#### SUBDIVISION REVIEW SHEET

CASE NO: C8-2010-0051

<u>Z & P DATE</u>: October 5, 2010

#### SUBDIVISION NAME: THE SPRINGS OF WALNUT CREEK PRELIMINARY PLAN

AREA: 62.6 Acres

LOTS: 122

**COUNTY:** Travis

APPLICANT: Yager Development, LLC (Richard Kunz) AGENT: Pape-Dawson Engineer, Inc. (Dustin Goss)

ADDRESS OF SUBDIVISION: 12009-1/2 N. IH 35 Northbound

**<u>GRIDS</u>:** M32, M33, N32, N33

WATERSHED: Walnut Creek

JURISDICTION: Full Purpose

EXISTING ZONING: GO, SF-6, SF-6-CO

PROPOSED LAND USE: Single Family, ROW, Greenbelt, Public

**ADMINISTRATIVE WAIVERS:** The applicant has requested, and received administrative waivers from LDC Section 25-4-153, exceeding the block length requirement and 25-4-33, the platting of the entire parent tract.

VARIANCES: The applicant requests two variances with the preliminary plan application:

- LDC Section 25-4-151, from the requirements that streets in new subdivisions align with streets in contiguous subdivisions. **RECOMMENDED**. (See memorandum from Transportation Review)
- 2. LDC Section 25-8-392 to allow development in the critical water quality zone for construction of a wastewater line. **RECOMMENDED**. (Environmental Board vote: 7-0). See attached memorandum and support material from Environmental Review).

#### **SIDEWALKS**

Sidewalks will be provided on both sides of all internal streets and the subdivision side of all boundary streets.

#### **DEPARTMENT COMMENTS:**

The request is for approval of the above referenced preliminary plan and associated variance requests. The applicant proposes to subdivide approximately 62 acres for 108 single-family residential lots, 14 open space and landscape lots, and associated right-of-way. The proposed residential density is 3.15 lots/acre. The lots will be accessed via an internal street network with connections to Yager Lane and IH-35 frontage road. The City of Austin will provide water service and wastewater service as well as electric service. The developer is dedicating parkland to satisfy parkland dedication requirements with the approval of the preliminary and finals. The developer will be responsible for all costs associated with any required improvements.

#### **STAFF RECOMMENDATION:**

The staff recommends approval of the preliminary plan subject to the Commissions approval of the above referenced variance requests.

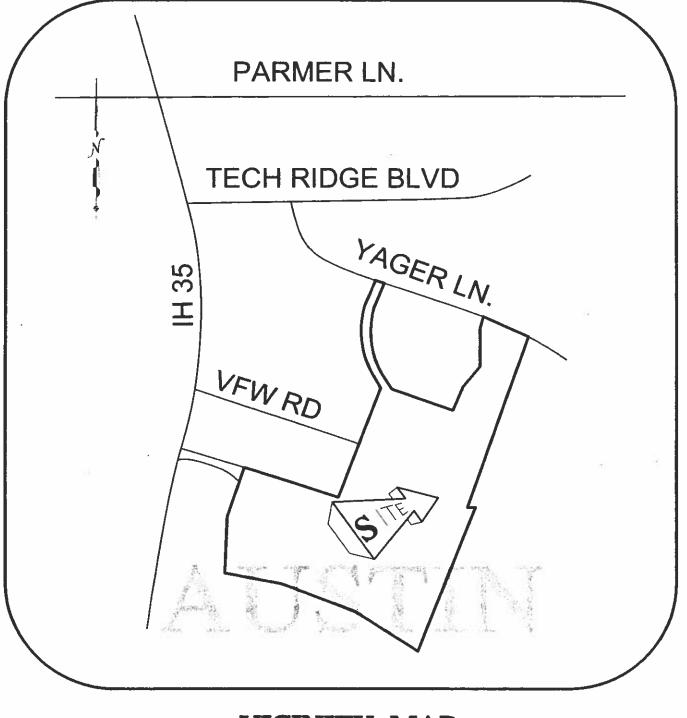
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#### ZONING AND PLATTING COMMISSION ACTION:

