Bryan W. Shaw, Ph.D., *Chairman* Buddy Garcia, *Commissioner* Carlos Rubinstein, *Commissioner* Mark R. Vickery, P.G., *Executive Director* 



## **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

Protecting Texas by Reducing and Preventing Pollution

April 30, 2010

Mr. Jim Grona Oak Bend Forest, LC P.O. Box 790645 San Antonio, Texas 78279-0645

Re: Edwards Aquifer, Comal County NAME OF PROJECT: Oak Bend Estates, located off of FM 3351 at Meadow Trail, 0.4 miles north of Cibolo Creek, Fair Oaks Ranch, Texas TYPE OF PLAN: Request for Approval of a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer Edwards Aquifer Protection Program ID No. 2917.00, Investigation No. 794601 Regulated Entity No. RN105879209

Dear Mr. Grona:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP Application for the above-referenced project submitted to the San Antonio Regional Office by John B. Luce Consulting Engineer on behalf of Oak Bend Forest, LC on February 25, 2010. Final review of the CZP was completed after additional material was received on April 23, and April 26, 2010. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

#### -PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 148.79 acres. It will include streets, driveways, sidewalks, and single-family homes. The impervious cover will be 20.29 acres (13.6 percent). According to a letter dated, February 24, 2010, signed by Robert Boyd, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

#### PERMANENT POLLUTION ABATEMENT MEASURES

This single-family residential project will not have more than 20 percent impervious cover.

REPLY TO: RECION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210-490-3096 • FAX 210-545-4329

Mr. Jim Grona Page 2 April 30, 2010

#### SPECIAL CONDITIONS

- I. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested format (Deed Recordation Affidavit, TCEQ-0625A) that you may use to deed record the approved CZP is enclosed.
- II. Since this project will not have more than 20 percent impervious cover, an exemption from additional permanent BMPs is approved. If the percent impervious cover ever increases above 20 percent or the land use changes, the exemption for the whole site as described in the property boundaries required by §213.4(g), may no longer apply and the property owner must notify the appropriate regional office of these changes.

#### STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.
- 3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

#### Prior to Commencement of Construction:

. . . . .

- 4. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 5. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 6. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.

Mr. Jim Grona Page 3 April 30, 2010

7. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

#### During Construction:

- 8. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 9. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
- 10. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 11. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 12. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.
- 13. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 5, above.

#### After Completion of Construction:

- - -

14 Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in

Mr. Jim Grona Page 4 April 30, 2010

writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.

15. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

- 16. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone Plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 17. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 18. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact Alan G. Jones of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4074.

Sincerely,

Mark R. Vickery, P.G. Executive Director Texas Commission on Environmental Quality

MRV/AGJ/eg

Enclos	sure:	Deed Recordation Affidavit, Form TCEQ-0625A Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-1026	3
cc:	Mr. I Mr. 7 Mr. 8	ohn B. Luce, P.E., John Luce Consulting Engineer Dan Kasprowicz, City of Fair Oaks Ranch Fom Hornseth, P.E., Comal County Karl J. Dreher, Edwards Aquifer Authority D Central Records, Building F. MC212	•

Bryan W. Shaw, Ph.D., Chairman Buddy Garcia, Commissioner Carlos Rubenstein, Commissioner Mark R. Vickery, P.G., Executive Director



RECEIVED MAR 0 8 2010 COUNTY ENGINEER

## **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

Protecting Texas by Reducing and Preventing Pollution

March 3, 2010

Mr. Thomas H. Hornseth, P.E. Comal County Engineer 195 David Jonas Drive New Braunfels TX 78132-3710

 Re: Edwards Aquifer, Comal County PROJECT NAME: Oak Bend Estates, located off of FM 3351 at Meadow Creek Trail, 0.4 miles north of Cibolo Creek, Comal County, Texas PLAN TYPE: Application for Approval of a Contributing Zone Water Pollution Abatement Plan (CZP) request, 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program EAPP File No.: 2917.00

Dear Mr. Hornseth:

The enclosed Contributing Zone Water Pollution Abatement Plan, received on February 25, 2010 application is being forwarded to you pursuant to the Edwards Aquifer Rules. The Texas Commission on Environmental Quality (TCEQ) is required by 30 TAC Chapter 213 to provide copies of all applications to affected incorporated cities and underground water conservation districts for their comments prior to TCEQ approval.

