

AGENDA ITEM NO.: 4 AGENDA DATE: Thu 06/23/2005

**PAGE:** 1 of 1

<u>SUBJECT</u>: Authorize the negotiation and execution of a license agreement with Lower Colorado River Authority (LCRA) to allow a 70 foot aerial expansion of an existing 100 foot infrastructure corridor located in Barton Creek Wilderness Park for a total 170 feet infrastructure corridor.

AMOUNT & SOURCE OF FUNDING: Revenue in the amount of \$32,500 to be paid to the Parks and Recreation for the granting of this License Agreement.

FISCAL NOTE: There is no unanticipated fiscal impact. A fiscal note is not required.

REQUESTING Austin Water Utility DIRECTOR'S

**DEPARTMENT:** AUTHORIZATION: Chris Lippe

FOR MORE INFORMATION CONTACT: William Conrad, 263-6430; Stuart Strong, 974-6766;

Laura Wiley, 972-0104

**PRIOR COUNCIL ACTION: N/A** 

**BOARD AND COMMISSION ACTION:** Recommended by Water and Wastewater Commission; reviewed by the Parks and Recreation Board and the BCCP Coordinating Committee.

**PURCHASING:** N/A

MBE / WBE: N/A

Both BCP staff and Parks staff have reviewed LCRA's proposal and believe it will be beneficial to the City's interests. LCRA requests a license agreement to allow them to install taller support towers along their utility line and to remove one tower. Because there are fewer towers, the potential for sag in the lines during high temperatures and heavy loads, and the potential for increased blow out or sway during high winds, this design requires expansion of the corridor to assure increased public safety and reliable provision of public services. However, overall, these actions will result in reduced vegetation management and less environmental damage to the Park/Preserve. Attached supporting documentation includes LCRA's letter requesting expansion of the corridor and license agreement, Surveyors Sketch

Because this proposed expansion occurs in parkland, the Parks and Recreation Department and the Law Department have reviewed the LCRA proposal and find that it will not result in significant change in park use and therefore, will not require a public hearing under chapter 26 of Texas Parks and Wildlife Code.

map and field notes, and documents provided by LCRA describing limits of vegetation management

RCA Serial#: 8903 Date: 06/23/05 Original: Yes Published:

Disposition: Adjusted version published:



May 10, 2005

Mr. William A. Conrad City of Austin, Austin Water Utility Wildland Conservation Division – Reicher Ranch 3635 RM 620 Austin, Texas 78738-6807

SUBJECT: Approval from BCCP Coordinating Committee for Expansion of Utility Corridor

on Tracts:

Tax ID# 0110270418; A EANES ABS 268; SUR 508, 23.875 ACRES and

Tax ID# 0110270422; JOSEPH FESSENDER ABS 291, SUR 73, 16.492 ACRES

## Dear Mr. Conrad:

LCRA Transmission Services Corporation (LCRA TSC) is rebuilding a portion of the Hi-Cross to Marshall Ford electric transmission line, which crosses the Barton Creek Preserve owned by the City of Austin and managed under the Balcones Canyonlands Conservation Plan (BCCP). The Hi-Cross to Marshall Ford line is one of the major sources of east-to-west power flow in parts of Austin and surrounding counties. This 16.5 mile line is owned jointly by LCRA TSC and Austin Energy, and the two utilities have been working for several years to increase the capacity of the line to serve the region's growing energy needs. Activities for this rebuild project include upgrading the wires to increase the capacity of the line and replacing existing steel lattice towers with single-pole structures. Although the capacity of the line will increase, it will remain a 138-kV line at this time.

As part of this process, LCRA TSC is requesting that the City of Austin grant LCRA TSC a license agreement for a portion of the above referenced parcels, which are located in the Barton Creek Preserve portion of the BCCP (Exhibit 1). You will note from the plats and field notes provided (Exhibit 2) that the affected area includes two 35-foot strips of land that run parallel and adjacent to the existing transmission line easement. The transmission line will be rebuilt within the existing 100-foot easement, but the additional area is needed to accommodate transmission wires that may swing outside the easement during extreme wind conditions. According to the BCCP Infrastructure Planning Guidelines, the BCCP Coordinating Committee must approve expansion of existing utility corridors, and such expansions must follow the BCCP Infrastructure Planning Guidelines, the modification procedures, and the Interlocal Agreement.