**<u>CASE MANAGER</u>**: Don Perryman <u>e-mail:</u> don.perryman@ci.austin.tx.us

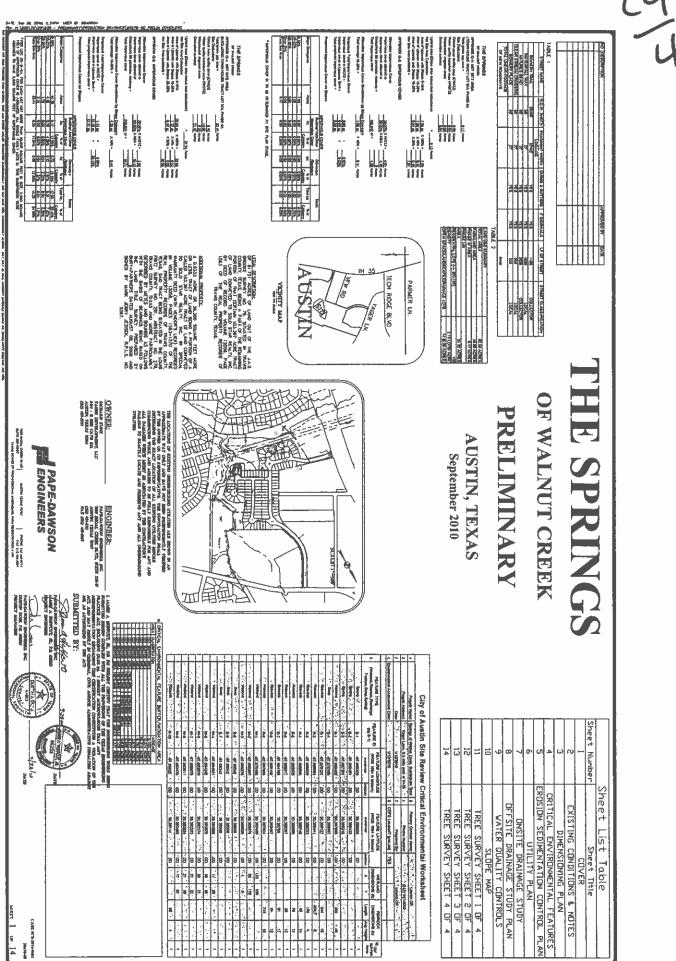
**<u>PHONE</u>**: 974-2786

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## VICINITY MAP

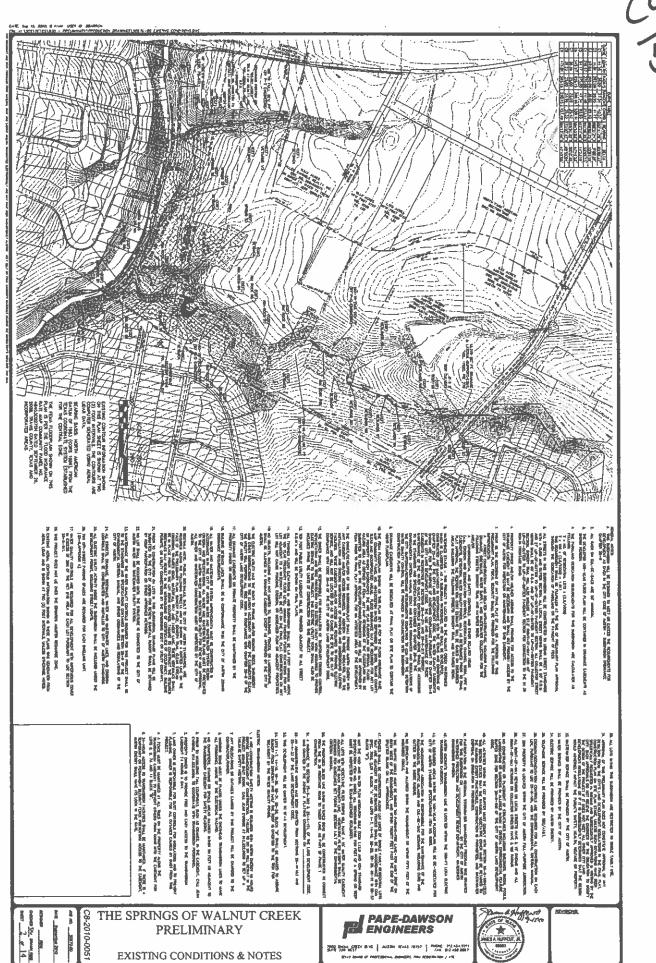
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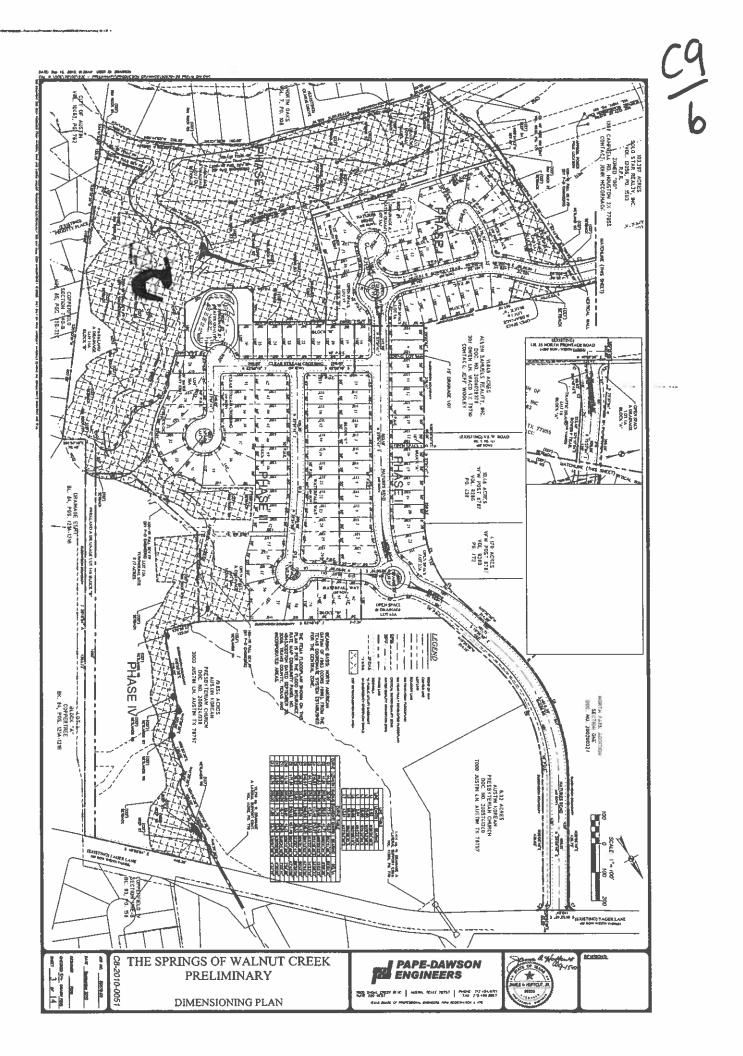
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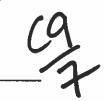




**EXISTING CONDITIONS & NOTES** 



#### Perryman, Don



Sent: Sunday, September 26, 2010 7:50 PM

To: Perryman, Don; Parada, Yolanda

Subject: Case C8-2010-0051

We received a public hearing notice regarding the Case#C8-2010-0051, **S**prings at Walnut Creek, 12009 1/2 N IH35 for October 5 Zoning & Platting Commission.

We are opposed to this development over the springs that are located on that property. These springs feed Walnut Creek and provide habitat to flora and amphibians living along the creek banks.

We are within 500 of the development and the springs are located within the development.

Carol Olewin Gary Hollar



#### LAND DEVELOPMENT ENVIRONMENTAL TRANSPORTATION WATER RESOURCES SURVEYING

September 22, 2010

Director, Planning and Development Review Department c/o Benny Ho 505 Barton Springs Road, 2<sup>nd</sup> Floor Austin, TX 78704

RE: Request for Variance to Section 25-4-151 Street Alignment and Connectivity The Springs of Walnut Creek Subdivision (C8-2010-0051)

Dear Director:

On behalf of our client, Yager Development, LLC, we are requesting a formal variance to §25-4-151, Street Alignment and Connectivity, of the City of Austin Land Development Code for The Springs of Walnut Creek Subdivision. This code section states "Streets of a new subdivision shall be aligned with and connect to existing streets on adjoining property unless the Land Use Commission determines that the Comprehensive Plan, topography, requirements of traffic circulation, or other considerations make it desirable to depart from the alignment or connection."

#### **Project Description**

The Springs of Walnut Creek Subdivision is proposed to consist of approximately 62.58 acres of land and 108 single family residential lots in north Austin, southeast of the IH35 / Tech Ridge Blvd. intersection, specifically southwest of the Yager Lane / Copperfield Drive intersection. The project is within the City of Austin Full-Purpose jurisdiction and within the Walnut Creek watershed, which is a Suburban watershed. The southern boundary of the site is bordered by Walnut Creek. The project lies within City of Austin (COA) Grid Numbers M-32, M-33, N-32, and N-33. The current project site is undeveloped land. This development is in the Desired Development Zone and does not lie within the Recharge or Transition Zone of the Edwards Aquifer.

Adjacent properties that have existing streets available for connection include VFW Post 8787 to the west, North Oaks Subdivision to the south, and Copperfield Subdivision to the east. VFW Road, Olmos Drive, and Pegotty Place are the existing streets within these properties, respectively.

#### **Analysis of Alternatives**

VFW Road is not a platted right-of-way and was not constructed to City or County public road standards. It is located within a commercial zoning district and connects directly to the IH-35 Northbound frontage road. Connection to VFW Road would not provide a separation of uses as it would provide a direct connection between the commercial zoning district and the residential use of

Director, Planning and Development Review Department The Springs of Walnut Creek Subdivision (C8-2010-0051) September 22, 2010 Page 2 of 2

the proposed development. Additionally, since VFW Road was not constructed to City of Austin standards it is not suitable for connection to the proposed street network.

Both Olmos Drive and Pegotty Place are located within single family developments across Walnut Creek from the proposed development. Topography and environmental features in the area deem the street connectivity requirment to be infeasible. Proposed connections would require crossing Walnut Creek, an unnamed tributary to Walnut Creek, Critical Water Quality Zones (CWQZ), Water Quality Transition Zones (WQTZ), 100-year floodplains, rimrocks, wetlands, springs, and their associated Critical Environmental Feature (CEF) setbacks. Additional environmental variances would be necessary to comply with the street connectivity requirement.

We feel that the project as proposed represents the minimum departure necessary from City requirements and represents the most feasible and environmentally responsible option, and therefore request a variance to §25-4-151.

Thank you for your consideration of our request. If you have any questions or need additional information concerning this variance request, please contact Dustin Goss, P.E.

