



ENVIRONMENTAL BOARD MOTION 0716084a-001

Date: July 16, 2008

Subject: Barton Springs Pool Master Plan

Motioned By: Jon Beall

Seconded By: Mary Ann Neely

Recommendation

The Environmental Board offers the attached resolution in response to the collaborative efforts from the Joint-Subcommittee for the Barton Springs Pool Master Plan, consisting of members of the Environmental Board and the Parks Board.

In addition, the Environmental Board recommends that staff clarify refinements of spring flow measurements that are currently being undertaken separately from the Master Plan projects, and offer to incorporate the Scientific Advisory Committee's Recommendations into Short Term and Conceptual long Term Objectives of the Barton Springs Pool Master Plan.

Vote 7-0-0-0

For: Ahart, Anderson, Beall, Dupnik, Maxwell, Moncada and Neely

Against: None

Abstain: None

Absent: None

Approved By:

Dave Anderson P.E., CFM, Chair

groups as short term projects are implemented and long-term projects are considered in the future.

- The separate studies clarifying the accuracy of daily spring flow measurements be included
- The Scientific Advisory Committee's Recommendations be considered and included in the short-term and conceptual long-Term Objects

ADOPTED: July 16, 2008

ATTEST:

 P.E.

David J. Anderson, PE, CFM
Environmental Board Chair



ENVIRONMENTAL BOARD MOTION EB071608-4b

Date: July 16, 2008

Subject: WPDR FY 2009 Proposed Budget

Motioned By: Phil Moncada

Seconded By: Rodney Ahart

Recommendation

The Environmental Board recommends **approval** of the WPDR FY09 Proposed Budget as presented to the Environmental Board FY08 Subcommittee. This budget enhances the staff and performance metrics necessary to promote the three core missions of the WPDR department – water quality protection and enhancement, flood mitigation, and erosion protection.

1. The Board recommends staffing be commensurate with the increased activity within the Department due to implementation of Bond projects. This includes funding for the following positions:
 - a. Project coordinator in Flood Hazard Mitigation to implement the bond program for effective project sponsorship.
 - b. Supervisor in Storm Drain Rehabilitation to coordinate concrete crews and lower the number of direct reports for the pipeline construction crew supervisor.
 - c. Commercial pond inspector to further increase the number of pond inspections and follow-up visits to check for compliance
2. The Board recommends that the Council and City Manager should begin to think seriously about a raise in the Drainage Utility Fee.
3. The Board recommends percent failure/success metrics be included in all inspection categories in the future.
4. The Board recommends that the Department develop additional metrics to quantify the value of open space in protection of creek/stream water quality.
5. The Board recommends that a metric be instituted that measures elevated review of stormwater controls in the recharge zone during rain events.
6. The Board recommends that additional Erosion Control crews be added, or that consultant/contractor help be solicited for erosion repairs.

Vote: 6-0-0-1

For: Ahart, Anderson, Dupnik, Maxwell, Moncada and Neely

Against:

Abstain:

Absent: Beall was off the dais

Approved By:

A handwritten signature in black ink, appearing to read "D. Anderson", followed by the letters "P.E." in a smaller, less distinct script.

David J. Anderson, P.E., CFM, Chair

THIS SECTION DOES NOT REQUIRE POSTING

Request Date	Request	Requestor	Staff	Agency	Status
6/7/06	Briefing on Zoning Cases and Impervious Cover	Phil Moncada	Jerry Rusthoven	NPZD	Pending
6/26/2008	Wildflower Commons	Dave Anderson	Pat Murphy	WPDR	pending
2/29/08	WTP4 Quarterly update	Dave Anderson	Greg Meszaros, Dir	AWU	10/1/2008
2/29/08	WTP4 Quarterly update	Dave Anderson	Greg Meszaros, Dir	AWU	1/7/2009
7/9/2008	Written Update Carson Creek Flood Hazard Reduction Engineering Study –	Rodney Ahart	Roxanne Cook	WPDR	8/20/2008
7/9/2008	Postponement Austin Del Valle Motor Cross Park	Dave Anderson	Patricia Foran	WPDR	8/6/2008
7/9/2008	Geo Tech Report and on the Water intake for WTP4	John Dupnik	Bill Strauber	AWU	8/6/2008
7/9/2008	Draft Tree Resolution	Dave Anderson	Phil Moncada	EB	8/6/2008



MEMORANDUM

TO: Phil Moncada, Member of the Environmental Board

FROM: Daryl Slusher, Assistant Director, AWU

DATE: July 11, 2008

SUBJECT: Answer to Phil Moncada.

Phil:

In recognition of the reduced environmental sensitivity of the Bullick Hollow site, there is no plan to provide funding for a WPDRD Environmental Inspector specifically for WTP4. Environmental inspection will be performed by WPDRD's inspector for that area and WPDRD has committed to designating the WTP4 project as a high priority for inspection. The inspector will also be involved during design of erosion and sedimentation controls.

AWU will continue to fund a full time Project Coordinator (Robyn Smith) to monitor and manage environmental issues during WTP4 design, construction, and startup. This funding is planned to last through the entire project, until 2016. Additionally the Environmental Commissioning contract is still active and that team is available for special needs.

WPDRD has also committed Chuck Lesniak, Environmental Policy Program Manager, as the project coordinator's supervisor and to oversee the Environmental Commissioning process. This structure and staffing provides independent environmental oversight of the WTP4 project.

Watershed has been performing this role since 2006 and was involved in identifying and monitoring environmental challenges at the Bull Creek site and also played a central role in finding and analyzing the new site.

DS/ds

Questions from EV Board Budget Subcommittee meeting on July 8, 2008

1. Please provide additional information on the UWO Structural Control budget item.

As part of the Urban Watersheds Ordinance (#91-0829-E), developers have the option of making a payment in lieu of constructing water quality controls. In cases of redevelopment, the City provides an average of 75% of the project cost estimate. The \$750,000 in the Drainage Utility Fund Summary represents the estimated amount the Department will need to meet the City's financial obligation.

2. What training is being provided to staff on new regulations?

As new rules and ordinances are approved, technical staff and section managers respectively provide training to staff members who are affected by the changes. Additionally, the Department Director has instructed managers to work on in-house training programs to ensure that staff are well-informed on relevant subject matter. See Attachment A for an example of classes offered.

3. Regarding the 20% commercial pond discount: Was there a timeline associated with the discount? Can/should the amount be lowered or eliminated?

There is not a timeline associated with the pond discount in the ordinance. A review of the discount intent and applicability will be undertaken during the fee study and rate analysis. See Attachment B for backup documentation.

4. Is one FTE adequate to meet the needs of the commissioning of the new WTP4 site?

To be addressed by Environmental Board Budget Subcommittee. One Project Coordinator is included in the FY09 Proposed Budget and will be funded by the Austin Water Utility.

5. What percentage of stream channels have been stabilized as part of ACWP?

See Attachment C.

6. Is the funding for Mike Kelly's position germane to the work he is involved in on the review and updated of the Erosion and Sedimentation controls criteria?

Yes, the Environmental Criteria Manual specifically addresses this in section 1.4.1 where it states that the Water Quality Management section supervisor (currently Mike Kelly) is responsible for establishing and reviewing the Erosion and Sedimentation control criteria.

