will be built, and the roadways will be constructed to properly drain storm water run-off into them. Additionally, for Lots 2, 5, 7, 9-17, 22-24, 51, 53, 55-63, 66-76, the cut/fill requested will allow a lot owner access to the property to construct a single family residential building and associated driveway, while structurally containing it will minimize its impact on the native landscape. As a result storm water run-off will be collected and detained to pre-construction conditions in detention ponds which will result in water quality equal to quality achievable without the variance.

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;

Not applicable.

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

Not applicable.

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

Not applicable.

Reviewer Name: Craig Carson

Reviewer Signature: 

Date: July 7, 2008

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

July
2008

City of Austin
Watershed Protection & Development Review Department
505 Barton Springs Road
Austin, Texas 78704

RE: Webb Estates
Construction of Roadway or Driveway on Slopes in Excess of 15% (LDC §30-5-301)
Variance Request
L&C Job No. 257-01

To Whom It May Concern:

The above referenced project is located on the west side of City Park Road approximately 1000 feet north of the intersection of City Park Road and Westminster Glen Avenue. The site is approximately 167.49 acres and is within the City of Austin Limited Purpose Jurisdiction.

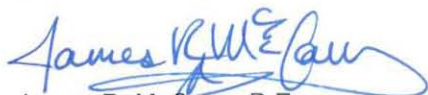
This variance request is for the construction of roadway and driveway improvements to serve a 79 lot single-family subdivision with a minimum lot size of one acre. The site is part of the Balcones Canyonland Preserve and known to contain nesting ground for the Golden Cheek Warbler. The conservation areas effectively divide the tract into two distinct sections. The typical topography found in west Travis County can be characterized as rolling terrain with incised drainage ways. To serve the western half of Webb Estates will require the crossing of two existing drainage ways, both with slopes in excess of 15%.

The Findings of Fact are as follows:

- The site is located in the hill country of West Travis County and bounded on two sides by existing subdivisions. Therefore granting of the variance would offer no greater entitlement than what has been given to the adjacent neighborhoods.
- LDC 30-5-301(1)(2) provides for the construction of roadways and driveways on slopes greater than 15% provided it is necessary for primary access to at least two contiguous acres with a gradient of 15% or less; or building sites for a least five residential units. In this case both criteria are satisfied.
- The surrounding subdivisions are built in the same areas of incised drainage ways found in the West Travis County Hill Country and have received similar consideration for their roadways and driveways. Greenshores on Lake Austin was granted the same variance request.
- There is no proposed development within a Critical Water Quality Zone, Water Quality Transition Zone or floodplain and all disturbed areas will be restored with vegetation or other erosion control measures.
- The project is not located within the Barton Springs Zone.

Based on this, we are requesting a variance, in accordance with LDC §30-5-301(A)(2)(3) and §30-5-301(B), from LDC §30-5-301(A) of the LDC, prohibiting construction of roadways and driveways on slopes in excess of 15%. We appreciate your review of this variance request. If you have any questions, or require any additional information, please do not hesitate to call.

Very Truly Yours,
LONGARO & CLARKE, L.P.


James R. McCann, P.E.
Project Manager

July
2008

City of Austin
Watershed Protection & Development Review Department
505 Barton Springs Road
Austin, Texas 78704

RE: Webb Estates
Construction of Building or Parking Area on Slopes in Excess of 25% (LDC §30-5-302)
Variance Request
L&C Job No. 257-01

To Whom It May Concern:

The above referenced project is located on the west side of City Park Road approximately 1000 feet north of the intersection of City Park Road and Westminster Glen Avenue. The site is approximately 167.49 acres and is within the City of Austin Limited Purpose Jurisdiction.

This variance request is for the construction of building and parking area improvements to serve a 79 lot single-family subdivision with a minimum lot size of one acre. The site is part of the Balcones Canyonland Preserve and known to contain nesting ground for the Golden Cheek Warbler. The conservation areas effectively divide the tract into two distinct sections. The typical topography found in west Travis County can be characterized as rolling terrain with incised drainage ways.

The Findings of Fact are as follows:

- The site is located in the hill country of West Travis County and bounded on two sides by existing subdivisions. Therefore granting of the variance would offer no greater entitlement than what has been given to the adjacent neighborhoods.
- Terracing techniques described in the Environmental Criteria Manual will be used for uphill and downhill areas greater than 15%. Cuts and fills will also be revegetated, or if the finished gradient is greater than 33% stabilized with a permanent structure except in areas of a stable cut.
- The surrounding subdivisions are built in the same areas of incised drainage ways found in the West Travis County Hill Country and have received similar consideration for their buildings and parking areas. Greenshores on Lake Austin was granted the same variance request.
- There is no proposed development within a Critical Water Quality Zone, Water Quality Transition Zone or floodplain and all disturbed areas will be restored with vegetation or other erosion control measures.
- The project is not located within the Barton Springs Zone.

Based on this, we are requesting a variance from LDC §30-5-302 prohibiting construction of buildings and parking areas on slopes in excess of 25%. We appreciate your review of this variance request. If you have any questions, or require any additional information, please do not hesitate to call.

Very Truly Yours,
LONGARO & CLARKE, L.P.



James R. McCann, P.E.
Project Manager

February 2008

City of Austin
Watershed Protection & Development Review Department
505 Barton Springs Road
Austin, Texas 78704

RE: Webb Estates C8J-07-0055
Cut and Fill (LDC §30-5-341; 30-5-342) Variance Request
L&C Job No. 257-01

To Whom It May Concern:

The above referenced project is located on the west side of City Park Road approximately 1000 feet north of the intersection of City Park Road and Westminster Glen Avenue. The site is approximately 167.49 acres and is within the City of Austin Limited Purpose Jurisdiction.

Approximately half of the tract drains south to the Turkey Creek Watershed with the remaining portions draining north to the West Bull Creek Watershed. The tract is currently developed with a single-family homestead with horse stables and related improvements. The proposed project consists of constructing roadway improvements to serve a 76 lot single-family subdivision with a minimum lot size of one acre. The site will include the construction of three detention ponds and will include large areas dedicated as conservation lots. Due to the typical topography found in west Travis County we anticipate exceeding the four foot cut/fill limit for the construction of the roadways, driveways, building sites and utility installations.

The Findings of Fact are as follows:

- The site is located in the hill country of West Travis County and bounded on two sides by existing subdivisions. Therefore granting of the variance would offer no greater entitlement than what has been given to the adjacent neighborhoods.
- LDC §30-5-341& §30-5-342 provides for cut and fill in excess of four feet for the construction of roadways within the right-of-way, building sites with sides perpendicular to the ground or on pier and beam foundations and for utility installations and wastewater drain fields. No construction activities outside of what is stipulated within the code are proposed.
- The surrounding subdivisions are built in the same areas of incised drainage ways found in the West Travis County Hill Country and have received similar considerations in their development. Greenshores on Lake Austin was granted the same variance request.
- There is no proposed development within a Critical Water Quality Zone, Water Quality Transition Zone or floodplain and all disturbed areas will be restored with vegetation or other erosion control measures.
- The project is not located within the Barton Springs Zone.

Based on this, we are requesting a variance from Sections 30-5-341 and 30-5-342, prohibiting cuts and fills greater than four feet. We appreciate your review of this variance request. If you have any questions, or require any additional information, please do not hesitate to call.

Very Truly Yours,
LONGARO & CLARKE, L.P.

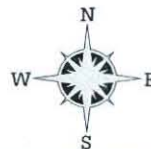


James R. McCann, P.E.
Project Manager

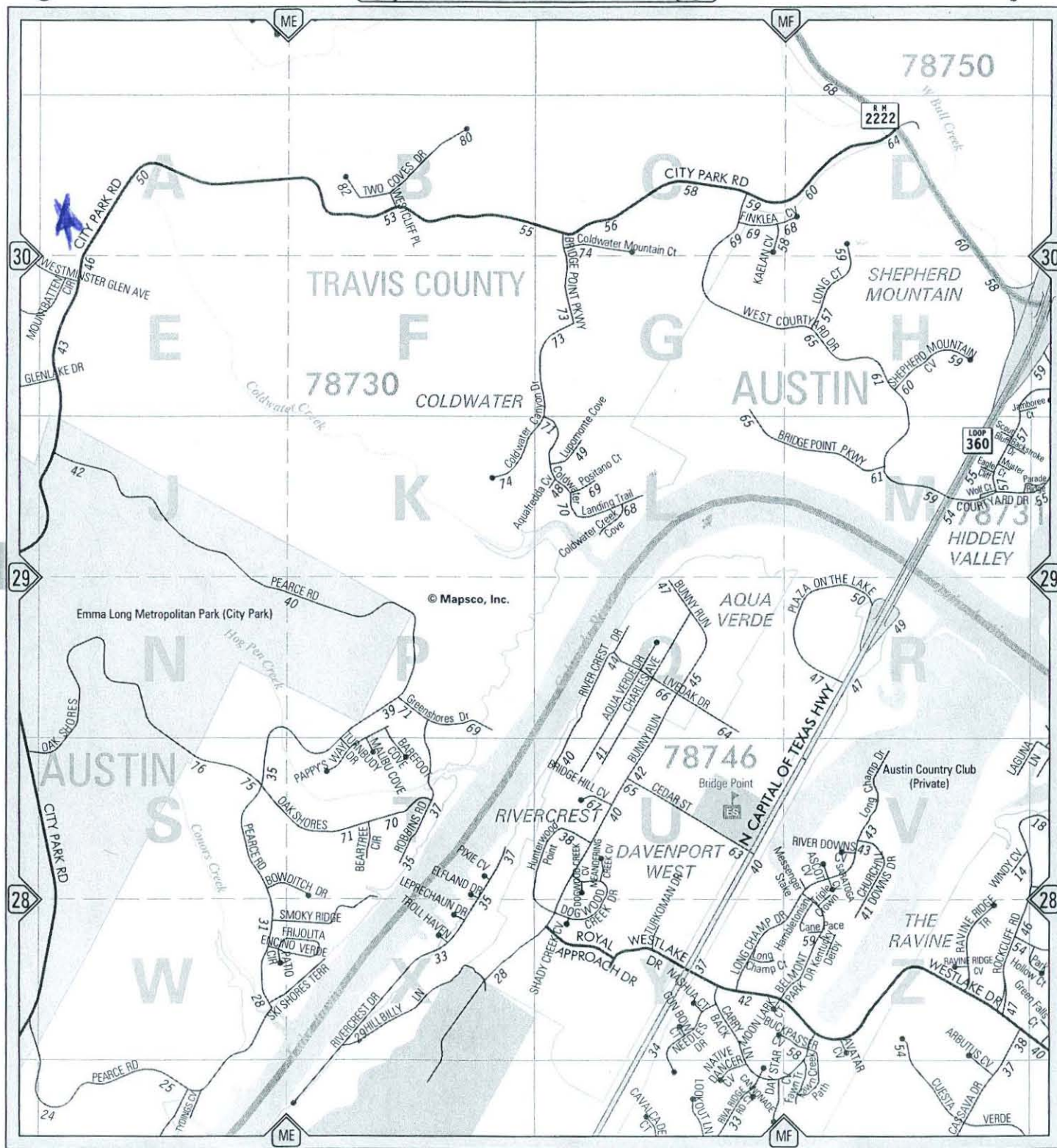


Directions to Webb Estates

Head west on R.R. 2222. Go west of the Capital of Texas Highway and turn left on City Park Road. Approximately 1000 feet before you reach Westminster Glen Avenue, the site will be on the right side (north side) of the road.