Sincerely, Pape-Dawson Engineers, Inc. Texas Board of Professional Engineers. Firm Registration # 470

James A. Huffcut, 91. P.E.

Vice President, Land Development

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#### MEMORANDUM

| TO:                    | Don Perryman, Case Manager                                    |
|------------------------|---|
|                        | Members of the Planning Commission                            |
| FROM:                  | Benny Ho, Transportation Review                               |
| DATE:                  | September 28, 2010  |
| SUBJECT:               | Variance Request for The Springs of Walnut Creek C8-2010-0051 |
| <b>RECOMMENDATION:</b> | To approve the variance                                       |

The applicant for the above referenced subdivision is requesting a variance to Title 25 of the Land Development Code (LDC) Section 25-4-151, which requires streets of new subdivisions must be in line with existing streets in adjoining property except where the Comprehensive Plan, topography, requirements of traffic circulation or other considerations make it desirable to depart from such alignment. The variance requested is for Olmos Drive, Pegotty Place and VFW Road.

The 62.58 acre proposed development is located on the south side of Yager Lane near tech Ridge Boulevard and Canyon Ridge Boulevard. This single family development consist of 108 lots.

#### Staff recommends approval of the variance for the following reasons:

Adjacent properties that have existing streets available for connection included VFW Road to the west, North Oaks Subdivision to the south and Copperfield Subdivision to the east. VFW Road, Olmos Drive and Pegotty Place are the existing streets within these properties respectively.

- No existing or proposed lots would be landlocked if any of the three streets are not extended through this subdivision.
- Without the Pegotty Place extended through this subdivision, traffic circulation in the Copperfield Subdivision would not be inhibited because there is an existing access to this subdivision through Yager Lane, which is a collector.
- Traffic circulation in the North Oak Subdivision would not be inhibited because there are three existing access streets for North Oak Subdivision to IH35.
- Walnut Creek separates this subdivision to the North Oaks Subdivision to the south, connecting to Olmos Drive may cause potential environmental impacts to the creek.
- VFW road is not a platted right of way and was not constructed to City or County public road standard. It is located within a commercial zoning district. Connection to VFW road would not provide a separation of land uses as it would provide a direct connection between the commercial zoning district and the residential use.

- This subdivision is providing pedestrian connectivity via an open space easement to VFW
  road.
- Pegotty Place can be accessed by pedestrians through the green belt.

If you have any further questions or required additional information, please contact me at 974-3402.

Benny Ho Engineer C Land Use Review Division/Transportation Review City of Austin, Planning & Development Review Department.



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#### **ENVIRONMENTAL BOARD MOTION 072110-3b**

Date: July 21, 2010

Subject: Springs of Walnut Creek C8-2010-0051

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Motioned By: Phil Moncada

Seconded by: Bob Anderson

#### Recommendation

The Environmental Board recommends a variance to land development code 25-8-392 to allow development within the Critical Water Quality Zone.

**Rationale:** The line location is in the least intensive location. Tying into the existing manhole would be less environmentally degrading than building a new manhole.

Vote 7-0-0-0

For: Anderson, Beall, Gary, Maxwell, Moncada, Neely and Schissler

Against:

Abstain:

Absent:

Approved By: Many Sang Maparell

Mary Gay Maxwell Environmental Board Chair





### **ITEM FOR ENVIRONMENTAL BOARD AGENDA**

| BOARD MEETING<br>Date Requested:      | July 21, 2010   |
|---------------------------------------|---|
| Name & Number<br>of Project:          | Springs of Walnut Creek<br>C8-2010-0051   |
| NAME OF APPLICANT<br>OR ORGANIZATION: | Pape-Dawson Engineers, Inc.<br>Jim Huffcut – Phone (512) 454-8711   |
| LOCATION:                             | 12009 ½ N IH 35 SVRD NB   |
| PROJECT FILING DATE:                  | April 23, 2010  |
| PDR/Environmental<br>Staff:           | Keith Mars, 974-2755<br>keith.mars@ci.austin.tx.us  |
| PDR/<br>Case Manager:                 | Don Perryman, 974-2786<br>don.perryman@ci.austin.tx.us  |
| WATERSHED:                            | Walnut Creek (Suburban)<br>Desired Development Zone   |
| ORDINANCE:                            | Comprehensive Watershed Ordinance (Current Code)  |
| REQUEST:                              | Applicant is proposing a wastewater line to tie into a main<br>line already located in the Critical Water Quality Zone.<br>Therefore, the applicant is requesting the following<br>variance: Variance from LDC 25-8-392 – to allow<br>development within the Critical Water Quality Zone. |
| <b>RECOMMENDATION:</b>                | Recommend approval  |





#### **MEMORANDUM**

TO: Mary Gay Maxwell, Chair and Members of the Environmental Board

- **FROM:** Keith Mars, Environmental Review Specialist Senior Planning and Development Review Department
- **DATE:** July 21, 2010
- **SUBJECT:** Variance from LDC 25-8-392 to allow development within the Critical Water Quality Zone by proposing a wastewater line to tie into a main line already located in the Critical Water Quality Zone.

#### **Description of Project**

The Springs of Walnut Creek consists of approximately 62.58 acres and 108 singlefamily lots. The project is located at 12009-1/2 North IH35, which is east of the Texas Commission on Environmental Quality complex and north of Braker Lane.

#### **Description of Property**

The proposed Springs of Walnut Creek is located in the Walnut Creek Watershed and is classified as suburban. The tract is undeveloped and undisturbed with the exceptions of a utility line corridor, old ranch roads, and an abandoned pad site. Vegetation largely consists of a dense oak/juniper overstory canopy and riparian corridors with instream wetland vegetation. There are four waterways onsite: Walnut Creek, a major waterway, borders the southern boundary of the project, an unnamed minor waterway that drains into Walnut Creek, and two unnamed, unclassified tributaries to Walnut Creek. All creeks are either protected by critical water quality zones (CWQZ) or by critical environmental feature (CEF) buffers due to wetlands, springs, seeps, and/or rimrock features.

#### Existing Topography/Geology/Soil Characteristics/Vegetation

The site elevation ranges from approximately 580 feet above mean sea level at Walnut Creek to 680 feet above mean sea level at Yager Lane. The majority (~82.0%) of the site is characterized as relatively flat, upland conditions. The waterways and transitional



areas (~18.0%) are characterized by steep (1:1, 2:1) midslopes of the creek basin down to the creek bed.

The site is located within the Austin Chalk formation and is particularly apparent in the waterways dominated by chalk and marled limestone. The soils on the property are classified in the Austin-Eddy Association. These soils are silty-clay to clay loam. The underlying material is weathered chalk and silty clay loam.

Upland vegetation largely consists of an oak-juniper woodland interspersed with patch upland grasses. The upland woodland canopy is stratified in two layers. The overcanopy is dominated by Live Oak (*Quercus fusiformis*) and Red Oak (*Quercus texana*) while the understory is dominated by hollies (*Ilex vomitoria and Ilex decidua*), and Redbuds (*Cercis Canadensis*). The riparian and instream areas are characterized by riparian woody plants, such as American Elm (*Ulmus americana*) and Eastern Cottonwood (*Populus deltoides*) and wetland plants, such as, rush (*Juncus spp.*) and arrowhead (*Sagittaria spp.*)

#### **Critical Environmental Features/Endangered Species**

There are 27 critical environmental features (CEFs) that have been identified within the project boundaries. 11 are rimrock, 9 are wetlands, 4 are seeps, and 3 are springs. All critical environmental features are protected by buffers. These CEFs, their associated buffers and the critical water quality zone area (19.09 acres of the 62.58 acre tract) have been dedicated to the City as parkland.