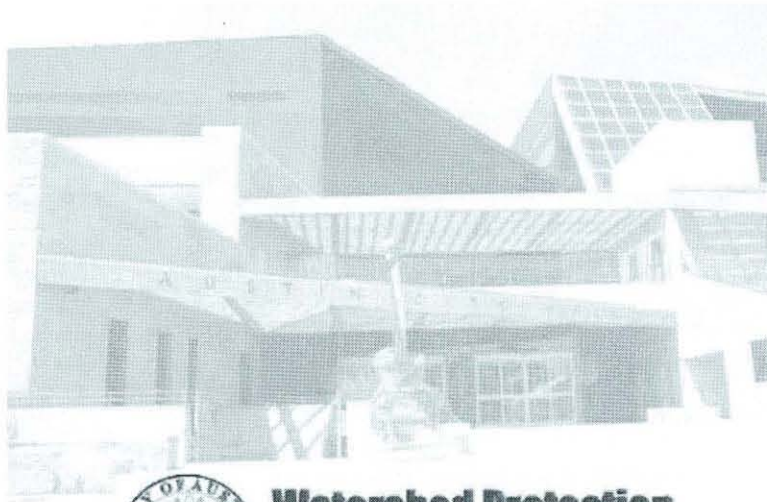
7. Does the Environmental Inspection section have enough coverage due to staggered hours, especially on Fridays?

The staggered hours and schedules do not impact customer service. This has been in existence for several years with ample staff working five days a week. In addition, these schedules (four days at ten hours each) have proven to be a fuel cost cutting measure, an important benefit considering current fuel costs.

Land Use Review Training for You!

» Presented by the Employees
of the City of Austin's
Land Use Review Department

**Get the information you need about Water
Quality, Urban Forestry Conservation, Drainage,
Subdivisions, Transportation and more...!**



**Watershed Protection
Development Review**



Victoria Li, P.E., Director
Watershed Protection and Development Review Department

Bobby Ray, Assistant Director, One Stop Shop
Watershed Protection and Development Review Department

Julie Lipton, Division Manager, Land Use Review
Watershed Protection and Development Review Department



Watershed Protection
Development Review

The City of Austin's Land Use Review Division is proud to present Training for You, training classes to improve your knowledge of various aspects of review for development projects and how they interface with your job responsibilities. We will be presenting classes to our fellow employees to include the topics of Water Quality, Transportation, Urban Forestry Review, Regional Storm Management, Underground Storage Tanks, Drainage Easements, and more.

These classes are designed to give you more in-depth information about each discipline at Land Use Review and perhaps provide answers to questions you may have had about the procedures of our review teams!

The following pages list the classes available and a brief description of the topic covered.

An Overview of Regional Stormwater Management Plan (RSMP)

Jose Guerrero

Engineer, P.E.

June 18th, 11:00 AM, Room 240, OTC

We have all heard about RSMP but do we REALLY know what it is? Here is your opportunity to find out from Jose Guerrero about our Stormwater program. Jose will explain how detention waivers are granted and about the fees that are collected for the City as a result. Jose will also be highlighting some of the upcoming changes in the RSMP program, including RSMP incorporation into Amanda.



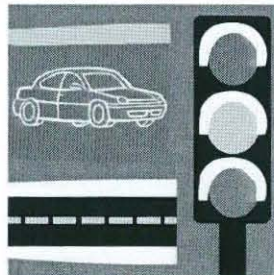
City of Austin Off-Street Parking Requirements

Joe Almazan

Development Services Process Coordinator

August 6th, 11:00 AM, Room 240, OTC

What is involved in determining proper parking for a project? Off-street parking is required for many developments and Joe will explain what properties require off-street parking and why. You will also find out about calculating the parking requirements, parking lot design, bicycle parking, queuing, drive-thru's and more.



Urban Forestry Review

Michael Embesi

Urban Forestry Conservation Program Manager

August 13th, 11:00 AM, Room 240, OTC

Trees have an essential role within our community and green tree-filled neighborhoods help to make Austin the livable city that it is. The City of Austin Tree and Natural Area Preservation Code is based upon sound urban forest management principles and the assurance of a sustainable urban forest with a diversification of

species and a mix of young, medium and aged trees. Michael will explain how proposed development projects are evaluated for reforestation or preservation of the existing mix of trees.



Fiscal Surety and Drainage Easements

Javad Oskouipour

Supervising Engineer, P.E. / Drainage

July 23rd, 11:00 AM, Room 240, OTC

Fiscal Surety is required prior to final plat subdivision recording for those subdivision improvements and environmental and safety controls which are in the general public interest.



As part of the application process, most reviewers have had to work with drainage easement documents which allow for water flow through sites. Javad will explain the drainage easement requirements for permitting and recording.



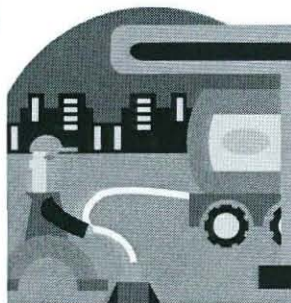
Underground Storage Tanks

Jason Johnson

Environmental Compliance Specialist

July 2nd, 11:00 AM, Room 240, OTC

Did you know that remnants of the past sit below our city streets? You will learn about storage tanks from long ago that still remain, how likely you are to run across a plan with a tank and what to do when you find one. You will also learn about current operating procedures for underground tanks.



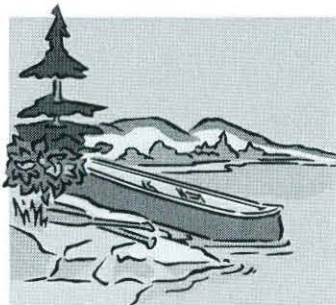
A Discussion of Frequently Misunderstood Water Quality Issues

Forrest Nikorak

Supervising Engineer, P.E./Drainage & Water Quality

July 9th, 11:00 AM, Room 240, OTC

This session will be of interest to those employees involved with the review and inspection aspect of water quality. Forrest will discuss topics including General



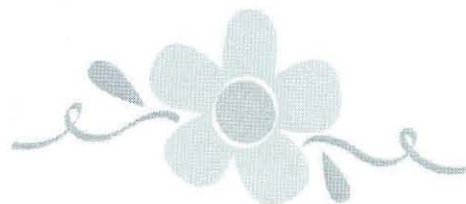
Water Quality, Sedimentation Filtration Ponds and Wet Ponds. Some of the issues he will explore will be plug flow and pond geometry, the new appendix "T" application, wet pond short circuiting and water balance.



**This training is being offered to WPDR employees only,
however, seating is limited. Please RSVP to
lynn.tozser@ci.austin.tx.us**

OR

**For more information, contact:
Lynn Tozser, Program Specialist
Watershed Protection and Development Review Department
Land Use Review Division
974-2698**



Training for You

Classes Presented by the Employees of the City of Austin Land Use Review Division for Employees of Watershed Protection and Development Review

Correction, Revision, Redevelopment or New...?

Lynda Courtney

Development Service Process Coordinator

June 11th, 11:00 AM, Room 240, DTC



The incoming Site Plan has had changes...but what type of changes are they? How do you categorize a Correction, Revision, Redevelopment or New Plan? Learn to recognize the key elements of each and the best way to handle the new information.

In-House Communications

George Zapalac

Development Services Manager

June 25th, 11:00 AM, Room 240, DTC



You can get the attention of your coworkers....If you know the proper technique! Find out how to get your message across. The correct communication etiquette and style will get a response to your request for information.

Parkland

David Wahlgren

Development Services Process Coordinator

July 30th, 11:00 AM, Room 240, DTC



Most residential subdivision or site plan projects require parkland dedication or fees. Get up to date information on how the parkland fees are calculated in the ETJ vs. in the City and also how fees can affect the project.



**Watershed Protection
Development Review**

Attachment B: Additional information regarding 20% pond maintenance discount

From the Drainage ordinance:

§ 15-2-16 REDUCED CHARGE WITH POND REGISTRATION.

(A) The user of a non-residential benefitted property with an on-site detention or water-quality pond that receives storm water run-off from the property must register the pond to be entitled to request a reduced drainage charge under this section. The pond registration and reduced drainage charge requests must be in writing and be provided to the director.

(B) The director may adopt rules regarding eligibility for a reduced drainage charge under this section, including requirements for registration, maintenance, and inspection of the pond.

