#### **ZONING CHANGE REVIEW SHEET**

**CASE:** C14-2010-0042 – Sunset Ridge

**P.C. DATE:** April 27, 2010

May 11, 2010 June 9, 2010

ADDRESS: 8401 Southwest Parkway

**OWNER & APPLICANT:** Los Indios Ventures, Inc. (Tim Jamail)

**ZONING FROM:** IP-NP

TO: GO-NP

AREA: 9.6 acres

**SUMMARY STAFF RECOMMENDATION** (Revised since May 11, 2010):

The Staff recommendation is to grant general office – conditional overlay – neighborhood plan (GO-CO-NP) combining district zoning. The Conditional Overlay: 1) limits the number of daily vehicle trips to 2,200; 2) modifies Section 25-2-1025(A) to allow water quality and detention pond-facilities for an office use to count towards fulfillment of the 40 percent natural area requirement; and 3) modifies Section 25-2-1025(A) to reduce the natural area requirement to 30 percent for a religious assembly use, and allow water quality and detention pond facilities to count towards fulfillment of this requirement.

#### PLANNING COMMISSION RECOMMENDATION:

April 27, 2010: APPROVED A POSTPONEMENT REQUEST BY THE NEIGHBORHOOD TO MAY 11, 2010.

[M. DEALEY; D. ANDERSON –  $2^{ND}$ ] (9-0)

May 11, 2010: APPROVED GO-CO-NP DISTRICT ZONING AS STAFF RECOMMENDED; BY CONSENT.

[C. SMALL; M. DEALEY – 2<sup>ND</sup>] (8-0) J. REDDY – ABSENT

June 9, 2010:

**ISSUES** (Revised since May 11, 2010):

Since the Planning Commission meeting of May 11, 2010, a new addition to the Applicant's request has been made to modify the application of the Hill Country requirements that 40 percent of a site be left in a natural state [LDC 25-2-1025 – Natural Area]. This section also allows for Commission and Council to modify this requirement. For an office use, the Applicant proposes that the water quality and detention pond area which comprises 1.135 acres count towards fulfillment of the 40 percent natural area requirement. Please refer to the conceptual site plan provided as Exhibit D. For a religious assembly use, the Applicant proposes to reduce the amount of natural buffer area to 30%, which would also include the 1.003 acre water quality/detention pond area as shown in the conceptual plan provided in Exhibit E. The required 50-foot wide Hill Country Roadway vegetative buffer is provided in

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both scenarios. Staff supports the Applicant's requests as the Restrictive Covenant establishes that the property is subject to the terms of the Williamson Creek Ordinance which allows for a higher amount of impervious cover.

The Applicant's engineer has provided a letter outlining three different water quality scenarios which is located at the very back of the packet.

The Applicant has met to discuss the restrictive covenant amendment and rezoning cases with the Travis Country West Home Owners Association. A letter of support from the Association is provided at the back of the packet.

#### **DEPARTMENT COMMENTS:**

The rezoning area is a legal tract with frontage on Southwest Parkway, contains one vacant structure and is zoned industrial park – neighborhood plan (IP-NP) district with the base district established through the 1985 Oak Hill Area Study. The Restrictive Covenant attached to the IP zoning ordinance establishes a maximum floor-to-area ratio of 0.25 to 1; requires compliance with the Williamson Creek ordinance; and establishes permitted and conditional commercial, industrial and civic uses.

The tract is adjacent to the Travis Country West subdivision to the east and south (SF-2-CO-NP), one single family residence to the west (GO-MU-CO-NP), and undeveloped land across Southwest Parkway to the north (LR, LO, SF-6-CO, all outside the Oak Hill Combined Neighborhood Planning Area). Please refer to Exhibits A (Zoning Map) and A-1 (Aerial View).

The Applicant is seeking to amend the Restrictive Covenant in order to construct an office development, and has also been approached by a church to add religious assembly, and related administrative support, day care services and educational facilities as a permitted use.

Staff has recommended that the Applicant file a rezoning request from IP-NP to GO-NP in conjunction with the related Restrictive Covenant Amendment request to modify certain uses and development standards. Staff supports the rezoning and restrictive covenant amendment requests as it will remove an industrially-zoned tract and other intensive industrial and commercial uses over the aquifer, provide SOS water quality ponds, and reduce the maximum impervious cover for an office use from 65% to 55%.

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#### **EXISTING ZONING AND LAND USES:**

|       | ZONING                      | LAND USES  |
|-------|-----------------------------|--|
| Site  | IP-NP                       | One vacant structure; Undeveloped  |
| North | SF-2-CO; SF-6-CO;<br>LR; LO | Undeveloped; One single family residence                                     |
| South | SF-2-CO-NP                  | Pond and single family residences within the Travis Country West subdivision |
| East  | SF-2-CO-NP                  | Pond and single family residences within the Travis Country West subdivision |
| West  | GO-MU-CO-NP                 | One single family residence  |

NEIGHBORHOOD PLANNING AREA: West Oak Hill TIA: Is not required

<u>WATERSHED:</u> Williamson Creek / <u>DESIRED DEVELOPMENT ZONE:</u> No Barton Creek – Barton Springs Zone – Contributing Zone

#### CAPITOL VIEW CORRIDOR: No-

#### HILL COUNTRY ROADWAY: Yes

#### **NEIGHBORHOOD ORGANIZATIONS:**

298 - Oak Hill Association of Neighborhoods (OHAN) 605 - City of Rollingwood

705 – OHAN 78735 712 – Travis Country West H

712 - Travis Country West Home Owners Association

742 – Austin Independent School District 779 – Oak Hill Combined NPA Staff Liaison

786 – Home Builders Association of Greater Austin

917 - Barton Creek North Property Owners Association

943 – Save Our Springs Alliance

1037 - Homeless Neighborhood Association

1075 – League of Bicycling Voters

1113 - Austin Parks Association

1166 - Oak Hill Neighborhood Planning Contact Team

1200 - Super Duper Neighborhood Objectors and Appealers Organization

1224 - Austin Monorail Project

1228 - Sierra Club, Austin Regional Group

1236 - The Real Estate Council of Austin, Inc.

#### **SCHOOLS:**

Oak Hill Elementary School

Small Middle School

Austin High School

### **CASE HISTORIES:**

| NUMBER        | REQUEST    | COMMISSION             | CITY COUNCIL                      |
|---------------|------------|------------------------|-----------------------------------|
| C14-2007-     | DR to MF-1 | To Grant MF-1-CO with  | Approved MF-1-CO as               |
| 0250 —        |            | the CO for 2,000 trips | Commission recommended with a     |
| Amarra Drive  |            | and maximum of 215     | Restrictive Covenant for two-star |
| Lot 1 – 8718- |            | units. The Commission  | Green Building and erosion and    |
| 8734          |            | also recommended that  | sedimentation control measures    |
| Southwest     |            | the Applicant comply   | that exceed current requirements  |

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| Parkway;<br>5105-5301<br>and 5305-<br>5325 Barton<br>Creek<br>Boulevard |  | with future erosion and sedimentation controls at the site permit stage | (3-20-08).   |
|---|--|---|--|
| C14-06-0061<br>- 8509<br>Southwest<br>Parkway                           | GO-MU-CO to GO-MU-CO, in order to remove the CO that restricts development of the Property to one residential unit | To Grant GO-MU-CO with the CO for a 2,000 trips per day limit           | Approved GO-MU-CO as<br>Commission recommended (07-<br>27-06).   |
| C14-01-0083  - Sutter  Residence -                                      | DR to SF-2   | To Grant SF-2-CO with CO for 2 residences                               | Approved SF-2-CO with CO for 0.184 residences per acre (8-23-01)   |
| 8700<br>Southwest<br>Parkway  |  |   |  |
| C14-99-2144 - Travis Country West - Southwest Parkway at                | LR; GR; IP to<br>SF-2  | To Grant SF-2-CO  | Approved SF-2-CO with CO establishing a maximum of 2.139 residential units per acre and allowing one curb cut to Old Bee Caves Road (10-5-00). |
| Travis Cook<br>Road   | 60. 60.151   |   |  |
| C14-94-0044 - Jamail Zoning Change - 5601 Sunset Ridge                  | GO to GO-MU  | To Grant GO-MU-CO   | Approved GO-MU-CO with the CO restricted to one dwelling unit (6-23-94).   |
| C14-92-0117 - Parkway II - 8212 Barton Club                             | SF-3; LO, LR<br>to GR  | Scheduled for<br>Commission, but<br>postponed indefinitely -<br>Expired | Not applicable   |

#### **RELATED CASES:**

1985 Zoning and Restrictive Covenant

The subject property was annexed into the City limits on December 19, 1985 approved for IP zoning on September 17, 1987 (C14-85-288.166), as part of the Oak Hill Study. The Restrictive Covenant attached to the IP zoning ordinance establishes development standards, as well as permitted and conditional uses. A copy of the recorded Restrictive Covenant is provided as Attachment A.

