ZONING CHANGE REVIEW SHEET

<u>CASE:</u> C814-06-0109 (Lakeshore PUD) <u>PC DATE:</u> February 27, 2007

ADDRESS: 2201 Lakeshore Blvd

OWNER/APPLICANT: Lakeshore LTD

AGENT: Armbrust & Brown (David Armbrust)

ZONING FROM: MF-3 **TO:** PUD **AREA:** 50.15 acres

SUMMARY STAFF RECOMMENDATION:

Staff recommends approval of Planned Unit Development (PUD) district zoning based on the PUD Land Use Plan and Notes (See Attachment 4) with the following conditions:

- 1) The PUD should incorporate all of the recommendations of the Traffic Impact Analysis (See Attachment 5)
- 2) Note 9 on the PUD Notes states that private utilities, including water and waste water, be permitted to cross lots. This may not be permitted under the Plumbing Code, and staff recommends that this note be amended to include the caveat "where authorized by the City".
- 3) Note 10 on the PUD Notes should be clarified with the addition "as determined by the City of Austin".
- 4) Note 26 on the PUD Notes states that all structures, 4 stories or taller and consisting of 50,000 square feet of rentable space be required to meet the standards of a 1 star rating under the City's Green Building Program's Multifamily Rating system. Staff recommends that all buildings, regardless of size be required to meet this minimum standard.
- 5) Note 29 on the PUD Notes states that the areas designated as accessible to the general public will be made accessible once 60% of the project dwelling units are occupied. Staff recommends that this be amended to state that the areas designated for public use be accessible once either 60% of the project dwelling units are occupied or no later than 5 years after the PUD is approved by City Council. Additionally, staff recommends this access is guaranteed through dedicated vehicular and pedestrian easements.
- 6) It should be clarified that Site Development Criteria Table 2 on the PUD Notes applies to only townhouses.
- 7) Staff recommends that the Table "Additional Permitted Uses" included in the PUD Notes be amended to prohibit the use "Laundry Services". The Laundry Service use includes large scale commercial laundry cleaning facilities, and does include drop off laundry/dry cleaning uses nor laundry mats.
- 8) Staff recommends that the Table "Additional Permitted Uses" included in the PUD Notes be amended to limit the combined total square footage of Cocktail Lounge or Liquor Sales to no more than 9,000 square feet of space, divided

among no more than 3 sites each with a maximum square footage of no more than 3000 square feet.

ENVIRONMENTAL BOARD RECOMMENDATION:

December 20, 2006: Recommended approval with conditions of a variance to Land Development Code 25-8-261 (B) to allow development within a critical water quality zone. (Vote 6-1; 2 absent). For: Anderson, Moncada, Maxwell, Ahart, Dupnick and Beall. Against: Ascot. Absent: Curra and Jenkins.

PARKS AND RECREATION BOARD RECOMMENDATION:

January 23, 2007: Recommended approval to the director and the Planning Commission of the Lakeshore Planned Unit Development with the condition that they provide \$650 per residential unit in funds for park improvements. If the full 2500 units are constructed as proposed, this would represent roughly \$1.6 million of improvement funds. Motion carried 6-0-1 with board member Chimenti abstaining.

PLANNING COMMISSION RECOMMENDATION:

January 30, 2007: Postponed to February 13, 2007, at the request of staff.

February 13, 2007: Postponed to February 27, 2007, at the joint request of the neighborhood and applicant.

February 27, 2007: Recommended staff's recommendation with the following additional conditions:

- Maximum of 1800 residential units;
- Maximum of 80% of the final square footage of the project will be residential uses, excluding any units built as part of a live/work unit.
- Maximum 65% impervious cover;
- Final building placement will preserve a an unobstructed line of sight from Elmont Drive to Lakeshore Drive through areas 8, 9 and 10 on the land use plan;
- All buildings will be built to a minimum 2-star Green Building standard;
- Funds will be provided equaling \$650 per residential unit to be available to the Parks Department on parkland improvements specified in the Riverside Neighborhood Plan including improvements to the Country Club Creek.

(Approved 7-2, Sullivan and Stegman voting no).

DEPARTMENT COMMENTS:

The site is a roughly 50 acres currently developed as apartments. The proposal is to remove the existing 760 multi-family units and redevelop the property with approximately 2500 living units, and roughly 100,000 square feet of retail.

The base district for the PUD will be MF-6, with modified site development standards. The overall impervious cover will not exceed 80%, and heights will range from 60' along the perimeter of the site to a maximum of 120' in the interior of the site.

Staff recommends the approval of the PUD. The benefits included as part of the plan are superior to what would be required under conventional zoning. Specific superior elements include:

- 1. Sustainable Site Design. Several sustainable practices will be incorporated into the site design and development:
 - a. 50% of the non-asbestos demolition waste will be recycled or salvaged;
 - b. Recycled materials will be used on planters, park benches and other site improvements;
 - c. 80% of the projects landscaping will use native plants from the City's Grown Green and Preferred Planting List.
 - d. The project will be developed and implemented.
- 2. Green Building Program. The project will participate in the City's Green Building Program. The applicant has proposed that all buildings over 4 stories be required to achieve a minimum of a 1-star rating under the Green Building Program Multifamily Rating System. Staff recommends that all buildings achieve this standard.
- 3. Water Quality Pond. The project will include a "wet" water quality pond instead of paying the fee-in-lieu of water quality available for urban watersheds, or building a less expensive concrete sedimentation filtration pond.
- 4. Willow Creek Improvements. The developer will be cleaning a waterway of debris, selectively removing invasive plant species and introducing native vegetation, and implementing a creek maintenance plan. Staff recommends that the improvement and maintenance plans be submitted for review prior to final approval of the PUD agreement.
- 5. Additional Setback Area along Lakeshore Blvd. The proposed plan includes a 100-foot setback off Lakeshore Blvd, which serves as a landscape / parkland buffer accessible to the public. By comparison, the current Town Lake overlay only restricts development to within 50 feet of Lakeshore Blvd. The existing project includes buildings located within 25 feet of Lakeshore Blvd and surface asphalt lots that are adjacent to the road.
- 6. Pedestrian Friendly Layout. To encourage pedestrian use, the developer has committed to building sidewalks, planter strips, and street trees on both sides of all internal drives shown on the PUD Land Use Plan. All sites within the project have direct access to a hike and bike trail, sidewalk or green belt. Additionally, staff recommends that this pedestrian friendly layout be linked to the surrounding neighborhood by dedicating pedestrian easements to all of the areas of the PUD intended for public use.
- 7. Connectivity / Hike & Bike. The developer is building a hike and bike trail adjacent to the Willow Creek Greenway (providing a connection between Elmont Drive and Town Lake and restoring this area into useable park land) as well as along Lakeshore Boulevard to provide connectivity between the surrounding

community and the Town Lake park system. Public vehicular and pedestrian access between Elmont and Lakeshore Blvd will be provided via at least one internal drive. The site plan will also accommodate a future pedestrian connection between the City of Austin property immediately east of the project. Staff recommends that these connections be secured through dedicated easements.

8. Community Park. The project will include a publicly accessible Community Park of at least 20,000 square feet in size.

The project will impact and benefit from its proximity of the site to Town Lake and the hike and bike trails. The project includes a 100 foot waterfront overlay setback, and along the south side of Lakeshore Blvd, publicly accessible open space is planned. In addition to these items, and a trail along Willow Creek, the applicant has offered to provide funds for other City park improvements. The applicant and the Parks and Recreation Department are continuing to negotiate the details of this separate agreement.

EXISTING ZONING AND LAND USES:

	LAND USES		
Site	MF-3	Apartments	
North	P	Town Lake and parkland	
South	MF-4	Apartments	
East	MF-3, P, GR	Apartments, City Maintenance Facility	
West	MF-3, GR	Apartments	

WATERSHED: Town Lake(and Willow Creek)

AREA STUDY: The subject tract is part of the Riverside Neighborhood Plan. The Riverside Neighborhood Plan calls for Mixed Use on this property. The proposal is in accord with the adopted Future Land Use Map (see Attachment 2).

DESIRED DEVELOPMENT ZONE: Yes.

TIA: Attached.

<u>CAPITOL VIEW CORRIDOR:</u> No. <u>HILL COUNTRY ROADWAY:</u> No.