#### Water/Wastewater

Water and wastewater service are proposed to be provided by the City of Austin.

#### **Environmental Variance Request**

LDC 25-8-392 – to allow development within the Critical Water Quality Zone by proposing a wastewater line to tie into a main line already located in the Critical Water Quality Zone.

The applicant is proposing an eight inch wastewater line collection system to pass through the critical water quality zone and tie into the existing 54 inch mainline located in an existing drainage easement in the critical water quality zone. The easement and requested wastewater line is located approximately 60 feet away from the creek centerline to the centerline of the easement and is located outside of the creek basin. The proposed wastewater line runs near perpendicular to the creek until within the existing 40 foot easement and 54 inch mainline. Then, to avoid building a more environmentally intrusive new manhole, the applicant is proposing to run approximately 40 feet of the new line parallel to the critical water quality zone to tie into an existing manhole eye-out. Though tying into an existing wastewater line already located in the critical water quality zone, the proposed 40 feet section that runs parallel to the critical water quality will not be code compliant. Thus, the environmental variance for the proposed work has been requested.

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#### **Recommendations**

Staff has worked with the applicant and reviewed iterations of the proposed project since February 2009 (date of the first submittal that expired in February 2010) to ensure environmental code requirements are met. Staff has also spent, at a minimum, 50 staff hours traversing the site assessing onsite conditions. Given the sensitive condition of the riparian and waterway areas, staff also attempted to work with the applicant and city real estate staff in purchasing some or all of the property for conservation. An agreement could not be negotiated and the plans were resubmitted. Short of purchasing the land outright, and recognizing the applicant's desire to develop the property, staff has ensured environmental code requirements have been met other than the requested variance.

In the context of the variance request, staff confirms that the line location is the least intrusive location for the line placement and represents minimum departure from code. Staff also agrees with the applicant that building a new manhole to tie into would be more environmental degrading than would running the line parallel in the critical water quality zone to tie into an existing manhole eye-out. Staff has also consulted with Austin Water Utility and has confirmed that no other line location is feasible. For the aforementioned reasons, staff recommends approval of the environmental variance request and has required that the disturbed area within the critical water quality zone be revegetated per 609s native seeding and direct planting.

If you need further details, please contact Keith Mars at 974-2755.

Keith Mars, Environmental Review Specialist Senior Planning and Development Review

Environmental Program Coordinator: Ingrid McDonald **Environmental Officer:** 





#### Planning and Development Review Staff Recommendations Concerning Required Findings Water Quality Variances

| Application Name:<br>Application Case No: | Springs of Walnut Creek<br>C8-2010-0051   |
|---|---|
| Code Reference:                           | Land Development Code Section 25-8-392 Development within the Critical Water Quality Zone   |
| Variance Request:                         | To allow approximately 50 feet of 8 inch wastewater<br>line to be constructed parallel and within the CWQZ of<br>Walnut Creek to tie into an existing 54 inch mainline. |

## A. Land Use Commission variance determinations from Chapter 25-8, Subchapter A – Water Quality of the City Code:

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development.

**Yes.** The variance is necessary to construct the wastewater line parallel to the creek and within the critical water quality zone. There is an existing 54 inch mainline located in an existing drainage easement in the critical water quality zone.

#### 2. The variance:

a) Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

Yes. The proposed location is less environmentally degrading than the code compliant option of running the line perpendicular through the critical water quality zone and building up a new manhole eye-out. Though a 40 foot section of the proposed wastewater line runs parallel to the creek, there is an existing manhole eye-out at the proposed terminal point of the 8 inch wastewater line. Thus, though code compliant, building up a new manhole would be more environmentally degrading than utilizing the existing manhole eye-out, albeit requiring the line to run 40 feet parallel to the creek.



b) Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

Yes. After consulting with Austin Water Utility and ensuring compliance the environmental code requirements, this line location represents the minimum change necessary.

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

 Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.
 Yes. The proposed wastewater line will result in water quality that is at least

**Yes.** The proposed wastewater line will result in water quality that is at least equal to the water quality achievable without the variance. The proposed wastewater alignment has been selected over the alternate wastewater alignments because: (1) the proposed alignment avoids building a new manhole eye-out; (2) even if possible, other alternative locations would require going through critical environmental feature setbacks; (3) 609S revegetation is required for work within the critical water quality zone; and (4) the proposed wastewater alignment will minimize the depth of trenching activities.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-393 (Water Quality Transition Zone), Section 25-8-423 (Water Quality Transition Zone), Section 25-8-453 (Water Quality Transition Zone), or Article 7, Division 1 (Critical Water Quality Zone Restrictions):
  - The above criteria for granting a variance are met;
     Yes. The criteria for granting a variance are met as described above.
  - The requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and
     Yes. There are no other feasible locations for the wastewater line.
  - 3. The variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

**Yes.** The proposed wastewater line represents minimum departure from code and is actually a less environmentally degrading alternative than code compliance due to the utilization of an existing manhole eye-out.

| Reviewer Name:      | Keith Mars |  |
|---------------------|------------|--|
| Reviewer Signature: | Jeith Th   |  |

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Date: July 7, 2010



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





LAND DEVELOPMENT ENVIRONMENTAL TRANSPORTATION WATER RESOURCES SURVEYING

May 26, 2010

Director, Planning and Development Review Department c/o Keith Mars 505 Barton Springs Road, 2<sup>nd</sup> Floor Austin, TX 78704

RE: Request for Variance to Section 25-8-261(E) Critical Water Quality Zone Crossing, Non-Perpendicular The Springs of Walnut Creek Subdivision (C8-2010-0051)

Dear Director:

On behalf of our client, Yager Development, LLC, we are requesting a formal variance to §25-8-261(E) of the City of Austin Land Development Code for construction of a non-perpendicular wastewater line crossing in the Critical Water Quality Zone (CWQZ) for The Springs of Walnut Creek Subdivision. We feel that the project as proposed represents the minimum departure necessary from City requirements and represents the most feasible and environmentally responsible option

#### **Project Description**

The Springs of Walnut Creek Subdivision is proposed to consist of approximately 62.58 acres of land and 108 single family residential lots in north Austin, southeast of the 1H35 / Tech Ridge Blvd. intersection, specifically southwest of the Yager Lane / Copperfield Drive intersection. The project is within the City of Austin Full-Purpose jurisdiction and within the Walnut Creek watershed, which is a Suburban watershed. The southern boundary of the site is bordered by Walnut Creek. The project lies within City of Austin (COA) Grid Numbers M-32, M-33, N-32, and N-33. The current project site is undeveloped land. This development is in the Desired Development Zone and does not lie within the Recharge or Transition Zone of the Edwards Aquifer.

The nearest existing wastewater lines are a 54-inch RCP line located along the southern boundary of the site that runs parallel to and north of Walnut Creek, and a 12-inch PVC pipe running along the eastern boundary of the site and also within the Yager Lane right of way. Based on the site topography, service is proposed to tie to an existing manhole on the 54-inch RCP line. The manhole is located near the southwest corner of the site, approximately 60-feet north of Walnut Creek, and includes an existing 8-inch eye-out for connection of the proposed wastewater line. The subdivision's internal 8-inch wastewater collection system is proposed to pass through the CWQZ once in order to tie to the existing 54-inch RCP and provide service to the entire subdivision.