The license agreement that LCRA TSC is requesting from the City of Austin would prevent the City from constructing facilities taller than 30 feet within the 35-foot wide strips parallel and adjacent to the existing 100-foot wide electric transmission line easement. The license agreement would <u>not</u> permit LCRA TSC to install or construct any structures in the additional area. Additionally, LCRA TSC is requesting the right to trim trees that have grown into the danger zone for this transmission line and to maintain a five-year

maintenance cycle. Trees within the 35-foot areas that are the subject of the license agreement will not be trimmed during the golden-cheeked warbler breeding season unless a tree is encroaching into the danger zone and therefore constituting an emergency as defined in the BCCP guidelines. By conducting periodic line patrols and inspections, LCRA TSC will make special effort to schedule any required trimming outside of the breeding season.

The BCCP Infrastructure Guidelines recognize that maintenance may be required to address emergency situations that could present an imminent threat to public health, safety, property, or loss of service. LCRA must and will act quickly to eliminate the emergency condition. However, during these situations, LCRA will make every effort to contact the BCCP Coordinating Committee Secretary for advice or guidance during emergency maintenance work. As stated in the Guidelines, written notification describing the emergency maintenance work will be sent to the BCCP Coordinating Committee Secretary within five working days after the work has been completed.

The danger zone for a transmission line is the safety clearance area that surrounds the energized wires of the line, and is identified by an engineering calculation. The calculation incorporates the potential swing of the line (caused by wind) and sag (caused by high ambient temperatures and electrical loading) and then applies an additional clearance based on National Electrical Safety Code (NESC). Clearance for this specific line is approximately 12 feet from the wires. Trees or other vegetation encroaching into the danger zone can cause an electrical arc and endanger the public, cause electrical outages, or ignite and damage the Preserve via uncontrolled fire. For these reasons, it is necessary that trees not be allowed to grow too close to the transmission lines.

A vegetation maintenance zone (Exhibit 3) surrounds the danger zone and reflects the estimated tree growth over five years (LCRA TSC's maintenance cycle). The size of the vegetation maintenance zone is influenced by tree species, rainfall amount, and soil conditions, but is estimated to be approximately 8 feet in the portion of the BCCP where LCRA TSC is seeking a license agreement. Only trees encroaching into the vegetation maintenance zone are candidates for trimming; LCRA TSC will not trim any trees that have not grown into the maintenance zone.

LCRA TSC recently conducted an assessment of trees within the area addressed in the proposed license agreement. The assessment revealed that the existing clearance is generally adequate to allow five-years of growth without encroaching into the danger zone. In other words, it is unlikely that any trees would need to be trimmed during the first five years. In canyon-bottom areas, it is also unlikely that any trees would ever grow high enough to enter the danger zone.

After five years, and on a five-year cycle, thereafter, trees that have grown into the vegetation maintenance zone will be trimmed in accordance with ANSI 300 (American National Standards Institute) standards and good utility practice in order to protect the health of the trees and ensure adequate clearance for the next five years. LCRA TSC will conduct an assessment for the subsequent five-year maintenance cycle during Fall 2009 and share the results of that assessment with BCCP staff. Any trees identified at that time as having the potential to grow into the danger zone in the coming five years would be

Mr. William A. Conrad May 10, 2005 Page 3

trimmed to the appropriate height to prevent them from growing into the danger zone within the next five years.

With regard to electrical clearances, this transmission line was designed to be operated with at least a 50-foot minimum vertical clearance above grade in the license agreement areas. Clearances are much higher in the canyons and on the downhill side of the transmission line. To provide the necessary safety clearances and to reliably operate the transmission line, trees that could grow into the danger zone during each 5-year maintenance cycle will be trimmed to provide approximately 20 feet of clearance from the transmission line (approximately 12 feet for the danger zone and approximately 8 feet for the vegetation maintenance zone). This approximate 20-feet clearance will allow for future growth of the trees during the 5-year maintenance cycle without encroaching into the danger zone. At the minimum clearance of 50 feet, this means that the trees would be trimmed to a height of 30 feet above the ground. In canyons and on the downhill side of the transmission line, trees could grow to heights greater than 40 feet.