CONTINUED ON MAP 493



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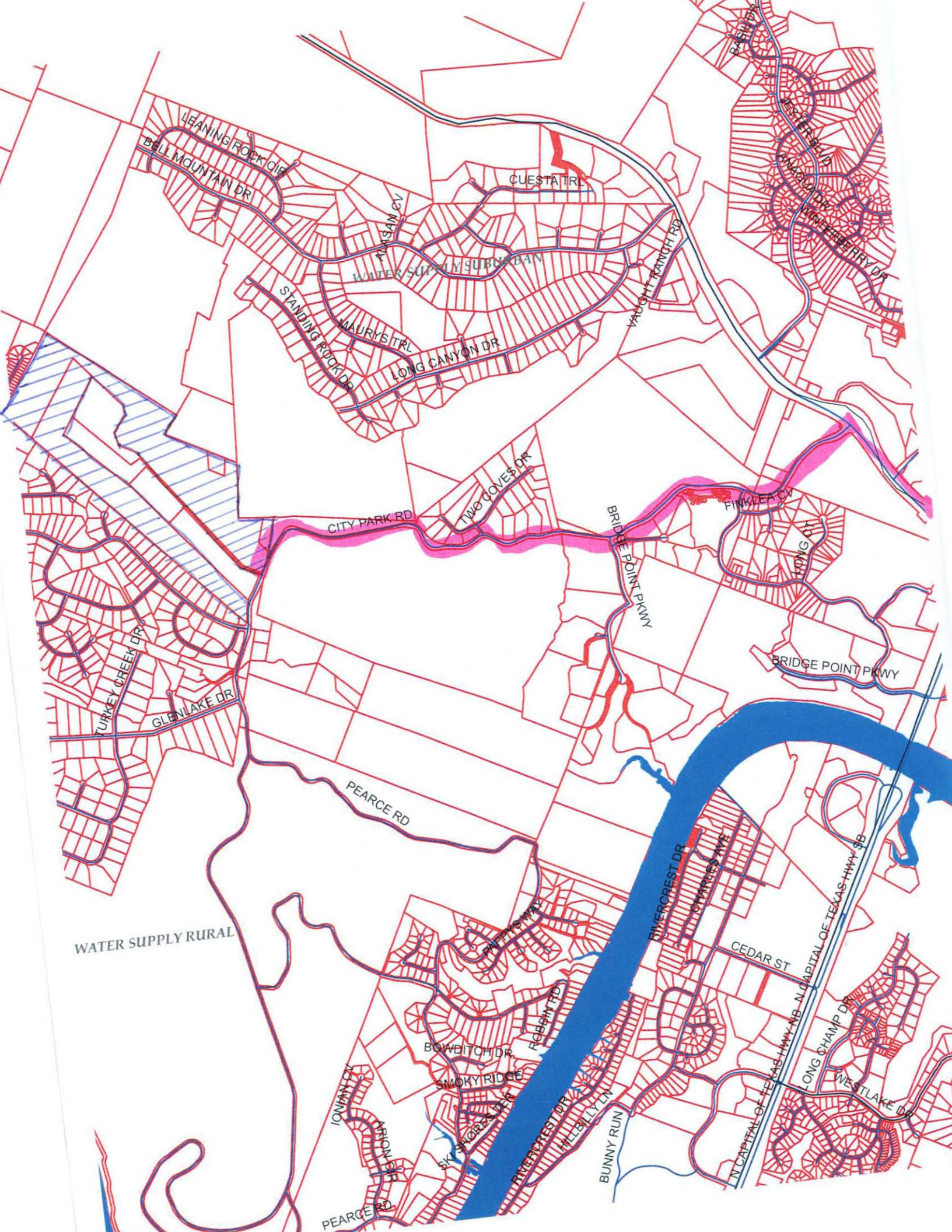
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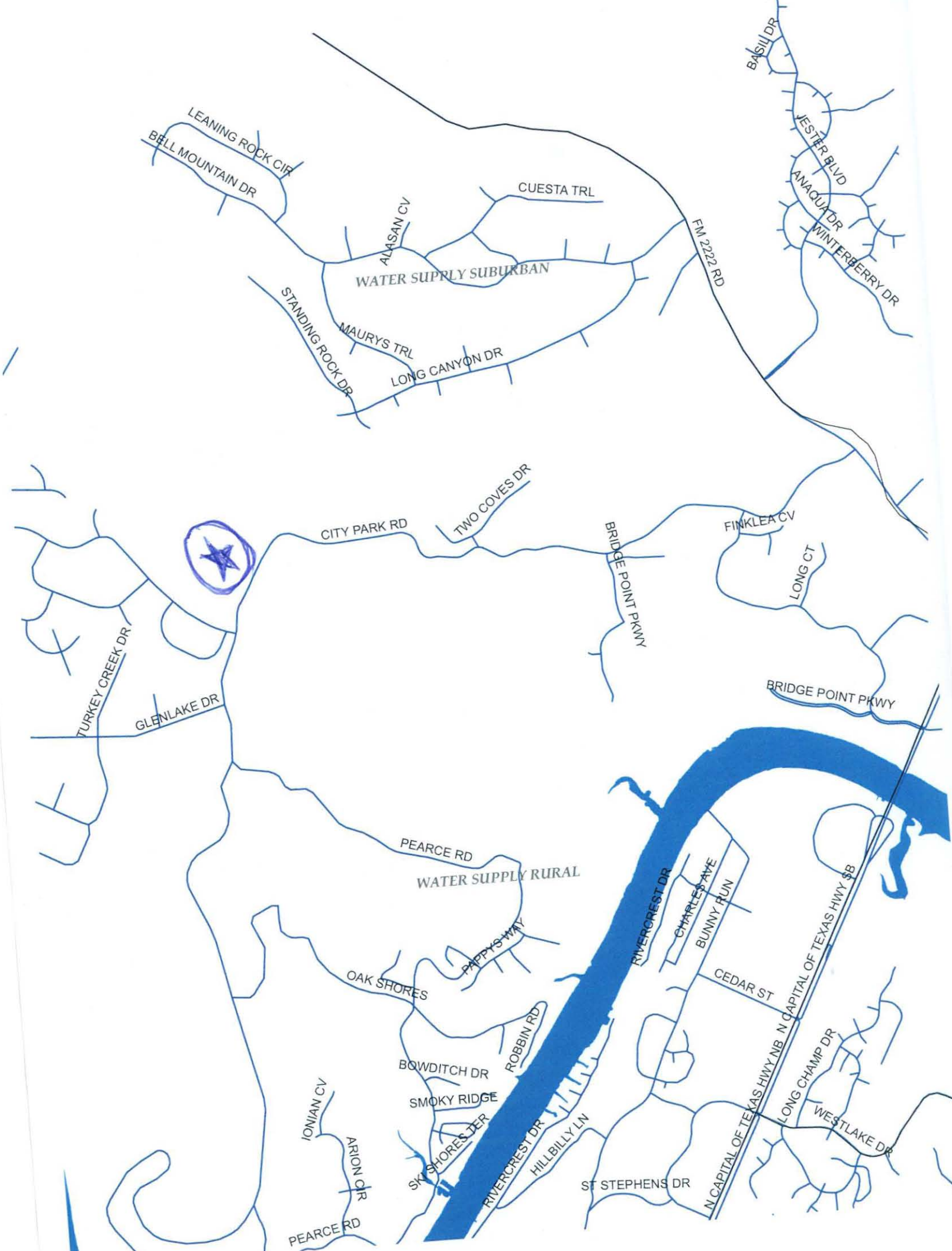
CONTINUED ON MAP 553