Director, Planning and Development Review Department The Springs of Walnut Creek Subdivision (C8-2010-0051) May 26 2010 Page 2 of 4



The City's Land Development Code §25-8-261(E) states that a "utility line may cross a critical water quality zone". The current policy interpretation is that a complete and <u>perpendicular</u> crossing of the CWQZ <u>and the creek</u> is required for work within the CWQZ to maintain compliance with LDC provisions. The preferred alignment of the proposed 8-inch PVC wastewater line does not cross Walnut Creek and crosses perpendicular to the CWQZ until it reaches the existing 40-foot wastewater easement (Vol. 6932, P. 971) that contains the 54-inch wastewater line. Once inside the existing easement, the proposed line runs parallel to and north of the 54-inch wastewater line for approximately 50 LF in order to tie to the existing manhole on the 54-inch RCP line. The proposed 8-inch wastewater line will cross a small tributary to Walnut Creek that does not qualify as requiring its own CWQZ. We are therefore requesting a variance from the requirements of COA LDC §25-8-261(E).

#### Analysis of Alternatives

For this project, compliance with the LDC is achievable, but is clearly the more environmentally costly option, as well as the more financially-costly option. Compliance could be achieved by cutting the existing 54-inch RCP line and installing an additional manhole where the proposed internal wastewater collection system projects perpendicular across the CWQZ. This solution is not practical or economical, and would require a more significant construction footprint in order to be completed. Since the existing 54-inch RCP line is located along the north side of Walnut Creek, no creek crossing will be required. It is our opinion that trenching parallel to the existing line for 50 LF and tying into an existing manhole eye-out is the least environmentally invasive approach. Adding a new manhole 50 LF down from an existing manhole on such a large line will have a more pronounced environmental impact on the area.

Construction methods for the proposed alignment will include clearly delineating the limits of construction by staking and installation of construction fencing, installing tree protection within the limits of construction, installing silt fencing along the creek side of the existing wastewater easement, and installing a rock berm in the tributary downstream of the work area. Construction efforts will be coordinated to limit the size of excavated trench, the equipment performing the work, and the disturbed work area. Additionally, surplus excavated materials will be removed on a daily basis, pump discharge will be filtered if groundwater is encountered, 85% densities will be achieved above the pipe zone, the gabion mattress will be replaced within the tributary crossing, trenches will be backfilled to natural grade, and all disturbed areas will be immediately seeded and matting placed after backfilling is complete. Construction activities are anticipated to be completed in one week or less.

Construction methods for the alternative alignment will require a minimum 8-ft x 8-ft cast in place structure for the manhole base within an excavation measured 50-ft x 50-ft at the surface. The cast in place structure will involve construction below the water table, thus requiring drilling well shafts upstream of the excavation with continuous pumping. The pumped discharge would require filtration by sedimentation pond or frac tanks. After an estimated three weeks of continuous





Director, Planning and Development Review Department The Springs of Walnut Creek Subdivision (C8-2010-0051) May 26 2010 Page 3 of 4

pumping, the excavation could be ready to begin forming and pouring the cast in place concrete manhole base, followed by cure time, stacking riser sections, air testing, manhole coating, backfill, cleanup, topsoil and hydromulch. Estimated completion time of six weeks. Project would involve a very large disturbed area and pose an environmental risk when working on a thirty year old wastewater pipe.

#### Findings of Fact

Under current City Land Development Code, the Director may grant variance if the Director determines that:

1. Are there special circumstances applicable to the property involved where strict application deprives such property owner of privileges or safety enjoyed by other similarly situated property with similarly timed development?

YES – The Austin Water Utility (AWU) department has determined that connection to the existing wastewater manhole, as shown on the Preliminary Plan, is their preferred point of service for the tract. AWU will not allow construction of a lift station to tie wastewater service in to a different location.

2. Does the project demonstrate minimum departures from the terms of the ordinance necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use, and which will not create significant probabilities of harmful environmental consequences?

YES – By constructing the approximately 50 LF of wastewater line parallel to the creek within the existing 54-inch wastewater line's 40-foot easement, the proposed wastewater line will be installed within a previously utilized work zone and will minimize new construction impacts to the creek. Construction impacts from the proposed alignment will be significantly less than the environmental impacts resulting from the alternative alignment.

3. The proposal does not provide special privileges not enjoyed by other similarly situated properties with similarly timed development, and is not based on a special or unique condition which was created as a result of the method by which a person voluntarily subdivided land.

YES – The property boundary is centered within a tributary to Walnut Creek that has a rimrock outcropping that is designated as a Critical Environmental Feature (CEF). This environmental barrier limits the ability to route the wastewater line to the connection point and prevents a perpendicular crossing of the CWQZ.



Director, Planning and Development Review Department The Springs of Walnut Creek Subdivision (C8-2010-0051) May 26 2010 Page 4 of 4



## 4. Does the proposal demonstrate water quality equal to or better than would have resulted had development proceeded without the variance?

YES – Construction impacts will be significantly reduced for the proposed alignment which requires the variance, as compared to that of the non-variance alternative. The alternative alignment requires a much longer construction timeline, larger disturbed work area, and modification to a 30-year old 54-inch wastewater line that would increase the potential for a wastewater spill. The proposed alignment provides the least invasive approach to providing wastewater service to the property.

#### 5. For a variance from the requirements for development within the Critical Water Quality Zone and/or Water Quality Transition Zone: Does the application of restrictions leave the property owner without any reasonable, economic use of the entire property?

YES – The Austin Water Utility (AWU) department has determined that connection to the existing wastewater manhole, as shown on the Preliminary Plan, is their preferred point of service for the tract. AWU will not allow construction of a lift station to tie wastewater service in to a different location. Also, the presence of multiple CEF's and associated setbacks, prevent connection to the 54-inch wastewater line along the remainder of the property. The proposed alignment provides the only point of service for the property.

Thank you for your consideration of our request. If you have any questions or need additional information concerning this variance request, please contact Dustin Goss, P.E.

Sincerely, Pape-Dawson Engineers, Inc. Texas Board of Professional Engineers, Firm Registration # 470

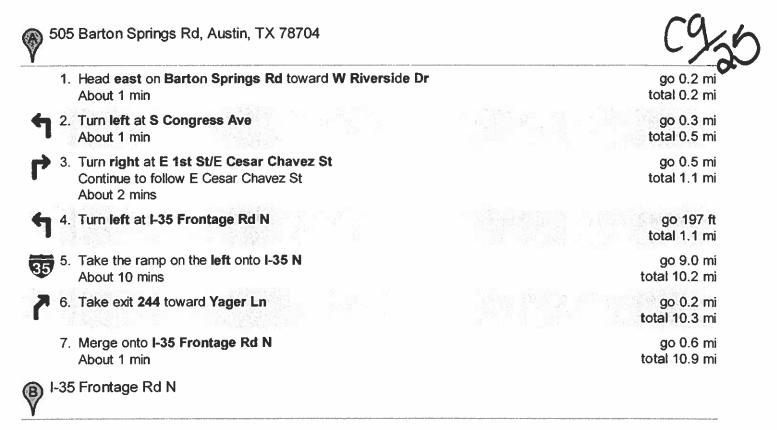
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James A. Huffcut, Jr., P.E. Vice President, Land Development