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#### 2008 Oak Hill Neighborhood Plan and Rezonings

The property is designated as Office on the Future Land Use Map (FLUM) of the Oak Hill Neighborhood Plan. The rezonings associated with the West Oak Hill Neighborhood Plan Area were approved by Council on December 11, 2008 (C14-2008-0129, Ordinance No. 20081211-098). The base district of the subject property did not change, and the NP combining district was added.

#### 2010 Restrictive Covenant Amendment

The Applicant requests an amendment of the Restrictive Covenant to increase the FAR and reduce the maximum impervious cover for an office use, add religious assembly and related administrative support, day care services and educational facilities as a permitted use, provide SOS water quality ponds for either an office or religious assembly use, and remove 10 of the more intensive industrial and commercial uses over the aquifer (C14-85-288.166 (RCA) – Sunset Ridge).

#### Land Use Determination and Approved Site Plan

The property has an approved land status determination and is not required to be platted (C8i-03-0087). There is an existing approved site plan for a three-story office building and a four-level parking garage that is within the 0.25: to 1 FAR limitation. This site plan is valid until September 9, 2010 (SPC-03-0014C). Please refer to Exhibit C.

#### **ABUTTING STREETS:**

| Name                 | ROW     | Pavement | Classification                                  | Sidewalks | Bike<br>Route                       | Capital<br>Metro |
|----------------------|---------|----------|---|-----------|-------------------------------------|------------------|
| Southwest<br>Parkway | Varies  | Varies   | Arterial, MAD 6,<br>17,300 vpd<br>(TXDOT, 2005) | No        | Yes,<br>Priority<br>1 bike<br>route | Not<br>available |
| Sunset<br>Ridge      | 50 feet | Varies   | Local   | No        | No                                  | No               |

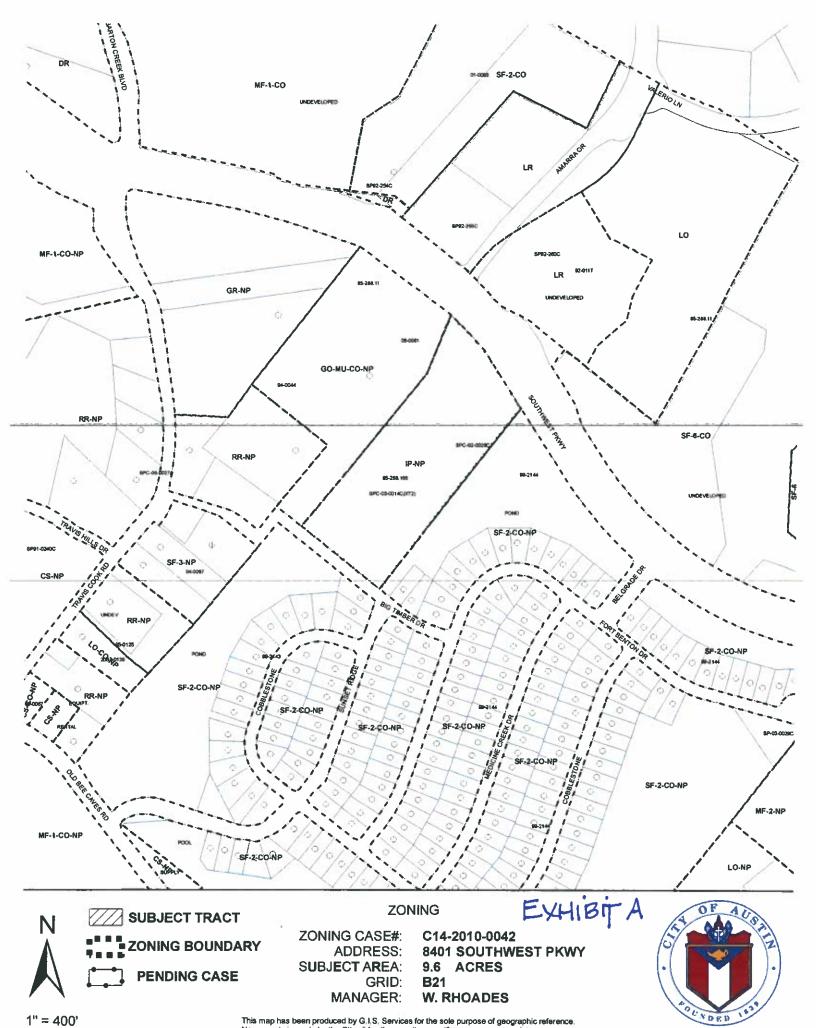
CITY COUNCIL DATE: May 27, 2010

ACTION: Approved a Postponement request by the Applicant to June 10, 2010 (6-0, Spelman – off the dais).