Please forward your comments to this office by March 24, 2010.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact the San Antonio Region Office at (210) 490-3096.

Sincerely

Lynn M. Bumguardner Water Section Manager San Antonio Regional Office

LMB/eg

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TCEQ-R13 FEB 25 2010 SAN ANTONIO



JOHN B. LUCE REGISTERED PROFESSIONAL ENGINEER CIVIL ENGINEERING CONSULTANT

## **OAK BEND ESTATES**

RECEIVED

CITY OF FAIR OAKS RANCH Comal County, Texas MAR 0 8 2010 COUNTY ENGINEER

# **CONTRIBUTING ZONE PLAN**

for

REGULATED ACTIVITIES ON THE CONTRIBUTING ZONE TO THE EDWARDS AQUIFER 30 TAC §213.24(1)



JOB NO. E- 111060103 January 22, 2010

> P.O. BOX 405 BULVERDE, TEXAS 78163

(830) 980-7878 jblranch@gvtc.com

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Contributing Zone Plan Application

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), Effective June 1, 1999

Regulated Entity Name: Oak Bend Estates County: Comal Stream

Stream Basin: Cibolo Creek.

- 1. X Regulated activities on this site will disturb at least 5 acres.
  - \_\_\_\_ Regulated activities on this site will disturb less than 5 acres and are part of a larger common plan of development or sale with the potential to disturb cumulatively five or more acres.
- 2. Customer (Applicant):

Contact Person:	Jim Grona	
Entity:	Oak Bend Forest, LC	
Mailing Address:	P.O. Box 790645	
City, State:	San Antonio, Texas	Zip: 78279-0645
Telephone:	210-771-0033	FAX: 210-366-9549

Agent/Representative (If any):

Contact Person:	John B. Luce, P.E.	
Entity:	John Luce Consulting Eng	gineer
Mailing Address:	P.O. Box 405	-
City, State: Bulverde,	Texas	Zip: 78163
Telephone:	830-980-7878	FAX: 830-980-7842

- 3. X This project is inside the city limits of Fair Oaks Ranch
  - \_\_\_\_ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of San Antonio, Texas.
  - \_\_\_\_ This project is not located within any city's limits or ETJ.
- 4. The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

On FM 3351 @ Meadow Creek Trail, 0.4 miles north of Cibolo Creek.

- 5. <u>X</u> ATTACHMENT A Road Map. A road map showing directions to and the location of the project site is found as at the end of this form.
- 6. X ATTACHMENT B USGS Quadrangle Map. A copy of the USGS Quadrangle Map (Scale: 1" = 2000') is found at the end of this form. The map(s) clearly shows:
  - X Project site boundaries.
  - X USGS Quadrangle Name(s).
- 7. <u>X</u> ATTACHMENT C Project Narrative. A detailed narrative description of the proposed project is found at the end of this form.
- 8. Existing project site conditions are noted below:

- \_\_\_\_ Existing commercial site
- \_\_\_\_ Existing industrial site
- Existing residential site
- Existing paved and/or unpaved roads
- \_\_\_\_ Undeveloped (Cleared)
- X Undeveloped (Undisturbed/Uncleared)
  - Other: \_\_\_\_\_

#### PROJECT INFORMATION

9.	The type of project is: <u>x</u> Residential: # of Lots: <u>x</u> Residential: # of Living Unit E Commercial Industrial Other:	130 quivalents: 130	
10.	Total project area (size of site):	148.79	_ Acres
	Total disturbed area:	148.79	_ Acres

11. Projected population: <u>325</u>

12. The amount and type of impervious cover expected after construction is complete is shown below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	315,900	÷ 43,560 =	7.252
Driveways & Sidewalks	195,000	÷ 43,560 =	4.477
Streets	372,870	÷ 43,560 =	8.560
Total Impervious Cover 883,770 ÷ 43,560 =			20.289
Total Impervious Cover ÷ Total Acreage x 100 =			13.6%

- 13. <u>x</u> ATTACHMENT D Factors Affecting Surface Water Quality. A description of factors that could affect surface water quality is found as at the end of this form. If applicable, this should included the location and description of any discharge associated with industrial activity other than construction.
- 14. <u>x</u> Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

#### FOR ROAD PROJECTS ONLY N/A Complete questions 15-20 if this application is exclusively for a road project.

- 15. Type of project:
  - TXDOT road project.
  - County road or roads built to county specifications.
  - City thoroughfare or roads to be dedicated to a municipality.
  - Street or road providing access to private driveways.