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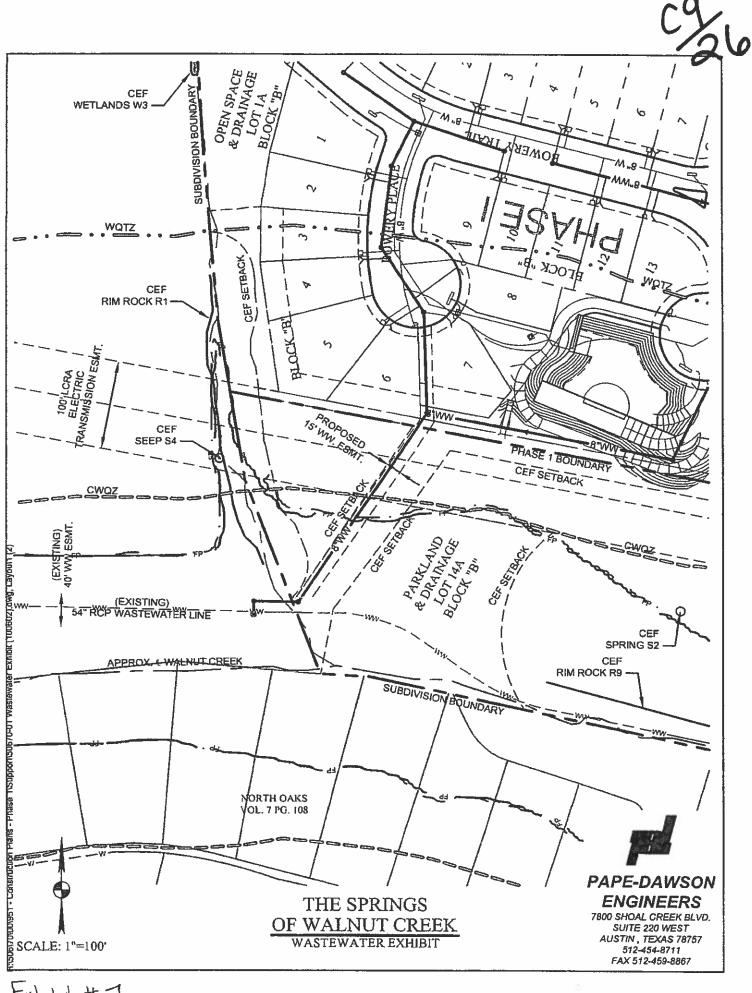
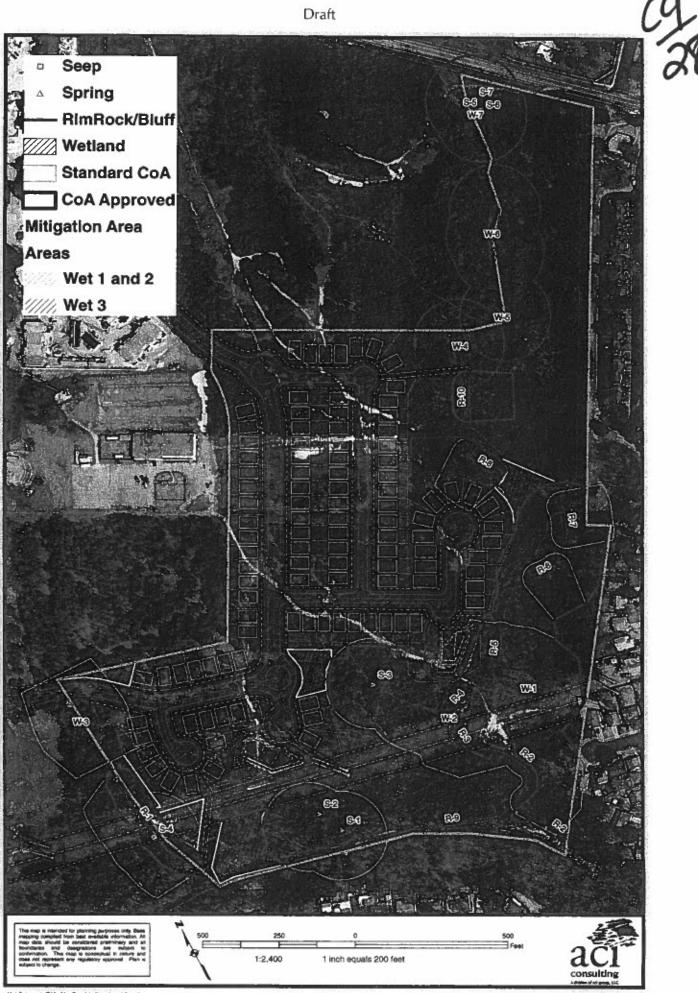


Exhibit #1





Map Occurrent (P: VacMap Templete/Nemplete\_1.5.ma



| Catchment          | Total area                       | 43.5 square miles | Kin Sol I for all                       |
|--------------------|----------------------------------|-------------------|---|
|                    | Area in recharge                 | 11.9 square miles | SPAR XON                                |
|                    | Creek length                     | 22.3 miles        | 57556 L W                               |
|                    | Receiving water                  | Colorado River    | 1 2 3 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| Demographics       | 2000 population                  | 93,934            |   |
|                    | 2030 projected population        | 133,387           |   |
|                    | 30 year projected % increase     | 42 %              |   |
| Land Use           | Impervious cover ('97 crwr data) | 24.1 %            | 1 Depart                                |
| Overall EII Scores | 2000                             | 76                | - The state                             |
|                    | 2003                             | [171]             | Featured Other N<br>Phase 1             |
| 31 31 31           | 2006                             | \$72.             | Watershed Watersheds                    |

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#### Flow Regime\* for Sample Sites on Walnut Creek Upstream to Downstream

|                                |   |   | 2003   | 2006   |   |   |   |  |   |   |
|--------------------------------|---|---|--|--|---|---|---|--|---|---|
|                                | Feb   | Mar   | May  | Sep  | Dec   | Feb   | May   | Jul  | Aug   | Nov   |
|                                | 19  | 10-17   | 14   | 23   | 3   | 22  | 18  | 5-12   | 23  | 29  |
| Site Name                      | WQ  | Bio   | WQ   | WQ   | WQ  | WQ  | WQ  | Bio  | WQ  | WQ  |
| Wells Branch at Win Metro Park |   |   |  |  |   | BR  | B   | B  | B   | B   |
| Walnut at Metric               | B   | B   | B  | В  | li li   | BR  | B   | B  | B   | B   |
| Walnut below IH 35             | B   | B   | B  | B  | B   | BR  | B   | R  | 18  | 18  |
| Walnut at Old Manor Rd         | STATE IN COLUMN   | IN STATE  | B  | В  | R   | i R   | R   | в  | В   | B   |
| Walnut at Loyola Lane          | B   | B   | B  | B  | R   |   |   |  |   |   |
| Walnut at SP Railroad Bridge   | BBB   | Real Provide  | B  | In Ball  | BBB   | BE IS DO  | B   | B  | SHE TEN   | B   |
|                                | Wells Branch at Win Metro Park<br>Walnut at Metric<br>Walnut below IH 35<br>Walnut at Old Manor Rd<br>Walnut at Loyola Lane | 19Site NameWQWells Branch at Win Metro ParkWWalnut at MetricBWalnut below IH 35BWalnut at Old Manor RdBWalnut at Loyola LaneB | 1910-17Site NameWQBioWells Branch at Wln Metro ParkWalnut at MetricBBWalnut below IH 35BBWalnut at Old Manor RdBBWalnut at Loyola LaneBB | FebMarMay1910-1714Site NameWQBioWQWells Branch at Wln Metro ParkImage: Comparison of the second se | FebMarMaySep1910-171423Site NameWQBioWQWQWells Branch at Wln Metro ParkWQBioWQWQWalnut at MetricBBBBWalnut at MetricBBBBWalnut below IH 35BBBBWalnut at Old Manor RdBBBBWalnut at Loyola LaneBBBB | FebMarMaySepDec1910-1714233Site NameWQBioWQWQWells Branch at Win Metro ParkImage: Comparison of the second se | FebMarMaySepDecFeb1910-171423322Site NameWQBioWQWQWQWQWells Branch at Wln Metro ParkImage: Comparison of the second | FebMarMaySepDecFebMay1910-17142332218Site NameWQBioWQWQWQWQWQWells Branch at Wln Metro ParkIIIBioBioBioBioBioWalnut at MetricBBBBBBBBBWalnut below IH 35BBBBBBBBWalnut at Old Manor RdBBBBBBBBWalnut at Loyola LaneBBBBBBB | FebMarMaySepDecFebMayJul1910-171423322185-12Site NameWQBioWQWQWQWQWQBioWells Branch at Wln Metro ParkImage: Comparison of the second secon | FebMarMaySepDecFebMayJulAug1910-171423322185-1223Site NameWQBioWQWQWQWQWQWQBioWQWells Branch at Wln Metro ParkImage: Constraint of the second se |