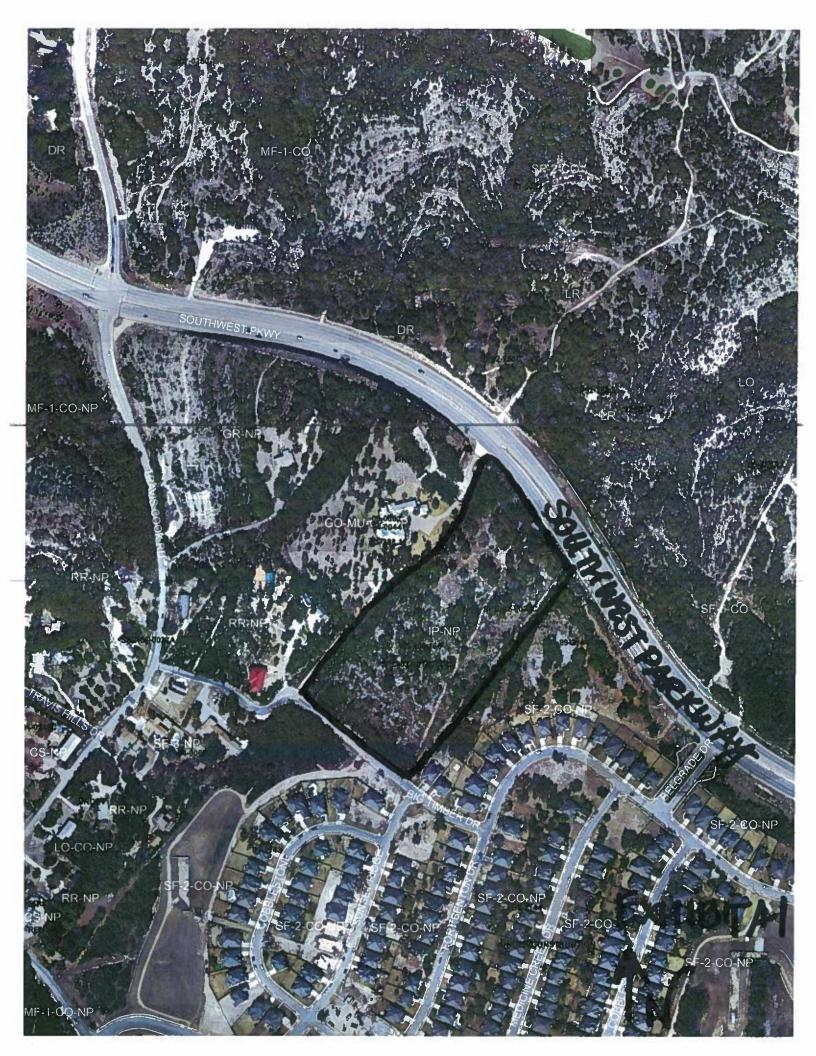
June 10, 2010

<u>CASE MANAGER:</u> Wendy Rhoades e-mail: wendy.rhoades@ci.austin.tx.us

**PHONE:** 974-7719







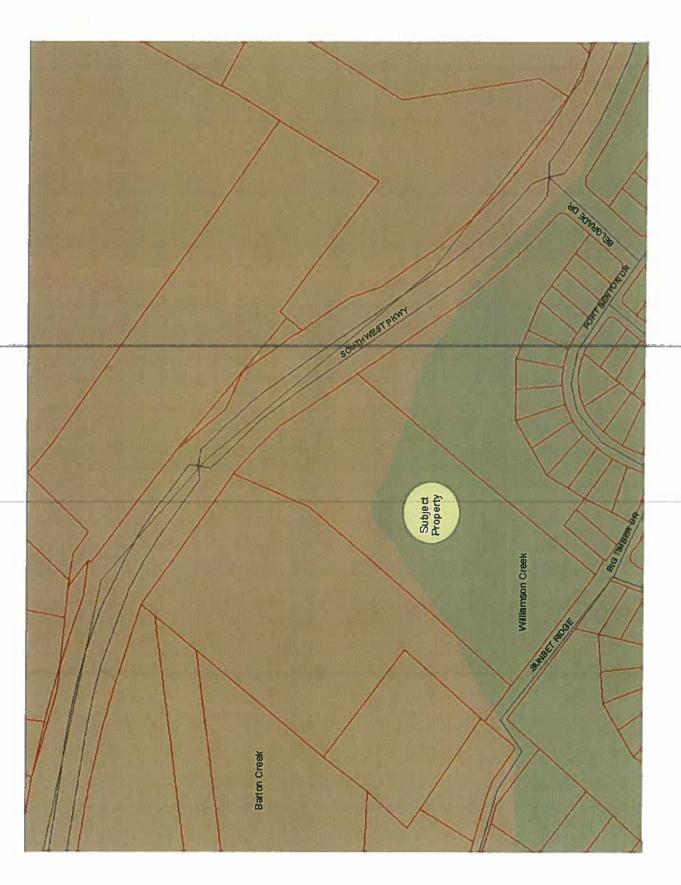


EXHIBIT B WATERSHED MAP

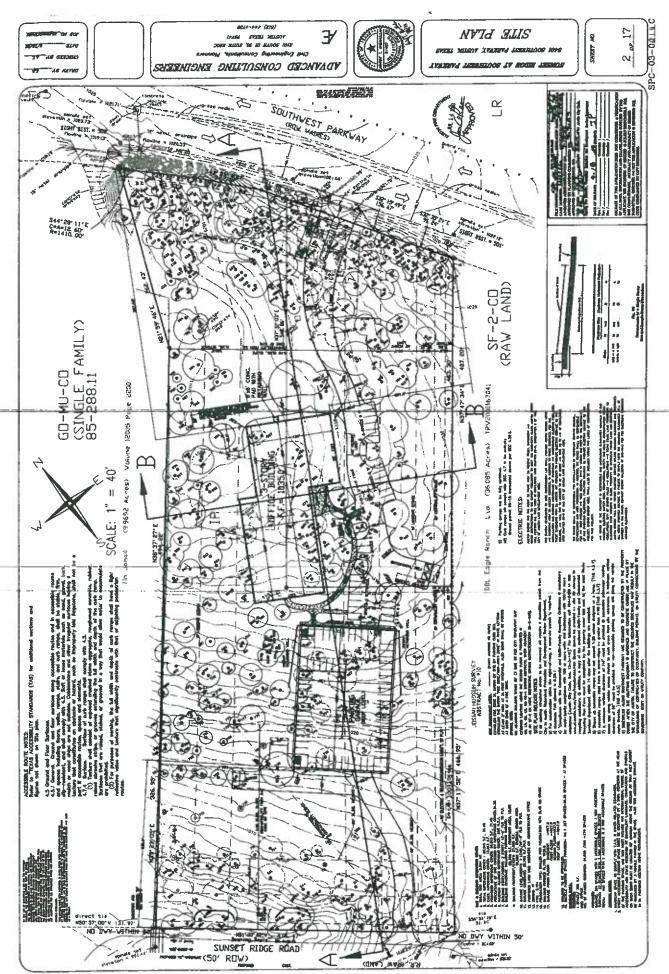
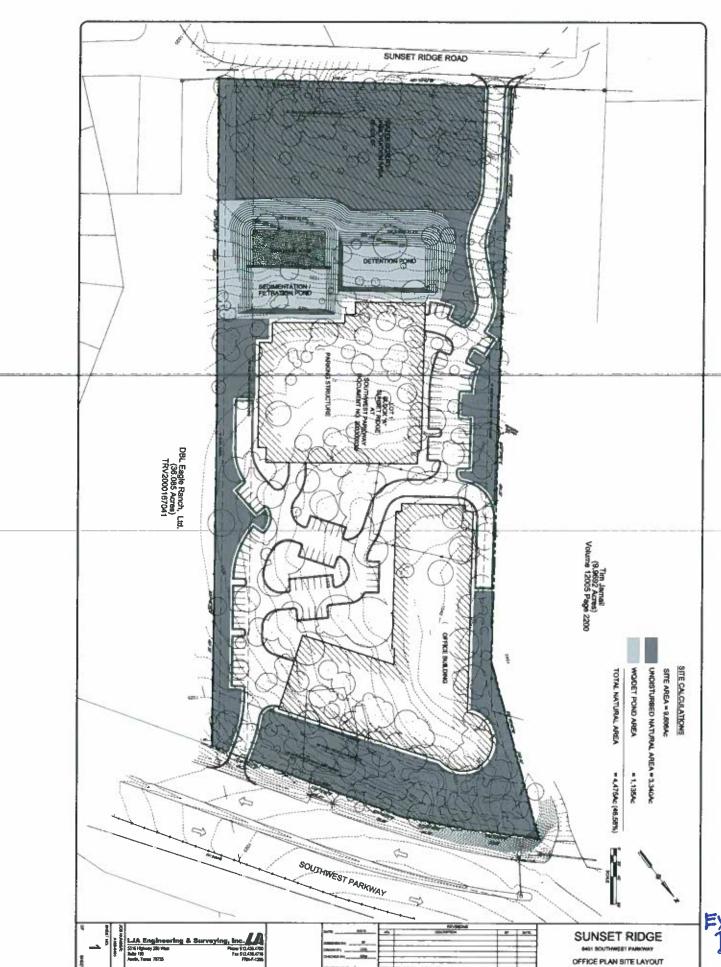
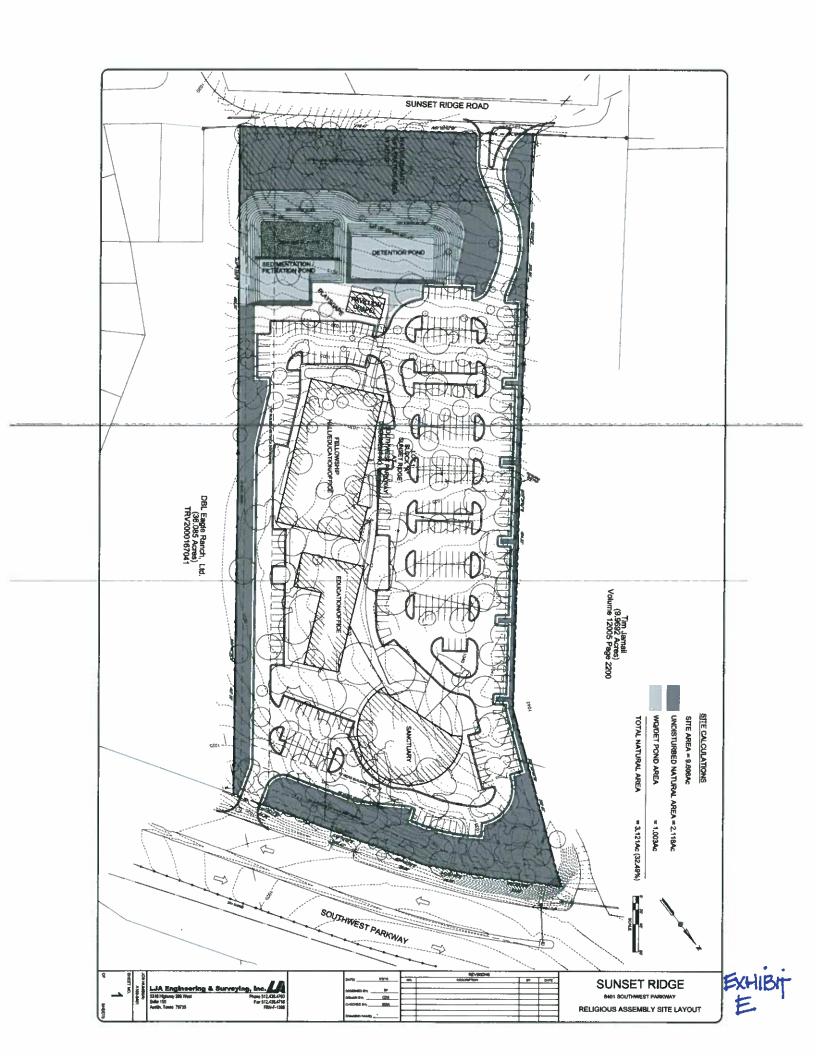


EXHIBIT C APPROVED SITE PLAN



EXHIBIT



#### RESTRICTIVE COVENANT

Owner: Boston Lans G.L.S. Joint Venture

Owner's Address: 11130 Jollyville Road. Austin, Texas 78759

Consideration: One and No/100 Dollars (\$1.00) and other good and valuable consideration paid by the City of Austin in hand to the Owners, the receipt and sufficiency of which is acknowledged.