REGISTERED NEIGHBORHOOD AND COMMUNITY ORGANIZTIONS

- East Riverside / Oltorf Neighborhood Planning Team
- South River City Citizens Association (SRCC)
- Southeast Austin Neighborhood Alliance
- The Crossing Gardenhome Owners' Association
- South Austin Trails and Greenbelt Alliance
- People Organized to Defend Earth and her Resources (PODER)
- South Central Coalition
- Austin Neighborhoods Council (ANC)
- Terrell Lane Interceptor Association
- Barton Springs / Edwards Aguifer Conservation District

C814-06-0109 Lakeshore

SCHOOLS: (AISD ISD)

Travis Heights Elementary School Fulmore Middle School Travis High School

CITY COUNCIL DATE: ACTION:

March 8, 2007: Postponed to April 12, 2007

April 12, 2007

ORDINANCE READINGS: 1st 2nd 3rd

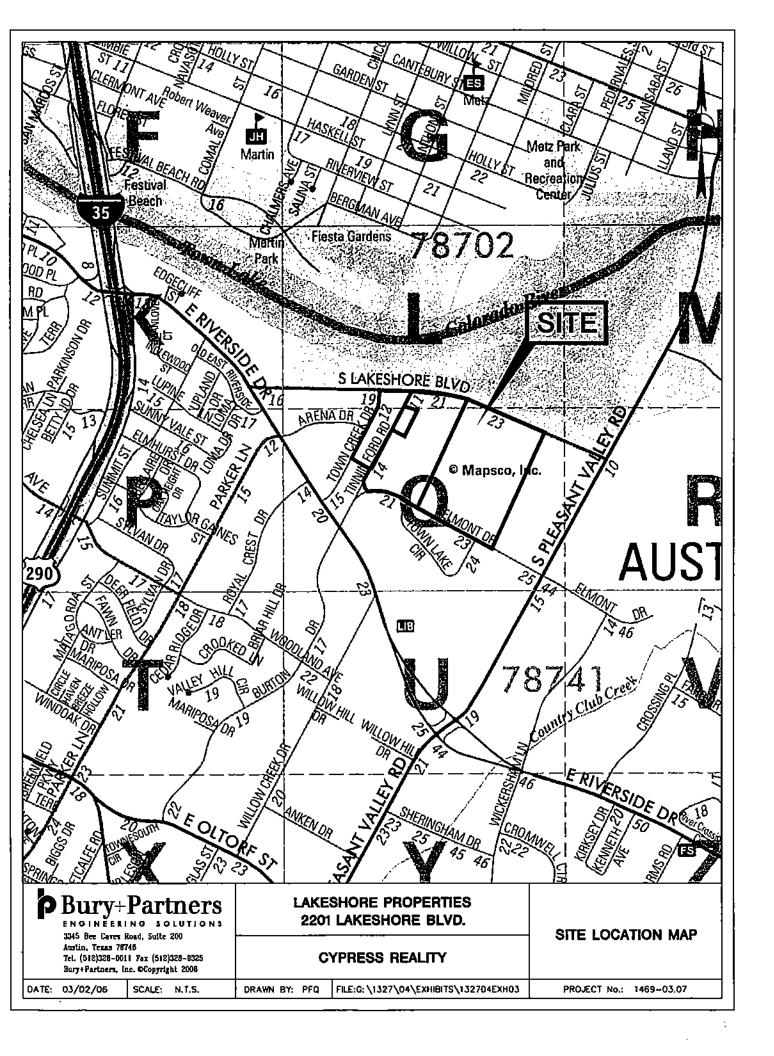
ORDINANCE NUMBER:

CASE MANAGER: Robert Heil **PHONE:** 974-2330

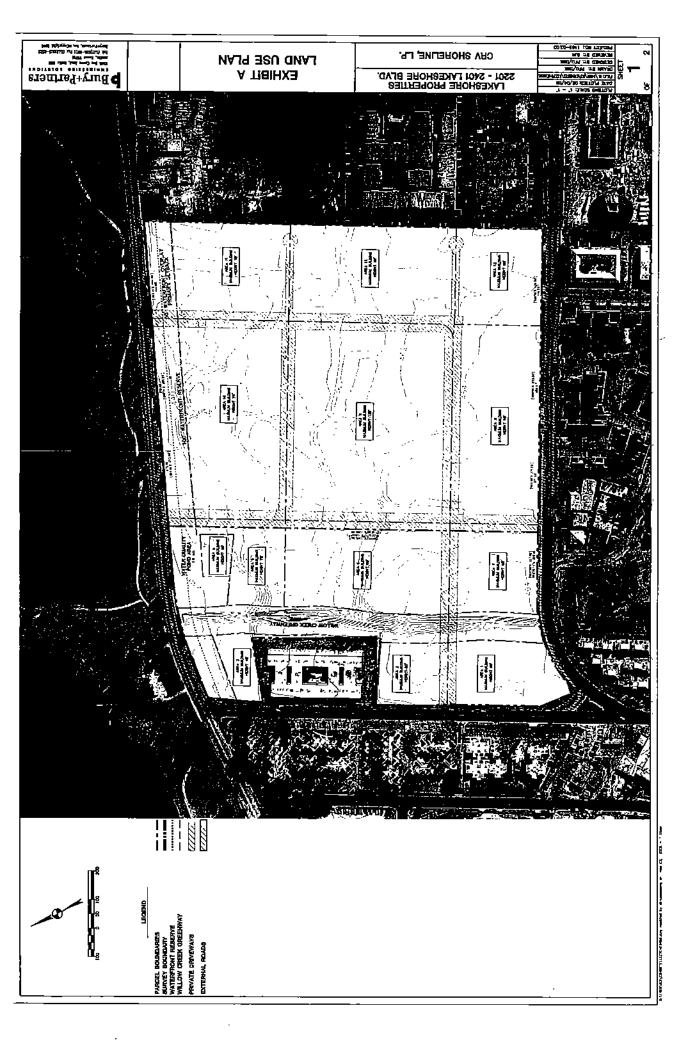
EMAIL: Robert.Heil@ci.austin.tx.us

List of attachments:

- 1) Location Map
- 2) Ariel Photograph
- 3) Lakeshore PUD Land Use Plan and Notes
- 4) Conceptual Master Plan
- 5) Traffic Impact Analysis
- 6) Environmental Board Minutes
- 7) Riverside Neighborhood Plan Future Land Use Map
- 8) Detail Staff Review Comments and Applicant Responses
- 9) Response letter from applicant, November 2, 2006
- 10) Environmental Assessment, August 10, 2006
- 11) Lakeshore Green Building Standards



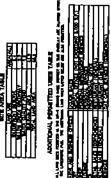




СКУ ВНОМЕПИЕ, ГР. SSO1 - SYOI TYKERHOHE BLAD TYKERHOHE PROPERTIES

NOTES **А ПВІНХЗ**

LAND USE PLAN



Вшу+Рагилета



TERM TABLE 1	- -	:1:	5	•] :	1	•	5	1	5	Ŀ	•	•
OTTO DEVELOPMENT CHITRIN TABLE	7 0.720 35 7444			į		1			200	277			

ATT DEVELOPMENT CHITIPAL TABLE 1	11 11 11 11 11 11 11 11 11 11 11 11 11	The part of the pa

of the designment of the North Constitution of the constitution of the state of the Addison frontied from the constitution of ha sand bapatan man mai na mana 1881 at ha lan fan am al na jan deba De FAG. An hapata mar bande lan and it manas en man and si den manata. This steints, paries 1892 and 4500 to marcons to the terminal is believe man.

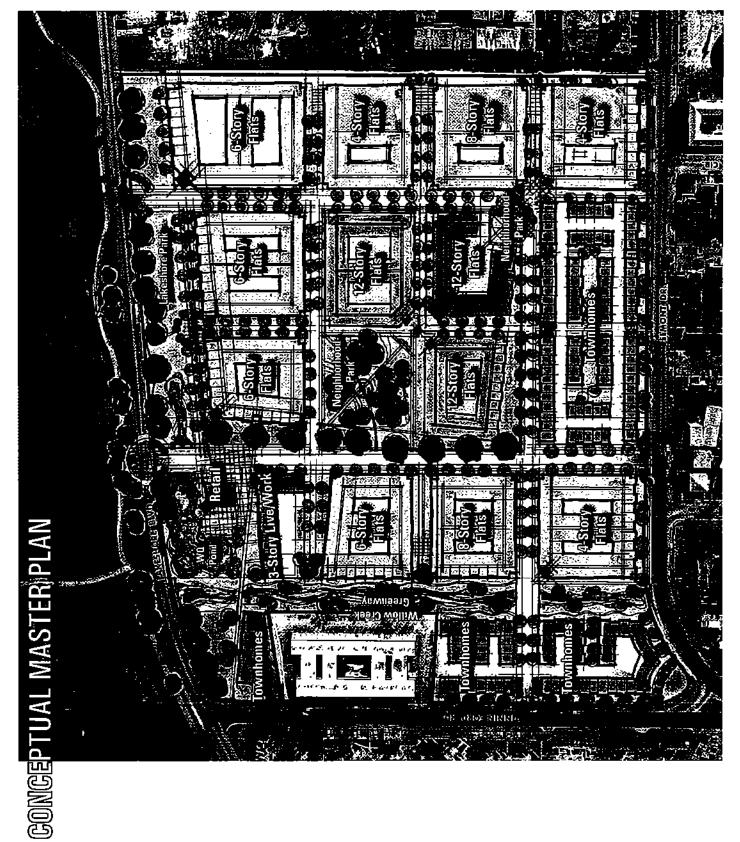
A STATE OF THE STA

The to contract, which of a series to the series of the series of the total and the series of the se

- I I per tiples and (00) keeps on

Party of Frank of M spare state (Appendix of Color IV, at The Frank) when the state of the Color of the State of the State of the State of State of

	 _
ATT DEVELOPMENT OFFICIAL TABLE 1	Live of the property of the pr





Date:

January 11, 2007

To:

Robert Heil, Case Manager

CC:

Kathy Hornaday, P.E. WHM Transportation Engineering

Reference:

Lakeshore PUD TIA, C814-06-0109

The Transportation Review Section has reviewed the Traffic Impact Analysis for Lakeshore PUD, dated July 2006, prepared by Kathy Hornaday, P.E., WHM Transportation Engineering, and offers the following comments:

TRIP GENERATION

Lakeshore PUD is a 50.15-acre development located in east Austin at the southeast corner of Tinnin Ford Road and Lakeshore Boulevard.