(C) After receiving a pond registration and a reduced drainage charge request under this section, the director shall grant the reduced rate to the property. If the director finds that storm water run-off from the property does not drain to the pond or the pond does not exist, the director shall revoke the pond registration and charge the user for any reduction to which the property was not entitled.

(D) The reduced drainage charge under this section is prospective only and must be requested by the user. A user who is paying a reduced charge on October 1, 2001 must file a pond registration request with the director no later than January 2, 2002.

(E) The director shall have each property receiving a reduced charge under this section inspected on a regular basis. If the inspection shows the pond is not maintained as required by the Environmental and Drainage Criteria Manuals, the full charge shall be reinstated at the first billing after the user has been notified of the loss of eligibility and advised of what improvements are necessary to again become eligible for the reduced charge. The user must reapply for the reduced charge.

(F) The director may not refund any drainage charges under this section.

(G) The amount of the reduction of the drainage charge permitted by this section shall be set by ordinance. A user may receive only the most recently authorized reduction.

Source: 1992 Code Section 18-3-16; Ord. 031204-14; Ord. 031211-11.

From WPDR billing rules:

Differential rate

The users of nonresidential property having well maintained, on-site detention and/or water quality ponds that receive storm water run-off from that property must register the pond to be entitled to request a reduced drainage charge. A Pond Registration and Fee Reduction Request form should be completed and provide to the director. After receiving a pond registration and a

reduced drainage charge request the director shall grant the reduced rate to the property. The director shall have each property receiving a reduced charge inspected on a regular basis. If the inspection shows that the pond is not maintained as required by the Environmental and Drainage Criteria Manual, the full charge shall be reinstated at the first billing after the user has been notified of the loss of eligibility and advised of what improvements are necessary to again become eligible for the reduce charge. The use must reapply for the reduced charge. The current differential rate is twenty percent (20%) of the nonresidential rate. If the property does not qualify for the differential rate, the owner will be informed as to what maintenance and/or repairs are required in order to receive the adjusted rate. (15-2-16 of the Drainage Ordinance)

Attachment C: ACWP Project Overlap

MP project number	Watershed	Total MP project cost	Portion of project covered by ACWP	WPDRD cost savings from ACWP project	ACWP Project Area	ACWP Project Name	ACWP Project Description	Current Status
EC-BMK-2	Buttermilk	840,000	50%	420,000	Cross Town	Little Walnut/Buttermilk-Buttermilk Creek	Stabilize 500 feet of channel from Hampton Inn to 500 ft. downstream	Complete
EC-SHL-2	Shoal	825,000	50%	412,500	Cross Town	Shoal Creek Channel Stabilization	Stabilize 1800 feet of channel from 29th St. to Gaston	Complete
EC-SHL-9	Shoal	910,000	75%	682,500	Cross Town	Upper Shoal-Lower Hancock	Stabilize 600 feet of channel from Hancock Library to 500 ft d/s of Hancock Bridge	Complete
EC-TAN-4	Tannehill	714,000	50%	357,000	Cross Town	Upper Tannehill-Lower Fort:Old Manor Line	Stabilize 500 feet of channel from downstream of 51st St.	Complete
EC-TAN-5	Tannehill	875,000	50%	437,500	Cross Town	Upper Tannehill-Broadmoor Cameron	Stabilize 2000 feet of channel from Berkman to RSMP dam	Complete
EC-WLR-4	Waller	490,000	100%	490,000	Cross Town	Upper West Waller-45th & Speedway	Stabilize 800 feet of channel from IM fields to 46th St.	Complete
				\$2,799,500	Cross Town			
EC-EBO-2	East Bouldin	595,000	10%	59,500	Govalle	Govalle 1-South 2nd St. Re-route: Phase 1	Stabilize 50 LF, both sides of channel near S. 3rd	Construction
EC-EBO-3	East Bouldin	971,000	50%	485,500	Govalle	Govalle 1-South 2nd St. Re-route: Phase 1	Stabilize 750 ft. of east bank from Johanna to Milton	Construction
EC-JOH-1	Johnson	595,000	50%	297,500	Govalle	Govalle 5- Johnson Creek	Stabilize 300 ft. of channel downstream of 5th Street.	Warranty
	Boggy	1,300,000	50%	650,000	Govalle 4	Manor/Comal/Rose wood	Relocate Sanitary line outside of Boggy Creek to allow WPDRD restoration project	Construction
	Country Club	1,500,000	100%	1,500,000	Govalle 3	Parker Lane/Metcalf Road	Stabilize 1500 LF of Channel	Construction
				\$2,992,500	Govalle			
				\$5,792,000	Grand Total			

Responses to Environmental Board Recommendations from September 5, 2007

1. The Environmental Board recommends approval of the WPDR FY08 Proposed Budget.

No response required.

2. The Board recommends staffing be commensurate with the increased activity within the Department due to implementation of Bond projects. This includes funding for the following positions:

- a. Project coordinator in Flood Hazard Mitigation to implement the bond program for effective project sponsorship.**
- b. Supervisor in Storm Drain Rehabilitation to coordinate concrete crews and lower the number of direct reports for the pipeline construction crew supervisor.**
- c. Commercial pond inspector to further increase the number of pond inspections and follow-up visits to check for compliance**

The Department Director identified 3 positions in priority order that had to be removed in order to balance the FY08 Budget. These positions will be considered during the upcoming fee study.

3. The Board recommends that the Council and City Manager should begin to think seriously about a raise in the Drainage Utility Fee.

In the May 7th Budget Worksession with Council, the Department Director informed Council that staff would be conducting a detailed fee study and would be presenting recommendations for a rate increase and long-term funding strategy to be implemented beginning in FY10.

4. The Board recommends percent failure/success metrics be included in all inspection categories in the future.

The Department is tracking information as indicated below:

1. COMMERCIAL EV INSPECTIONS

- a. COMPLIANT
- b. NON-COMPLIANT
- c. TOTAL INSPECTIONS
- d. COMPLIANCE RATE (BASED ON TOTAL INSPECTIONS)
- e. VERBAL NOTICE VIOLATIONS ISSUED
- f. WRITTEN NOTICE VIOLATIONS ISSUED
- g. STOP WORK ORDERS (RED-TAGS) ISSUED
- h. NOTICES/RED-TAGS RELEASED

2. RESIDENTIAL EV INSPECTIONS

- a. COMPLIANT
- b. NON-COMPLIANT
- c. TOTAL INSPECTIONS
- d. COMPLIANCE RATE (BASED ON TOTAL INSPECTIONS)
- e. VERBAL NOTICE VIOLATIONS ISSUED
- f. WRITTEN NOTICE VIOLATIONS ISSUED

- g. STOP WORK ORDERS (RED-TAGS) ISSUED
- h. NOTICES/RED-TAGS RELEASED

3. SITE PLAN EXEMPTIONS - EV INSPECTIONS

- a. COMPLIANT
- b. NON-COMPLIANT
- c. TOTAL INSPECTIONS
- d. COMPLIANCE RATE (BASED ON TOTAL INSPECTIONS)
- e. VERBAL NOTICE VIOLATIONS ISSUED
- f. WRITTEN NOTICE VIOLATIONS ISSUED
- g. STOP WORK ORDERS (RED-TAGS) ISSUED
- h. NOTICES/RED-TAGS RELEASED

4. REQUESTS FOR INSPECTION - EV INSPECTIONS

- a. COMPLIANT
- b. NON-COMPLIANT
- c. TOTAL INSPECTIONS
- d. COMPLIANCE RATE (BASED ON TOTAL INSPECTIONS)
- e. VERBAL NOTICE VIOLATIONS ISSUED
- f. WRITTEN NOTICE VIOLATIONS ISSUED
- g. STOP WORK ORDERS (RED-TAGS) ISSUED
- h. NOTICES/RED-TAGS RELEASED

5. NUMBER OF EV INSP PERFORMED

- a. COMPLIANT
- b. NON-COMPLIANT
- c. NUMBER OF ENVIRONMENTAL INSPECTIONS PERFORMED (TOTAL INSPECTIONS)
- d. COMPLIANCE RATE (BASED ON TOTAL INSPECTIONS)
- e. VERBAL NOTICE VIOLATIONS ISSUED
- f. WRITTEN NOTICE VIOLATIONS ISSUED
- g. STOP WORK ORDERS (RED-TAGS) ISSUED
- h. NOTICES/RED-TAGS RELEASED

5. The Board recommends that the Department develop additional metrics to quantify the value of open space in protection of creek/stream water quality.