By accommodating wind-displaced transmission lines, the additional area specified in the license agreement offsets the need for an additional transmission line pole and related access, thus reducing the number of trees removed from the Barton Creek Preserve and minimizing impact to the environment. The license agreement also improves the safety and reliability of the line by disallowing construction of facilities close to the transmission line. Management of vegetation within this area will be addressed in the Vegetation Management Plan developed for this transmission line according to the BCCP Work Group, which includes Austin Energy. Work on this Plan will begin in the near future.

By this letter, LCRA TSC is requesting 8CCP Coordinating Committee approval of this utility corridor expansion as we work to upgrade this transmission line to improve electric reliability and safety to serve growing energy needs in the region. Please call me at (512) 369-5632, or e-mail me at dennis.palafox@lcra.org, if you have any questions or concerns.

Sincerely,

Dennis Palafox, P.W.S.

Senior Environmental Coordinator

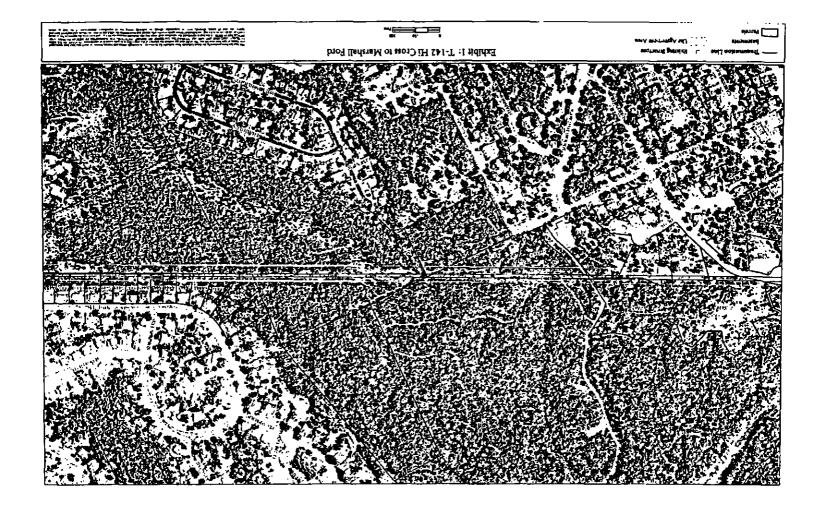
Transmission Services

Attachments:

Exhibit 1 - Site Location

Exhibit 2 - Plats and Field Notes

Exhibit 3 — Depiction of Danger Zone



Travia County, Texas JOSEPH FESSENDEN SURVEY 73 ALEX EANES SURVEY 508

## "EXHIBIT A"

FIELD NOTE DESCRIPTION OF A 1045 ACRE EASEMENT TRACT, LOCATED IN THE JOSEPH FESSENDEN SURVEY 73 AND THE ALEX EANES SURVEY 508, BOTH OF TRANS COUNTY, TEXAS; SAID 11045 ACRE TRACT IS CONTAINED WITHIN A 55.316 ACRE TRACT DESCRIBED IN A WARRANTY DEED TO THE CITY OF AUSTRU, DATED DECEMBER 19, 1979, AND RECORDED IN VOLUME 68.22, PAGE 278 OF THE DEED RECORDS OF TRANS COUNTY, TEXAS; SAID 1,045 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING at a ½ iron rod found for the southeast corner of Lot 20, Block C, The Hills of Lost Greek, Section 5, a subdivision of record in Volume 79, Page 74 of the Plat Records of Travis County, Texas, being also the northeast corner of Lot 21, Block C, The Hills of Lost Greek, Section 5, and the west line of the 55,316 acro tract, from said point a 60D nail found for an angle point in the west line of the 55,316 acre tract, being also the southeast corner of Lot 24, Block C, The Hills of Lost Creek, Section 5, bears South 35'37'32" East, a distance of 48,67 feet.