The property is currently developed with multi family and zoned Multi Family Residence (MF-3). The applicant has requested a zoning change to Planned Unit Development (PUD). The estimated completion of the project is expected in the year 2010.

Based on the standard trip generation rates established by the Institute of Transportation Engineers (ITE), the development will generate approximately 17,248 unadjusted average daily trips (ADT).

The table below shows the adjusted trip generation by land use for the proposed development:

Table 1. Adjusted Trip Generation							
LAND USE	Size	ADT	AM Peak	PM Peak			
Apartments	2,500du	13,043	1,084	1,165			
Shopping Center	100,000sf	4,871	138	346			
Existing Apartments to be removed	760du	4,246	339	392			
Total New Trips		13,688	883	1,119			

ASSUMPTIONS

1. Traffic growth rates provided by TXDOT were as follows:

Table 2. Growth Rates per Year					
Roadway Segment %					
All Roads	2%				

2. In addition to these growth rates, background traffic volumes for 2004 included estimated traffic volumes for the following projects:

• SP-05-1381C	Liberted Bank
 SP-04-0018C 	2237 E. Riverside
 SP-04-0185C 	Autozone #3069
 SPC-02-0174F 	Storage USA
 SP-00-2475C 	EL Gran Mercado
 SP-02-0194C 	Jefferson Commons at Town Lake
 SPC-04-0021C 	Colorado River Park
 SP-05-1260C 	HEB Austin #12
• C8-06-0022.0A	Riverside Plaza
• C14-04-0129	Lakeshore Waterfront

3. Reductions were taken for pass-by for the following uses:

Table 3. Summary of Pass-By and Inte	rnal Capture	Reductions
offendenal vergens and the control		
Land Use	AM	PM
Shopping Center	34%	34%
த் Internal Capture Redu	ettons%:	
Land Use	AM	PM
Apartments and Shopping Center	2%	7%

4. A 10% reduction was taken for transit use based on the 15 Capital Metro bus stops in the area.

EXISTING AND PLANNED ROADWAYS

Riverside Drive – This roadway is classified as a six lane divided major arterial. The 2005 traffic volumes for Riverside Drive were 47,001 vehicles per day east of Willow Creek drive. The 2025 AMATP recommends upgrading Riverside Drive to an eight lane divided major arterial. Riverside Drive is in the Bicycle Plan as a Priority 1 route.

Tinnin Ford Road – Tinnin Ford Road is a two lane collector roadway. The estimated traffic volume on this facility is 5,500 vehicles per day.

Pleasant Valley Road – This roadway is classified as a four lane undivided major arterial and carried 19,598 vehicles per day in 2005. The roadway plan recommends upgrading this roadway to a four lane divided major arterial by 2030. Pleasant Valley Road is in the Bicycle Plan as a Priority 1 route.

Elmont Drive – Elmont Drive is a two lane collector roadway with estimated traffic volumes of 3,960 vehicles per day.

INTERSECTION LEVEL OF SERVICE (LOS)

The TIA analyzed 11 intersections, 3 of which are or will be signalized. Existing and projected levels of service are as follows, assuming that all improvements recommended in the TIA are built:

Table 4. Level of Service						
Intersection		06 ting	i	Site + casted		
	AM	PM	AM	PM		
Tinnin Ford Road/Burton Drive @ Riverside Drive*	D	С	F	D		
Pleasant Valley Road and Elmont Drive*	Α	Α	В	С		
Pleasant Valley Road and Lakeshore Boulevard*	В	B.	В	С		
Tinnin Ford Road and Lakeshore Boulevard	Α	Α	Α	D		
Tinnin Ford Road and Elmont Drive	Α	Α	D	Α		
Town Lake Circle and Elmont Drive (West)	Ā	A	Α	A		
Town Lake Circle and Elmont Drive (East)	Α	A	Α	A		
Tinnin Ford Road and Driveway A			A	A		
Driveway B and Lakeshore Boulevard			Ā	Ä		
Driveway C and Lakeshore Boulevard			Α	Α		
Driveway D and Elmont Drive			Α	A		

^{* =} SIGNALIZED

RECOMMENDATIONS

- 1) At the time of the first site plan, the intersection of Elmont Drive and Tinnin Ford Road is required to be reconfigured to provide a 90 degree "T" intersection with Tinnin Ford Road. Schematics are included in the TIA and final design details will be reviewed and approved at the time of site plan.
- 2) Driveway alignment and minimum widths are recommended as stated in the TIA.
- 3) Two copies of the final TIA are required to be submitted prior to 3rd Reading at City Council.
- 4) Final approval from DPWT ~ Signals is required prior to 1st Reading.
- 5) Development of this property should be limited to uses and intensities which will not exceed or vary from the projected traffic conditions assumed in the TIA, including peak hour trip generations, traffic distribution, roadway conditions, and other traffic related characteristics.

If you have any questions or require additional information, please contact me at 974-2788.

Emily M. Barrer

Sr. Planner - Transportation Review Staff Watershed Protection and Development Review



ENVIRONMENTAL BOARD MOTION 122006-B2

Date:

December 20, 2006

Subject:

Lakeshore Planned Development Unit (PUD)

Motioned By:

Phil Moncada

Seconded by: Jon Beall

Recommendation

The Environmental Board recommends approval with conditions of a variance to Land Development Code 25-8-261 (B) to allow development within a critical water quality zone.

Staff Conditions

None.

Rationale

- 1. The proposed development is consistent with COA high-density development goals, and will help to clean up and revitalize this section of Lakeshore Boulevard.
- The applicant has proposed to dedicate public space along Lakeshore Boulevard, and to provide
 public pedestrian access from Elmont Drive and Tinnin Ford Road to Lakeshore Boulevard. This
 includes a minimum 6-foot wide hike and bike trail along Lakeshore Boulevard in the dedicated
 Waterfront Reserve and along Willow Creek.
- 3. Numerous invasive species in Willow Creek will be replaced with a quality native plant program, developed with a City of Austin biologist.
- 4. A water quality pond is proposed to treat the runoff from the entire site.
- Green Building standards are proposed. Applicant will provide Watershed Protection and Development Review staff a copy of a Letter of Intent to Austin Energy that a minimum one-star rating is proposed for all multi-family structures.
- 6. The proposed project is environmentally superior to the existing buildings on site and what could be developed under existing zoning.

Vote

6-1-0-2

For:

Anderson, Moncada, Maxwell, Ahart, Dupnik and Beall

Against:

Ascot

Abstain:

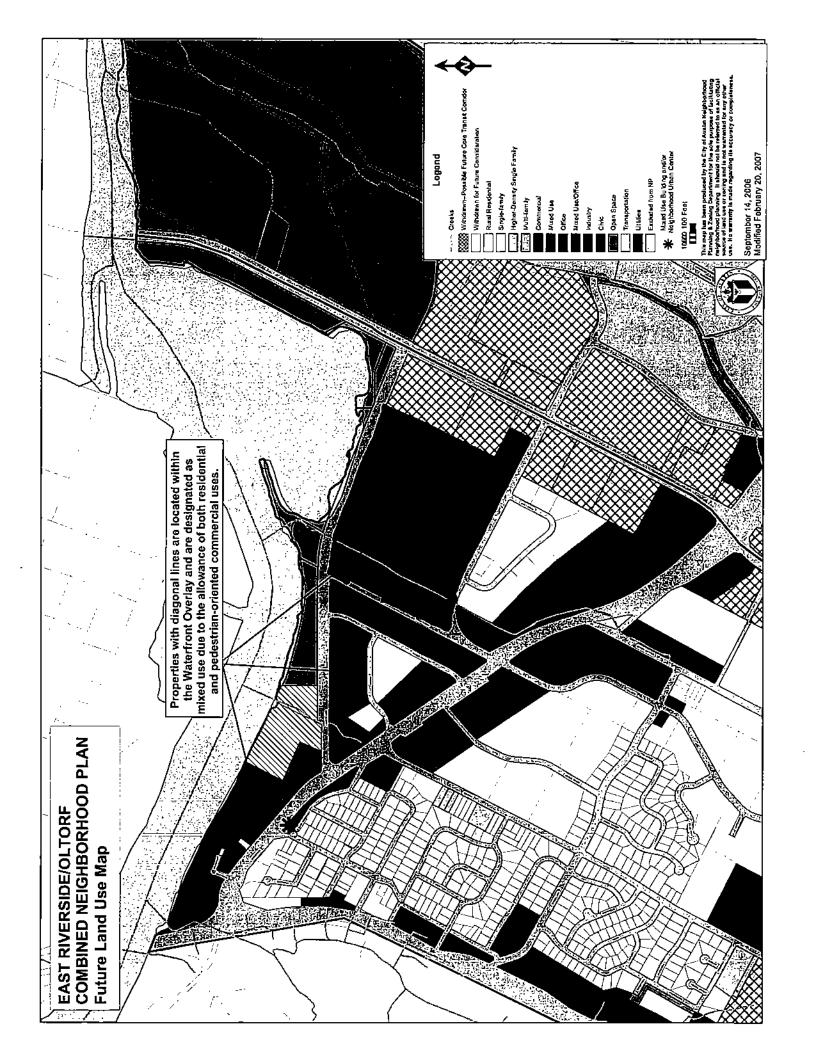
Absent:

Curra and Jenkins

Page 1 of 2

Approved By:

Dave Anderson P.E., CFM Environmental Board Chair



DETAILED STAFF COMMENTS AND APPLICANT RESPONSES

CASE NUMBER: C814-06-0109

CASE MANAGER: Robert Heil PHONE #: 974-2330 PROJECT NAME: Lakeshore Planned Unit Development

LOCATION: 2201 Lakeshore Boulevard

SUBMITTAL DATE: May 10, 2006
REPORT DATE: June 28, 2006
UPDATE 1 DATE August 16, 2006
UPDATE 2 DATE: September 29, 2006

COMMENT SUMMARY:

- Drainage Construction APPROVED.
- Electric APPROVED.
- Environmental APPROVED
- Fire APPROVED.
- Industrial Waste APPROVED.
- Parks and Recreation APPROVED
- Site Plan APPROVED.
- Subdivision APPROVED.
- Transportation APPROVED.
- Water Quality APPROVED.
- Water & Waste Water APPROVED.
- Zoning and Land Use APPROVED

<u>Drainage Construction - APPROVED.</u>

BENNY HO, P. E. 974-3402

This site is located at Lakeshore Boulevard and Tinnin Ford Road in the Town Lake Watershed, which is classified as an Urban Watershed.

DE1. Please be informed that this PUD will have to provide conveyance of off-site run on water. With such understanding, there are no other outstanding drainage comments. All drainage comments are cleared.

Electric – APPROVED DAVID LAMBERT 322-6109

- EL 1. For information on the Green Building program and standards, contact Katie Jensen at 482-5407. The applicant is encouraged to participated at a Three-Star Rating Level.
- EL 2. FYI: Any relocation of electric facilities shall be at landowner's/developer's expense.

EL 3. FYI: Contact Marvin Johnson at 505-7598 to discuss permanent electric service. He will need a copy of the released site plan/recorded plat from the customer to release his design to construction.

Environmental - APPROVED. TERESA ALVELO 974-7105

EV 1 Please provide a summary listing, point-by-point, how this proposed PUD is environmentally-superior to regular current code. What is meant by "point-by-point" is to address items such as tree preservation, proposed impervious cover, open space, density issues, etc., on all environmental-related issues.

Response from applicant:

- 1. Sustainable Site Design. The project owner, who will act as the site developer, has incorporated sustainable, green building considerations into the site design. These considerations include, among other things, the following:
 - a commitment to recycling or salvaging 50% of the non-asbestos demolition waste;
 - utilizing recycled content on planters, park benches and other site improvements;
 - water conservation measures for common area landscaping and irrigation systems, including the use of native plants and water efficient irrigation specifications;
 - an Integrated Pest Management (IPM) plan; and
 - planting street trees to mitigate heat island effect.
- 2. Green Building Program. In addition to the sustainable site measures, multifamily buildings within the project shall be required to achieve a minimum of a 1-star rating under the Green Building Program Multifamily Rating System.
- 3. Water Quality Pond. The project will include a "wet" water quality pond instead of paying the fee-in-lieu of water quality available for urban watersheds, or building a less expensive concrete sedimentation filtration pond. In addition to offering a more aesthetically pleasing solution compared to a concrete pond, the proposed wet pond or "constructed wetlands" relies on natural cleaning processes in order to achieve higher levels of water quality management while requiring lower maintenance over the life of the ponds.
- 4. Upstream Water Quality. As part of the effort to restore Willow Creek to useable open space, the developer will be cleaning a waterway of debris, selectively removing invasive plant species and introducing native vegetation, and implementing a creek maintenance plan. These measures will improve the water quality from the 167 acres upstream conveyed through the channel. In its current state, offsite run-off pushes a significant amount of trash and debris through the channel and into Town Lake.

EV 2 Please provide an environmental Assessment is required that meets LDC 25-8-121-124 criteria. Phase I environmental assessments do not satisfy LDC requirements.

<u>Response from applicant</u>: An environmental assessment (8/10/06) from Terracon Consulting Engineers and Scientists is attached.

EV 3 Please provide off-site drainage acreage for the tributary. If this tributary is classified, please show and label the CWQZ.

Response from applicant: The drainage area to the site is 167 acres. The Critical Water Quality Zone (CWQZ will coincide the boundaries of the 100-year floodplain. These boundaries will be provided at the completion of the drainage area study by Bury+Partners, Inc.)

<u>Update 1:</u> Pending update information on the CWQZ boundaries per Bury & Partners. Please note that LDC 25-8-92 (B) (1) (2) establishes a CWQZ along Town Lake. Both CWQZ's should be clearly shown and labeled in all future graphic documentation. Depending on the location of the CWQZ on Town Lake and the proposed "100' Waterfront Reserve", the reserve may not hold great value in terms of meeting the "environmentally-superior" criteria. In response to note number 29 and 33, landscaping, sidewalks, and general disturbance is not allowed in a CWQZ. See LDC 25-8-261 for clarification.

Response from applicant: See attached letter 11/02/06. As discussed in our meeting with Teresa Alvelo on October 26, 2006, the placement of trails without compacting base, removal of dead trees, removal of invasive tree species, removal of debris and planting of native trees is allowed within the Critical Water Quality Zone (CWQZ) and is consistent with Section 25-8-261 of the Land Development Code (LDC). Additionally the revised PUD plan shows the CWQZ.

EV 4 Please provide Q1/Q2 tables for the suburban watershed area. Please provide a variance request letter for excessive impervious cover for this watershed. The table titled, "Site Development Criteria Table 2" indicates that maximum impervious cover is less than maximum building cover. Please clarify as maximum impervious cover should be a larger number than building cover.

Response from applicant: As per our phone conversation on July 11, 2006, all drainage from the this site will drain to Town Lake Watershed. There is no limitation on impervious cover in urban watersheds. Q1/Q2 tables will be provided at the completion of the drainage study.

<u>Updatel:</u> There seems to be some confusion over the presence, or lack thereof, of the Country Club watershed (suburban) on this proposed site. Please clarify. The COA GIS indicates the Country Club watershed does exist in small part. If it is

applicant's opinion that the Country Club watershed is not present, please provide credible documentation, or a COA staff name that can verify your position.

<u>Response from applicant</u>: See attached letter 11/02/06. As discussed in our meeting with Teresa Alvelo on October 26, 2006, this comment is no longer applicable.

EV 5 Please provide a proposed impervious cover for the urban watershed area.

Response from applicant: Proposed impervious cover for the site is 80%. Individual lot impervious cover can be found on Site Development Criteria Table 1. All drainage will flow to Town Lake watershed which is classified as urban.

Update 1: Cleared.

EV 6 According to flood plain maps, portions of this site lies within the 100 year flood plain. The site also contains Critical Water Quality Zones as defined in LDC 25-8-92 (C). The tributary that discharges into Town Lake may require a CWQZ designation. Please confirm per LDC 25-8-92 (C). No development is allowed within the Critical Water Quality Zone. No water quality transition zone is associated with this project.

Response from applicant: The site lies in a 100-year floodplain Zone A, which has not been studied by the Federal Emergency Management Agency (FEMA). Bury+Partners, Inc. is conducting a drainage study to determine the 100-year floodplain elevations and the CWOZ.

Update 1: Pending applicant response.

Response from applicant: See attached letter 11/02/06. As per our email from Ray Windsor the drainage study has been approved.

EV 7 Please clearly show and label all 100-year floodplain, waterway centerlines, and CWOZ.

Response from applicant: Bury+Partners, Inc. is conducting a drainage study to determine the 100-year floodplain elevations and the CWQZ.

<u>Update 1:</u> Pending applicant response.

Response from applicant: See attached letter 11/02/06. The revised PUD plan shows the 100 year floodplain and CWQZ

EV 8 A variance to LDC 25-8-394 (C) may be required for areas falling within the Country Club Creek watershed. Please verify and confirm. Any variances associated with this application will be presented to the Environmental Board

prior to the Planning Commission hearing. Please provide a variance request letter addressing the findings-of-fact, if applicable.

Response from applicant: This comment is noted by the applicant.

<u>Update 1:</u> Comment pending response to EV 4.