- 16. Type of pavement or road surface to be used:
  - \_\_\_ Concrete Asphaltic concrete pavement

Other:

- 17.Length of Right of Way (R.O.W.):feet.Width of R.O.W.:feet. $L \times W =$ \_\_\_\_\_ Ft² ÷ 43,560 Ft²/Acre =acres.18.Length of pavement area:feet.Width of pavement area:feet. $L \times W =$ \_\_\_\_\_ Ft² ÷ 43,560 Ft²/Acre =feet. $L \times W =$ \_\_\_\_\_ Ft² ÷ 43,560 Ft²/Acre =acres.Pavement areaacres ÷ R.O.W. areaacres x 100 = \_\_\_\_% impervious cover.
- 19. \_\_\_\_ A rest stop will be included in this project. \_\_\_\_ A rest stop will **not** be included in this project.
- 20. \_\_\_\_ Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ.

#### STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

21. <u>x</u> ATTACHMENT E - Volume and Character of Stormwater. A description of the volume and character (quality) of the stormwater runoff which is expected to occur from the proposed project is found at the end of this form. The estimates of stormwater runoff quality and quantity are based on area and type of impervious cover. The runoff coefficient of the site for both pre-construction and post-construction conditions is included.

#### WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

- 22. Wastewater will be disposed of by:
  - <u>x</u> On-Site Sewage Facility (OSSF/Septic Tank):
    - **ATTACHMENT F Suitability Letter from Authorized Agent.** An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's written approval is provided at the end of this form. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities. The system will be designed by a licensed professional engineer or a registered sanitarian and installed by a licensed installer in compliance with 30 TAC §285.
  - Sewage Collection System (Sewer Lines): Wastewater is to be disposed of by conveyance to the (name) treatment plant for treatment and disposal. The treatment facility is:
    - \_\_\_\_ existing.
    - \_\_\_\_ proposed.

Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

#### FOR PERMANENT ABOVEGROUND STORAGE TANKS (ASTs) > 500 GALLONS Complete questions 23-29 if this project includes the installation of AST(s) with volume(s) greater than 500 gallons. N/A

23. Tanks and substance stored:

AST Number	Size (Gallons)	Substance to be Stored	Tank Material
1	006444400000000000000000000000000000000		
2			
3			
4			
5			
Total		x 1.5 =	gallons

- 24. \_\_\_\_ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems. N/A
  - ATTACHMENT G Alternative Secondary Containment Methods. Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are found at the end of this form. N/A
- 25. Inside dimensions and capacity of containment structure(s): N/A

Length (L) (Ft.)	Width (W) (Ft.)	Height (H) (Ft.)	$L \times W \times H =$ (Ft <sup>3</sup> )	Gallons
Total				

26.

27.

- All piping, hoses, and dispensers will be located inside the containment structure.
- \_\_\_\_ Some of the piping to dispensers or equipment will extend outside the containment structure. N/A
- \_\_\_\_ The piping will be aboveground
- \_\_\_\_ The piping will be underground

\_\_\_\_ The containment area must be constructed of and in a material impervious to the

substance(s) being stored. The proposed containment structure will be constructed of N/A

- 28 ATTACHMENT H - AST Containment Structure Drawings. A scaled drawing of the containment structure is found at the end of this form that shows the following: N/A
  - Interior dimensions (length, width, depth and wall and floor thickness).
  - Internal drainage to a point convenient for the collection of any spillage.
  - Tanks clearly labeled
  - Piping clearly labeled
  - Dispenser clearly labeled
- 29. Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill. N/A
  - In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.
  - In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

#### SITE PLAN

#### Items 30 through 41 must be included on the Site Plan.

- 30. The Site Plan must have a minimum scale of 1" = 400'. Site Plan Scale: 1" = 200'.
- 31. 100-year floodplain boundaries
  - Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
  - No part of the project site is located within the 100-year floodplain. <u>X</u>

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s):

FEDERAL INSURANCE RATE MAP for COMAL COUNTY, TEXAS AND INC. AREAS PANEL 190 OF 505, MAP NO. 48091C0190F MAP EFFECTIVE DATE: SEPT. 2, 2009

(See Attachment "B" Maps: FIRM Map No. 48091C0190 F)

- 32. The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.
  - The layout of the development is shown with existing contours at appropriate, but not Χ\_ greater than ten-foot contour intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.