Property:

All that certain tract, piece or parcel of land, lying and being situated in the County of Travis, State of Texas, described in Exhibit "A" attached hereto and made a part hereof for all purposes, to which reference is here made for a more particular description of said property; and,

Owners of the Property, for the consideration, impress the Property with these covenants and restrictions running with the land:

- 1. The Property shall be limited to a maximum of.25 to 1 floor to area ratio as defined by Section 1212 of Chapter 13-2A of the Austin City Code.
- 2. Development of the Property shall be in compliance with Sections 9-10-171 through 9-10-230 and Sections 13-3-401 through 13-3-475 of the Austin City Code, which regulats site development and subdivisions in the Williamson Creek Watershed.
- 3. The Property shall be limited to the following use types, defined in the Austin City Code:

Commercial Uses Administrative and Business Offices Agricultural Sales and Services\* Arts and Craft Studio (Limited) Arts and Craft Studio (General) Arts and Craft Studio (Industrial) Building Maintenance Services Business Support Services Business or Trada School Communications Services Constructions Sales and Services Financial Services Indoor Entertainment Indoor Sports and Recreation Medical Offices Outdoor Sports and Recreation Personal Services Professional Offices Research Services\* Restaurant (Convenience) Restaurant (Limited) Restaurant (General) Mervice Station

\*Not permitted in the Critical Water Quality Zons.

Industrial Uses
Custom Manufacturing
Light Manufacturing
Limited Warehouse and Distribution
General Warehouse and Distribution

attachment a

civic Uses
Communication Services Pacilities
Cultural Services
Cultural Services
Cultural Services (Commercial)
Group Homes, Class I (Limited & General)
Group Homes, Class II
Local Utility Services
Maintenance and Services Facilities
Railroad Facilities
Safety Services

4. The following use types are permitted if approved by the Conditional Use Procedure described in Sections 6200 through 6290 of Chapter 13-2A of the Austin City Code:

Commercial Uses Outdoor Entertainment

<u>Civic Uses</u> Club or Lodge Parking Facilities

- 5. If any person or entity shall violete or attempt to violete the foregoing agreement and covenant, it shall be lawful for the City of Austin, a municipal corporation, its successors and assigns, to prosecute proceedings at law or in equity, against such person or entity violating or attempting to violate such agreement or covenant, to prevent the person or entity from such actions, and to collect damages for such actions.
- 6. If any part of this agreement or covenant shall be declared invalid, by judgment or court order, the same shall in no way affect any of the other provisions of this agreement, and such remaining portion of this agreement shall remain in full affect.
- 7. If at any time the city of Austin, its successors or assigns, fails to enforce this agreement, whether or not any violations of it are known, such failure shall not constitute a waiver or estopped of the right to enforce it.
- 8. This agreement may be modified, amended, or terminated only by joint action of both (a) a majority of the members of the City Council of the City of Austin, or such other governing body as may succeed the City Council of the City of Austin, and (b) the owner(s) of the Property at the time of such modification, amendment or termination.

All citations to the Austin City Code shall rafer to the Austin City Code of 1981, as emended from time to time, unless otherwise specified.

When the context requires, singular nouns and pronouns include the plural.

| EXECUTED this | the 20th day of | The second secon | , 1987.   |
|---------------|-----------------|--|-----------|
|               | Boston          | zana orz.s. foin   | t Venture |
|               | BY: _           | Robert R. Gunn   |           |

288.166/2

# Oak Hill Surveying Co., Inc. 6120 Hwy. 290 West - Austin, TX 78735 - (512) 892-5320

Sept. 13, 1984

FIELD MOTES DESCRIBING A 12.1557 ACRE (529,500 S.F.) TRACT OF LAND OUT OF THE J. HUDSON SURVEY MO. 530 IN TRAVIS COUNTY, TEXAS, SAID 12.1557 ACRE TRACT OF LAND BEING CONVEYED TO E. F. OERTLI BY DEED RECORDED IN VOLUME 2401, PAGE 10 AND VOLUME 2308 PAGE 166 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, SAID 12.1557 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at an iron pipe found on the Northeast line of a 50° wide roadway easement at the Southwest corner of that certain 52.59 scre tract of land conveyed to James H. Arnold, et. ux. by deed recorded in Volume 3459, Page 2250 of the Travis County Deed Records, said point being situated at the Southeast corner of said tract conveyed to E. P. Certli by deed recorded in Volume 2401, Page 10 of the Travis County Deed Records.

THENCE with the Northeast boundary line of said Roadway Easement N46°49'20"W for 416.53 feet to an iron pipe found at the most Southerly corner of that certain 11.50 scre tract of land conveyed to Evan Hintner by deed recorded in Volume 6513, Page 107 of the Travis County Deed Records.

THENCE along the East boundary ofusaid 11.50 acre tract same being the West boundary of the herein described tract the following three (3) courses:

1. M43\*35'26"E for 326.82 feet to an iron pipe found.

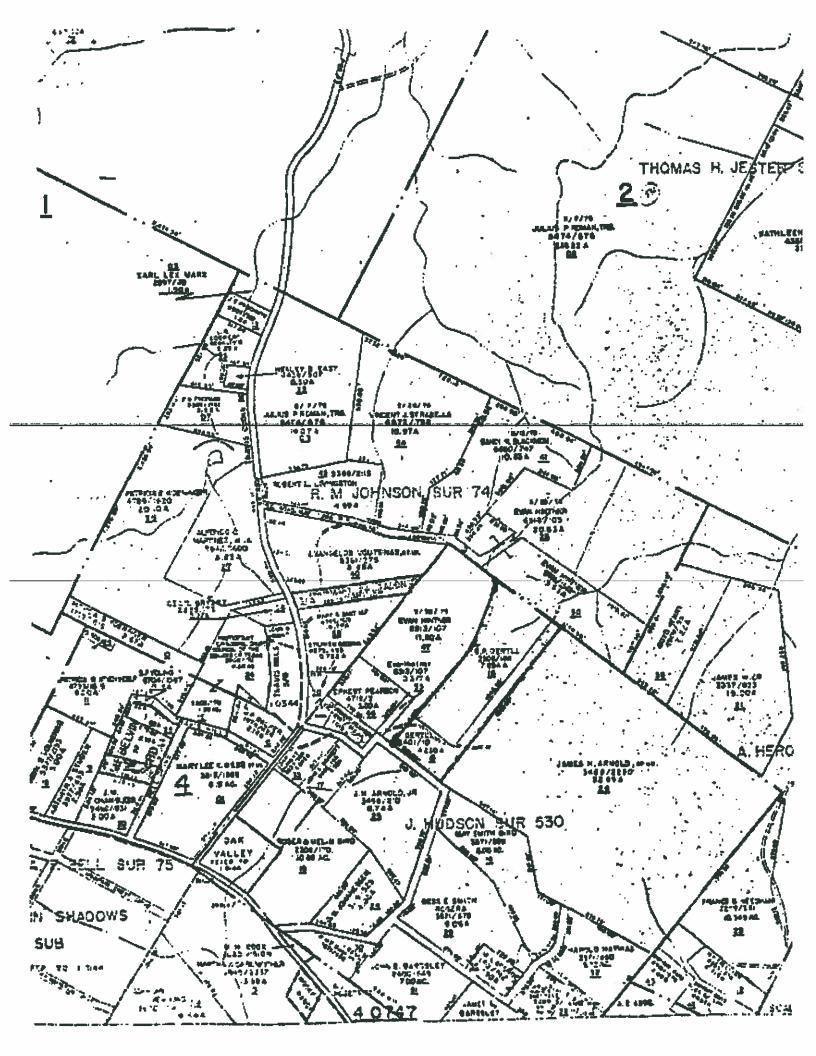
2. M42°32'12"E for 494.13 feet to an iron pipe found.

3. N26°11°24"E for 450.08 feet to an iron pipe found on the Southwest boundary line of that certain 9.53 acre tract of land described in e daed to Evan Hintner recorded in Volume 5991, Page 1382 of the Travis County Deed Records.

THENCE with the fenced Southwest boundary line of said 9.53 acre tract \$46\*43'32"E for 517.82 feet to an iron pipe found at the Northwest corner of said 52.59 acre James N. Arnold tract.

THENCE along the fenced West boundary line of said 52.59 acre tract \$41°46'34"W for 1250.90 feet to the POINT OF BEGINNING of the herein described tract containing 12.1557 acres of land more or less.

I HEREBY CERTIFY that these notes were prepared from a survey made on the ground under my supervision according to law and true and correct to the best of my knowledge.



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#### **SUMMARY STAFF RECOMMENDATION** (Revised since May 11, 2010):

The Staff recommendation is to grant general office – conditional overlay – neighborhood plan (GO-CO-NP) combining district zoning. The Conditional Overlay: 1) limits the number of daily vehicle trips to 2,200; 2) modifies Section 25-2-1025(A) to allow water quality and detention pond facilities for an office use to count towards fulfillment of the 40 percent natural area requirement; and 3) modifies Section 25-2-1025(A) to reduce the natural area requirement to 30 percent for a religious assembly use, and allow water quality and detention pond facilities to count towards fulfillment of this requirement.

#### BASIS FOR LAND USE RECOMMENDATION (ZONING PRINCIPLES)

1. The proposed zoning should be consistent with the purpose statement of the district sought.

The general office (GO) district is intended for offices and selected commercial uses predominantly serving community or City-wide needs, such as medical or professional offices. A building in a GO district may contain more than one use.