Staff response: In an attempt to quantify the water quality benefits of land purchases, staff calculated the pollution that would be avoided by purchasing a tract and thus preventing the development entitled to the land. Staff analyzed a number of tracts to calculate a cost effectiveness metric of dollars per pound of pollution avoided. Due to the significant cost of land, purchasing property to prevent pollution did not present itself as a cost effective solution when viewed through this metric. As an example, staff uses a rule of thumb of \$1-\$2 per pound of pollution captured in determining the cost effectiveness of an engineered Stormwater retrofit. The cost to prevent pollution by purchasing a property resulted in cost effectiveness around \$20 per pound of pollution prevented.

WPDRD has historically used different funding strategies to fund the prevention of future pollution and the clean up of existing pollution. The focus of CIP appropriations has been to fund engineered retrofits to address existing problems, and there is no shortage of demand for this type of retrofit clean-up in areas developed

without water quality regulation. Land purchases for water quality protection through avoiding future pollution have historically been funded by issuing bonds.

Viewed as a whole, the current policy of reliance on bond funding for land purchases and Drainage Utility Funds for Capital Projects has been effective. Reliance on DUF CIP funding for land purchases has a couple drawbacks. First, it would slow the progress of urban retrofits and second, it would take much longer to achieve the land purchases by relying on annual appropriations (assuming allocations of \$2-4 million per year). There may be some rationale for consideration of a CIP appropriation for land conservation when funding is needed to leverage Federal dollars for a project when bond money is not available, but that would be a policy shift requiring broad discussion with appropriate WPDRD stakeholders (e.g. EV Board, Citizens Advisory Board, Executive Committee, City Manager's Office and City Council).

6. The Board recommends that a metric be instituted that measures elevated review of stormwater controls in the recharge zone during rain events.

Due to the large number of construction sites active at any one time, inspections during storm events could only be extremely limited, and as such, metrics have not been developed to measure this activity. However, in an effort to improve performance of temporary controls during storm events, we are currently conducting a study on the review, inspection and enforcement of stormwater controls (requested by Council as an aftermath to the Barton Springs Zone Redevelopment Ordinance). We are developing proposals for enhanced specifications for temporary controls using latest science and technology, limitations on maximum amount of disturbed area exposed at any one time, and increased code requirements for contractor inspection, maintenance, and record keeping. Recommendations from the study are scheduled for completion this fall.

7. The Board recommends that additional Erosion Control crews be added, or that consultant/contractor help be solicited for erosion repairs.

No new FTEs were added in the FY09 Budget. However, as mentioned in Item #3, the Department will be conducting a detailed fee study in the near future. This exercise will include an in-depth assessment by Division Managers of their long-term resource needs. The recommendation for additional Erosion Control crews will be considered during this process.

8. The Board recommends that the Department leverage, to the greatest extent possible, relationships with local community organizations to maximize both the environmental learning potential for those who need those type of services, and the tangible environmental benefits organization like these bring to the Austin environment.

See below for information on relationships the Department has maintained with local community organizations.

- a. Currently American YouthWorks provides environmental services to WPDRD under a \$25,000 service agreement which expires at the end of this fiscal year. Under this contract they are primarily providing landscape services on a

streambank stabilization project on Blunn Creek, along with related fieldwork in a few other creek areas. WPDRD staff is currently preparing a contract for a future service agreement with American YouthWorks with a funding amount of approximately double the previously mentioned agreement. Education of AYW crew members is an important component of these service agreements. WPDRD employees are always happy to discuss the native plants, landscape design, management, appropriate use of natural resources, and similar issues on these projects.

- b. The Department has also been working with AYW-AmeriCorps on streambank improvements along Waller Creek as well as stormdrain marking.
- c. The Department has partnered with Keep Austin Beautiful on its clean creek campus program, Green stewards camp, adopt-a-creek program, and creek cleanups.



ITEM FOR ENVIRONMENTAL BOARD AGENDA

BOARD MEETING

DATE REQUESTED: July 16, 2008

**NAME & NUMBER
OF PROJECT:** Wildflower Commons/PUD
C814-06-0233

**NAME OF APPLICANT
OR ORGANIZATION:** Drenner & Golden Stuart Wolff, LLP
(Michele Haussmann – Phone 404-2233)

LOCATION: 4700 – 5200 Blocks of State Highway 45

PROJECT FILING DATE: December 21, 2006

**WPDR/ENVIRONMENTAL
STAFF:** Patricia Foran, 974-3427
patricia.foran@ci.austin.tx.us

**WPDR/
CASE MANAGER:** Wendy Rhoades, 974-7719
Wendy.Rhoades@ci.austin.tx.us

WATERSHED: Slaughter Creek and Bear Creek Watersheds (Barton
Springs Zone)
Drinking Water Protection Zone

ORDINANCE: Bradley Settlement Agreement

REQUEST: Applicant is requesting PUD zoning for the property.

STAFF RECOMMENDATION: Recommended.



MEMORANDUM

TO: Betty Baker, Chair
Members of the Zoning & Platting Commission

FROM: Patricia Foran, Environmental Review Specialist Senior
Watershed Protection and Development Review Department

DATE: July 7, 2008

SUBJECT: Wildflower Commons PUD - C814-06-0233
4700 – 5200 Blocks of State Highway 45

Staff received a rezoning application for the above-mentioned case on December 21, 2006 that proposes a zoning change from the single-family residence standard lot (SF-2) and general office (GO) districts to Planned Unit Development (PUD) on 253.24 acres of land.

The PUD proposal consists of a mixed use development consisting of condominiums, office uses, a supermarket, shopping center with restaurant and a hotel. In total, impervious cover is proposed at 15% net site area, which is approximately 37.99 acres of impervious cover. The applicant is allocated approximately 45.61 acres of impervious per the Bradley Settlement Agreement.

The Applicant is requesting seven exceptions to environmental regulations.

Description of Property

The proposed PUD is situated in the Bear and Slaughter Creek Watersheds, both of which are classified as Barton Springs Zone. The PUD is composed of five tracts and is bisected by proposed State Highway 45. The tracts lie in the Drinking Water Development Zone and are located over the Edwards Aquifer Recharge Zone. Critical Water Quality Zone (CWQZ), Water Quality Transition Zone (WQTZ), 100-year floodplain, and critical environmental features (CEFs) occur within the proposed PUD.

The existing tracts are currently undeveloped. The proposed PUD area is bounded by undeveloped land on the west (County), undeveloped land (County) and undeveloped land (GR-CO) within the Circle C Ranch subdivision to the north, undeveloped land (County) on the east and south.

Existing Topography/Soil Characteristics/Vegetation

The elevation ranges from 800 to 880 feet above mean sea level. There is a watershed divide located on the property; the majority of the project area slopes to the northeast towards Slaughter Creek, and a portion slopes to the southwest towards Bear Creek. All slopes are less than 15%.

There are two soil mapping units on site: Speck stony clay loam and Tarrant soils. The geologic units of the site of the Edwards Group, which consist of Grainstore, Kirschberg Evaporite, and Dolomitic members of the Cretaceous age Kainer Formation.

The project site is located in the Live Oak-Ashe Juniper Parks vegetation region which is characterized as wooded and open rangeland.