Response from applicant: See attached letter 11/02/06. Attached is a letter written to the Environmental Board summarizing the proposed project. City staff has requested that this project be presented to the Environmental Board for a courtesy hearing (and not a recommendation) since it is a PUD.

EV 9 The proposed PUD notes indicates that cut/fill variances will be required for this proposed PUD. Please note that cut/fill code does not apply in urban watersheds. With that said, please describe where the proposed cut/fill will occur and to what depths. Please provide a variance request letter that addresses findings of fact.

<u>Update 1:</u> Comment pending response to EV 4.

Response from applicant: See attached letter 11/02/06. As discussed in our meeting with Teresa Alvelo on October 26, 2006, this comment is no longer applicable since it has been determined that the entire site drains to an urban watershed.

EV 10 (Update 1) What is applicant's proposal for upkeep, cost, maintenance and management of the proposed wet pond in the dedicated public space?

Response from applicant: See attached letter 11/02/06. The applicant proposed to construct and maintain a wetpond.

EV 11 (Update 1) Does applicant agree to the adoption of an IPM plan?

Response from applicant: See attached letter 11/02/06. The applicant agrees to the adoption of an IPM plan. It is included as Note 28 in the Land Use Plan.

Arborist Requirements

AR 1 Please provide a tree survey for all trees 8+" in diameter.

Response from applicant: A tree survey will be provided as it is available.

<u>Update 1:</u> Pending applicant response.

Response from applicant: Tree survey provided.

<u>Fire Review - APPROVED.</u> RALPH CASTILLO 974-0192

This submittal is approved 5-23-06 subject to the following comment:

All private roadways, hydrants, and buildings must be as constructed as required by the 2003 international Fire Code, as amended by the City of Austin.

Industrial Waste – APPROVED. COLLEEN BUCKLEY 972-1060

- IW1. No Comment.
- IW2. No review required for this phase of the project. Please continue to route plans to Industrial Waste for review.

<u>Update 1:</u> Plans will be provided for Industrial Waste Review.

<u>Parks and Recreation – APPROVED.</u>

JULIE LIPTON 974-6727

P1. PARD does not recommend approval of the re-zone application, based on the comments below.

Response from applicant: See attached letter (11/02/06).

Update 2: Cleared.

P2. The proposed development faces Town Lake, is on the south side of Lakeshore Blvd., and is in the WO-South Lakeshore sub district. The proposal does not significantly preserve the natural environment or ensure adequate public facilities and services within the PUD.

Response from applicant: See attached letter.

Response from applicant: See attached letter (11/02/06).

P3. The proposal does not meet section 25-2-144 (c) which states that the PUD be ... "superior to the development that would have occurred under conventional zoning and subdivision regulations.

Response from applicant: See attached letter.

Response from applicant: See attached letter (11/02/06).

<u>Site Plan – APPROVED.</u> KATHY HAUGHT 974-2724

SP1. If this site is developed as one cohesive development, a restrictive covenant for a unified development will be required.

Response from applicant: This comment is noted by the applicant.

SP2. Pedestrian oriented uses are required on ground floor of development in the waterfront overlay.

Response from applicant: As per LDC-25-2-691 (C)(11), residential uses are considered pedestrian oriented uses and are allowed in the Waterfront Overlay.

SP3. Per LDC 25-2-692(F) "in the the South Shore Central subdistrict, not less than 50% of the net usable floor area of the ground level of a structure adjacent to Town Lake must be used for pedestrian-oriented uses.

Response from applicant: This comment is noted by the applicant.

SP4. Please see height limitations with regard to required setbacks within the Town Lake Overlay.

Response from applicant: This comment is noted by the applicant.

<u>Subdivision – APPROVED.</u> Subdivision - SYLVIA LIMON 974-2767

SR 1. FOR INFORMATION – Please provide copies of the recorded plats for this development.

Response from applicant: This comment is noted by the applicant.

<u>Transportation - APPROVED.</u> EMILY BARRON 974-2788

TR1. A traffic impact analysis is required and has been received. Additional right-ofway, participation in roadway improvements, or limitations on development intensity may be recommended based on review of the TIA. [LDC, Sec. 25-6-142]. Comments will be provided in a separate memo (Attached).

Response from applicant: Review of the TIA by the applicant is pending.

TR2. Staff has no objection to notes 8, 19 and 25 however, it should be noted that all driveways that are proposed to remain or be replaced will be subject to the requirements of Table 5-2 of the TCM.

Response from applicant: This comment is noted by the applicant.

TR.3 No additional right-of-way is required.

EXISTING CONDITIONS

NAME	ROW	PAVEMENT	CLASSIFICATION	BICYCLE	CAPITAL	SIDEWALKS
				PLAN	METRO	
Tinnin	80'	44'	Collector	No	No	No
Ford						
Road						
Lakeshore	120'	50'	Arterial	Yes	No	Yes
Boulevard						
Elmont	80'	44'	Collector	No	No	Yes
Drive					ĺ	

Water Quality – APPROVED. BENNY HO, P. E. 974-3402

This site is located at Lakeshore Boulevard and Tinnin Ford Road in the Town Lake Watershed, which is classified as an Urban Watershed.

- WQ1. It appears that some of the development proposed is located across a drainage way from the water quality pond making conveyance from these proposed development to the splitter box to be difficult and unlikely. However, as discussed over the telephone, with the understanding that the lots west of the drainage way must provide separate on-site water quality control, this comment is cleared.
- WQ2. For your information Please consider providing roof gardening and rainwater recovery to the proposed development. Such improvement can be considered as additional environmental benefit required for PUD approval. Additional information with regard to this issue can be obtained from Mr. Tom Franke, EIT (Tel. 974-1882) of the City of Austin Environmental Resources Management Section.
- WQ3. There is no additional outstanding water quality comment. All water quality comments are cleared.

Water and Wastewater – APPROVED. PAUL URBANEK 974-3017

WW 1. Change Exhibit A Land Use Plan Notes 1 and 2 to the following:

The landowner intends to serve each lot with City of Austin water and wastewater utilities. The landowner, at own expense, will be responsible for providing the water and wastewater utility improvements, offsite main extension, system upgrades, utility adjustments, and utility relocation to serve each lot. Water and wastewater utility service must be provided to each lot, the private plumbing and fire system must be confined within each lot, and the private plumbing and fire system cannot cross another lot to connect to the City utility system.

No lot will be occupied until the structure is connected to the City of Austin water and wastewater utility system.

The water and wastewater utility system serving this subdivision must be in accordance with the City of Austin design criteria. The water and wastewater utility plan must be reviewed and approved by the Austin Water Utility. The water and wastewater utility construction must be inspected by the City. The landowner must pay all associated and applicable City fees.

Response from applicant: The notes have been changed per your comment.

WW 2. The existing water and wastewater utility system will not serve the proposed land uses and multi-story development. In such case, offsite main extension and system upgrades are required and must be provided by the landowner, at own expense. In order to obtain City water and wastewater utility service, the landowner must obtain City approval of a Service Extension Request. For more information pertaining to the process and submittal requirements, contact Phillip Jaeger, Austin Water Utility, 625 East 10th Street, 5th Floor Waller Creek Center.

The Austin Water Utility reserves the right to make additional comments and to establish other requirements with the Service Extension Request review.

Response from applicant: This comment is noted by the applicant.

Zoning and Land Use – APPROVED. Robert Heil 974-2330

- ZN 1. Insufficient justification has been provided for PUD zoning. The following three items have been cited as ways in which the proposed PUD would superior to the development that would occur under conventional zoning and subdivision regulations (see LDC section 25-2-144).
 - The "clustering of open space through building setback"
 - The use of an unspecified amount of structured parking as part of the overall parking mix.
 - A general description of the proposed PUD as "pedestrian-oriented" without specifics of the nature of the proposed pedestrian-oriented aspects of the proposed project.

Response from applicant: See details on land use plan and not the following improvements:

Additional Setback Area along Lakeshore Blvd. The proposed plan includes a 100-foot setback off Lakeshore Blvd, which serves as a landscape / parkland buffer accessible to the public. By comparison, the current Town Lake overlay only restricts development to within 50 feet of Lakeshore Blvd. The existing project includes buildings located within 25 feet of Lakeshore Blvd and surface asphalt lots that are adjacent to the road.

Pedestrian Friendly Layout. In order to encourage pedestrian use, the developer has committed to building sidewalks, planter strips, and street trees on both sides of all internal drives shown on the PUD Land Use Plan. All sites within the project have direct access to a hike and bike trail, sidewalk or green belt.

ZN 2. (Update 1) Staff would prefer to see lower building heights along the waterfront reserve near the hike and bike trail. Building heights of 40 feet on parcels 10 and 11 would be appropriate. Alternatively, heights of 40' on the north half of parcels 10 and 11 with heights of 60' on the remainder of the parcels would be acceptable. Moving the square footage (and height) from tracts 10 and 11 to tracts 1, 7, 8 and 13 is encouraged.

Response from applicant: See attached letter 11/02/06.