B = baseflow conditions

4

1.1

Blue = Samples were taken Grey = Samples were not taken Blank = site not visited

|                 | Parameter            | Mean    | Max        | Min       | Relative concentrations compared to other 2006 Phase 1 watersheds                           |  |  |  |  |  |  |
|-----------------|----------------------|---------|------------|-----------|---|--|--|--|--|--|--|
| Physicochemical | D.O. mg/l            | 9.2     | 12.1       | 6.6       | Average' or above average at all sites  |  |  |  |  |  |  |
|                 | pH st.units          | 8.06    | 9.47       | 7.67      | Most values average <sup>1</sup> , 464 slightly above average, Site 503 with one high value |  |  |  |  |  |  |
|                 | Cond uS/cm           | 607     | 802        | 492       | Most values average', potentially a decreasing trend downstream                             |  |  |  |  |  |  |
|                 | SO <sub>4</sub> mg/l | 48.0    | 68.5       | 29.0      | Average   |  |  |  |  |  |  |
| Nutrients       | NH <sub>3</sub> mg/l | 0.03    | 0.14       | 0.01      | One high reading at Site 464 in August, average <sup>1</sup> at all other sites             |  |  |  |  |  |  |
|                 | NO <sub>3</sub> mg/l | 0.42    | 1.45       | 0.02      | Most sites high or above average in May, but average for other samples                      |  |  |  |  |  |  |
|                 | Ortho P mg/l         | 0.04    | 0.12       | 0.02      | Average', with one above average concentration at Site 503 in February                      |  |  |  |  |  |  |
| Sediment Load   | TSS mg/l             | 1.1     | 6.0        | 0.1       | One high reading at Site 503 in May, average <sup>1</sup> at all other sites                |  |  |  |  |  |  |
|                 | Turbidity ntu        | 1.7     | 5.8        | 0.8       | Consistently above average at Site 503, average' at all other sites                         |  |  |  |  |  |  |
| Biology         | E.Coli /100ml        | 700     | 4,839      | 17        | Site 895 with very high concentrations, other sites average                                 |  |  |  |  |  |  |
|                 | Benthic Macs         | Good dr | ersity and | commu     | nity structure, consistently above average to high rating for most parameters               |  |  |  |  |  |  |
|                 | Diatoms              | High au | lity Cons  | istent go | od scores for Cymbella richness, pollution tolerance and % similarity to reference.         |  |  |  |  |  |  |

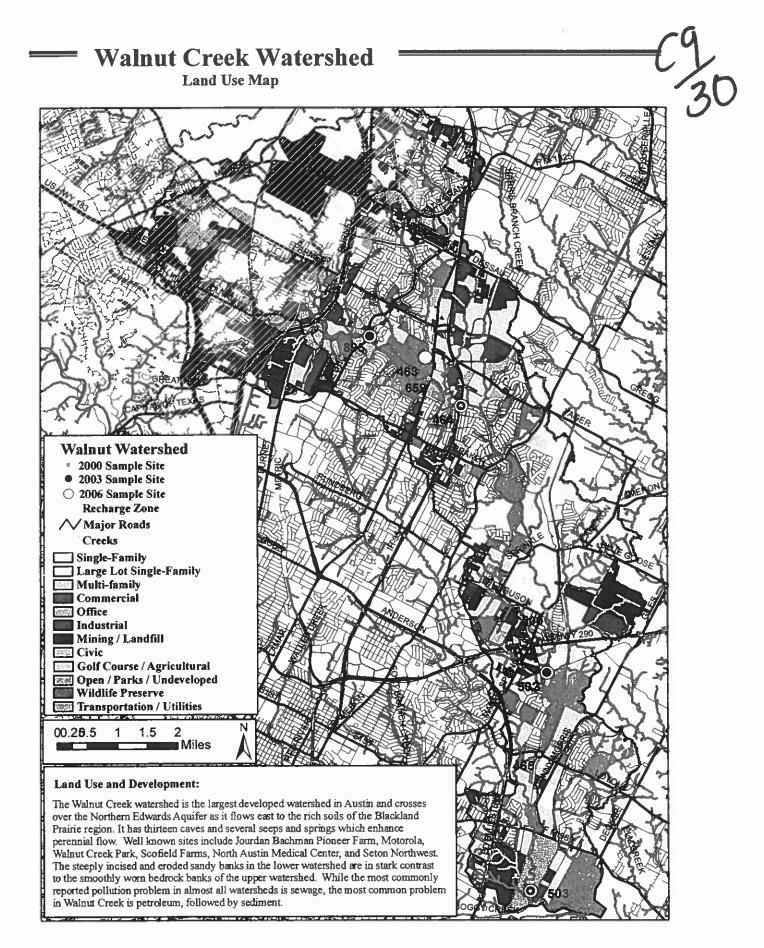
<sup>1</sup> values for this parameter are similar to the median scores for the other 2006 Phase 1 watersheds