THENCE North 54\*16'55' East, leaving the east line of Block C. The Hills of Lost Creek, Section 5, over and acrose the 55.316 acre tract a distance of 50.36 feet to a 5/6" iron rod with aluminum cap eet for the POINT OF BEGINNING, (N=10074457.22 ust, E=3086696.29 ust, NAD837HARN traxs. Central Zone Grid Coordinates), being also in the east line of a 100' wide Easternent from Herry Wire to LCRA recorded in Volume 649. Page 620 Deed Records of Travis Courty, Taxas, as delineated on the final plat of said The Hills of Lost Creek, Soction 5, for the northwest corner of this tract,

THENCE over and across the 55.316 acre tract the following four (4) courses and distances:

- North 54\*16'55" East, a distance of 35.00 feet to a 5/8" iron rod with aluminum cap set, for the northeast corner of this tract;
- South 35'39'27' East, 35' from and parallel to the said 100' wide Easement, a distance
  of 1300.80 feet to a 56' iron rod with atuminum cap eat, for the southeast corner of this
  tract, from said point a 3/8' iron rod found for an angle point in the east time of the 55.316
  acre tract, being also the southwest comer of Lot 1, Block D. Lost Creek Hilliop, a
  subdivision of record in Volume 77, Page 156 of the Plat Records of Travis County,
  Texas beens North 69'59'37" East, a distance of 263.14 feet;
- South 54"20"19" West, a distance of 35.00 feet to a 5/8" iron rod with aluminum cap set, for the southwest comer of this tract, being also the east line of the 100" wide Easement:
- North 35'39'27 West, with the east line of the 100' wide Easement a distance of 1300.76 feet to the POINT OF BEGINNING. Said tract contains 1.045 acres of land more or less.

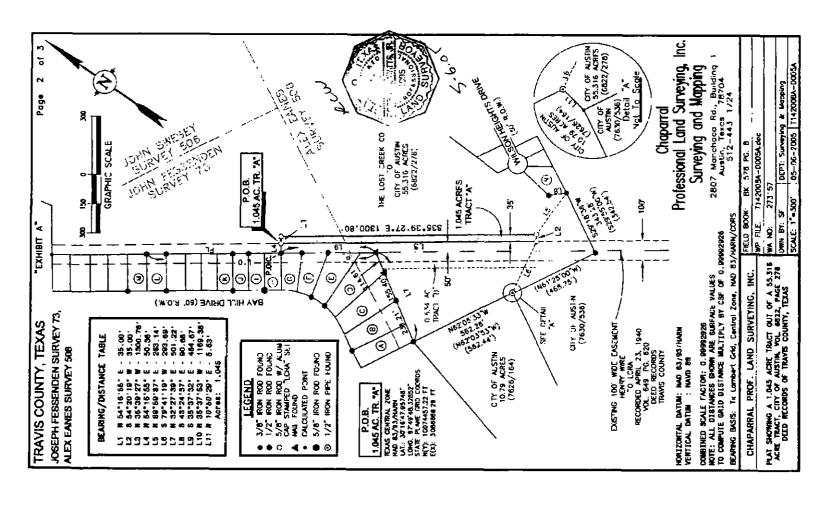
The lield noises and plat attached hereto are an accurate ropresentation of a survey made and monumented on the ground under my supervision in the month of April, 2005.

Wellet (7 5-6-0

Robert C. Watts, Jr. Texas Registered Professional Land Surveyor #4995 Chaparral Professional Land Surveying, Mc.

Bearing Basis: Lambert Gnd Texes Central Zone - NAD83/93/HARN Word Doc File: T142008A-0005A.doc AutoCAD File: T142008A-0005A.dwg





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TRAVIS COUNTY, TEXAS JOSEPH FESSENDEN SURVEY 73, ALEX EANES SURVEY 508	(A)   LOT 27   BLOCK C, "HE MILS OF   LOST CREEK SECTION 5     (79/74)	HORIZONTAL DATUM: NAD 89/89/HARN VERITCAL DATUM: NAYO 89 CODELICAL DATUM: NAYO 89 CODELICAL DATAMES BY SERVER VALUES TO COMPUTE ORIO DISTANCE MALTIPLY BY GSF OF 0.99982928 BEARING BASS- Tx Lumbert Gist, Central Zone, NAO. 89/HARN/COPS CHAPARRAL PROF. LAND SURVETNING, INC. PELD BOOM PLIT SHOWING A 1.045 ACRE TRACT OUT OF A 33.316 WA NO. ACRE TRACT, CITY OF ALSTIN, YOL. 6822, PAGE 278 SOULE: 17