Based on previous discussions with the surrounding neighborhood group, we would like to place the tallest buildings in the center of the site. We have received comments from the neighborhood that they would not like to have the tallest buildings located directly adjacent to the neighborhood. Placing the tallest buildings in the center of the site allows stepping down of height along the perimeter.

The purpose of the proposed 100 foot waterfront reserve, located on the north portion of the site is to create a greater park and open space area south of Lakeshore Boulevard. It was for this reason that the applicant was willing to incorporated a 50 foot setback, in addition to the 50 foot waterfront overlay set by code, to total the proposed 100 foot waterfront reserve. The effect of this setback is to address community concerns about height too close to the Town Lake corridor.

In accordance with staff's request to see lower building heights along the waterfront reserve, the applicant is willing to limit building heights to three story development within 25 feet of the waterfront reserve setback area.

ZN3. Accommodation for a future pedestrian easement is encouraged between the northern internal east-west street (which currently runs from the main internal north-south internal street and ends in a cul-de-sac) and the parkland to the east of the project.

Response from applicant: See attached letter 11/02/06. Noted. Circulation within the development for residents and the community is important to the success of the project. Sidewalks, streetscape, and trails within the development are proposed to provide access to Town Lake for the public.

ZN4. Accommodation for a future pedestrian easement is encouraged along the eastern edge of the property between Elmont Drive and Lakeshore Blvd.

Response from applicant: See attached letter 11/02/06. Noted. Circulation within the development for residents and the community is important to the success of the project. Sidewalks, streetscape, and trails within the development are proposed to provide access to Town Lake for the public.

ZN5. Please list specific design features the project will incorporate from Austin Energy's Green Building Guidelines, and the resultant Green Building Star rating. Staff encourages the project to achieve a three star rating.

Response from applicant: Proposed Lakeshore Green Building Elements are attached.

ARMBRUST & BROWN, L.L.P.

ATTORNEYS AND COUNSELORS

100 Congress Avenue, Suite 1300 Austin, Texas 78701-2744 512-435-2300

FACSIMILE 512-435-2360

DAVID B. ARMBRUST (512) 435-2301 darmbrust@abaustin.com

November 2, 2006

Robert Heil
Neighborhood Planning and Zoning Department
City of Austin
505 Barton Springs Road, 5th Floor
Austin, TX 78704

Re: Lakeshore PUD Zoning Case (C814-06-0109)

Dear Robert:

The following information is being submitted in response to comments dated September 29, 2006 for the Lakeshore PUD.

Environmental

- EV3. As discussed in our meeting with Teresa Alvelo on October 26, 2006, the placement of trails without compacted base, removal of dead trees, removal of invasive tree species, removal of debris, and planting of native trees is allowed within the Critical Water Quality Zone (CWQZ) and is consistent with Section 25-8-261 of the Land Development Code (LDC). Additionally, the attached revised PUD plan shows the CWQZ.
- EV4. As discussed in our meeting with Teresa Alvelo on October 26, 2006, this comment is no longer applicable.
- EV6. Attached is an email from Ray Windsor stating that the drainage study has been approved.
- EV7. The attached revised PUD plan shows the 100 year floodplain and CWQZ.
- EV8. Attached is a letter written to the Environmental Board summarizing the proposed project. City staff has requested that this project be presented to the Environmental Board for a courtesy hearing (and not a recommendation), since it is a PUD.

ARMBRUST & BROWN, L.L.P.

Page 2

- EV9. As discussed in our meeting with Teresa Alvelo on October 26, 2006, this comment is no longer applicable since it has been determined that the entire site drains to an urban watershed.
- EV10. The applicant proposes to construct and maintain the wet pond.
- EV11. Yes, the applicant agrees to the adoption of an IPM plan. It is included as Note 28 in the land use plan.
- AR1. Attached is a copy of the tree survey.

Parks and Recreation

Comments P1 through P3 have been addressed in the attached letter that was provided to Parks staff on November 1, 2006. As requested in our meeting with Parks staff on October 18, 2006, we have outlined the proposed common areas within the PUD. City staff has requested that this project be presented to the Parks Board for a courtesy hearing (and not a recommendation).

Zoning and Land Use

Z2. Based on previous discussions with the surrounding neighborhood group, we would like to place the tallest buildings in the center of the site. We have received comments from the neighborhood that they would not like to have the tallest buildings located directly adjacent to the neighborhood. Placing the tallest buildings in the center of the site allows stepping down of height along the perimeter.

The purpose of the proposed 100 foot waterfront reserve, located on the north portion of the site, is to create a greater park and open space area south of Lakeshore Boulevard. It was for this reason that the applicant was willing to incorporate a 50 foot setback, in addition to the 50 foot waterfront overlay setback set by code, to total the proposed 100 foot waterfront reserve. The effect of this setback is to address community concerns about height too close to the Town Lake corridor.

In accordance with staff's request to see lower building heights along the waterfront reserve, the applicant is willing to limit height to three story development within 25 feet of the waterfront reserve setback area.

- ZN3. Noted. Circulation within the development for residents and the community is important to the success of the project. Sidewalks, streetscape, and trails within the development are proposed to provide access to Town Lake for the public.
- ZN4. Noted. Circulation within the development for residents and the community is important to the success of the project. Sidewalks, streetscape, and trails within the development are proposed to provide access to Town Lake for the public.

ARMBRUST & BROWN, L.L.P.

Page 3

ZN5. The applicant is willing to require the attached Lakeshore Green Building Standards within the PUD.

Upon your review of this information, please feel free to contact Kris Kasper (435-2325), Lynn Ann Carley (435-2378) or me (435-2301) with any questions.

Very truly yours,

David B. Armbrust

Enclosures

cc: David Cox



5307 Industrial Oaks Boulevard Suite 160 Austin, Texas 78735 Phone 512.442.1122 Fax 512.442.1181 www.terracon.com

ENVIRONMENTAL ASSESSMENT 56.63-Acre Tract Regatta, Chelsea, & Lakeview Apartments

Regaπa, Cheisea, & Lakeview Apartments
1201 Townlake Circle & 2201 - 2401 Lakeshore Boulevard
Austin, Travis County, Texas

Project No. 96067482

August 10, 2006

Prepared for:

Cypress Real Estate Advisors, Inc. 1501 S. Mopac Expressway, Suite 230 Austin, Texas 78746

Prepared by:

Terracon Consultants, Inc. Austin, Texas



Environmental Assessment

Critical Environmental Features and Hydrogeologic Elements
56.63-Acre Tract
Regatta, Chelsea, & Lakeview Apartments
1201 Townlake Circle & 2201 - 2401 Lakeshore Boulevard
Austin, Travis County, Texas

Terracon Project No. 96067482

1.0 INTRODUCTION

This report presents Terracon Consultants, Inc.'s (Terracon) critical environmental feature (CEF) assessment and hydrogeologic report portion of the City of Austin (COA) Environmental Assessment (EA) prepared for the above-referenced site. The purpose of the EA is to satisfy a COA, Land Development Code §25-8-121 *Environmental Assessment Requirement*, which necessitates that an EA be performed for any development: (1) over a karst aquifer; (2) within an area draining to a karst aquifer or reservoir, (3) in a water quality transition zone; (4) in a critical water quality zone; (5) in a floodplain; or (6) on a tract with a gradient of more than 15 percent.

Terracon personnel performed a field investigation of the site and surrounding areas (within approximately 150 feet of the site) on August 2, 2006. To satisfy EA requirements, the field investigation was performed to determine the presence or absence of geologic, natural, or manmade features including: faults, fractures, riparian woodlands, water wells, borings, and excavations, as well as, COA CEFs including: bluffs, canyon rimrock, caves, sinkholes, springs, seeps, and wetlands. The following sections present the results of the EA.

2.0 ENVIRONMENTAL SETTING

2.1 Site Description

The 56.63-acre site is located at 1201 Townlake Circle and 2201 through 2401 Lakeshore Boulevard in Austin, Travis County, Texas. The site location (in relation to the surrounding area) is depicted on Figure 1, which was reproduced from a portion of the United States Geological Survey (USGS) 7.5-minute series topographic map (attached). The site is improved with three apartment complexes; Regatta Apartments (western portion of the site), Chelsea on Town Lake Apartments (central portion of the site), and Lakeview Apartments (eastern portion of the site). An improved roadway (Tinnin Ford Road) traverses the western portion of the site, more specifically, separating the Regatta Apartment complex from the Town Lake Village Apartments (off-site) and the Chelsea on Town Lake Apartments. In association with the on-site apartment complexes, the site is improved with asphalt paved driveways and parking areas and landscaped grounds. Additionally, an unnamed tributary of Town Lake (Colorado River), which serves as an apparent stormwater



drainage feature for on-site and surrounding development, traverses the western portion of the site (near Chelsea on Town Lake Apartments).

2.2 Land Use

Based on a review of historical black and white aerial photographs (1951, 1964, 1980, and 2001), the site appears to have predominantly consisted of vacant, agricultural land since prior to 1951 until the mid- to late 1960s and early 1970s when the existing on-site apartment complexes, as well as the surrounding commercial development and apartments were constructed. The unnamed tributary of Town Lake (as shown on the topographic map), is evident in the western portion of the site on the 1951 through 2001 aerial photographs. Based on site observations, the site is currently being used for residential purposes.