Critical Environmental Features/Endangered Species

Forty-nine CEFs were identified on the subject tract by COA staff and the environmental assessment. These features are classified as the following: twenty are sinkholes; thirteen are solution cavities; five are closed depressions; seven are caves; three are solution cavity – solution fractures, and one is a sink hole and wetland. Please refer to the attached CEF exhibit for agreed upon CEF locations and setbacks. Additional conditions requested by ERM staff (and agreed to by the applicant) are included in the attached memorandum dated July 7, 2008.

Water/Wastewater

The applicant proposes to utilize City of Austin water and wastewater services.

Environmental Exception Requests

The environmental exceptions requested for this project are to LDC Sections:

1. Exception from LDC 25-8-65 (Roadways)

(A) Except as otherwise provided in this section, impervious cover calculations for development adjacent to a roadway shall account for the adjacent roadway.

(B) For development with an internal roadway, impervious cover calculations include the internal roadway, except that pavement width in excess of 44 feet is excluded. This does not reduce the requirements for stormwater detention facilities or water quality controls for run-off from the roadways.

(C) For development adjacent to a roadway built as a City Capital Improvements Program project after May 18, 1986, impervious cover calculations include one-half of the pavement width, up to a maximum of 44 feet, and the associated right-of-way.

(D) This section does not apply in the desired development zone to a development with impervious cover of not more than:

- (1) 5,000 square feet; or

- (2) 7,000 square feet for development located at a smart growth transportation corridor or node described in Section 25-6-3 (*Smart Growth Corridors and Nodes Described*).

Although the Bradley Agreement does not require adjacent roadways to be accounted for in calculation of allowable impervious cover, the applicant is requesting to include this section as an exception since it is included in the LDC.

2. Exception from LDC 25-8-262(B)(3)(b) (Critical Water Quality Zone Street Crossings)

(B) This subsection applies in a watershed other than an urban watershed.

(3) A minor waterway critical water quality zone may be crossed by an arterial and collector streets, except:

(b) in a water supply suburban or water supply rural watershed, or the Barton Springs Zone, a collector street crossing must be at least 2,000 feet from a collector or arterial street crossing on the same waterway.

The applicant is requesting to remove this requirement to allow one waterway crossing on Tract 1 to provide safe access that otherwise would not be possible.

3. Exception from LDC 25-8-341 (Cut Requirements)

"Cut on a tract of land may not exceed 4' of depth."

The applicant is requesting a modification to allow cuts up to 10' associated with the water quality and detention facilities, and up to 15' for areas associated roadways, parking areas, driveways, and other site development.

4. Exception from LDC 25-8-342 (Fill Requirements)

"Fill on a tract of land may not exceed 4' of depth."

The applicant is requesting a modification to allow fill up to 10' associated with the water quality and detention facilities, and up to 15' for areas associated roadways, parking areas, driveways, and other site development.

5. Exception from LDC 25-8-482 (Critical Water Quality Zone)

"Development is prohibited in a critical water quality zone, except as provided in Article 7, Division 1 (*Critical Water Quality Zone Restrictions*).

The applicant is requesting a modification to allow a driveway or roadway into Tract 1.

6. Exception from LDC 25-8-483(A)(1) (Water Quality Transition Zone)

“(A) Development is prohibited in a water quality transition zone that lies over the Edwards Aquifer recharge zone, except for:

- (1) development described in Article 7, Division 1 (*Critical Water Quality Zone Restrictions*);

The applicant is requesting a modification to allow one driveway or roadway into Tract 1.

7. Exception from LDC 25-1-21(98) (Definitions)

“SITE means a contiguous area intended for development, or the area on which a building has been proposed to be built or has been built. A site may not cross a public street or right-of-way.”

The applicant is requesting to redefine site to include all tracts, including those separated by a public street or sight-of-way.

Recommendations

Staff from the Watershed Protection and Development Review and Neighborhood Planning and Zoning departments have worked with the Applicant to provide additional benefits in site development as support for the proposed PUD:

- Transfers 7.621 acres of available impervious cover to the Hill Country Conservancy;
- Dedicate a minimum of 100 acres of open space as a conservation easement;
- Prohibit development within the Bear Creek Watershed;
- Prohibit development on Tracts 2 and 4;
- Reduce the maximum construction envelope from 257.778 acres to 123.684 acres;
- Prohibit development upstream of all CEFs with the exception of one solution cavity - solution fracture, WC021;
- Provide a water quality conservation pond that captures 1.98 acre feet above the required water quality volume;
- Adopts the Exterior Light Pollution Reduction techniques consistent with that approved for Southwest Marketplace (Costco and Lifetime Fitness – Forum PUD, Tract 2 and Parcels F and J). These techniques involve design and implementation of interior and exterior lighting so that no direct-beam illumination leaves the building site;
- Adopts the Landscape and Exterior Design / Heat Island Reduction requirements consistent with that approved for Southwest Marketplace (Costco and Lifetime Fitness – Forum PUD, Tract 2 and Parcels F and J); Available shading options include: additional plantings, using light colored materials on non-roof impervious surfaces, providing underground parking or using pervious pavement where soils are four feet or greater in depth. Available heat island reduction options include using energy efficient or vegetated roofing materials, and conducting a life cycle cost analysis for the use of concrete for all non-pervious paved parking and roadway surfaces; and

- Provide 2-star Austin Energy Green Building Standards or equivalent LEED rating (as the subject properties are not within the Austin Energy service area);

The Wildflower Commons PUD may be scheduled for consideration by the Zoning and Platting Commission at their August 5, 2008 meeting.

If you need further details, please contact me at 974-3427.

Patricia Foran, Environmental Review Specialist Sr.
Watershed Protection and Development Review

Environmental Program Coordinator: _____
Ingrid McDonald

Environmental Officer: _____
Pat Murphy



MEMORANDUM

TO: Patrica Foran, Senior Environmental Reviewer
Watershed Protection and Development Review Department

FROM: Scott E. Hiers, P.G., Senior Environmental Scientist
Watershed Protection and Development Review Department

DATE: July 7, 2008

SUBJECT: Corrections to ERM's August 22, 2007 memo regarding Critical Environmental Feature setbacks of Wildflower Commons.

As part of the City of Austin's development review process, Environmental Resource Management (ERM) staff reviewed the karst assessment for the Wildflower Commons development site. The site is about 268-acres located in south Austin immediately south of the intersection of Loop 1 and State Highway 45. In late July and early August ERM, Barton Spring Edward Aquifer District and ACI Consulting staff members completed several karst surveys to determine if any karst recharge features might have been missed by an initial karst survey completed by J. Jackson Harper in October 2003.

Our surveys covered about 90 percent of the property. However, a layer of mulch and several brush piles from tree removal and clearing activities impeded our view of the ground in several areas. Although our survey efforts was hampered in some areas, we were able to identify 35 additional recharge features on or within 300-ft of the site. In all, 67 recharge features were identified by Harper's 2003 and the City's 2007 karst assessments. ERM staff has determined that 49 of the 67 features are critical environmental features (48 recharge features and 1 wetland/sinkhole). These features are located on or within 300-ft of the Wildflower Commons site. Table 1 lists all the features identified by both surveys and a corresponding location map (Map 1) is attached.

Based the surface drainage patterns, 2-ft topography, the type of feature, the feature's size and the density (or clustering) of features, ERM staff is recommending protecting the critical environmental features with 19 critical environmental feature setback areas (Labeled A thru S). The attached map shows the location of the setback areas. ERM staff is recommending that the CEFs and their associated setback area (or buffers) are documented within the PUD ordinance along with the following Land Development Code (LDC) requirements from Section 25-8-281.