2. Zoning changes should promote compatibility with adjacent and nearby uses.

Staff supports the rezoning and restrictive covenant amendment requests as it will remove an industrially-zoned tract and other intensive industrial and commercial uses over the aquifer, provide SOS water quality ponds, and reduce the maximum impervious cover for an office use from 65% to 55%.

#### **EXISTING CONDITIONS**

#### Site Characteristics

The site contains one vacant structure located along Southwest Parkway, and is otherwise undeveloped. The property slopes gently towards Sunset Ridge to the south.

#### **Impervious Cover**

The maximum impervious cover allowed on commercial properties subject to the Williamson Creek ordinance is 65% for areas with slopes between 10 and 20 percent.

#### **Environmental**

This site is not located over the Edwards Aquifer Recharge Zone (the site is located over the Edwards Aquifer Contributing Zone). As shown in Exhibit B, the site is in the Williamson Creek and the Barton Creek Watershed of the Colorado River Basin, which are classified as Barton Springs Zone (BSZ) watersheds. It is in the Drinking Water Protection Zone. At this time, information has been provided indicating that a Restrictive Covenant grandfathers the property to the Williamson Creek Ordinance (Ordinance No. 840726-LL).

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Single and two-family residential development shall not exceed a projected impervious cover of 40 percent. The projected impervious cover on any single commercial lot shall not exceed 40 percent within 200 feet of a Critical Water Quality Zone of a major waterway, within 100 feet of a Critical Water Quality Zone of an intermediate waterway, and no commercial development shall occur within 100 feet of the centerline of a minor waterway. Unless the aforementioned commercial development provisions are more restrictive, no commercial development shall exceed 65 percent cover on slopes of 10 to 20 percent gradient, nor 25 percent on slopes greater than 20 percent gradient.

According to flood plain maps, there is no flood plain within the project location.

The site is located within the endangered species survey area.

Numerous trees will likely be impacted with a proposed development associated with this rezoning case. If further explanation or specificity is needed, please contact the City Arborist at 974-1876.

All developments on this site will be subject to providing detention, sedimentation, and filtration for water quality control when projected impervious cover exceeds 18 percent.

#### **Transportation**

Additional right of way may be required at the time of subdivision or site plan application.

A traffic impact analysis was waived for this case because the applicant agreed to limit the intensity and uses for this development. If the zoning is granted, development should be limited through a conditional overlay to less than 2,200 vehicle trips per day. [LDC, 25-6-117]

#### Water and Wastewater

The landowner intends to serve the site with City of Austin water and wastewater utilities. The landowner, at own expense, will be responsible for providing any water and wastewater utility improvements, offsite main extensions, utility relocations and or abandonments required by the land use. The water and wastewater utility plan must be reviewed and approved by the Austin Water Utility for compliance with City criteria. All water and wastewater construction must be inspected by the City of Austin. The landowner must pay the City inspection fee with the utility construction. The landowner must pay the tap and impact fee once the landowner makes an application for a City of Austin water and wastewater utility tap permit.

#### Site Plan and Compatibility Standards

Any changes to the site plan which is affected by this amendment will need to proceed through the revision process. The revision will need to comply with Commercial Design Standards, Subchapter E, per the approval of the extension on February 6, 2007.

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FYI -The site plan was extended until September 9, 2010.

If the restrictive covenant amendment is approved, a correction will need to be submitted to update the FAR, gross floor area on the site plan sheets.

The site is located within 1,000 feet of Southwest Parkway and within a Hill Country Roadway Corridor. Except for clearing necessary to provide utilities or site access, a 50 foot vegetative buffer will be required along Southwest Parkway. Buildings must be at least 75 feet from the dedicated right-of-way or drainage easement (Section 25-2-1023(B) – Roadway Vegetative Buffer). The height of a building in the Southwest Parkway roadway corridor may not exceed the lesser of: the height permitted by the zoning or the site plan approved for the property; or 60 feet.

The site is subject to compatibility standards. Along the east property line, the following standards apply:

- · No structure may be built within 25 feet of the property line.
- · No structure in excess of two stories or 30 feet in height may be constructed within 50 feet of the property line.
- · No structure in excess of three stories or 40 feet in height may be constructed within 100 feet of the property line.
- · No parking or driveways are allowed within 25 feet of the property line. In addition, a fence, berm, or dense vegetation must be provided to screen adjoining properties from views of parking, mechanical equipment, storage, and refuse collection.

Additional design regulations will be enforced at the time a site plan is submitted.

# **Travis Country West Homeowner's Association**

11149 Research Blvd., Suite 100, Austin, TX 78759-5227 Voice (512) 502-7517 Fax (512) 346-4873 1-800-900-9120

1149 Research Blvd., Suite 100 Austin, TX 78759

April 23, 2010

To Whom It May Concern:

Please consider this letter as a first request for postponement of rezoning case #: C14-85-288.166(RCA)

Sunset Ridge pertaining to the property located at 8401-Southwest Parkway. We are making this request on behalf of the Travis Country West Home Owner's Association (The Association). The Association would like to request a two-week postponement with a date certain of May 11, 2010. We hope to complete our decision process that will determine our public input on the case during the two weeks and we hope that we will not need to request a second postponement.

Sincerely,

Seth Prejean Director Travis Country West HOA



Terrence L. Irlon
Attorney at Law

2224 Walsh Tariton Suite 210 Austin, Texas 78746 512.347.9977 Fax: 512.347.7085 tirion@isblaw.com

May 7, 2010

VIA U.S. MAIL
Mr. Marco Martinez
C/o Mr. Carl A. Gamble
TCW Property Management, Inc.
11149 Research, Suite 100
Austin, Texas 78759-5227

Re: Travis Country Community Service Association, Inc./Los Indios Venture, Inc. Agreement

Dear Mr. Martinez:

This letter is written to you as President of the Travis Country Community Service Association, Inc. (the "Association"). My client Los Indios Ventures, Inc. ("Los Indios") proposes the following cooperation agreement.

As you know, Los Indios has an approved City of Austin site plan SP-03-0014C for Sunset Ridge at Southwest Parkway Office Development Project (the "Project"). This Project approves the construction of an office project in the "IP" industrial park zone district, which currently allows for 89,515 square feet of impervious cover. However, in March of 2008, Los Indios received a letter from the City acknowledging that the property was entitled to more impervious cover by applicable ordinance than is currently approved in the site plan and that the site plan can be amended to allow up to 270,753 square feet or 65% impervious cover as provided for under the Williamson Creek Ordinance.

There is a Restrictive Covenant on the property which currently limits the applicable FAR to .25:1. This covenant has the draw back of discouraging structured parking and a taller more compact building footprint in favor of covering a larger surface area with surface parking. The FAR restriction is not required by zoning, but only by a restrictive covenant running in favor of the City of Austin.

My client would propose that the Restrictive Covenant be amended to allow a .50 FAR. Furthermore, my client would request that the proposed amendment provide for an additional use to allow for religious assembly and private primary and/or secondary educational facilities/administrative support services in connection with religious assembly use. If a church purchases the property, it would not need the additional FAR, but would need the 65% impervious cover and for the Restrictive Covenant to include the additional civic use of religious assembly and private primary or secondary educational facilities. In addition, my client will ask for a variance from compatibility setback requirements which are triggered by the SF-2 zoning of the Conservation Easement abutting the eastern property line of the subject tract, whether the ultimate use is office or religious assembly. This will allow the Southwest Parkway driveway access to be located along the easterly property line for increased sight visibility to address traffic safety concerns.

Mr. Marco Martinez May 7, 2010 Page 2

In consideration for the neighborhood's support for the amendment of the Restrictive Covenant regarding FAR at Planning Commission and City Council, and the neighborhood's support for the compatibility waiver variances before the Board of Adjustment, my client would: (i) revise its approved site plan to relocate the office building footprint as a three and four story building further to the west; (ii) construct a structured parking garage towards the center of the tract limited in height to 45 feet; and (iii) relocate the access drive to Southwest Parkway along the easterly property line, and (iv) relocate the access drive to Sunset Ridge (which currently is at the southeastern corner of the tract) to the southwestern side of the tract and allow only emergency vehicle access via a "crash gate" from Sunset Ridge, all in accordance with the site plan and driveway detail attached to this letter as described in Attachment 1.

In the event the property is used for religious assembly and/or private primary or secondary educational facilities in connection with the religious assembly use: (a) the FAR would not exceed .25/1.0 and the height would be deed restricted to 45-feet; b) the access drive to Sunset Ridge (which currently is at the southeastern corner of the tract) would be relocated to the southwestern side of the tract and allow only emergency vehicle access via a "crash gate" from Sunset Ridge; and (c) items (i) and (ii) above would not apply. The Association hereby acknowledges that the representatives of All Saints Presbyterian Church would like the opportunity to continue their ongoing discussions with regard to the possibility of gaining the support of the Association for access on to Sunset Ridge from the subject property.