CONTINUED ON MAP 524



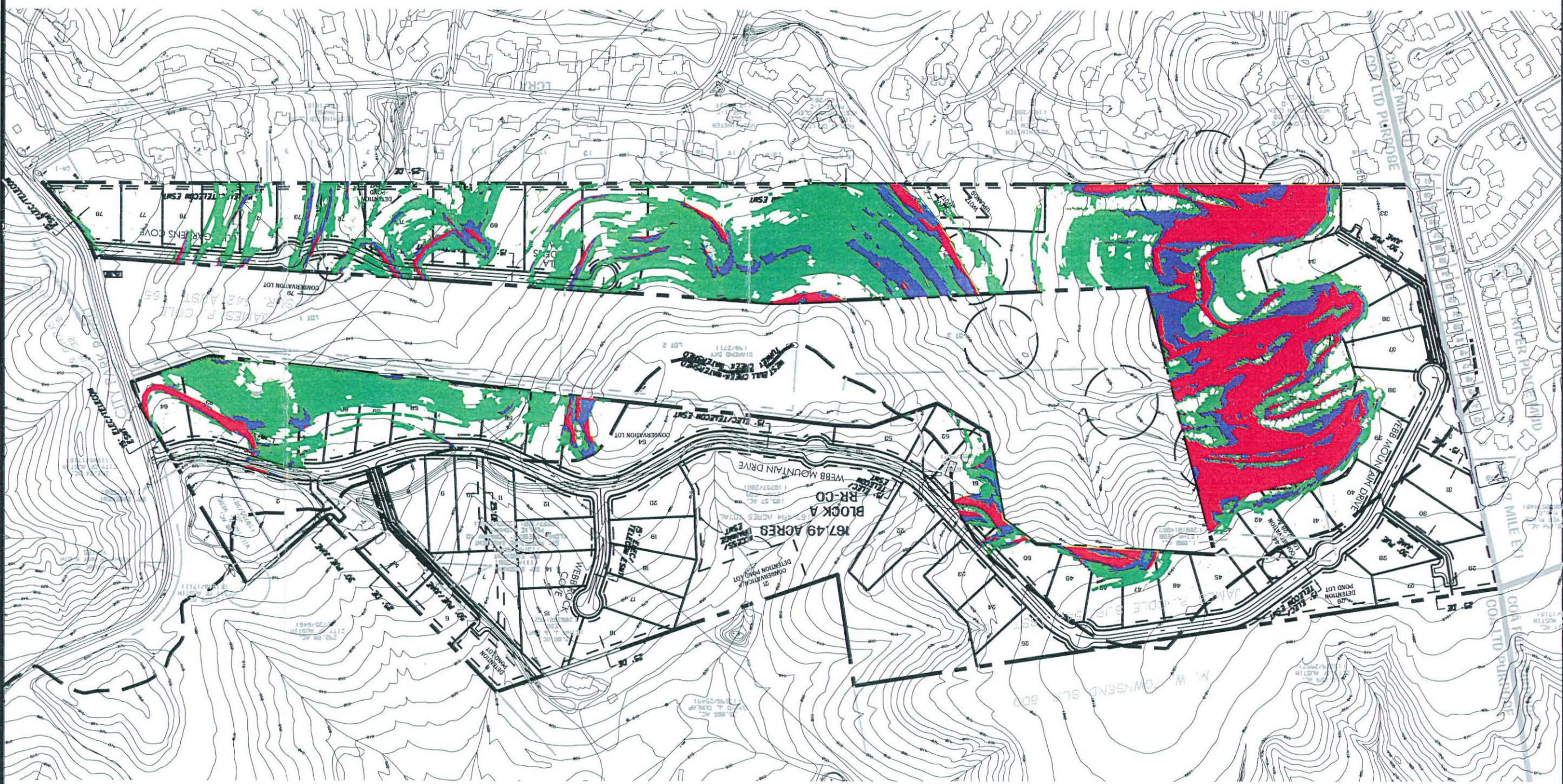
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WEBB ESTATES
PRELIMINARY PLAN
SLOPE MAP - TURKEY CREEK WATERSHED

[illegible]

THE PREVIOUS COVER SHOWN IN TABLE 02 INCLUDES
30 SINGLE FAMILY RESIDENTIAL LOTS BASED ON THE
CAPTURE AREAS SHOWN ON THE PROPOSED DRAINAGE
AREA MAP. PLEASE SEE SHEETS D02 & D01.

APPENDIX G-1: NET SITE AREA

Net Site Area (bustards) =	67.55 Acres
Area of uplands with Slopes 25-35% =	9.18 Acres
%25% =	1.84 Acres
Area of uplands with Slopes 15-25% =	28.46 Acres
%40% =	11.38 Acres
Area of uplands with Slopes 0-15% =	54.23 Acres
%100% =	54.23 Acres
Net Site Area Calculation:	
Deduction (bustard gross area minus total deductions) =	102.70 Acres
Deduction (cotton) =	1.49 Acres
Wastewater treatment area =	0 Acres
Water quality mitigation zone (WQI2) =	1.06 Acres
Critical water quality zone (CWQ2) =	0.64 Acres
Site Deductions:	
Total gross site area =	140.19 Acres

APPENDIX Q-2: IMPERVIOUS COVER

Webb Estates - Turkey Creek Watershed - Water Supply Rural Watershed

SLOPE		CATEGORIES		ACRES		%	
Over 35%	12.32	0	0	0	0.04		
25-35%	8.18	0	0	0	0.10		
15-25%	28.48	2.35	1.10%	0.50			
0-15%	54.23	2.13	10.14%	3.37			
AC.		% OF CATEGORY					

PROPOSED IMPERVIOUS COVER ON SLOPES		BUILDING AND OTHER IMPERVIOUS COVER		ACRES		%	
Proposed impervious cover in riparian zone =	13.40 Acres	0	0	0	0.04		
Proposed impervious cover =	13.40 Acres	0	0	0	0.10		
ACRES		% OF CATEGORY					

ED TO IMPERVIOUS COVER		BUILT IMPERVIOUS COVER BREAKDOWN BY SLOPE CATEGORY		ACRES		%	
Age 15-25%	28.48 Acres x 10% =	2.85	10%	0.50			
Proposed impervious cover =	58.8704 SQ. FT.	13.40		0.50			
Proposed impervious cover =	0.02 Acres	0	0	0	0.04		
Proposed impervious cover for permitted roadway =	0.02 Acres	0	0	0	0.10		
Proposed impervious cover allowed at 20 % x NSA =	13.49 Acres	0	0	0	0.50		
Proposed impervious cover allowed at N/A % x WOT2 =	Acres	0	0	0	3.37		
ACRES		% OF CATEGORY					

APPENDIX Q-3:

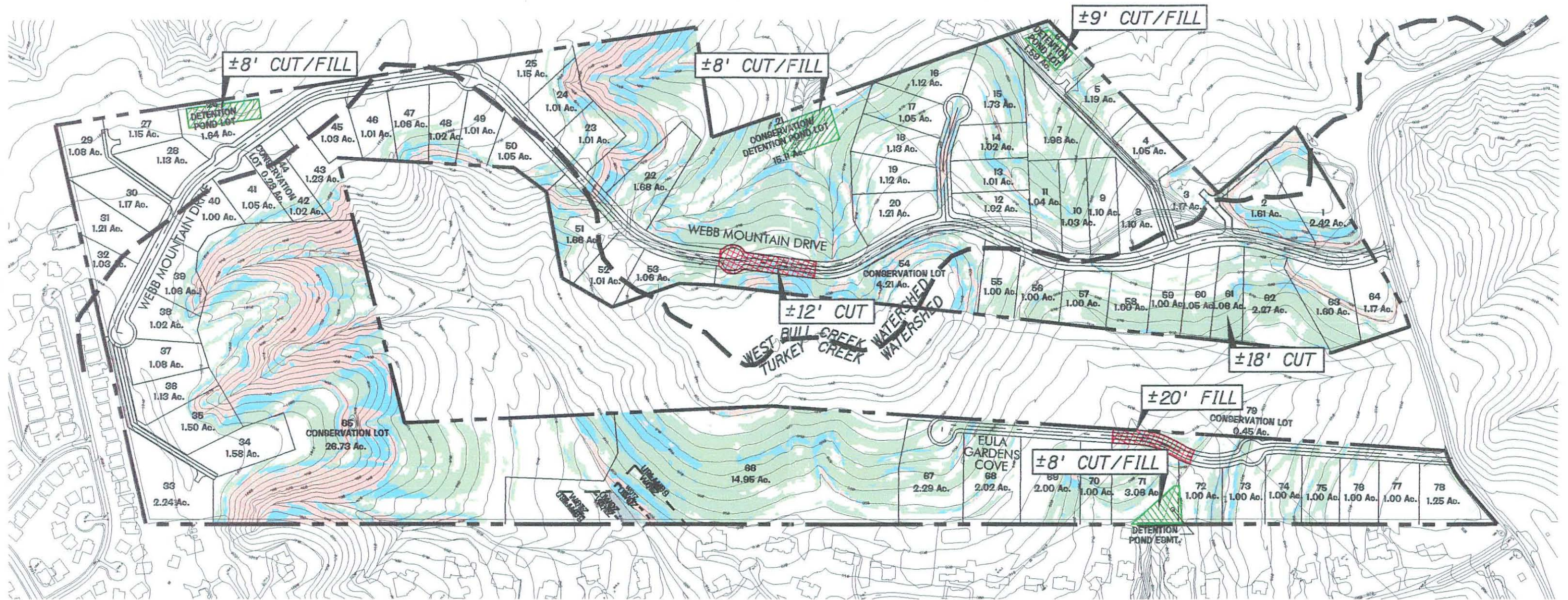
TRANSFER OF DEVELOPMENT RIGHTS (TDR) TABLE

[illegible]

ROW	AC
OVER 35% SLOPES	12.32 AC
25-35% SLOPES	9.18 AC
15-25% SLOPES	28.46 AC
0-15% SLOPES	53.94 AC



WEBB ESTATES (C8J-2008-0082) CUT & FILL VARIANCE REQUEST EXHIBIT

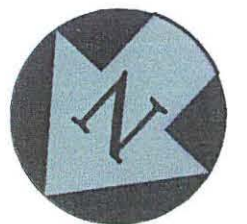


LEGEND :

	0-15% SLOPES		CUT/FILL DETENTION POND
	15-25% SLOPES		CUT/FILL ROAD WAYS
	25-35% SLOPES		
	OVER 35% SLOPES		

RESIDENTIAL LOTS

LOT No.	MAX CUT/FILL	LOT No.	MAX CUT/FILL
2	12'	57	10'
5	14'	58	8'
7	18'	59	8'
9	12'	60	10'
10	10'	61	18'
11	10'	62	12'
12	13'	63	18'
13	16'	66	10'
14	8'	67	12'
15	10'	68	14'
16	8'	69	10'
17	12'	70	12'
22	18'	71	16'
23	16'	72	14'
24	12'	73	16'
51	10'	74	14'
53	10'	75	18'
55	12'	76	12'
56	10'		



[illegible][illegible]