1. No residential lots may include a CEF or be located within 50 feet of a CEF.
2. Setback areas must be established to protect all CEFs. Although the LDC allows a portion of the CEF buffer to be included in a residential lot, I do not recommend that this be allowed. Residential lots should not include any portion of a CEF buffer. Setbacks must comply with the setback area has stated in Table 1 and shown Map 1. ERM is willing to revise setback areas listed in Table 1 and shown on Map 1 during PUD process, if the applicant provides more detail

information to ERM staff such as 1-ft topographic survey that better delineates the catchment areas and a hydrogeologic assessment that better evaluates its recharge potential.

3. No disturbance of native vegetation is allowed within the buffer zone. This shall be stated in a section of the PUD ordinance specifically addressing Critical Environmental Feature protection.
4. No construction is allowed within the buffer zone, except for cave gates and educational trails built in compliance with 25-8-281 of the LDC. In the PUD ordinance, this shall be stated as "No construction or placement of structures within a Critical Environmental Feature buffer zone."
5. Stormwater disposal or irrigation is prohibited within a CEF buffer zone and shall be stated in the PUD ordinance.
6. Erosion and sedimentation controls must be installed at the perimeter of all CEF buffers prior to the initiation of construction.

Additional recommendations for CEF protection not explicitly stated in the Land Development Code, Section 25-8-281.

1. All CEFs must be shown on a topographic map (or maps), and listed in a summary table and included on an exhibit (s) in the PUD ordinance. The table must include the identification of the CEF, the type of CEF, and the recommended setback area. All maps must have north arrow and reference scale.
2. All CEFs and associated CEF buffers are to be shown on all plats, preliminary plans, site plans and construction plans. The PUD ordinance and the plat notes must have a following statement "all activities within the critical environmental feature setback must comply with Section 25-8-281(c)(2) of Austin's Land Development Code. This section states that the natural vegetative cover must be retained to the maximum extent practicable; construction is prohibited; and wastewater disposal or irrigation is prohibited this requirement."
3. No utilities are allowed within CEF buffers.
4. Fencing is required at the edge of all CEF buffer areas that are within limits of construction. Fencing must be 6 feet in height. Wrought iron or vinyl-coated chain link are acceptable. Access gates with a lockable latch are to be provided for each buffer.
5. Fencing at the edge of CEF buffers must be installed prior to the initiation of construction.
6. Water quality BMPs should not drain directly into CEF setback area. Level spreaders or similar structures must be used to overland sheet flow stormwater before it discharges near CEF setback areas. Stormwater irrigation must occur outside the CEF setback areas.
7. An IPM plan should be prepared for Wildflower Commons PUD.

Suggestions for alternative CEF protection not required by the Land Development Code.

1. An Operation and Maintenance plan is recommended for the long term management of all CEF buffers. The purpose of the CEF buffer is to protect water quality. Trash removal, pet waste pickup and inspections will increase the likelihood that conditions within the buffers are

protective of water quality. The long term funding mechanism and the responsible management entities throughout the construction and post-construction phases should be identified in future submittals.

2. A restrictive covenant granting access to City of Austin staff to all CEF buffers within the Wildflower Commons PUD should be included in the ordinance.

If you have any questions regarding these comments or have additional information, please contact me at 974-1916.



Scott E. Hiers, P.G., Environmental Scientist
Watershed Protection and Development Review Department

SH :

Attachment

cc: David Johns, City of Austin
Wendy Welsh, City of Austin
Stan Reece, ACI Consulting

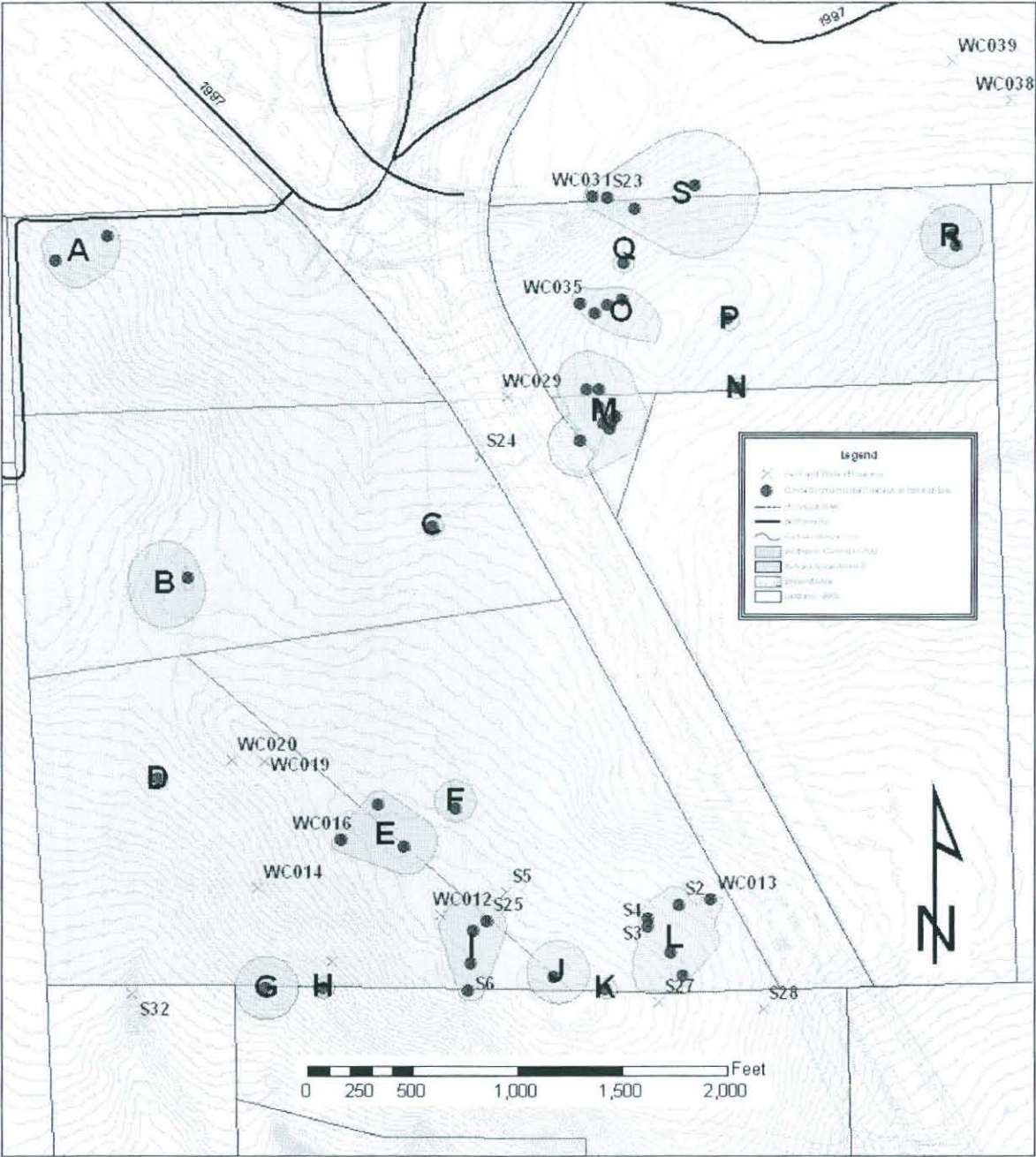
Table 1: GPS locations and corresponding CEF setback area