In the event the amendments to the Restrictive covenant described herein are not approved by the City of Austin, then this agreement shall be rendered null and void and of no further force and effect.

In further consideration for the support of this Restrictive Covenant amendment and Board of Adjustment variance, my client will continue to support the TCW Neighborhood's efforts to achieve meaningful traffic calming measures approved by the City. In light of the fact that we may not know if the traffic calming measures proposed by the City will achieve their desired results before your neighborhood's support is requested on the Restrictive Covenant amendment and compatibility waiver variance, my client is willing to escrow the sum of \$30,000 in accordance with a mutually agreed escrow agreement to demonstrate its support for these neighborhood efforts. This money would be escrowed whether an office project or a church is developed on the subject property and may be used to construct traffic calming measures approved by the City within the neighborhood or to pursue the privatizing of Sunset Ridge between Old Bee Cave Road and Cobblestone Street and the construction of a gate. The escrow agreement would provide that the money could be used by the neighborhood for gate construction costs, or installation of other traffic calming devices and attorney's fees, consulting work, engineering fees, permit fees, and street vacation fees, in connection with the aforementioned gating or traffic calming measures as determined by the neighborhood and in accordance with the Escrow Agreement. The escrow funds would be escrowed at the time of final site plan approval by the City of Austin of either the proposed office project or religious assembly use as previously described and remain in place for a period of two (2) years, at the end of which time any remaining funds would be refunded to Los Indios.

In the event the property is developed as an office project, Los Indios will also agree to the signage, lighting, landscaping and trash restrictions as described in the Declaration of Covenants, Conditions and Restrictions previously negotiated with your Association, a copy of which is attached hereto as Attachment 3. Additionally, All Saints Presbyterian Church will agree to include the Association as a party to the proposed Declaration of Covenants, Conditions and Restrictions prepared in the event of a sale of the subject property to All Saints Presbyterian Church as previously provided to the Association to include provisions to (i) restrict access to Sunset Ridge to emergency vehicles only via a crash gate and (ii) prohibit parking of their

Mr. Marco Martinez May 7, 2010 Page 3

parishioners on the TCW neighborhood streets.

Sincerely

Terrence L. Irion

TLI:lm:

Cc: Tim Jamail

ACKNOWLEDGED AND AGREED:

Marco Martinez, President

Date: May 10,2010

Travis Country Community Service Association, Inc.

Subject to and corditioned upon final agreement of the form of all restrictive covenants, the escrew agreement and other obscurrents to memorialize this letter agreement prin to City Council approval. Man

## LJA Engineering & Surveying, Inc.



5316 Highway 290 West Suite 150

Austin, Texas 78735

Phone 512.439.4700 Fax 512.439.4716 www.ljeengineering.com

May 5, 2010

Mr. Tim Jamail Los Indios Ventures, Inc. 151 South First Street, Suite 200 Austin, TX 78714

Re.

8401 Southwest Parkway LJA Job Number A188-0401

Dear Mr. Jamail:

We are writing this letter to provide information to you on potential water quality scenarios for the 9.6 acre Sunset Ridge tract located at 8401 Southwest Parkway, east of Travis Cook Road. As you are aware, the referenced tract is subject to a City approved Restrictive Covenant, Case Number C14-85-266.166. Paragraph 2 of the Restrictive Covenant requires that the "Development of the Property shall be in compliance with Sections 9-10-171 through 9-10-230 and Sections 13-3-401 through 13-3-475 of the Austin City Code, which regulate site development and subdivisions in the Williamson Creek Watershed." Under these regulations, the subject tract would be allowed to be developed as a commercial development with 65% impervious cover and require water quality treatment via a sedimentation / filtration pond sized to capture the first 0.5 inch of runoff.

In conjunction with the two possible proposed amendments to the Restrictive Covenant, one to allow for an increased-FAR-under the existing approved-uses and the other possible amendment to allow for religious assembly use, it is our understanding that you have agreed to further restrict development of the property under either scenario such that water quality treatment will be increased to meet the non-degradation requirements of Section 1.6.9.3 of the Environmental Criteria Manual, as defined in the SOS Ordinance. Based on this, we have analyzed three basic scenarios in order to quantify the increased water quality benefits as proposed:

- 1) 65% Impervious cover under the Williamson Creek Ordinance
- 2) 65% impervious cover for Church use, with SOS water quality controls
- 3) 55% Impervious cover for Office use, with SOS water quality controls

It is important to note that no specific site plan was used to evaluate these scenarios; rather a generic control was used for the entire site acreage for comparison purposes. The actual volumes of ponds and pollutant loads may vary slightly once design is undertaken as controls are sized by drainage area contributing to them.

The first scenario is essentially a review of pollutant loads based on existing agreements in place. The Williamson Creek Ordinance (Ordinance No. 801218-W) requires water quality controls to be sized for a 0.5 inch capture volume, treated with a conventional sedimentation / filtration pond. The City of Austin has performed studies quantifying the amount of pollutant load bypassing water quality controls when the capture volume is 0.5 inches, specifically in The First Flush of Runoff and its Effects on Control Structure Design, 1990. The City's findings indicated that between 20 and 25 percent of the annual pollutant load was left untreated at this capture volume. In order to determine the actual pollutant load removals, we have used the City's published data on sedimentation / filtration pond efficiency coupled with the percent capture as described above. The results for all the required pollutants are shown on the enclosed spreadsheets, but overall removal percentage of annual pollutant loads range from 25% for total nitrogen (TN) to 71% for total suspended solids (TSS).

The second and third scenarios are potential development scenarios under which the site would voluntarily comply with the non-degradation requirements of the SOS ordinance, which requires no increase in the developed pollutant load from the pre-developed (baseline) pollutant load. Per these requirements, the capture volume is determined based upon the percent impervious cover draining to the pond. Based on this, the capture volume for Scenario 2 is 1.77 inches, while for Scenario 3 it is 1.59 inches. The attached spreadsheets show the required pollutant removal rates which range from 94.8% for TSS to 99.3% for Fecal Streptococci (FS) for Scenario 2, and from 93.5% for TSS to 99.1% for FS for Scenario 3. In order to accomplish this level of pollutant load removal, a form of retention followed by irrigation or infiltration on vegetated areas is required, thus resulting in a zero-discharge system that effectively removes 100% of the total pollutant load.

Based on this, the following Table summarizes the three scenarios:

|                   |          | Scer                          | nario 1               | Scenario 2                    |                       | Scenario 3                    |                       |
|-------------------|----------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|
| Reqd Capture Vol. |          | 17,424 cf                     |                       | 61,681 cf                     |                       | 55,408 cf                     |                       |
|                   | Baseline | Polluntant<br>Load<br>Removed | Percentage<br>Removed | Poiluntant<br>Load<br>Removed | Percentage<br>Removed | Poliuntant<br>Load<br>Removed | Percentage<br>Removed |
| TSS               | 191      | 0000                          | 740/                  |                               | 4-0-4                 |                               | •                     |
| i ·               | 1        | 2629                          | 71%                   | 3685                          | 100%                  | 2920                          | 100%                  |
| TP                | 0.13     | 2.52                          | 47%                   | 5.36                          | 100%                  | 4.25                          | 100%                  |
| TN                | 1.9      | 15.1                          | 25%                   | 61.0                          | 100%                  | 48.3                          | 100%                  |
| COD               | 76       | 1418                          | 54%                   | 2646                          | 100%                  | 2097                          | 100%                  |
| BOD               | 28       | 109                           | 41%                   | 268                           | 100%                  | 212                           | 100%                  |
| Pb                | 0:0106   | 0.6673                        | 66%                   | 1.0050                        | 100%                  | 0.7963                        | 100%                  |
| FC                | 6.29E+10 | 2.13E+12                      | 36%                   | 5.92E+12                      | 100%                  | 4.69E+12                      | 100%                  |
| FS                | 4.71E+10 | 4.54E+12                      | 65%                   | 6.99E+12                      | 100%                  | 5.54E+12                      | 100%                  |
| TOC               | 21.1     | 318.4                         | 50%                   | 636.5                         | 100%                  | 504.3                         | 100%                  |
| Zn                | 0.0278   | 0.9916                        | 59%                   | 1.6749                        | 100%                  | 1.3271                        | 100%                  |

In addition, as mentioned previously, in order for Scenarios 2 and 3 to meet the non-degradation requirements, both scenarios will require a vegetated area for irrigation or infiltration of the treated stormwater.

Please feel free to call with any questions or if you need additional information.

Sincerely,

Danny Miller, P.E. Senlor Project Manager

W:\A188\401\WQ Summary.doc

# SUNSET RIDGE TRACT (LOS INDIOS VENTURES, INC.)

WILLIAMSON CREEK ORDINANCE POND WITH SOS POLLUTANT LOADINGS

SITE DATA WATER QUALITY AREA **ACRES** IMPERVIOUS COVER

A 9.60 65.0%

RECHARGE ZONE? RUNOFF COEFF. (Rf) LAND USE (SF, MF, CO?)