	DATE	TIME	NAME	ROOM	FLOOR	STATUS	REMARKS
101	10/17	10:15	J. B. ESTES	101	1st	OK	
102	10/17	10:15	J. B. ESTES	102	1st	OK	
103	10/17	10:15	J. B. ESTES	103	1st	OK	
104	10/17	10:15	J. B. ESTES	104	1st	OK	
105	10/17	10:15	J. B. ESTES	105	1st	OK	
106	10/17	10:15	J. B. ESTES	106	1st	OK	
107	10/17	10:15	J. B. ESTES	107	1st	OK	
108	10/17	10:15	J. B. ESTES	108	1st	OK	
109	10/17	10:15	J. B. ESTES	109	1st	OK	
110	10/17	10:15	J. B. ESTES	110	1st	OK	
111	10/17	10:15	J. B. ESTES	111	1st	OK	
112	10/17	10:15	J. B. ESTES	112	1st	OK	
113	10/17	10:15	J. B. ESTES	113	1st	OK	
114	10/17	10:15	J. B. ESTES	114	1st	OK	
115	10/17	10:15	J. B. ESTES	115	1st	OK	
116	10/17	10:15	J. B. ESTES	116	1st	OK	
117	10/17	10:15	J. B. ESTES	117	1st	OK	
118	10/17	10:15	J. B. ESTES	118	1st	OK	
119	10/17	10:15	J. B. ESTES	119	1st	OK	
120	10/17	10:15	J. B. ESTES	120	1st	OK	

[illegible]

70.037 AC.
CITY OF AUSTIN
(1848/1718)

30.494 AC.
RIVER PLACE
M.U.D.
(2002857440)

158.889 AC.
CITY OF AUSTIN
(13279/2957)

M. W. TOWNSEND SUR. 800
S51°35'02"E 2676.91'
(S49°30'46"E 2676.70')
(S49°27'50"E 2675.78')

JAMES P. COLE SUR.
1.000 AC.
LETHA WEBB
(2001014063)

N34°09'20"E 443.02'
(N36°27'25"E 442.73')

RIVER PLACE
SECTION 8
(196/208)

RIVER PLACE
SECTION 8
(196/208)

CHINA GARDEN DR.

N34°20'19"E 1235.40'
(N36°39'17"E 1235.51')

26
DETENTION
POND LOT
1.64 Ac.

27
1.15 Ac.

28
1.13 Ac.

29
1.08 Ac.

30
1.17 Ac.

31
1.21 Ac.

32
1.03 Ac.

33
2.24 Ac.

34
1.58 Ac.

35
1.50 Ac.

36
1.13 Ac.

37
1.08 Ac.

38
1.02 Ac.

39
1.08 Ac.

40
1.00 Ac.

41
1.05 Ac.

42
1.02 Ac.

43
1.23 Ac.

44
1.03 Ac.

45
1.01 Ac.

46
1.01 Ac.

47
1.06 Ac.

48
1.02 Ac.

49
1.01 Ac.

50
1.05 Ac.

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1.01 Ac.

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1.01 Ac.

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1.01 Ac.

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1.01 Ac.

131
1.01 Ac.

132
1.01 Ac.

133
1.01 Ac.

134
1.01 Ac.

135
1.01 Ac.

136
1.01 Ac.

LEGEND:
PROPOSED EASEMENT
A 25' CURB RADIUS
B 28' CURB RADIUS
C 25' R.O.W. RADIUS
D 20' R.O.W. RADIUS

NOTE:
1. ALL CURB RETURN RADII ARE 15' UNLESS OTHERWISE NOTED ON PLANS.

EXISTING WELL TO BE CAPPED BY A
LICENSED WELL DRILLER IN
COMPLIANCE WITH TCEO REQUIREMENTS

x F22 SEEP

F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

F26 150' RIMROCK

x F25 SEEP

F27 SEEP x

F28 50' RIMROCK

x W01 SINK HOLE

N42°56'41"W 2097.14'
(N40°51'19"W 2097.19')

65
CONSERVATION LOT
26.73 Ac.

S32°50'42"W 1131.49'
(S34°55'00"W 1131.77')
(S35°00'00"W 1131.741)

x F22 SEEP

F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

F26 150' RIMROCK

x F25 SEEP

F27 SEEP x

F28 50' RIMROCK

x W01 SINK HOLE

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(S35°00'00"W 1131.741)

x F22 SEEP

F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

F26 150' RIMROCK

x F25 SEEP

F27 SEEP x

F28 50' RIMROCK

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F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

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F27 SEEP x

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F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

F26 150' RIMROCK

x F25 SEEP

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F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

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F27 SEEP x

F28 50' RIMROCK

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F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

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F27 SEEP x

F28 50' RIMROCK

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x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

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F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

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F27 SEEP x

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x F22 SEEP

F7 SEEP x

x F6 SEEP

F21 SEEP x

F23 SEEP x

F24 SEEP x

F26 150' RIMROCK

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F27 SEEP x

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x F22 SEEP

F7 SEEP x

x F6 SEEP

F21 SEEP x

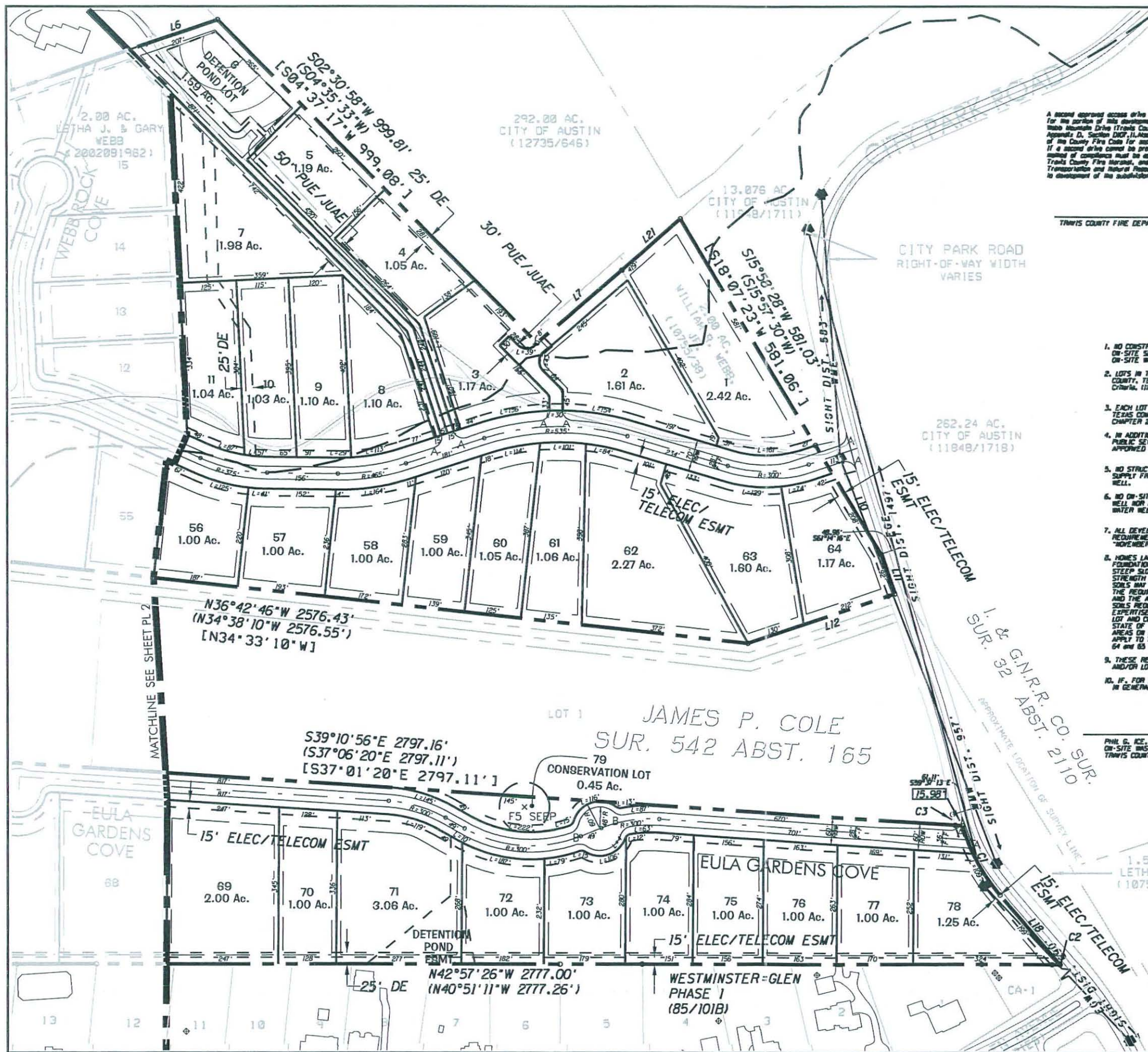
F23 SEEP x

F24 SEEP x

F26 150' RIMROCK

x F25 SEEP

F27 SEEP

[illegible]



WEBB ESTATES
PRELIMINARY PLAN
100 SCALE PRELIMINARY PLAN



LONGARO & CLARKE
Consulting Engineers

Land Development • Stormwater Management • Water Resources
7201 North Central Expressway • Building A • Suite 220 Austin, Texas 78721

LEGEND :