- 33. <u>X</u> A drainage plan showing all paths of drainage from the site to surface streams. (See Attachment "X" Sht. CZP 1)
- 34. X The drainage patterns and approximate slopes anticipated after major grading activities.
- 35. X Areas of soil disturbance and areas which will not be disturbed.
- 36. <u>X</u> Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices. (See Attachment "X" Sht. CZP 1)
- 37. X Locations where soil stabilization practices are expected to occur.
- 38. \_\_\_\_ Surface waters (including wetlands). N/A
- 39. \_\_\_\_ Locations where stormwater discharges to surface water. N/A There will be no discharges to surface water.
- 40. \_\_\_\_ Temporary aboveground storage tank facilities. **N/A** Temporary aboveground storage tank facilities will not be located on this site.
- 41. \_\_\_\_ Permanent aboveground storage tank facilities. N/A Permanent aboveground storage tank facilities will not be located on this site.

## Permanent best management practices (BMPs) and measures that will be used during and after construction is completed.

- 42. \_\_\_ Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction. N/A
- 43. \_\_\_\_ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director. **N/A** 
  - \_\_\_\_ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.
  - A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is provided below.
- 44. \_\_\_\_ Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion. N/A
- 45. X Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption

from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes. **(See Attachment "W" – Impervious Cover Increase to 20% Ltr.)** 

- X This site will be used for low density single-family residential development and has 20% or less impervious cover.
- \_\_\_\_ This site will be used for low density single-family residential development but has more than 20% impervious cover.
- This site will not be used for low density single-family residential development.
- 46. \_\_\_\_ The executive director may waive the requirement for other permanent BMPs for multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes. N/A
  - ATTACHMENT I 20% or Less Impervious Cover Waiver. This site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is found at the end of this form.
  - \_\_\_\_ This site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
  - \_\_\_\_ This site will not be used for multi-family residential developments, schools, or small business sites. N/A

#### 47. ATTACHMENT J - BMPs for Upgradient Stormwater.

- A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is provided as **ATTACHMENT J** at the end of this form.
- If no surface water, groundwater or stormwater originates upgradient from the site and flows across the site, an explanation is provided as ATTACHMENT J at the end of this form.
- X If permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT J** at the end of this form.

#### 48. **ATTACHMENT K - BMPs for On-site Stormwater.**

- \_\_\_\_ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is provided as **ATTACHMENT K** at the end of this form.
  - X If permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, an explanation is provided as **ATTACHMENT K** at the end of this form.

- 49. \_\_\_\_ ATTACHMENT L BMPs for Surface Streams. A description of the BMPs and measures that prevent pollutants from entering surface streams is provided at the end of this form. N/A
- 50. \_\_\_\_ ATTACHMENT M Construction Plans. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information have been signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed permanent BMPs and measures are provided at the end of this form. Design Calculations, TCEQ Construction Notes, all proposed structural measures, and appropriate details must be shown on the construction plans. N/A
- 51. \_\_\_\_ ATTACHMENT N Inspection, Maintenance, Repair and Retrofit Plan. A plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is provided at the end of this form. The plan has been prepared and certified by the engineer designing the permanent BMPs and measures. The plan has been signed by the owner or responsible party. The plan includes procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofits as well as a discussion of record keeping procedures. N/A
- 52. \_\_\_\_ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site. N/A
  - Pilot-scale field testing (including water quality monitoring) may be required for BMPs that are not contained in technical guidance recognized by or prepared by the executive director.
    - \_ **ATTACHMENT O Pilot-Scale Field Testing Plan.** A plan for pilot-scale field testing is provided at the end of this form.
- 53. \_\_\_\_ ATTACHMENT P Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is provided at the end of this form. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity which increases erosion that result in water quality degradation. (See Attachment "P" Minimizing Surface Stream Contamination)

## Responsibility for maintenance of permanent BMPs and measures after construction is complete.

- 54. \_\_\_\_ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. N/A
- 55. \_\_\_\_ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a

multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur. **N/A** 

#### **ADMINISTRATIVE INFORMATION**

- 56. X One (1) original and three (3) copies of the complete application has been provided.
- 57. X Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.
- 58. X The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **CONTRIBUTING ZONE PLAN APPLICATION** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

John B. Luce, P.E. Print Name of Customer/Agent - 10 - 10 Signature of Customer/Agent

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.