0.50 ND 0.4738 CO

BASELINE LOADING

CAPTURE VOL. (IN.)

| (FROM | TABLE | 1-10) |
|-------|-------|-------|
|       |       |       |

| 31 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |          |           |
|--|----------|-----------|
|  | UNIT     | BASELINE  |
| POLLUTANT                              | LOAD(Bp) | LOAD (Up) |
| TSS                                    | 19.9     | 191       |
| TP<br>TN                               | 0.014    | 0.13      |
| TN                                     | 0.2      |           |
| COD                                    | 7.9      | 76        |
| BOD                                    | 2.9      | 28        |
| Pb                                     | 0.0011   | 0.011     |
| FC                                     | 8.55E+09 |           |
| FS                                     | 4.91E+09 | 4.71E+10  |
| TOC                                    | 2.2      |           |
| Pb<br>FC<br>FS<br>TOC<br>Zn            | 0.0029   | 0.028     |
|  |          |           |

BOS RULES TABLE 1-11
POLLUTANT CONCENTRATIONS FOR DEVELOPED SITES

| TOLLOTANT GONOCICTATIONS TON DEVELOPED SITES |       |           |          |           |          |  |  |  |
|--|-------|-----------|----------|-----------|----------|--|--|--|
| SF: 0-15%                                    |       | MF: 0-15% | MF: >15% | CO: 0-15% | CO: >15% |  |  |  |
| 82.5   | 110   | 82.5      | 110      | 82.5      | 110      |  |  |  |
| 0.1  |       | 0.1       | 0.16     | 0.1       | 0.16     |  |  |  |
| 1.27   |       | 0.97      | 1,4      | 1.18      | 1.82     |  |  |  |
| 28.5   | 35    | 28.5      | 35       | 50.5      |          |  |  |  |
| 8  | - 8   | 8         | 8        | 6         | 8        |  |  |  |
| 0.012  |       | 0.012     | 0.02     | 0.017     | 0.03     |  |  |  |
| 6200   |       | 6200      | 8400     | 21500     | 39000    |  |  |  |
| 7000   | 11000 | 7000      | 11000    | 24500     | 46000    |  |  |  |
| 7.5  |       | 7.5       | 9        | 12.5      | 19       |  |  |  |
| 0.024  | 0,04  | 0.024     | 0.04     | 0.029     | 0.05     |  |  |  |

#### DEVELOPED LOADING

|           |          | DEVELOP  |
|-----------|----------|----------|
|           | UNIT     | ED LOAD  |
| POLLUTANT | LOAD(Dp) | (Tp)     |
| TSS       | 383.8    | 3685     |
| TP        | 0.558    | 5.36     |
| TN        | 8.35     | 60.97    |
| COD       | 275.7    | 2646     |
| BÓÐ       | 27.9     | 268      |
| Pb        | 0.1047   | 1.005    |
| FC        | 8.17E+11 | 5.92E+12 |
| FS        | 7.28E+11 | 6.99E+12 |
| TOC       | 66.3     | 636      |
| Zπ        | 0.174    | 1.675    |

#### **UNIT LOADS FOR DEVELOPED SITES**

|           |          | 25 01120  |          | <u> </u>  |          |
|-----------|----------|-----------|----------|-----------|----------|
| SF: 0-15% | SF: >15% | MF: 0-15% | MF: >15% | CO: 0-15% | CO: >15% |
| 287.9     | 383.8    | 287.9     | 383.8    | 287.9     | 383.6    |
| 0.349     | 0.558    | 0.349     | 0.558    | 0.349     |          |
| 4.43      | 6.98     | 3.38      | 4.89     | 4,12      |          |
| 99.5      | 122.1    | 99.5      | 122.1    | 176.2     |          |
| 27.92     |          | 27.92     | 27.92    | 27.92     |          |
| 0.0416    | 0.0698   | 0.0419    | 0.0898   | 0.0593    | 0.1047   |
| 9.81E+10  | 1.33E+11 | 9.81E+10  | 1.33E+11 | 3.40E+11  | 6.17E+11 |
| 1.11E+11  | 1.74E+11 | 1.11E+11  | 1.74E+11 | 3.88E+11  | 7.28E+11 |
| 26.2      | 31.4     | 26.2      | 31.4     | 43.6      | 66.3     |
| 0.084     | 0.140    | 0.084     | 0.140    | 0.101     | 0.174    |

| REMOVAL   |     |                          |             |                               |                         |          |                     |
|-----------|-----|--------------------------|-------------|-------------------------------|-------------------------|----------|---------------------|
| POLLUTANT | Rp  | REQ'D<br>REMOVAL<br>(LB) | Efficiency: | % of Annual Load<br>Captured* | BMP REMOVAL:<br>SED/FIL |          | Actual<br>Removal % |
|           |     |                          |             |                               | LB REMOVED              |          |                     |
| TSS       | N/A | N/A                      | 87%         |                               | 2,629                   | 1,056    | 71%                 |
| TP        | N/A | N/A                      | 61%         | 77%                           | 2,518                   | 2.84     | 47%                 |
| TN        | N/A | N/A                      | 31%         | 80%                           | 15.1                    | 45.8     | 25%                 |
| ÇÓD       | N/A | N/A                      | 67%         | 80%                           | 1,418                   | 1,228    | 54%                 |
| 800       | N/A | N/A                      | 51%         | 80%                           | 109                     | 159      | 41%                 |
| Pb        | N/A | N/A                      | 80%         | 83%                           | 0.667                   | 0.338    | 66%                 |
| FC        | N/A | N/A                      | 36%         | 77%                           | 2.13E+12                |          |                     |
| FS        | N/A | N/A                      | 65%         | 75%                           | 4.54E+12                | 2.45E+12 |                     |
| TOC       | N/A | N/A                      | 81%         | 82%                           | 319                     | 318      | 50%                 |
| Zn        | N/A | N/A                      | 80%         | 74%                           | 0.992                   | 0.683    | 59%                 |

# SUNSET RIDGE TRACT (LOS INDIOS VENTURES, INC.)

SOS POLLUTANT LOADINGS (65% I.C. ON TRACT)

SITE DATA

WATER QUALITY AREA A

**ACRES** 9.60 IMPERVIOUS COVER 65.0% CAPTURE VOL. (IN.) 1.77 RECHARGE ZONE? NO RUNOFF COEFF. (Rf) LAND USE (SF, MF, CO?) 0.4736

BASELINE LOADING

(FROM TABLE 1-10)

| (ITCHITABLE 1-10)           |          |           |  |  |  |  |
|-----------------------------|----------|-----------|--|--|--|--|
|                             | UNIT     | BASELINE  |  |  |  |  |
| POLLUTANT                   | LOAD(Bp) | LOAD (Up) |  |  |  |  |
| TSS                         | 19.9     | 191       |  |  |  |  |
| TP                          | 0.014    | 0.13      |  |  |  |  |
| TN                          | 0.2      | 1.9       |  |  |  |  |
| COD                         | 7.9      | 76        |  |  |  |  |
| BOD                         | 2.9      | 28        |  |  |  |  |
| Pb                          | 0.0011   | 0.011     |  |  |  |  |
| FC                          | 6.55E+09 | 6.29E+10  |  |  |  |  |
| FS                          | 4.91E+09 | 4.71E+10  |  |  |  |  |
| TOC                         | 2.2      | 21        |  |  |  |  |
| Pb<br>FC<br>FS<br>TOC<br>Zn | 0.0029   | 0.028     |  |  |  |  |

CO

SOS RULES TABLE 1-11

| POLLUTANT CONCENTRATIONS FOR DEVELOPED SITES |          |           |          |           |          |  |
|--|----------|-----------|----------|-----------|----------|--|
| SF: 0-15%                                    | SF: >15% | MF: 0-15% | MF: >15% | CO: 0-15% | CO: >15% |  |
| 82.5   | 110      | 82.5      | 110      | 82.5      |          |  |
| 0.1  |          | 0.1       | 0.16     | 0.1       | 0.18     |  |
| 1.27   | 2        | 0.97      | 1.4      | 1,16      |          |  |
| 28.5   | 35       | 28.5      | 35       | 50.5      |          |  |
| 8  | 8        | - 8       | 6        | 6         | 8        |  |
| 0.012  | 0.02     | 0.012     | 0.02     | 0.017     | 0.03     |  |
| 6200   | 8400     | . 6200    | 8400     | 21500     | 39000    |  |
| 7000   | 11000    | 7000      | 11000    | 24500     | 46000    |  |
| 7.5  | 9        | 7.5       | 9        | 12.5      |          |  |
| 0.024  | 0.04     | 0.024     | 0.04     | 0.029     | 0.05     |  |