	PROPOSED SIDEWALK
	PROPOSED EASEMENT
A	25' CURB RADIUS
B	28' CURB RADIUS
C	25' R.O.W. RADIUS
D	20' R.O.W. RADIUS

**TIMWIS COUNTY (TC) ON-SITE WASTEWATER PROGRAM
NOTES: FOR LOTS WITH STEEP SLOPES:
...NEED ESTATES SUBDIVISION...**

1. NO CONSTRUCTION WILL BEGIN ON A LOT IN THIS SUBDIVISION UNTIL PLANS FOR THE PRIVATE ON-SITE SEWAGE FACILITY (OSSF) ARE SUBMITTED TO AND APPROVED BY THE TARRANT COUNTY ON-SITE WASTEWATER PROGRAM.
2. LOTS IN THIS SUBDIVISION MUST COMPLY WITH THE "NOVEMBER 21, 1983, RULES OF TARRANT COUNTY, TEXAS FOR PRIVATE SEWAGE FACILITIES: MIN. LOT SIZE REQUIREMENTS (MIN. LOT SIZE Criteria, 111, 121 and 131a - 141 Lot Size and Slope Requirements, 111, 121, 131, 141 and 151).
3. EACH LOT IN THIS SUBDIVISION IS RESTRICTED TO ONE SINGLE FAMILY RESIDENCE ONLY. PER TEXAS COMMISSION ON ENVIRONMENTAL TOXIC TITLE 30, TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 205.2, 1984.
4. IN ADDITION, NO STRUCTURE IN THE SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A PUBLIC SEWER SYSTEM OR PRIVATE ON-SITE SEWAGE FACILITY (OSSF) WHICH HAS BEEN APPROVED AND LICENSED FOR OPERATION BY THE TARRANT COUNTY ON-SITE WASTE WATER PROGRAM.
5. NO STRUCTURE IN THE SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A POTABLE WATER SUPPLY FROM AN APPROVED WATER SYSTEM, APPROVED PUBLIC WATER WELL, OR A PRIVATE WATER WELL.
6. NO ON-SITE SEWAGE FACILITY (OSSF) MAY BE INSTALLED WITHIN 100 FEET OF A PRIVATE WATER WELL NOR MAY AN ON-SITE SEWAGE FACILITY SYSTEM BE INSTALLED WITHIN 100 FEET OF PUBLIC WATER WELL.
7. ALL DEVELOPMENT ON ALL LOTS IN THIS SUBDIVISION MUST BE IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF TCEQ TITLE 30, TAC CHAPTER 205, TARRANT COUNTY CODE CHAPTER 48, AND "NOVEMBER 21, 1983, RULES OF TARRANT COUNTY, TEXAS" NOTED IN 2. ABOVE.
8. HOMES LARGER THAN 3,000 SQ. FT., LIVING AREA, WITH LIVING AREA BEING DEFINED BY THE FOUNDATION SLAB OF A ONE STORY OR FIRST FLOOR OF A MULTISTORY HOME, ON LOTS WITH STEEP SLOPES MAY REQUIRE DESIGNED RETAINING WALLS WITH COMPACTED BACKFILLED STRUCTURAL STRENGTH SOILS UPHILL FROM EACH WALL. THE RETAINING WALLS AND STRUCTURAL STRENGTH SOILS MAY BE REQUIRED TO SUPPORT THE INSTALLATION OF THE OSSF. SO IT WILL COMPLY WITH TARRANT COUNTY REQUIREMENTS OF TCEQ TITLE 30, TAC CHAPTER 205, TARRANT COUNTY CODE CHAPTER 48, AND THE ABOVE 11-21-83 RULES OF TARRANT COUNTY. THE RETAINING WALLS AND ANY COMPACTED SOILS REQUIRED SHALL BE DESIGNED BY A TEXAS LICENSED PROFESSIONAL ENGINEER WITH EXPERTISE IN GEOTECHNICAL DESIGN, BASED ON THE PERCENT (H) SLOPE OF EACH INDIVIDUAL LOT AND COMPLIANCE WITH THE ABOVE RULES AND REGULATIONS OF TARRANT COUNTY AND THE STATE OF TEXAS, ANY REQUIRED GEOTECHNICAL DESIGNS NOTED ABOVE COULD REQUIRE LARGE AREAS ON MANY OF THE LOTS. THEREFORE, THESE GEOTECHNICAL DESIGN REQUIREMENTS MAY APPLY TO THE FOLLOWING LOTS: 1 THRU 20, 48 THRU 50, 53, 54, 100 CONSERVATION LOT 1 THRU 53, 64 AND 65 CONSERVATION LOT 1, 66 THRU 68, AND 71 THRU 73, BLOCK A.
9. THESE RESTRICTIONS ARE ENFORCEABLE BY THE TARRANT COUNTY ON-SITE WASTEWATER PROGRAM AND/OR LOT OWNERS IN THIS SUBDIVISION.
10. IF, FOR SOME REASON, THE RIVER CITY M.U.D. COULD NOT PROVIDE WATER SERVICE, AS NOTED IN GENERAL NOTE 10, THEN DEVELOPMENT WITH WATER WELLS ON LOTS COULD BE IMPOSSIBLE.

GENERAL NOTES:

- STREET NAME RIBBON

	ROW WIDTH	PAVEMENT WIDTH	LF OF STREET	SIDEWALK	STREET CLASSIFICATION	
WEBB MOUNTAIN DRIVE	YES	70'	28'	6,204'	NO	LOCAL
WEBB ROCK COVE	YES	60'	28'	480'	NO	LOCAL
EULA GARDENS COVE	YES	60'	28'	2,173'	NO	LOCAL
- ALL STREETS IN THIS SUBDIVISION WILL BE CONSTRUCTED TO CITY OF AUSTIN STREET STANDARDS WITH A RIBBON CURB SECTION. UNLESS OTHERWISE NOTED ABOVE.
- PROPERTY OWNER OR HIS/HER ASSIGNS SHALL PROVIDE FOR ACCESS TO THE DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY THE CITY OF AUSTIN AND/OR TRAVIS COUNTY FOR INSPECTION OR MAINTENANCE OF SAID EASEMENT.
- ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS/HER ASSIGNS.
- NO OBJECTS, INCLUDING BUT NOT LIMITED TO BUILDINGS, FENCES, LANDSCAPING OR OTHER STRUCTURES ARE PERMITTED IN ANY DRAINAGE EASEMENTS, EXCEPT AS APPROVED BY THE CITY OF AUSTIN AND TRAVIS COUNTY.
- CONTOUR DATA: CITY OF AUSTIN 2003 GIS DATA
- PRIOR TO THE RECORDING OF ANY FINAL PLAT OF ALL OR A PORTION OF THIS PRELIMINARY PLAN, FISCAL SURETY SHALL BE PROVIDED ... FOR THE FOLLOWING IMPROVEMENTS:
 - STREET CONSTRUCTION AND RELATED INFRASTRUCTURE, INCLUDING PAVING, DRAINAGE, SIDEWALKS, WATER SUPPLY, AND WASTEWATER COLLECTION FOR THE FOLLOWING STREETS: WEBB MOUNTAIN DRIVE, EULA GARDENS COVE AND WEBB ROCK COVE
 - ENVIRONMENTAL AND SAFETY CONTROLS, AND OTHER RELATED ITEMS (E.G., EROSION AND SEDIMENTATION CONTROLS, RESTORATION, CHANNEL WORK, PIPE IN EASEMENTS, DETENTION, WATER QUALITY PONDS ETC.) AS DETERMINED PRIOR TO FINAL PLAT APPROVAL. THE RESTORATION COST ESTIMATE WILL BE BASED ON DISTURBED AREAS INCLUDING THE FOLLOWING STREETS: WEBB MOUNTAIN DRIVE, EULA GARDENS COVE AND WEBB ROCK COVE
- NO CONSTRUCTION OR PLACEMENT OF STRUCTURES INCLUDING BUILDINGS, SHEDS, POOLS, LANDSCAPING OR GARDENS IS ALLOWED WITHIN A CRITICAL ENVIRONMENTAL FEATURE BUFFER ZONE PER SECTION 30-5-281 OF THE CITY OF AUSTIN'S LAND DEVELOPMENT CODE.
- A TRAVIS COUNTY DEVELOPMENT PERMIT IS REQUIRED PRIOR TO SITE DEVELOPMENT.
- NO DRIVEWAY SHALL BE CONSTRUCTED CLOSER THAN 150 FEET TO THE EDGE OF PAVEMENT OF AN INTERSECTING ARTERIAL STREET. NO DRIVEWAY SHALL BE CONSTRUCTED CLOSER THAN 50 FEET TO THE EDGE OF PAVEMENT OF AN INTERSECTING LOCAL OR COLLECTOR STREET.
- ALL LOTS IN THIS SUBDIVISION ARE PROHIBITED FROM TAKING DIRECT ACCESS TO CITY PARK ROAD.
- STANDARD STREET NAME SIGNS WILL BE INSTALLED AT ALL STREET INTERSECTIONS.
- ALL WATER SYSTEM IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN, AND SUBMITTED TO THE CITY OF AUSTIN WATER UTILITY FOR REVIEW AND APPROVAL. ALL WATER CONSTRUCTION MUST BE INSPECTED BY THE CITY OF AUSTIN.
- DETENTION NOTE: PRIOR TO DEVELOPMENT OF THIS SUBDIVISION, DRAINAGE PLANS WILL BE SUBMITTED TO CITY OF AUSTIN FOR REVIEW. RAINFALL RUNOFF SHALL BE HELD TO THE EXISTING AMOUNT ESTABLISHED. RUNOFF IN EXCESS OF THAT AMOUNT SHALL BE DETAINED BY THE USE OF PONDING OR OTHER APPROVED METHODS.
- WATER SERVICE WILL BE PROVIDED BY RIVER CITY M.U.D. NO LOT SHALL BE OCCUPIED UNTIL CONNECTED TO AN APPROVED WATER SYSTEM.
- WATERSHED STATUS - THIS SUBDIVISION IS LOCATED IN THE WEST BULL CREEK WATERSHED, AND THE TURKEY CREEK WATERSHED. THE WEST BULL CREEK WATERSHED IS CLASSIFIED AS A WATER SUPPLY SUBURBAN WATERSHED, AND THE TURKEY CREEK WATERSHED IS CLASSIFIED AS A WATER SUPPLY RURAL WATERSHED. THIS SITE IS SUBJECT TO THE PROVISIONS SET FORTH IN CHAPTER 30-5 AS PROVIDED FOR BOTH WATERSHED CLASSIFICATIONS REGARDING WATER QUALITY.
- EROSION/SEDIMENTATION CONTROLS ARE REQUIRED FOR ALL CONSTRUCTION OF EACH LOT, INCLUDING SINGLE FAMILY AND DUPLEX CONSTRUCTION, PURSUANT TO LDC SECTION 30-5-181 AND THE ENVIRONMENTAL CRITERIA MANUAL.
- ALL NON-SINGLE FAMILY LOTS, DRAINAGE AND CONSERVATION LOTS, WILL BE MAINTAINED BY THE OWNERS OF THIS SUBDIVISION PER HOA TO BE RECORDED WITH THE FINAL PLAT.