South Lakeshore Boulevard forms the northern site boundary, followed by COA park and Town Lake. A COA maintenance facility is located to the adjoining east/northeast of the site, and an apartment complex borders the site to the east/southeast; both are followed by South Pleasant Valley Road. A densely vegetated area (associated with the COA maintenance facility) is evident to the adjoining east/northeast on the 1980 and 2001 aerial photographs. Elmont Drive forms most of the southern site boundary, and is followed by several multi-family apartment complexes; the Regatta Apartments is bordered by commercial development (including Diamond Shamrock, Dairy Queen, a car wash, etc.) to the adjoining south. Town Creek Drive forms the western site boundary, followed by additional apartment complexes.

2.3 Vegetation

The site is located within the Blackland Prairie physiographic region (Amos and Gehlbach, 1988). The vegetation types present in the region include the Pecan-Sugarberry Series and the Gammagrass-Switchgrass Series. The Pecan-Sugarberry Series occupies floodplains within the Blackland Prairie and are most prevalent along major rivers. Dominant species include sugarberry (Celtis laevigata), cedar elm (Ulmus crassifolia), American elm (Ulmus americana), Texas oak (Quercus texana), plateau live oak (Q. fusiformis), and Texas ash (Fraxinus texensis). The Gammagrass-Switchgrass Series is tall grassland found primarily in lowlands or poorly drained uplands over clayey soils. Common species include Indiangrass (Sorghastrum nutans), little bluestem (Schizachyrium scoparium), and tall dropseed (Sporobolus asper).

Due to the predominantly developed nature of the site, on-site vegetation (where present) was limited to maintained grasses (predominantly Bermudagrass). Trees and shrubs consistent with the Pecan-Sugarberry Series are present along a fenceline that outlines the eastern site boundary, as well as interspersed areas throughout the site. Although access was not permitted to the on-site unnamed tributary of Town Lake (due to a high fence), it appears that the tributary is dominated by Chinese tallow (Sapium sebiferum), cottonwood (Populus deltoides), pecan (Carya illinioensis), giant ragweed (Ambrosia trifida), grapevine (Vitis sp.), and other native and/or invasive trees, shrubs, and woody vines. The canopy cover associated with the majority of the site is an estimated 0 to 20 percent, while the canopy cover associated with the on-site tributary is an estimated 60 to 90 percent.



2.4 Topography and Surface Water

This site is predominantly located within the Town Lake Watershed and Suburban Zone; however, the southeastern-most portion of the site lies within the Country Club West Watershed. The site is not located within the Edwards Aquifer Recharge, Transition, or Contributing Zones as mapped by the 1998 COA Watershed Regulation Areas Map and the Texas Commission on Environmental Quality (TCEQ) Recharge Zone Boundary Maps. Based on a review of the USGS Montopolis, Texas 7.5 minute topographic map, the site ranges from approximately 430 to 460 feet above mean sea level, gently sloping toward the north. An unnamed tributary of Town Lake (depicted as an intermittent stream by a dashed blue line) traverses the western portion of the site.

As previously mentioned, access to the on-site tributary corridor is restricted by a high fence; however, based on observations made from the fence boundaries, the tributary is deeply incised and is densely vegetated with predominantly upland species with interspersed areas containing hydrophytic vegetation. It appears that stormwater run-off (originating from the site and properties located to the south of the site) is conveyed by the on-site tributary towards its confluence with Town Lake. During the field investigation, no surface water, seeps, springs, or fringe wetland areas were observed within the on-site tributary. However, the absence of vegetation in the base of the tributary indicates that large volumes of water are conveyed within the on-site tributary. Based on site observations, the tributary is characterized as ephemeral and appears to only flow in response to rainfall events.

A small drainage swale was observed in the central portion of the site. Although it is somewhat incised, the drainage swale was vegetated with upland grasses, and no evidence of surface water was observed. The small drainage swale was not depicted on the topographic map and is not evident on the historical aerial photographs.

The densely vegetated area (as seen on the 1980 and 2001 aerial photographs) was observed to the adjoining east/northeast of the site, and appeared to be used as a storage lot in association with the COA maintenance facility. The vegetated area was dominated by upland grasses; however, some black willow (*Salix nigra*) and pecan trees were observed. Additionally, no surface water or tributary channel was observed within the densely vegetated area at the time of the field investigation. Based on the observed conditions, a depression may have been associated with the vegetated area; however, it appears to have been filled in. A small earthen berm is located along the eastern site boundary (on-site), which serves to prohibit overland sheet flow from entering the vegetated area. A stormwater drain was observed near the earthen berm, which appears to convey stormwater runoff (within a subterranean pipe) off-site towards the east. No obvious drainage outlet was observed within 150 feet of the site; therefore, it appears that stormwater runoff is conveyed (beneath the densely vegetated area) into a natural drainage channel located more than 150 feet east of the site.



Town Lake (depicted as a perennial stream) is located approximately 100 feet north of the site. The lake front in the site vicinity is bulkheaded; therefore, no emergent vegetation and minimal aquatic vegetation are present in this portion of the lake.

According to the National Wetland Inventory (NWI) map (prepared by the United States Fish and Wildlife Service [USFWS]), the on-site tributary is unclassified; however, Town Lake is characterized as a lacustrine, limnetic, open water (unknown bottom), permanently flooded, diked and impounded wetland (L1OWHh). No other potential wetlands were indicated on the site or properties adjoining the site.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates that the site is located within three designated floodplain areas. More specifically, the site is predominantly located within Zone X, which depicts areas outside of the 500-year flood zone. The northern-most portions of the site (located near Town Lake) are mapped as Zone X shaded, which are areas within the 500-year flood or within the 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile. Additionally, the on-site unnamed tributary of Town Lake is mapped as Zone A, which are special flood hazard areas inundated by 100-year flood (no base flood elevations determined).

2.5 Geology

A review of existing literature shows that the site is underlain by Quaternary Lower Colorado River Terrace Deposits (Qlcr), which are comprised of sand, silt, clay, and gravel frequently yellow to orange-brown. This formation is not known to form caves and voids suitable for usage by Terrestrial Karst Invertebrates (TKIs). No faults, fractures, caves, voids, or significant recharge features were observed on the site.

2.6 Soils

As mapped by the Natural Resource Conservation Service's *Soil Survey of Travis County, Texas*, soils underlying the site are of the Bergstrom-Norwood Association, which are typically deep, calcareous, loamy soils overlying recent and old alluvium. More specifically, the site is predominantly underlain by Bergstrom soils and Urban land (Bh), while the southern-most portions of the site (immediately north of Elmont Drive) are underlain by Houston Black soils and Urban land, 0 to 8 percent slopes (HsD).

Bh soils occupy non-flooding bottom lands and low terraces of the Colorado River. The surface layer is grayish-brown silty clay loam or silt (approximately 20 inches thick), which is underlain by reddish-brown silt loam that extends to a depth of about 60 inches. HsD soils have a surface layer of very dark gray clay or gravelly clay about 30 inches thick. Urban land is mainly occupied with single-family dwellings. These soils have high shrink-swell and erosion potential.



No geotechnical data was available to review the soil strata; however, based on the field investigation, the surface soils appear to fit the descriptions given for the mapped soils. According to the *Hydric Soils List of Texas*, the mapped soils are not identified as hydric.

2.7 Water Wells and Other Man-made Features

A search was made for water wells, borings, and excavations on or within 150 feet of the site. No water wells were recorded on the site or surrounding properties by the Texas Water Development Board (TWDB). No water wells, borings, or excavations were identified on the site or in the immediate vicinity of the site (150 feet from the site) by visual investigation from within site boundaries during Terracon's field investigation.

3.0 CRITICAL ENVIRONMENTAL FEATURES

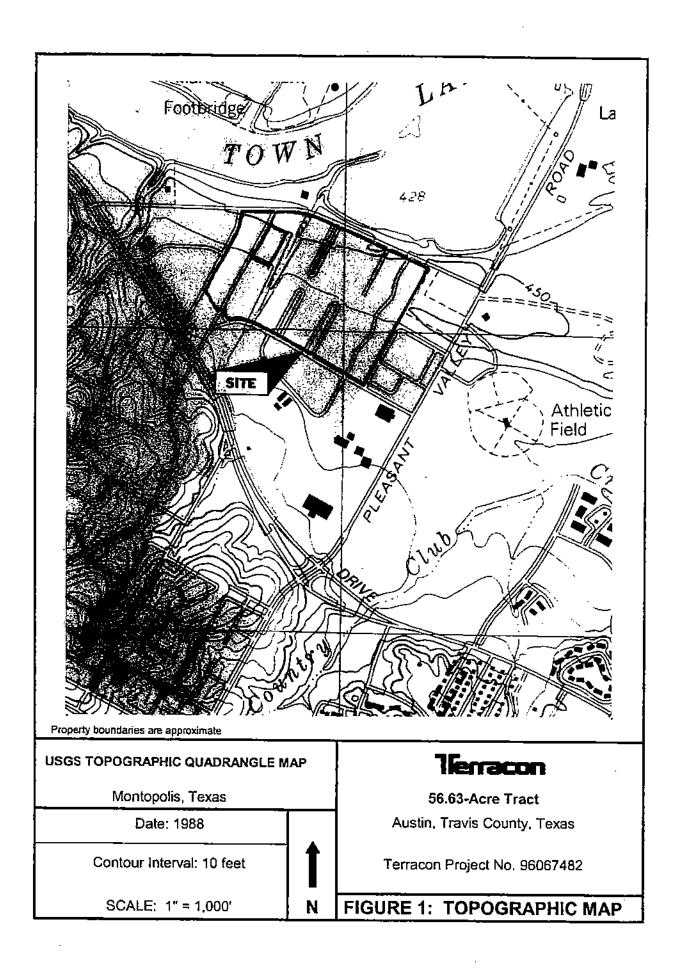
No canyon rimrock, bluffs, caves, sinkholes, springs, wetlands, or seeps, (as defined by the COA) were identified on the site or within 150 feet of the site boundary.