#### **DEVELOPED LOADING**

|           |          | DEVELOP    |
|-----------|----------|------------|
|           | UNIT     | ED LOAD    |
| POLLUTANT | LOAD(Dρ) | (Tp)       |
| TSS       | 383.6    | 3685       |
| TP        | 0.558    | 5.36       |
| TN        | 8.35     | 60.97      |
| COD       | 275.7    | 2646       |
| BOD       | 27.9     | 268        |
| Pb<br>EC  | 0.1047   | 1.005      |
| EC        | 6.17E+11 | _ 5.92E+12 |
| FS        | 7.28E+11 | 6.99E+12   |
| TOC       | 66.3     | 636        |
| Zn        | 0.174    | 1.675      |

UNIT LOADS FOR DEVELOPED SITES

| ]         |          |           |          |           |          |
|-----------|----------|-----------|----------|-----------|----------|
| SF: 0-15% | SF: >15% | MF: 0-15% | MF: >15% | CO: 0-15% | CO: >15% |
| 287.9     | 383.6    | 267.9     | 383.6    | 287.9     | 383.8    |
| 0.349     | 0.658    | 0.349     | 0.558    | 0.349     | 0.558    |
| 4.43      | 6.98     | 3.38      | 4.89     | 4.12      |          |
| 99.5      | 122.1    | 99.5      | 122.1    | 176.2     | 275.7    |
| 27.92     | 27.92    | 27.92     | 27.92    | 27.92     | 27.92    |
| 0.0419    | 0.0698   | 0.0419    | 0.0698   | 0.0593    | 0.1047   |
| 9.81E+10  | 1.33E+11 | 9.81E+10  | 1.33E+11 | -3,40E+11 | 8,17E+11 |
| 1.11E+11  | 1.74E+11 | 1.11E+11  | 1.74E+11 | 3.88E+11  | 7.28E+11 |
| 28.2      | 31.4     | 26.2      | 31.4     | 43.6      | 66.3     |
| 0.084     | 0.140    | 0.084     | 0.140    | 0.101     | 0.174    |

DEMOVAL

| REMOVAL   |       |          |              | 177      |
|-----------|-------|----------|--------------|----------|
|           |       | REQ'D    | BMP REMOVAL: |          |
| 1         |       | REMOVAL  |              | LB       |
| POLLUTANT | Rp    | (LB)     | % REMOVAL    | REMOVED  |
| TSS       | 94.8% | 3494     | 100%         | 3685     |
| TP        | 97.5% | 5.23     | 100%         | 5.36     |
| TN        | 96.9% | 59.0     | 100%         | 81.0     |
| COD       | 97.1% | 2571     | 100%         | 2646     |
| BOD       | 89.6% | 240      | 100%         | 288      |
| Pb        | 98.9% | 0.994    | 100%         | 1.005    |
| FC        | 98.9% | 5.86E+12 | 100%         | 5.92E+12 |
| FS        | 99.3% | 6.94E+12 | 100%         | 8.99E+12 |
| TOC       | 96.7% | 615      | 100%         | 636      |
| Zn        | 98.3% | 1.647    | 100%         | 1.675    |

# SUNSET RIDGE TRACT (LOS INDIOS VENTURES, INC.)

SOS POLLUTANT LOADINGS (55% I.C. ON TRACT)

SITE DATA

WATER QUALITY AREA A

ACRES 9,60
IMPERVIOUS COVER 55.0%
CAPTURE VOL. (IN.) 1.59
RECHARGE ZONE? NO
RUNOFF COEFF. (Rf) 0.3753
LAND USE (SF, MF, CO?) CO

**BASELINE LOADING** 

(FROM TABLE 1-10)

| TENOM TABLE 1-10)     |          |           |  |  |  |  |
|-----------------------|----------|-----------|--|--|--|--|
|                       | UNIT     | BASELINE  |  |  |  |  |
| POLLUTANT             | LOAD(Bp) | LOAD (Up) |  |  |  |  |
| TSS                   | 19.9     | 191       |  |  |  |  |
| TP<br>TN              | 0.014    | 0.13      |  |  |  |  |
|                       | 0.2      | 1.9       |  |  |  |  |
| COD                   | 7.9      | 78        |  |  |  |  |
| BOD                   | 2.9      | 28        |  |  |  |  |
| Pb                    | 0.0011   | 0.011     |  |  |  |  |
| FC                    | 6.55E+09 | 8.29E+10  |  |  |  |  |
| FS                    | 4.91E+09 | 4.71E+10  |  |  |  |  |
| FC<br>FS<br>TOC<br>Zn | 2.2      | 21        |  |  |  |  |
| Zn                    | 0.0039   | 0.028     |  |  |  |  |

SOS RULES TABLE 1-11

| POL | LUIANI | CONCEN | IKALION | S FOR I | DEVELOPE | D SITES |
|-----|--------|--------|---------|---------|----------|---------|
|     |        | 7      |         |         | 1        |         |

| SF: 0-15% | SF: >15% | MF: 0-15% | MF: >15% | CO: 0-15% | CO: >15% |
|-----------|----------|-----------|----------|-----------|----------|
| 82.5      | 110      | 82.5      | 110      | 82.5      | 110      |
| 0.1       | 0.16     | 0.1       | 0.18     | 0.1       | 0.18     |
| 1.27      | 2        | 0.87      | 1,4      | 1.18      | 1.82     |
| 28.5      | 35       | 28.5      | 35       | 50.5      | 79       |
| 8         | 8        | 8         | 8        | 8         | 8        |
| 0.012     | 0.02     | 0.012     | 0.02     | 0.017     | 0.03     |
| 6200      | 8400     | . 6200    | 8400     | 21500     | 39000    |
| 7000      | 11000    | 7000      | 11000    | 24500     | 46000    |
| 7.5       | 9        | 7.5       | 9        | 12.5      | 19       |
| 0.024     | 0.04     | 0.024     | 0.04     | -0.020    | 0.05     |

#### DEVELOPED LOADING

|           |          | DEVELOP  |
|-----------|----------|----------|
| 1         | UNIT     | ED LOAD  |
| POLLUTANT | LOAD(Dp) | (Tp)     |
| TSS       | 304.1    | 2920     |
| TP        | 0.442    | 4.25     |
| TN        | 5.03     | 48.31    |
| COD       | 218.4    | 2097     |
| BOD       | 22.1     | 212      |
| Pb        | 0.0829   | 0.796    |
| FC<br>FS  | 4.89E+11 | 4.89E+12 |
| FS        | 5.77E+11 | 5.54E+12 |
| TOC       | 52.5     | 504      |
| Zn        | 0.138    | 1.327    |

| UNIT | LOADS | FOR | DEVEL | .OPED | SITES |
|------|-------|-----|-------|-------|-------|
|      |       |     |       |       |       |

| SF: 0-15% | SF: >15% | MF: 0-15% | MF: >15% | CO: 0-15% | CO: >15% |
|-----------|----------|-----------|----------|-----------|----------|
| 228.1     | 304.1    | 228.1     | 304.1    | 228.1     | 304.1    |
| 0.276     | 0.442    | 0.278     | 0.442    | 0.278     | 0.442    |
| 3.51      | 5.53     | 2.68      | 3.87     | 3.26      | 5.03     |
| 78.8      | 96.8     | 78.8      | 96.8     | 139.6     | 218.4    |
| 22.12     | 22.12    | 22.12     | 22.12    | 22.12     | 22.12    |
| 0.0332    | 0.0553   | 0.0332    | 0.0553   | 0.0470    | 0.0829   |
| 7.77E+10  | 1:05E+11 | 7.77E+10  | 1.05E+11 | 2.70E+11  | 4.89E+11 |
| 8.78E+10  | 1.38E+11 | 8.78E+10  | 1.38E+11 | 3.07E+11  | 5.77E+11 |
| 20.7      |          | 20.7      | 24.9     | 34.8      | 52.5     |
| 0.066     | 0.111    | 0.066     | 0.111    | 0.080     | 0.138    |

REMOVAL

| 110000    |       |                          |  |          |
|-----------|-------|--------------------------|--|----------|
| POLLUTANT | Rp.   | REQ'D<br>REMOVAL<br>(LB) | BMP REMOVAL: RETENTION / INFILTRATION LB REMOVAL REMOVED |          |
| TSS       | 93.5% | 2729                     | 100%   | 2920     |
| TP        | 96.8% | 4.11                     | 100%   | 4.25     |
| TN        | 96.0% | 46.4                     | 100%   | 48.3     |
| COD       | 96.4% | 2021                     | 100%   | 2097     |
| BOD       | 86.9% | 184                      | 100%   | 212      |
| Pb        | 98.7% | 0.786                    | 100%   | 0.796    |
| FC        | 98.7% | 4.63E+12                 | 100%   | 4.89E+12 |
| FS        | 99.1% | 5.49E+12                 | 100%   | 5.54E+12 |
| TOC       | 95.8% | 483                      | 100%   | 504      |
| Zn        | 97.9% | 1.299                    | 100%   | 1,327    |