- ALL STREETS, DRAINAGE, WATER LINES, AND EROSION CONTROLS SHALL BE CONSTRUCTED AND INSTALLED TO CITY OF AUSTIN STANDARDS.
- ALL RADI AT RIGHT-OF-WAYS ARE 15', UNLESS OTHERWISE NOTED.
- LOTS 4-7, 27, 29, 33-37, BLOCK A SHALL BE SERVED BY A JOINT USE ACCESS EASEMENT. THE MAINTENANCE OF THE JOINT USE ACCESS EASEMENT SHALL BE THE RESPONSIBILITY OF THE LOT OWNERS SERVED BY JOINT USE ACCESS EASEMENT.
- LOTS 1-3, 8, 28, 30, 37, BLOCK A MAY BE SERVED BY EITHER THE JOINT USE ACCESS EASEMENT OR THE STREET FRONTAGE PROVIDED THESE LOTS.
- FIFTEEN FOOT PUBLIC UTILITY EASEMENTS ARE REQUIRED ADJACENT TO ALL STREET R.O.W.
- NO PORTION OF THIS PROJECT IS LOCATED INSIDE THE EDWARDS AQUIFER RECHARGE ZONE ACCORDING TO THE TCEQ QUAD MAPS. A PORTION OF THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE ACCORDING TO THE CITY OF AUSTIN WATERSHED REGULATION AREAS MAP.
- ELECTRIC SERVICE TO THE SITE WILL BE PROVIDED BY: AUSTIN ENERGY
- THE ELECTRICAL UTILITY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY, AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENT CLEAR. THE UTILITY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH VOLUME 2, TITLE 15 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
- THE OWNER / DEVELOPER OF THIS SUBDIVISION / LOT SHALL PROVIDE THE CITY OF AUSTIN ELECTRICAL UTILITY DEPARTMENT WITH ANY EASEMENT AND / OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRICAL FACILITIES.
- ANY ELECTRIC UTILITY ACTIVITY INSIDE THE SUBDIVISION SHALL BE INCLUDED UNDER THE DEVELOPMENT PERMIT, INCLUDING STREET LIGHTS.
- THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION FOR ELECTRIC UTILITY WORK REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE PROJECT. THIS ELECTRIC UTILITY WORK SHALL ALSO BE INCLUDED WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
- NO CONSTRUCTION OR PLACEMENT OF STRUCTURES INCLUDING BUILDINGS, SHEDS, POOLS, LANDSCAPING OR GARDENS IS ALLOWED WITHIN A CRITICAL ENVIRONMENTAL FEATURE BUFFER ZONE PER SECTION 30-5-281 OF THE CITY OF AUSTIN'S LAND DEVELOPMENT CODE.
- THIS SUBDIVISION PLAT IS LOCATED WITHIN THE LIMITED PURPOSE JURISDICTION OF THE CITY OF AUSTIN ON THIS THE 17th DAY OF AUGUST 2007.
- APPROVAL OF THIS PRELIMINARY PLAN DOES NOT CONSTITUTE APPROVAL OF ANY DEVIATION FROM THE CITY'S LAND DEVELOPMENT REGULATIONS IN THE FINAL PLAT, CONSTRUCTION PLAN OR SITE PLAN STAGE, UNLESS SUCH DEVIATIONS HAVE BEEN SPECIFICALLY REQUESTED IN WRITING AND SUBSEQUENTLY APPROVED IN WRITING BY THE CITY. SUCH APPROVALS DO NOT RELIEVE THE ENGINEER OF THE OBLIGATION TO MODIFY THE DESIGN OF THE PROJECT IF IT DOES NOT MEET ALL OTHER CITY LAND DEVELOPMENT REGULATION OR IF IT IS SUBSEQUENTLY DETERMINED THAT THE DESIGN WOULD ADVERSELY IMPACT THE PUBLIC'S SAFETY, HEALTH, WELFARE OR PROPERTY.
- WITHIN A SIGHT DISTANCE EASEMENT ANY OBSTRUCTION OF SIGHT DISTANCE BY VEGETATION, FENCING, EARTHWORK, BUILDINGS, SIGNS, PARKED CARS, OR ANY OTHER OBJECT WHICH IS DETERMINED TO CAUSE A TRAFFIC HAZARD IS PROHIBITED AND MAY BE REMOVED BY TRAVIS COUNTY OR THE CITY OF AUSTIN AT THE OWNER'S EXPENSE. THE PROPERTY OWNER IS TO MAINTAIN AN UNOBSTRUCTED VIEW CORRIDOR WITH THE BOUNDS OF SUCH EASEMENT AT ALL TIMES.
- WATER QUALITY CONTROLS ARE REQUIRED FOR ALL DEVELOPMENT WITH IMPERVIOUS COVER IN EXCESS OF 20% OF THE NET SITE AREA, PURSUANT TO LDC CHAPTER 30-5-211.

- A VARIANCE IS BEING REQUESTED FROM CHAPTER 30-2-153 (BLOCK LENGTH) OF THE LAND DEVELOPMENT CODE.
- A VARIANCE IS BEING REQUESTED FROM CHAPTER 30-2-152(B) (SINGLE OUTLET STREET) OF THE LAND DEVELOPMENT CODE.
- A VARIANCE IS BEING REQUESTED FROM CHAPTER 30-5-301 (CONSTRUCTION ON SLOPES IN EXCESS OF 15%) OF THE LAND DEVELOPMENT CODE.
- A VARIANCE IS BEING REQUESTED FROM CHAPTER 30-5-302 (CONSTRUCTION OF BUILDINGS AND PARKING AREAS IN SLOPES IN EXCESS OF 25%) OF THE LAND DEVELOPMENT CODE.
- A VARIANCE IS BEING REQUESTED FROM CHAPTERS 30-5-341 & 30-5-342 (4' CUT AND FILL LIMIT) OF THE LAND DEVELOPMENT CODE.
- A VARIANCE IS BEING REQUESTED FROM CHAPTER 30-2-158(B) (SUBDIVISION ACCESS) OF THE LAND DEVELOPMENT CODE.
- PARKLAND DEDICATION REQUIREMENTS WILL BE SATISFIED AT TIME OF FINAL PLAT.
- LOTS 5-7, 9-26, 34-36, 38-43, 46-64, 66-76, 78 BLOCK A HAVE SLOPES IN EXCESS OF 15%. CONSTRUCTION REQUIREMENTS FOR EACH OF THESE LOTS MUST BE IN ACCORDANCE WITH SECTION 1.8.2 OF THE ENVIRONMENTAL CRITERIA MANUAL OF THE CITY OF AUSTIN.
- LOT 65, BLOCK A CONTAINS 11.03 ACRES OF LAND TO BE USED AS TRANSFER OF DEVELOPMENT RIGHTS, WHICH EQUALS TO 11 ADDITIONAL SINGLE FAMILY RESIDENTIAL HOUSING UNITS AVAILABLE FOR TRANSFER PURSUANT TO SECTION 30-5-455 OF THE LAND DEVELOPMENT CODE AND IS RESTRICTED FROM DEVELOPMENT PURSUANT TO THIS PROVISION.
- LOTS 66-77, BLOCK A HAVE RECEIVED A TOTAL OF 11 ADDITIONAL SINGLE FAMILY RESIDENTIAL HOUSING UNITS OF THE TOTAL AVAILABLE FOR TRANSFER PURSUANT TO SECTION 30-5-455 OF THE LAND DEVELOPMENT CODE.
- ACCESS TO THE DUNLAP PROPERTY (13198/2549 O.P.R.T.C.) WILL BE MAINTAINED AT ALL TIMES AND THE JOINT-USE-ACCESS-EASEMENT DRIVEWAY TO THE LOT WILL BE CONSTRUCTED WITH THE ROADWAY IMPROVEMENTS. WATER SERVICE WILL ALSO BE PROVIDED AS SHOWN ON SHEET UT1.
- ALL CUTS AND FILLS MUST BE RESTORED TO 3:1 SLOPES OR BY OTHER METHODS LISTED IN THE CITY OF AUSTIN LAND DEVELOPMENT CODE SECTION 30-5-302 AND THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL SECTION 1.8.2.
- ANY UNUSED IMPERVIOUS COVER ALLOCATED TO A RESIDENTIAL LOT MAY BE RE-ALLOCATED TO AN UNDEVELOPED RESIDENTIAL BUILDING AND SHALL BE LIMITED SUCH THAT NO WATER QUALITY CONTROLS WILL BE REQUIRED FOR THIS SUBDIVISION IN EITHER WATERSHED ACCORDING TO THE CITY OF AUSTIN LDC 30-5-424, LDC 30-5-454, LDC 30-5-61.

LEGAL DESCRIPTION:

A LAND TITLE SURVEY OF 167.494 ACRES OUT OF THE JAMES P. COLE SURVEY 542 ABSTRACT 165, TRAVIS COUNTY, TEXAS, BEING A PORTION OF A 105.57 ACRE TRACT DESCRIBED IN A WARRANTY DEED TO LETHA WEBB DATED AUGUST 19, 1988, AND RECORDED IN VOLUME 10757, PAGE 208, ALL OF A 1.99 ACRE TRACT DESCRIBED IN A WARRANTY DEED TO LETHA WEBB DATED JUNE 4, 1991, AND RECORDED IN VOLUME 11450, PAGE 902, ALL OF A 59.11 ACRE TRACT DESCRIBED IN A WARRANTY DEED TO BETTY WEBB FOSTER DATED AUGUST 19, 1988, AND RECORDED IN VOLUME 10757, PAGE 203, ALL OF A 1,000 ACRE TRACT DESCRIBED IN A WARRANTY DEED TO LETHA WEBB DATED JANUARY 29, 2001, AND RECORDED IN INSTRUMENT NO. 2001014063, ALL OF A 2.00 ACRE TRACT DESCRIBED IN A WARRANTY DEED TO GARY WEBB DATED MAY 5, 2002, AND ALL OF A 2.00 ACRE TRACT DESCRIBED IN A CONTRACT OF SALE TO WILLIAM R. WEBB JR. AND DATED AUGUST 17, 1988, ALL OF THE REAL PROPERTY RECORDS OF TRAVIS COUNTY.

A second approved access drive will be required for the portion of this development located along Webb Mountain Drive (Travis County Fire Code Appendix D, Section D107.1). Also see Section D104.3 of the County Fire Code for separation requirements. If a second drive cannot be provided, an alternate method of compliance must be approved by the Travis County Fire Marshal, and the Travis County Transportation and Natural Resources Department, prior to development of the subdivision".