Id	Comments	X	Y	FEATURE	TYPE	Setback Area
1	Sinkhole	3070564.32	10031308.78	S1	SH	L
2	Sinkhole	3070644.19	10031700.86	S2	SH	L
3	Solution Cavity	3070500.07	10031634.03	S3	SC	L
4	Karst Depression	3070498.05	10031596.55	S4	CD	L
5	Karst Depression	3069823.00	10031757.14	S5	CD	
6	Sinkhole	3069644.06	10031290.42	S6	SH	I
7	Solution Cavity	3068952.24	10031305.05	S7	SC	H
8	Sinkhole	3067680.52	10034787.20	S8	SH	A
9	Solution Cavity	3068164.23	10032302.65	S9	SH	D
10	Sinkhole	3068680.75	10031303.15	S10	SH	G
11	Wetland/Sinkhole	3068319.34	10033210.07	S11	W-S	B
12	Sinkhole	3070281.20	10034009.00	S12	SH	M
13	Sinkhole	3070310.00	10033994.00	S13	SH	M
14	Solution Cavity	3070316.50	10033983.60	S14	SC	M
15	Sinkhole	3070327.70	10034022.40	S15	SH	M
16	Sinkhole	3070342.60	10034039.20	S16	SH	M
17	Cave	3070278.28	10034171.25	S17	C	M
18	Sinkhole	3070244.42	10034537.02	S18	SH	O
19	Cave	3071970.00	10034900.00	S19	C	R
20	Sinkhole	3070380.00	10034800.00	S20	SH	Q
21	Solution Cavity	3070919.85	10034172.71	S21	SC	
22	Solution Cavity	3070434.72	10035029.90	S22	SC	
23	Sinkhole	3070300.92	10035084.00	S23	SH	
24	Solution Cavity	3069699.78	10033850.50	S24	SC	
25	Sinkhole	3069730.39	10031622.05	S25	SH	I
26	Sinkhole	3069650.00	10031400.00	S26	SH	I
27	Sinkhole	3070550.00	10031251.00	S27	SH	
28	Karst Depression	3071050.00	10031200.00	S28	CD	
29	Sinkhole	3071137.00	10031512.00	S31	SH	S
30	Sinkhole	3068045.27	10031249.09	S32	SH	S
31	Sinkhole	3069696.00	10031559.00	S33	SH	I
32	Solution Cavity	3070710.00	10031910.00	S34	SC	
33	Karst Depression	3070740.00	10031769.00	S35	CD	
34	SC	3070760.00	10031512.00	S36	SC	L
35	Karst Depression	3070450.00	10031461.00	S37	CD	L
Id	Comments	X	Y	FEATURE	TYPE	Setback Area

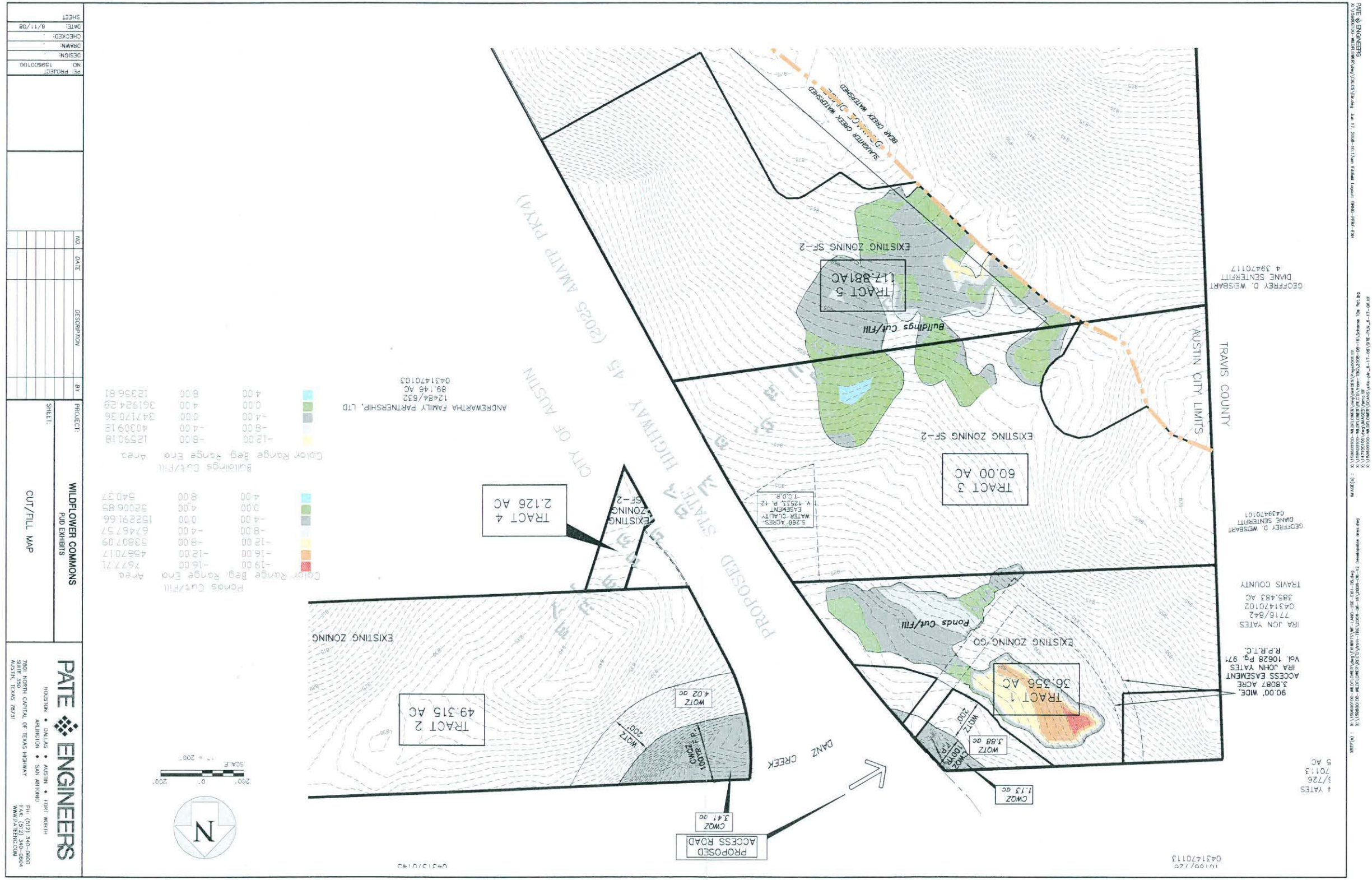
36	Sinkhole	3070479.97	10032979.98	WC003	SH	
37	Sinkhole	3070300.00	10031300.00	WC005	SH	K
38	Sinkhole	3070050.00	10031400.00	WC007	SH	J
39	Cave	3070670.00	10031400.00	WC008	C	L
40	Other	3068990.00	10031400.00	WC009	O	
41	Solution Cavity	3070610.00	10031500.00	WC010	SC	L
42	Solution Cavity	3069670.00	10031600.00	WC011	SC	I
43	Solution Cavity	3069510.00	10031600.00	WC012	SC	I
44	Sinkhole	3070800.00	10031700.00	WC013	SH	L
45	Other	3068640.00	10031800.00	WC014	O	
46	Cave	3069340.00	10032000.00	WC015	C	E
47	Solution Cavity	3069040.00	10032000.00	WC016	SC	E
48	Cave	3069580.00	10032200.00	WC017	C	F
49	Solution Cavity/Frac	3069210.00	10032200.00	WC018	SC-SF	E
50	Solution Cavity	3068670.00	10032400.00	WC019	SC	
51	Solution Cavity/Frac	3068520.00	10032400.00	WC020	SC-SF	
52	Solution Cavity/Frac	3069470.00	10033500.00	WC021	SC-SF	C
53	Sinkhole	3067920.00	10034900.00	WC023	SH	A
54	Karst Depression	3070170.00	10033900.00	WC027	CD	M
55	Karst Depression	3070210.00	10034200.00	WC028	CD	M
56	Other	3069830.00	10034100.00	WC029	O	
57	Cave	3070230.00	10035100.00	WC031	C	S
58	Cave	3070720.00	10035100.00	WC032	C	S
59	Karst Depression	3070260.00	10034100.00	WC033	CD	M
60	Solution Cavity/Frac.	3070880.00	10034500.00	WC034	SC-SF	P
61	Solution Cavity	3070180.00	10034600.00	WC035	SC	O
62	Solution Cavity	3070300.00	10034600.00	WC036	SC	O
63	Solution Cavity	3070370.00	10034600.00	WC037	SC	O
64	Cave	3072230.00	10035600.00	WC038	C	
65	Cave	3071960.00	10035700.00	WC039	C	
66	Sinkhole	3071950.00	10034900.00	WC040	SH	R
67	Zone	3068900.00	10036600.00	WC041	Z	

Map 1: Setback Area Location Map

Map 1: Location Map for Critical Environmental Feature Setbacks
(Revised - 07-07-2008)



Wildflower Commons P.U.D.