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## "EXHIBIT A"

TRACT 18

FIELD NOTE DESCRIPTION OF A 0.634 ACRE EASEMENT TRACT, LOCATED IN THE ALEX EANES SURVEY 508, TRAVIS COUNTY, TEXAS, SAID 0.634 ACRE TRACT IS CONTINIED WARRANTY DEED TO THE CONTINIED WITHIN A 5.316 ACRE TRACT DESCRIBED IN A WARRANTY DEED TO THE CITY OF AUSTIN, DATED DECEMBER 19, 19179 DECORDOS IN VOLUME 6822, PAGE 278 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, SAID 0.634 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING, (N=10073988.99 usit, E=3086879.15 usit, NAD8374JARN Texas Central Zore Gird Coordinates), at a 50° iron rod with aluminum cap set in the southeast line of Lot 24, Block C, The Hits of Lots Creek Section 5, a subdivision of record in Volume 79. Page 74 of the Pial Records of Travis County, Texas, being also the west line of a 100° wide Easement from Henry Wire to LCRA recorded in Volume 649, Page 620 Deed Records of Travis County. Texas, as delineated on the final plat of said The Hits of Lots Creek, Section 5, for the northeast corner of this tract, and being in the west line of the 55,316 acre tract, from said point a 80D rail found for an angle point in the west line of the 55,316 acre tract, being also the southeast corner of Lot 24, bears North 32\*2739\*East, a distance of 53.21 feet;

THENCE leaving the southeast line of Lot 24 over and across the 55.316 acre tract the following three (3) courses and distances:

- 1. South 35'39'27" East, with the west line of the 100' wube Easement, a distance of 796.20 feet to a 5/8" iron rod with aluminum cap set, for the southeast corner of this track from said point a 3/8" iron rod found for an angle point in the east line of the 55.316 acre track, being also the southwest corner of Lot 1, Block D. Lost Creek Hillipp, a subdivision of record in Volume 77, Page 196 of the Plat Records of Travis County, Taxas beers Morth 78'04'29' East, a distance of 381.05 feet.
- South 54'20'19" West, a distance of 35.00 feet to a 5/8" iron rod with aluminum cap set, for the southwest corner of this tract;
- 3. North 35'39'27' Weet, 35' from and parallel to the said 100' wide Easement, a distance of 782.15 feet to a 58' iron rod with aluminum cap set, for the northweet corner of this track, being also the southeast line of Lot 24, and being in the west line of the 55.316 acre track, from easil point a 60D roal found for the southwest corner of Lot 24 bears South 32'27'39' Weet, a distance of 23.68 feet.

THENCE North 3272739" East, with the southeast line of Lot 24, and being in the west line of the 55,316 acre tract, a distance of 37.72 feet to the POINT OF BEGINNING. Said tract contains 0.634 acres of land more or less.

The field notes and plat attached hereto are an accurate representation of a survey made and monumented on the ground under my supervision in the month of April, 2005.