TRAVIS COUNTY FIRE DEPARTMENT ESD#4

LEGEND :

.....	PROPOSED SIDEWALK
- 20' ESMT. -	PROPOSED EASEMENT
A	25' CURB RADIUS
B	28' CURB RADIUS
C	25' R.O.W. RADIUS
D	20' R.O.W. RADIUS

TRAVIS COUNTY (TC) ON-SITE WASTEWATER PROGRAM
NOTES: FOR LOTS WITH STEEP SLOPES:
--WEBB ESTATES SUBDIVISION--

1. NO CONSTRUCTION MAY BEGIN ON A LOT IN THIS SUBDIVISION UNTIL PLANS FOR THE PRIVATE ON-SITE SEWAGE FACILITY (OSSF) ARE SUBMITTED TO AND APPROVED BY THE TRAVIS COUNTY ON-SITE WASTEWATER PROGRAM.
2. LOTS IN THIS SUBDIVISION MUST COMPLY WITH THE "NOVEMBER 21, 1983, RULES OF TRAVIS COUNTY, TEXAS FOR PRIVATE SEWAGE FACILITIES: 8.04 LOT SIZE REQUIREMENTS-(A) Lot Size Criteria, (1), (2) and (3); - (b) Lot Size and Slope Requirements, (1), (2), (3), (4) and (5)."
3. EACH LOT IN THIS SUBDIVISION IS RESTRICTED TO ONE SINGLE FAMILY RESIDENCE ONLY, PER TEXAS COMMISSION ON ENVIRONMENTAL (TCEQ) TITLE 30, TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 285.2, (66).
4. IN ADDITION, NO STRUCTURE IN THE SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A PUBLIC SEWER SYSTEM OR A PRIVATE ON-SITE SEWAGE FACILITY (OSSF) WHICH HAS BEEN APPROVED AND LICENSED FOR OPERATION BY THE TRAVIS COUNTY ON-SITE WASTE WATER PROGRAM.
5. NO STRUCTURE IN THE SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A POTABLE WATER SUPPLY FROM AN APPROVED WATER SYSTEM, APPROVED PUBLIC WATER WELL, OR A PRIVATE WATER WELL.
6. NO ON-SITE SEWAGE FACILITY (OSSF) MAY BE INSTALLED WITHIN 100 FEET OF A PRIVATE WATER WELL NOR MAY AN ON-SITE SEWAGE FACILITY SYSTEM BE INSTALLED WITHIN 150 FEET OF PUBLIC WATER WELL.
7. ALL DEVELOPMENT ON ALL LOTS IN THIS SUBDIVISION MUST BE IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF TCEQ TITLE 30, TAC CHAPTER 285, TRAVIS COUNTY CODE CHAPTER 48, AND "NOVEMBER 21, 1983, RULES OF TRAVIS COUNTY, TEXAS" NOTED IN 2. ABOVE.
8. HOMES LARGER THAN 3,500 SQ. FT. LIVING AREA, WITH LIVING AREA BEING DEFINED BY THE FOUNDATION SLAB OF A ONE STORY OR FIRST FLOOR OF A MULTISTORY HOME, ON LOTS WITH STEEP SLOPES MAY REQUIRE DESIGNED RETAINING WALLS WITH COMPACTED BACKFILLED STRUCTURAL STRENGTH SOILS UPHILL FROM EACH WALL. THE RETAINING WALLS AND STRUCTURAL STRENGTH SOILS MAY BE REQUIRED TO SUPPORT THE INSTALLATION OF THE OSSF SO IT WILL COMPLY WITH THE REQUIREMENTS OF TCEQ TITLE 30, TAC CHAPTER 285, TRAVIS COUNTY CODE CHAPTER 48, AND THE ABOVE 11-21-'83 RULES OF TRAVIS COUNTY. THE RETAINING WALLS AND ANY COMPACTED SOILS REQUIRED SHALL BE DESIGNED BY A TEXAS LICENSED PROFESSIONAL ENGINEER WITH EXPERTISE IN GEOTECHNICAL DESIGN. BASED ON THE PERCENT (%) SLOPE OF EACH INDIVIDUAL LOT AND COMPLIANCE WITH THE ABOVE RULES AND REGULATIONS OF TRAVIS COUNTY AND THE STATE OF TEXAS, ANY REQUIRED GEOTECHNICAL DESIGNS NOTED ABOVE COULD REQUIRE LARGE AREAS ON MANY OF THE LOTS. THEREFORE, THESE GEOTECHNICAL DESIGN REQUIREMENTS MAY APPLY TO THE FOLLOWING LOTS: 1 THRU 20, 48 THRU 50, 53, 54 (Conservation Lot) THRU 63, 64 and 65 (Conservation Lot), 66 THRU 69, AND 71 THRU 79, BLOCK A.
9. THESE RESTRICTIONS ARE ENFORCEABLE BY THE TRAVIS COUNTY ON-SITE WASTEWATER PROGRAM AND/OR LOT OWNERS IN THIS SUBDIVISION.
10. IF, FOR SOME REASON, THE RIVER CITY M.U.D. COULD NOT PROVIDE WATER SERVICE, AS NOTED IN GENERAL NOTE 15., THEN DEVELOPMENT WITH WATER WELLS ON LOTS COULD BE IMPOSSIBLE.

PHIL G. ICE, P.E. DATE
ON-SITE WASTE WATER PROGRAM
TRAVIS COUNTY TNR

**Resolution of the Joint Sub-Committee
of the Environmental Board
and the
Parks and Recreation Board**

Concerning the Barton Springs Pool Master Plan

WHEREAS, Barton Springs Pool, is a historical landmark considered by many to be the crown jewel of Austin;

WHEREAS, over 409,000 people annually enjoy this spring-fed swimming pool,

WHEREAS, the only known surface habitats of the endangered Barton Springs Salamander (*Eurycea sosorum*) are located in Barton Springs Pool, Eliza Spring, Old Mill Spring (Sunken Garden) and Upper Barton Spring, and

WHEREAS, Barton Springs Pool is in immediate need of improvements to facilities, water quality and salamander habitat conditions, and

WHEREAS, City Council has unanimously supported the improvement of Barton Springs Pool by allocating \$6.2 million in capital improvement funds for short term projects that have received wide support

WHEREAS, City Council authorized securing the services of a professional consultant to work with stakeholders on a plan for Barton Springs Pool (*Resolution No. 20061019-035*) to address improvements to facilities, the grounds, infrastructure, water quality and salamander habitat conditions,

NOW, THEREFORE, BE IT RESOLVED, that the Joint Sub-Committee of the Environmental Board and the Parks and Recreation Board recommends to City Council the following:

- City Council accepts the Plan as a resource for short-term projects and concepts for possible future long-term projects, which would require extensive public input from stakeholders, Boards and Commissions and City Council.
- The City Manager should instruct the Parks and Recreation Department and the Watershed Protection Department to work cooperatively to complete the short-term projects with stakeholder participation. The resulting data, analysis and public input will provide information to further evaluate the long term projects.

- The plan, from this time forward, should be referred to as *Barton Springs Pool Master Plan: Concepts for Preservation and Improvement* to acknowledge that additional data and analysis is needed .
- The Joint Sub-Committee of the Environmental Board and Parks and Recreation Board should continue in an oversight capacity, hosting representatives of all stakeholder groups as short term projects are implemented and long-term projects are considered in the future.

Friends of Barton Springs Pool

To: Austin City Council
From: Board of Directors
Friends of Barton Springs Pool
Date: 9/6/06
Subject: Budget Recommendations

We are grateful to the City Manager and the Council for adding funds to the proposed budget for improvements to Barton Springs Pool. As we have seen, the Pool has reached a state that is distressing to all who love it. The commitment of the council and manager to reverse this downward trend is welcome.

There is much to be done. Top priority must go to rescuing the Pool itself from a choked decline. Beyond that the grounds and facilities need restoration, renovation, and improvement. Below are the spending priorities we favor. We would like to work with the council and staff to develop a comprehensive plan for addressing Pool issues.

Recommendations:

1. Remove the gravel from the deep end of the Pool.
2. Increase the staff available to clean the Pool both in the Parks and Recreation Aquatics Department (Aquatics) and in the Watershed Protection & Development Review Department (Watershed) Salamander Conservation Program.
3. Develop procedures to lower the Pool for cleaning when the water flow is below 54 cubic feet per minute (CFM) due to drought conditions.
4. Develop a concise manual of city operation and management of the Pool to show current practices in Pool-cleaning techniques, and what techniques still must be developed to keep the Pool clean, even in drought and flood conditions; thereby creating a clear statement of the practical problems that remain.
5. Provide arbor care to all the trees around the Pool.
6. Remove the unsightly and dangerous tangle of electrical wires strung across and around the Pool, and replace outdoor lighting with solar-powered lights.
7. Immediately begin planning for a modest bathhouse or changing room at the South Gate that can serve during later renovation of the main bathhouse.
8. Initiate long-term studies for restoration and renovation of the historic bathhouse.
9. Additional projects for the future include: Restore native flora & fauna to pool; Restore some creek flow to pool; Replace the chain link fence with wrought iron; Improve irrigation system; Rebuild the dam; Build a second dam and pool downstream.



AUSTIN DESIGN COMMISSION

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ERICA LEAK

STAFF LIAISON

03 June 2008

Re: Barton Springs Master Plan

Mayor Wynn and members of the City Council;

The Design Commission would like to thank Limbacher & Godfrey Architects for the presentation of their Barton Springs Pool Master Plan. It is readily apparent that a tremendous amount of thought, research and work went into its preparation. We are generally encouraged by the proposal and offer the following comments.

1.) **Approach.** The proposal contemplates moving forward along a cautionary route with testing and reports compiled prior to implementing any proposed changes. This is entirely appropriate.

2.) **Public involvement.** Barton Springs may well be the most iconic public place in Austin. As such, the public is demanding a tremendous amount of discussion, involvement and accountability in any process that leads to changing Barton Springs in any way. Judging from the included meeting notes there have been multiple public meetings with many more to follow. As PARD makes clear in the notes, this is a master plan only. "Any projects that might be implemented will have their own design and public process phases."