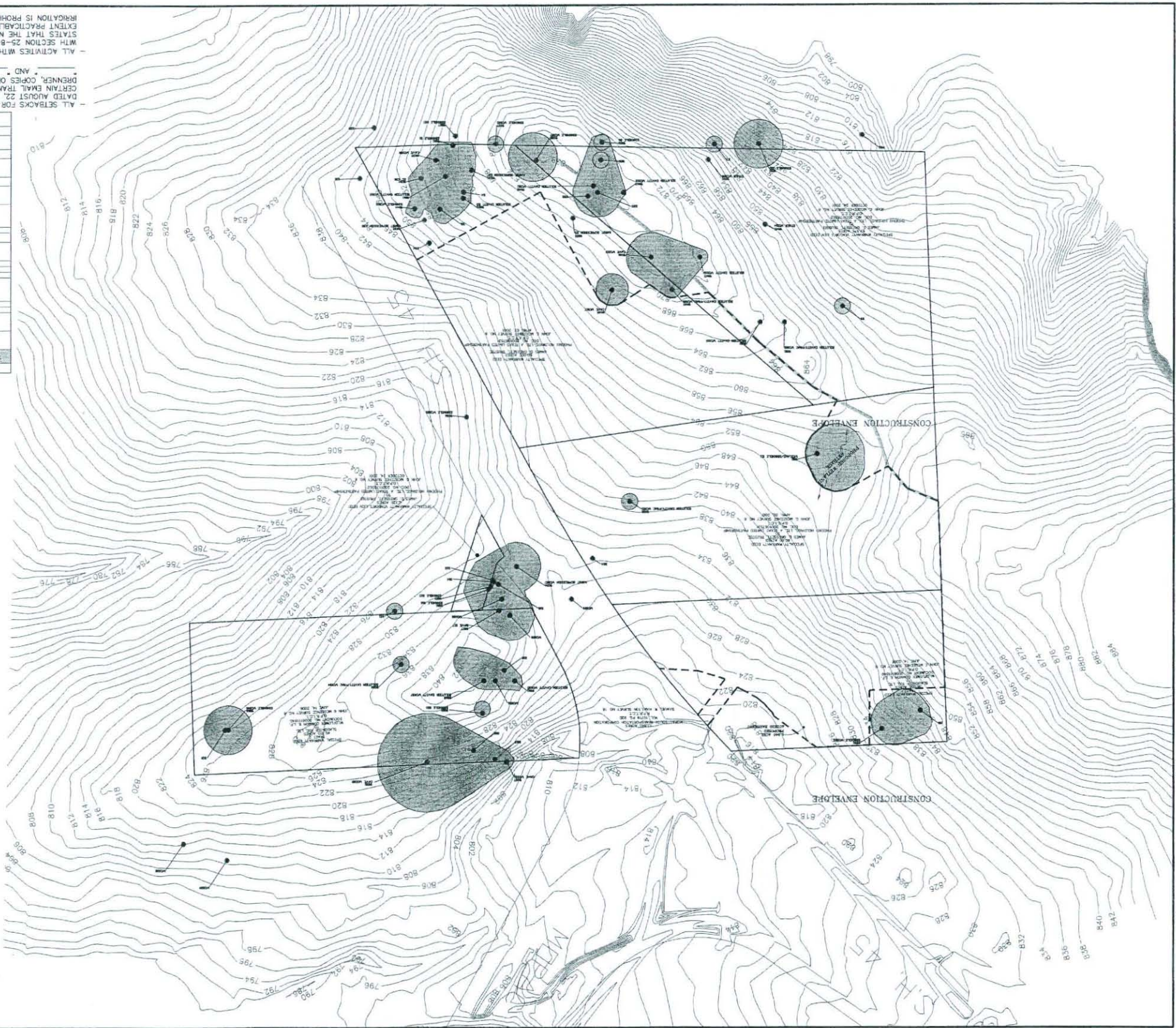
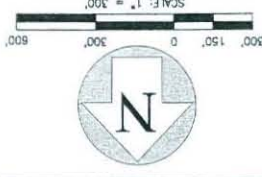


TABLE 2 - WILDFLOWER COMMONS - FEATURE ID, TYPE, LOCATION, SETBACK AREAS

Feature ID	Feature Type	Latitude (N)	Longitude (W)	Setback Area Reference
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8	049121.05	001210	35	3015A
9	049121.05	001210	35	3015A
10	049121.05	001210	35	3015A
11	049049.05	001210	35	3015A
12	049049.05	001210	35	3015A
13	049049.05	001210	35	3015A
14	049049.05	001210	35	3015A
15	049049.05	001210	35	3015A
16	049049.05	001210	35	3015A
17	049049.05	001210	35	3015A
18	049049.05	001210	35	3015A
19	049049.05	001210	35	3015A
20	049049.05	001210	35	3015A
21	049049.05	001210	35	3015A
22	049049.05	001210	35	3015A
23	049049.05	001210	35	3015A
24	049049.05	001210	35	3015A
25	049049.05	001210	35	3015A
26	049049.05	001210	35	3015A
27	049049.05	001210	35	3015A
28	049049.05	001210	35	3015A
29	049049.05	001210	35	3015A
30	049049.05	001210	35	3015A
31	049049.05	001210	35	3015A
32	049049.05	001210	35	3015A
33	049049.05	001210	35	3015A
34	049049.05	001210	35	3015A
35	049049.05	001210	35	3015A
36	049049.05	001210	35	3015A
37	049049.05	001210	35	3015A
38	049049.05	001210	35	3015A
39	049049.05	001210	35	3015A
40	049049.05	001210	35	3015A
41	049049.05	001210	35	3015A
42	049049.05	001210	35	3015A
43	049049.05	001210	35	3015A
44	049049.05	001210	35	3015A
45	049049.05	001210	35	3015A
46	049049.05	001210	35	3015A
47	049049.05	001210	35	3015A
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66	049049.05	001210	35	3015A
67	049049.05	001210	35	3015A
68	049049.05	001210	35	3015A
69	049049.05	001210	35	3015A
70	049049.05	001210	35	3015A
71	049049.05	001210	35	3015A
72	049049.05	001210	35	3015A
73	049049.05	001210	35	3015A
74	049049.05	001210	35	3015A
75	049049.05	001210	35	3015A
76	049049.05	001210	35	3015A
77	049049.05	001210	35	3015A
78	049049.05	001210	35	3015A
79	049049.05	001210	35	3015A
80	049049.05	001210	35	3015A
81	049049.05	001210	35	3015A
82	049049.05	001210	35	3015A
83	049049.05	001210	35	3015A

Individual Features Within Selfback	Range of Area	Area (00A)
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[illegible]

ALL ACTIVITIES WITHIN THE CENTRAL ENVIRONMENTAL FEATURE SETBACK MUST COMPLY WITH SECTION 25-8-2-8-1(C)(2) OF AUSTIN'S LAND DEVELOPMENT CODE. THIS SECTION STATES THAT THE NATURAL VEGETATION COVER MUST BE RETAINED TO THE MAXIMUM EXTENT PRACTICABLE. CONSTRUCTION IS PROHIBITED, AND WASTEWATER DISPOSAL OR IRRIGATION IS PROHIBITED BY THIS REQUIREMENT.