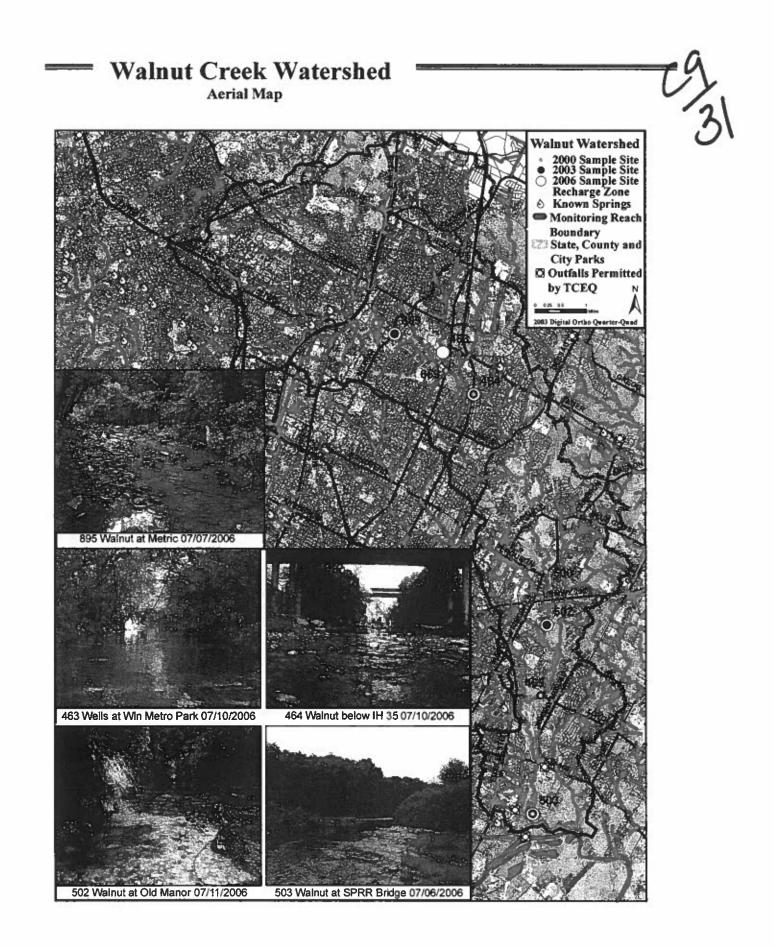
Discussion: Overall, Walnut maintains high integrity of aquatic life despite the below average physical integrity scores. Bacteria levels are typically good at most sites, with the exception of Site 895, which appears to be chronically elevated. The nutrient concentrations were high in May and sporadically high during other months

#### Sub-index scores for Walnut Creek Sites (upstream to downstream) 2000, 2003, 2006

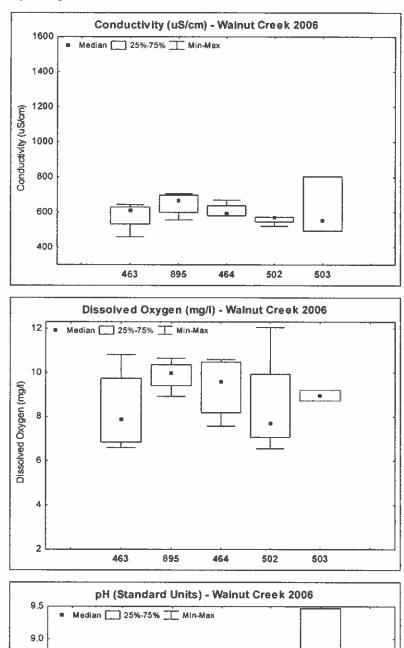
| Site Number        | Site 463 Site 895 |           |        |      |      | 翻题   | Site 46 | 4    | Site 502 |               |      | Site 465 |               |      | Site 503 |      |      |
|--------------------|-------------------|-----------|--------|------|------|------|---------|------|----------|---------------|------|----------|---------------|------|----------|------|------|
| Year of Sampling   | 2000              | 2003 2000 | \$ 200 | 2003 | 2006 | 2000 | 2003    | 2006 | 2000     | 2003          | 2006 | 2000     | 2003          | 2006 | 2000     | 2003 | 2006 |
| Water Quality      |                   | 66        | 120    | 64   | 60   | 67   | 59      | 67   |          | 61            | F723 | 62       | 56            |      | _51_     | 64   | 58   |
| Sediment           |                   | 82        |        | 75   | 82   | 95   | 75      | 82   |          | .76           | 82   | 95       | 75            |      | 95       | 75   | 82   |
| Contact Recreation |                   | 43        | 1940   | 51   | 28   | 90   | 72      | 56   |          | 88            | 59   | 97       | 88            |      | 91       | 86   | 54   |
| Non-Contact Rec.   |                   | 87        | M 3    | 78   | 81   | 72   | 82      | 78   |          | 73            | 58   | 92       | <b>約7:1</b> 號 |      | 68       | 78   | 70   |
| Physical Integrity |                   | (1)       | 205    | 74   | 73   | 50   | 75      | 69   |          | 64            | 69   | 495      | 63            |      | 35       | 48   | 63   |
| Aquatic Life       |                   |           |        | 76   | 94   | 72   | 79      | 95   |          | 66            | 97   | 88       | 69            |      | 67       | 56   | 100  |
| Benthic Mac.       |                   | 78        |        | 88   | 95   | 187  | 97      | 93   |          | 84            | 100  | 100      | 87            |      | 75       | 69   | 100  |
| Diatom             |                   | 81        |        | 63   | 92   | 57   | 60      | 97   |          | 47            | 93   | 75       | 51            |      | 58       | 42   | 99   |
| Total Ell Score    |                   | 72        | 語      | 713  | 6709 | 74   | 影74篇    | 75   |          | <b>港7:1</b> 题 | 73   | 81       | 70            |      | 68       | 68   | 71   |

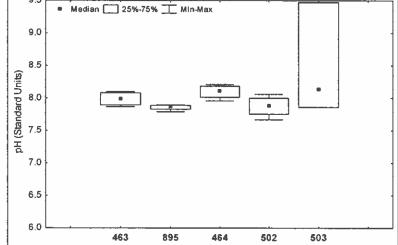
\* sediment samples only collected at the downstream site, blank cells indicate parameter was not collected, blank columns indicate site was dropped 100-87.5 Excellent 100-87.5 Excellent 100-87.5 V. Good 175-62.5 Good 100 62.5-60 Fair 100 50-37.5 Marginal 37 5-25 Poor 25-12.5 Bad 12.5-0 V. Bad





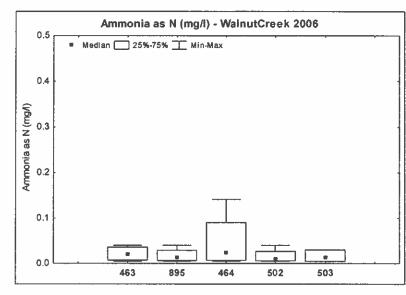
**Data Summary Graphs – Field Parameters** 



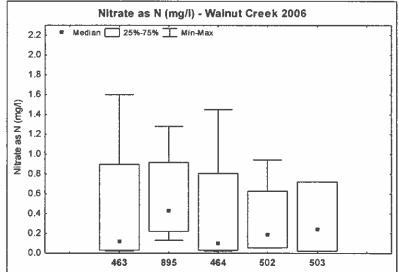


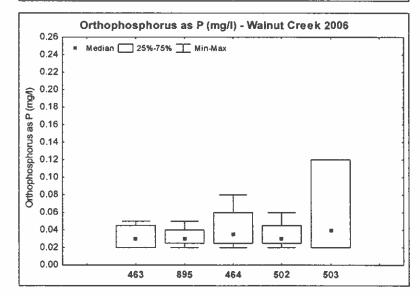
95

**Data Summary Graphs – Nutrients** 

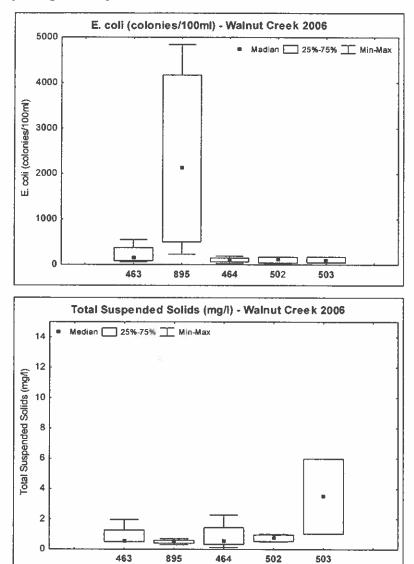


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Data Summary Graphs - Physical Parameters



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