Although no surface water was observed within the on-site tributary at the time of the field investigation, the presence of hydrophytic vegetation, deeply incised channel, and absence of vegetation within the base of the tributary, indicates that large volumes of water are conveyed by the on-site tributary. As previously stated, some interspersed wetland areas (as evidenced by hydrophytic vegetation) may be located within the on-site tributary corridor; however, the tributary corridor would not meet the criteria to be classified as a wetland CEF based on the dominance of upland vegetation. Additionally, it should be noted that based on the presence of the bulkhead and the lack of hydrophytic vegetation, Town Lake (on the portion that is located within 150 feet of the site) would not meet the criteria to be classified as a wetland CEF. It is likely that future on-site development will only be limited by the on-site tributary comdor, based on its location within the FEMA floodplain corridor and the COA Critical Water Quality Zone.



REFERENCES

- (Amos) Amos, B.B., and Gehlbach, F.R., Edwards Plateau Vegetation, Plant Ecological Studies in Central Texas, 1988.
- (FEMA) Federal Emergency Management Agency. Flood Insurance Rate Maps, Travis County, Community Panel Number 48453C0170 G (dated January 19, 2000).
- (TCEQ) Texas Commission on Environmental Quality, formerly the Texas Natural Resource Conservation Commission. Edwards Aquifer Recharge Zone Boundary Maps. 1996. Accessed August 2006.
- (TWDB) Texas Water Development Board. Water Well Drillers' Records. Accessed August 2006.
- (USFWS) US Fish and Wildlife Service. National Wetland Inventory Map, Montopolis, Texas, 1993.
- (USGS) US Geological Service 7.5 minute Topographic Quadrangle Maps Montopolis, Texas, 1988.
- (UT-BEG) University of Texas Bureau of Economic Geology. Geologic Atlas of Texas, Austin Sheet. The University of Texas at Austin. Reprinted 1981.
- (UT-BEG) Geologic Map of the Austin Area. Revised 1992.
- (Werchan) Werchan, Leroy E., A.C. Lowther, and Robert N. Ramsey. Soil Survey of Travis County, Texas. US Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Experiment Station, 1974.



Project No. 96067482

Date Photos Taken: August 2, 2006

Tierracon



Photo 1 Typical view of the on-site apartment complexes.



Photo 3 Typical view of the on-site unnamed tributary of Town Lake.

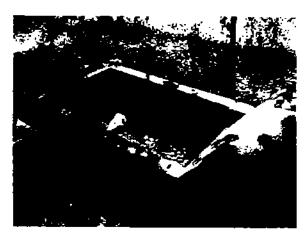


Photo 5 View of the stormwater drain located along the eastern site boundary.



Photo 2 Another typical view of the on-site apartment complexes.



Photo 4 Typical view of the on-site drainage swale.



Photo 6 View of the potential wetland area located to the adjoining east of the site.

LAKESHORE GREEN BUILDING STANDARDS

INTRODUCTION

The following represents the Green Building requirements for the Lakeshore Planned Unit Development (the "Project"). The requirements have been designed to reduce environmental costs and consequences and increase aesthetic value of the Project. The requirements are segregated into the following two categories: 1) Site Development Standards, which include sustainable measures to be incorporated into the design of the site's common areas; and 2) Multifamily Building Standards, which include a minimum standard for vertical development located within the Project.

SITE DEVELOPMENT STANDARDS

SITE SELECTION

The nature of the proposed Lakeshore development and its location are consistent with several sustainability measures identified within the Austin Energy Green Building Program. The following is a list of such measures.

Environmental Sensitivity: The project is located outside of the environmentally sensitive Edwards Aquifer recharge zone. Tributaries to Town Lake have been identified and will be protected by defined Critical Water Quality Zone easements. Disturbance within these zones will be minimized to the greatest extent practical.

Preferred Location: The project is a re-development of an existing apartment community located within the City of Austin's Desired Development Zone in an area described as the "Urban Core" on the Austin Smart Growth Zone Map.

Municipal Infrastructure: The project utilizes existing transportation and utility infrastructure and is located in an area with basic services.

Public Transportation: The project is located adjacent to several existing Capital Metro bus stops.

LANDSCAPING

Preservation of Existing Trees: All Class A category trees larger than six (6) inches and located within the 100 foot wide Waterfront Reserve and the 100 foot wide Willow Creek Greenway shall be preserved or relocated wherever practical. In the event that a tree must be removed due to a utility or roadway conflict, onsite mitigation shall be provided at 1.5:1 on a caliper inch basis.

Tree Management Plan: The Project Owner shall prepare and periodically update a long-term tree management plan to protect the existing and newly planted trees.

LAKESHORE GREEN BUILDING STANDARDS

Use of Native Plants. At least 80% of the landscaped area within the project shall utilize plan material recommended in the City of Austin "Preferred Plant List" and the Green Grow Native and Adaptive Landscape Plant Guide.

Planting Beds: All planting beds shall be mulched to a minimum of 2" depth in order to increase efficiency of irrigation systems.

IRRIGATION SYSTEM

The irrigation system for all common areas will be designed in a manner that makes efficient use of water. The irrigation plan shall incorporate the following components:

- Specification of water zones based on plant needs;
- Rain and wind shut-off devices;
- Design to minimize evaporation by using techniques such as low water delivery pressure, large drop size and deliver near to the ground;
- Three seasonal watering schedules (spring, summer and fall)
- Watering cycle beginning in the early morning and ending by 10:00 a.m. to minimize evaporation and fungus growth; and
- Sprinkler maintenance to ensure proper overlap and head-to-head coverage.

Reclaimed Water: In the event that the City of Austin extends its "purple pipe" reclaimed water system to the property, the Owner will make a diligent effort to utilize the system for its landscaping irrigation needs.

INTEGRATED PEST MANAGEMENT

An Integrated Pest Management (IMP) plan will be developed and implemented using City of Austin standards. The plan shall address both construction and post-construction chemical use.

STORM WATER MANAGEMENT

Water quality for sites located west of the drainage way will be achieved by use a wet pond or constructed wetlands, rather than the more traditional and economical concrete sedimentation-filtration pond. The purpose of the proposed water quality system is to utilize a natural process in order to achieve higher levels of water quality management while requiring lower maintenance over the life of the ponds.

HEAT ISLAND

Street Trees: Street trees will be provided at a minimum spacing of 50' centers along all principal drives (as shown on the PUD site plan) to reduce Heat Island effects and improve shade on streets and sidewalk impervious surfaces.

LAKESHORE GREEN BUILDING STANDARDS

Planters: Planters and landscaped zones will be provided at regular intervals along all principal drives (as shown on the PUD site plan) to reduce Heat Island effects and improve the aesthetics of the streetscape.

LIGHT POLLUTION

Street Lamps: Street light fixtures shall be directed towards the ground and contain hoods to reduce upward directed light.

CONSERVATION

Recycled Content: Planters, benches and stonework located within the project's common areas shall utilize recycled materials wherever practical.

SITE CONSTRUCTION

Disturbance Envelope: The limits of construction will preserve the maximum possible undisturbed areas. Fencing will be constructed to enforce undisturbed areas. Tree protection will be provided to minimize root damage, soil compaction, trunk scrapes, branch breaks, and grade changes.

Toxic Chemicals: All fuels, petroleum products, and chemicals stored on site during construction will be placed in a designated area with an impermeable liner.

Demolition Waste Plan: A minimum of 50% (by weight) of demolition shall be recycled or salvaged. All materials containing asbestos shall be excluded from this calculation.

MULTI-FAMILY BUILDING STANDARDS

In addition to the Green Building measures incorporated into the Project's common site areas, Multi-family Buildings located within the Project shall be required to achieve a minimum One Star Rating under the Green Building Program Multifamily Rating system as adopted at time of approval of this PUD and attached herein. For purposes herein, Multi-family Buildings shall be defined as all multi-tenanted structures 4-stories and taller and consisting of at least 50,000 rentable square feet.