# SITE LOCATION MAP

## OAK BEND ESTATES







EDWARDS AQUIFER RECHARGE EXHIBIT



Name: BOERNE, TEX. Date: 1964, Photorevised 1982 Scale 1 Inch Equals 2,000 Feet

## SITE LOCATION MAP **USGS Quadrangle Maps**

Name: BERGHEIM, TEX. Date: 1964, Photorevised 1973 Scale 1 Inch Equals 2,000 Feet

**Contour Interval: 20 Feet** 

**Contour Interval: 20 Feet** 



JBL

JOHN B. LUCE REGISTERED PRFESSIONAL ENGINEER CIVIL ENGINEERING CONSULTANT

Feb. 20, 2010

### ATTACHMENT C

## **PROJECT NARRATIVE**

The subject 148.79 acres is presently raw hill country land which is to be developed into 130 Single-Family Residential Lots. The City of Fair Oaks Ranch will own and maintained the community water system supplying potable water to said lots.

The initial construction will consist of 11,616 l.f. of street constructed to the City of Fair Oaks Ranch specifications (30' pavement width) and related drainage structure concrete (Construction Plans are in progress). These amounts to 372,870 s.f. with curb return filets, conc. drainage structures and extended-width entry or 8.56 acres of impervious cover. Driveways and sidewalks account for another 195,000 s.f. or 4.48 acres.

The ultimate construction will be that of 130 Single-Family Homes averaging approximately 2,430 s.f. each. These structural rooftops will be approximately equal to 315,900 s.f. or 7.25 acres of impervious cover.

The grand total impervious cover is, therefore, 883,770 s.f. (20.29 acres) or 13.6% of the 148.79 acre subdivision. Consequently, as per TCEQ Rule 30 TAC §213.4(g), there will be no permanent BMPs since this is to be a single family residential subdivision with less than 20% impervious cover.



(830) 980-7878 jblranch@gvtc.com



Feb. 7, 2010

#### ATTACHMENT D

## FACTORS AFFECTING SURFACE WATER QUALITY

There are factors that could affect surface groundwater quality both during and after construction. During construction contamination could come from oil, grease, diesel or gasoline drippings from construction equipment and also from the process of excavation materials and grading. If fuel or a hazardous substance spill occurs, the contaminated soil will be remove and placed in an impervious container to be disposed offsite at an approved disposal location. The placement of excavated materials will have appropriately sized erosion and sedimentation controls placed downgradient

After construction is complete, the potential sources of contamination would be from sediments brought onsite by vehicles, fuel, oil and grease from vehicles, fertilizers used for lawn care and pesticides used by the individual homeowners.



Feb. 10, 2010

ATTACHMENT E

## VOLUME AND CHARACTER OF STORMWATER

The stormwater runoff for the preconstruction conditions of these 149 acres would be across rocky soil, with native vegetation consisting of grasses, brush and trees. These precondition flows, proceed south and southeasterly to existing swales to FM 3351. The swales transfer the runoff to two pipe crossings under the FM road to two tributaries of the Cibolo Creek.

The proposed Single-Family Residential subdivision will generate an insignificant increase in stormwater runoff, which after exiting each residential lot, will be carried by roadside ditches and drainage pipe to the two road crossings.

After construction there will be an inconsequential amount of sediment and chemicals carried from this project.

See Attachment "X", Page CZP 3, Drainage Area Map with Runoff Calculations for Pre & Post Developed Stromwater flows.



Feb. 22, 2010

## ATTACHMENT F

## **OSSF SUITABILITY LETTER FROM AUTHORIZED AGENT**

An on-site sewage facility (OSSF) will be provided for each residential lot in this subdivision as a means of sewage disposal. A permit for each individual OSSF will be issued after approval by Comal County engineer's Office, the licensing authority.

The "OSSF Suitability Letter" follows this page.

Each lot must obtain a permit from the Comal County Assistant County Engineer, to construct an OSSF. This requires that each system is designed by either a licensed professional engineer or a registered sanitarian and installed by a licensed installer. The design and installation shall be in compliance with 30 TAC §285.