3.) **Specific concerns.**

a. Opening "the woods" on the south side of the pool is a bold proposal and worthy of careful consideration. Providing restrooms, a ticket office and an accessible route for people entering from Robert E. Lee seems reasonable but public safety is paramount. The opportunity to replace non-native plants and foliage is intriguing. Keeping low foliage thin and otherwise having high canopies would make sense.

b. Consider a more robust use of photo-voltaic generation by solar panels in conjunction with the provision of shade.

c. We recommend that any implemented improvements have concurrent and appropriate operations and maintenance budgets.

d. Consider the needs of those fishing from watercraft, the bank or wading.

e. Provide a space to develop a south entrance to Zilker Park at the top of the boat ramp. The volume of pedestrian and bicycle traffic warrants such an enhanced treatment.

f. Given that the grounds are the most heavily used part of the facility, consider options for expanding the popular gently-sloped lawns and making steep lawn areas more sustainable. Examine the use of low terraces in some areas to reduce the slope of steep lawns to the city standard of 3:1 slope.

4.) **Ongoing oversight.** We believe that it is important that an Advisory Board or Panel of some kind be formed to act as the client. The purpose of this board would be to shepherd the project through the inevitable shifts and changes that will no doubt be encountered as this master plan evolves and ultimately is implemented. Such a board is referenced in the Final Words section of the proposal and seems like a very reasonable and practical idea.

Thanks again to Limbacher & Godfrey Architects for the thorough and articulate proposal. While this is just the beginning of a long process we think it is a great start and look forward to the evolution of the plan and its ultimate implementation.

Sincerely,

A handwritten signature in dark ink, appearing to read "Girard Kinney". The signature is fluid and cursive, with a large initial "G" and a long, sweeping horizontal stroke at the end.

Girard Kinney, Chair
Design Commission

**BARTON SPRINGS POOL Master Plan
Short Term Projects**

Last update: 7/03/2008

	Project Description	Budget Costs	Problem	Proposed Solution	Lead Dept.	Status
1	Pilot Study for water recirculation at Beach	WPDR Staff	Beach area on north bank of pool is designated salamander habitat but has very few salamanders and much nuisance algae appears to originate in this area.	WPDRD to use existing pump in downstream dam to direct garden hose volumes of water onto small area of beach and document effects on substrate.	Watershed Protection and Development Review	Pilot study ran for approximately 3 months before electrical problems shut down the pump. Preliminary results are a dramatic change in bottom conditions, less nuisance algae and sediment in area with increased water velocity (0.3 to 2 ft/second along substrate). Electrical supply to pump repaired. Study restarted May 2008 and will continue for several months.
2	Pilot Study for ultrasonic algae control	\$5000/ WPDR	Nuisance algae growing in the shallow end of pool produces a slippery surface, it is difficult and time consuming to remove.	WPDRD and PARD to purchase equipment, which is advertised to kill and prevent the growth of algae. Test in lab to determine possible effects on salamanders and other aquatic life and, if safe, on small area of shallow end of pool to determine effectiveness.	Watershed Protection and Development Review	Potential pilot location suggested in NW Park (Beverly Sheffield) pond. Checking with maintenance staff on proximity to electrical and other constraints. If successful, may need to submit workplan for testing with captive salamanders, and non-salamander areas of BS pool to USFWS. Testing under controlled conditions likely to be more expensive than units themselves, but necessary.
3	Pilot Study for creek flow	WPDR Staff	Allowing creek water to flow through the pool area may alter the basic chemistry of the water in habitat area enough to be harmful to salamanders and create conditions favorable to growth of nuisance algae.	Conduct a pilot study to determine the effects of creek inflows in the pool; document changes in algal growth and gross community composition in shallow end, and document basic water chemistry in habitat area (specifically dissolved oxygen)	Watershed Protection and Development Review	Need sustained baseflow in Barton Creek before proceeding.
4	Tree assessment and treatment	\$250,000	Many trees in pool area are aging, losing limbs, presenting a safety risk to users.	Assess and treat aging trees as necessary, plant replacement trees of various species and aesthetics.	Parks and Recreation	Conducted an Invitation for Bid (IFB) [Best Value] through COA Purchasing Dept. in order to contract with an Arborist for detailed assessment of the 45 most critical trees. As per City policy, a review panel of COA employees was established, and reviewed all bids received. Based on bid amount, experience, certifications, and technology proposed, review panel made a recommendation which will now go to City Council for approval.
5, 6	5) Replace overhead wiring with underground wiring and 6) add electrical service to pool side to facilitate pool cleaning	\$400,000 (AE funds)	5) Overhead electrical wires create a potentially dangerous situation to pool users if limbs from the numerous aging large trees fall and break a line. • 6) There is insufficient electric supply to power all electric cleaning equipment.	5) Bury all electric lines, replace existing light poles and lamps which will increase safety and provide a more aesthetically pleasing environment.. • 6) Upgrade power supplies to both north and south side of pool so more electric power washers can be used for pool cleaning.	Parks and Recreation / Austin Energy	Project in preliminary design phase.
7	Topographic surveys	\$106,275	Insufficient topographic data for various modeling and construction projects.	Collect new detailed data upstream of pool, inside pool, and at Sunken Gardens for various modeling efforts and grounds improvements.	Watershed Protection and Development Review	SAM, Inc. from PW rotation list working on revisions to scope of work for survey from meeting with PARD/WPDRD/PW staff. Maps highlighting surface features for higher resolution sent for use in revisions. Field recon with staff once revisions are recieved to scope. Conduct of survey anticipated before end of August.
8	Remove gravel bar	\$905,600	Gravel deposited by floods has built up in the deep end of the pool and previous removal effort could only remove material smaller than 6" in diameter and was only moderately successful.	Use type of floating mechanical dredge to remove all sizes of flood debris from deep end of pool. Need to determine methods to remove debris from BSP grounds once it's removed from water.	Parks and Recreation	An environmental engineering firm has been hired to develop an environmentally-sound, cost-effective, time-conscious plan for removal of gravel. Received preliminary design concepts on May 23. Met with consultants on 6/16 to further develop concepts and provide further scope. Expect more detailed plans by 7/18. Plans will be presented to stakeholders for input prior to decision on which approach to use, and prior to any work beginning.
9	Rehabilitate bathhouse (Phase 1)-Roof & Mechanical	\$476,875	Historic bathhouse needs repairs and upgrades to meet current health and safety codes and prevent further deterioration.	Repairs to various parts of facility to meet current codes, including roof and mechanical systems.	Parks and Recreation	Consulted with roofing contractor and Austin Energy (for solar hot water) on May 22. Awaiting proposals from each.
10	Replace Barton Creek bypass grate	\$233,478	Current grate clogs easily and this reduces the efficiency of the bypass making flooding of pool more likely	Design new grate that allows small debris to pass through, thereby improving its efficiency.	Watershed Protection and Development Review	Project in preliminary design phase. Ideal design for inlet grate, upper and lower dam modifications may need to be considered as a unit to provide maximum operational flexibility.
11	Renair bypass tunnel joints	\$285,362	Several joints in bypass culvert are failing, allowing	Repair all bypass joints except those in AWU project	Watershed Protection and Development Review	Project in preliminary design phase. Two joints and several weep holes sealed as part of lift station project.

14,15	Hydrodynamic modeling - Flow and flood modeling	\$250,809	14) Impoundment of Barton Springs has altered the natural aquatic ecosystem from a free flowing spring-fed creek to a pond, slowing water velocities in most areas of the pool. This reduces salamander habitat, encourages growth of nuisance algae, and captures sediment. • 15) SSP floods during storm events producing greater than 500 cfs of flow upstream of the pool.	14) Conduct physical or numeric modeling of water flow direction and velocity in the pool with current infrastructure. Model potential modifications to upper and lower dams to include additional gates. Model pool under different spring flow (discharge) conditions, drought to high flows. Model pool water velocities when creek floods top upper dam with and without gates open in lower dam, with new gates in lower dam. Model new gates in upper dam to allow creek flows into pool. • 15) Need topographic data. Will calculate flood elevations upstream of pool to help determine if floods into pool can be reduced by raising the elevation of the upstream dam.	Watershed Protection and Development Review	Awaiting topographic survey data. WPRD staff consulting with Utah State hydraulic engineers on potential for physical and numerical modeling project. Staff in WPRD with experience using SMS model as a potential for ongoing maintenance and resource once model created and calibrated. Additional surveying may be needed for bathymetry on finer resolution depending on model requirements. Scope for surveying unlikely to change as a result, but additional data may need to be developed by modelers for this task using survey as base.
16	Silt and algae disposal	\$35,000	Silt and algal debris from drawdown and flood cleaning of pool is currently routed downstream of pool to Barton Creek, which is in violation of City's Habitat Conservation Plan for the salamanders.	Develop system to move cleaning debris off site for composting or other disposal.	Parks and Recreation	Project in preliminary design phase.
17	Interpretative Plan	\$121,862	Pool area needs additional interpretative and educational information.	Develop interpretive plans for grounds and install new materials, including at south entrance.	Parks and Recreation	Plan at 25% completion, working to set meeting with stakeholders
18	Temporary skimmer	\$278,495	Floating nuisance algae is an aesthetic problem for swimmers, particularly during droughts. Its growth on the pool floor can cover salamander habitat and it is difficult to remove.	Pilot system in drought of 2006 was successful in removing floating algae. A temporary system will be installed along sections of the south wall of the pool which will rely on wave and wind action to push algae to skimmer and gravity to suck it down to the creek below the pool.	Parks and Recreation	Project in preliminary design phase.
19	General grounds improvements	\$1,010,975	Pool area grounds need improvements, including non-slip, drought-tolerant landscaping, a more visually pleasing fence.	Replace pool fence, plant native grasses in appropriate areas, add seating to facilitate sense of community.	Parks and Recreation	Awaiting topographic survey prior to beginning design process.
20	Sunken Garden improvements	\$278,495	Parts of the sunken walls have collapsed, others are unstable and have numerous holes the walls preventing regulation of spring flows.	Renovate existing walls and replace as necessary, install an adjustable gate to allow regulation of spring flows to improve habitat management.	Watershed Protection and Development Review	Developing project goals, including integration with Interpretive Plan. Developing scope of work in cooperation with WPRD watershed engineers.
21	Structural testing of dams	\$141,700	Insufficient structural information on capacity of existing dams.	Perform construction material testing on both existing dams to determine the structural strength of the concrete and the friction between the dam and underlying rock.	Parks and Recreation	Project in preliminary design phase.