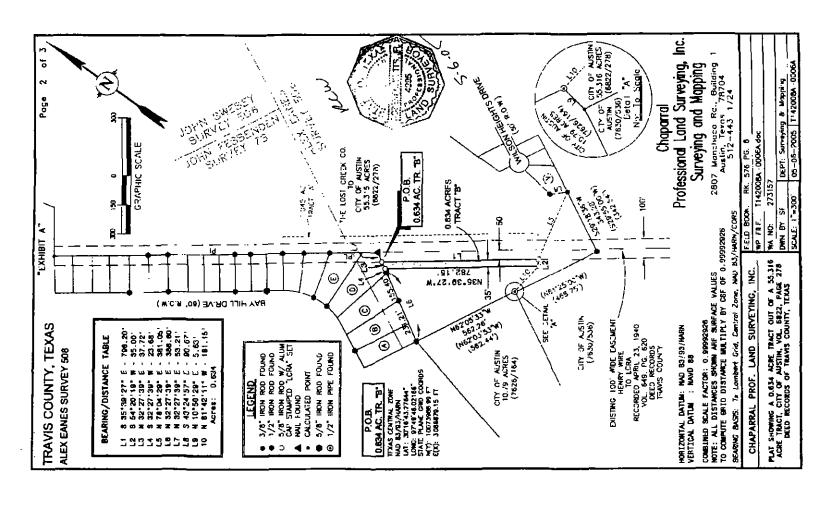
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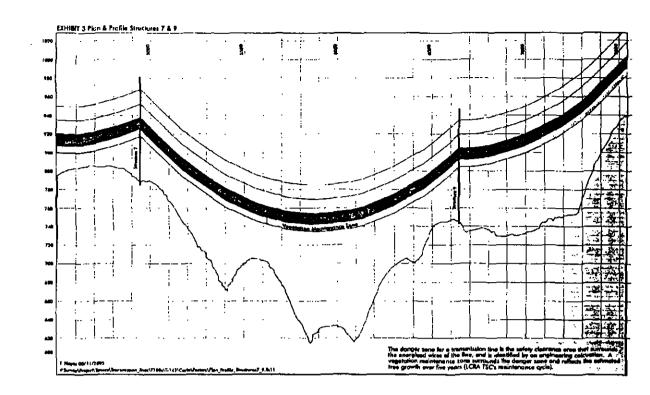
Robert C. Watts, Jr.

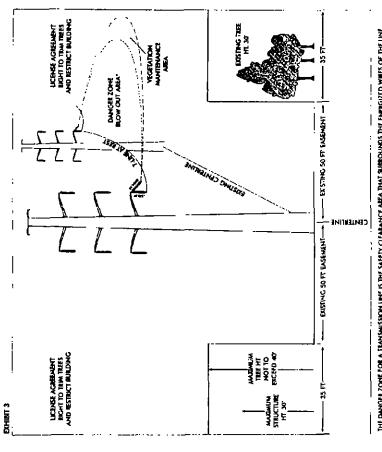
Texas Registered Professional Land Surveyor #4995 Chaparral Professional Land Surveying, Inc. Besing Besis: Lambert Grid Texas Central Zone - NADS3/93/HARN Word Doc File: TH2008A-0006A.doc AutoCAD File: T142008A-0006A.dwg



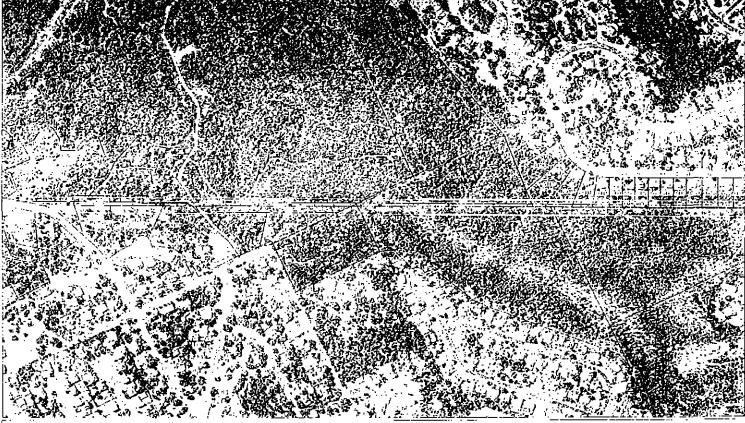


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## No.060105-D WATER AND WASTEWATER COMMISSION RESOLUTION A LICENSE AGREEMENT WITH LOWER COLORADO RIVER AUTHORITY (LCRA) June 1, 2005

REGULAR MEETING VOTE: 8-0-0-1

Motion made by:

Coleman

Commissioners Consenting:

Raun, Friese, Warner, Chan, Lee, Scott-Ryan, Gonzalez

Commissioners Dissenting:

Commissioners Abstaining:

Commissioners Absent:

Pool

The Water and Wastewater Commission recommends the Council authorize the City Manager to negotiate and execute a license agreement with Lower Colorado River Authority (LCRA) allowing a 70 foot aerial expansion of an existing 100 foot infrastructure corridor located in Barton Creek Wilderness Park to a total of 170 feet

Michael Warner Chairperson

Water and Wastewater Commission

(3/1/05 Date