Signed: Luce, P.F. 2/22/10 hn B. uthorized Agent



## ATTACHMENT F



Comal County OFFICE OF COMAL COUNTY ENGINEER

February 24, 2010

Mr. John B. Luce, P.E. P.O. Box 405 Bulverde, TX 78163

Re: Oak Bend Estates Contributing Zone Plan within Comal County, Texas

Dear Mr. Luce:

In accordance with TAC §213.24(8)(B), Comal County has found that the entire referenced site is suitable for the use of private sewage facilities and will meet the requirements for on-site sewage facilities as specified in TAC §285 based on the following information submitted to our office on February 24, 2010:

• Contributing Zone Plan prepared by John B. Luce, P.E.

If you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

Robert Boyd, P.E. Comal County Assistant Engineer

cc: Jay Millikin, Comal County Commissioner, Precinct No. 2

## ATTACHMENT G

## ALTERNATE SECONDARY CONTAINMENT METHODS

NOT APPLICABLE TO THIS PLAN

## ATTACHMENT H

## AST CONTAINMENT STRUCTUREDRAWINGS

NOT APPLICABLE TO THIS PLAN

Feb. 7, 2010

ATTACHMENT I

## 20% OR LESS IMPERVIOUS COVER WAIVER

I hereby certify that Oak Bend Estates are being developed as Single-Family Residential with a total purposed impervious cover of less than 20%.



Feb., 7, 2010

## ATTACHMENT J

## **EXEMPTION FROM PERMANENT BMPs**

Oak Bend Estates are by TCEQ rule, exempt from providing permanent BMPs for stormwater control. This exemption is allowed since it is to be a single-family residential development and the total impervious cover, including housing, streets, drives, sidewalks and all other impervious structures, cover less than 20% of the total 148.79 acres.

The total proposed impervious cover of 13.6% is calculated on Page 2, Section 12. of the Contributing Zone Plan Application for Regulated Activities.



(830) 980-7878 jblranch@gvtc.com



Feb. 7, 2010

### ATTACHMENT K

## **EXEMPTION FROM PERMANENT BMPs**

Oak Bend Estates are by TCEQ rule, exempt from providing permanent BMPs for stormwater control. This exemption is allowed since it is to be a single-family residential development and the total impervious cover, including housing, streets, drives, sidewalks and all other impervious structures, cover less than 20% of the total 148.79 acres.

The total proposed impervious cover of 13.6% is calculated on Page 2, Section 12. of the Contributing Zone Plan Application for Regulated Activities.



(830) 980-7878 jblranch@gvtc.com

Feb. 7, 2010

## ATTACHMENT L

## **EXEMPTION FROM PERMANENT BMPs**

Oak Bend Estates are by TCEQ rule, exempt from providing permanent BMPs for stormwater control. This exemption is allowed since it is to be a single-family residential development and the total impervious cover, including housing, streets, drives, sidewalks and all other impervious structures, cover less than 20% of the total 148.79 acres.

The total proposed impervious cover of 13.6% is calculated on Page 2, Section 12. of the Contributing Zone Plan Application for Regulated Activities.



JBL

JOHN B. LUCE REGISTERED PRFESSIONAL ENGINEER CIVIL ENGINEERING CONSULTANT

Feb. 7, 2010

### ATTACHMENT M

## CONSTRUCTION PLANS

Oak Bend Estates are by TCEQ rule, exempt from providing permanent BMPs for stormwater control. Therefore, no BMP construction plans are provided. However, installation instructions are provided in Attachment "X", Page CZP 1.



(830) 980-7878 jbiranch@gvtc.com INSPECTION, MAINTENANCE, REP AIR and RETROFIT PLAN for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

REGULATED ENTITY NAME: OAK BEND ESTATES

#### POTENTIAL SOURCES OF CONTAMINATION

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

- 1. Fuels for construction equipment and hazardous substances which will be used during construction:
  - X Fuels and hazardous substances will not be stored on-site.
- 2. X Spill Response Actions. A description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is provided at the end of this form.
- 3. *N/A* Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- X ATTACHMENT 0 Potential Sources of Contamination. Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.

#### SEQUENCE OF CONSTRUCTION

- 5. X Sequence of Major Activities. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.
- 6. X Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Cibolo Creek Tributarys.

#### TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All Temporary BMPs must be shown on the site plan.

7. X Temporary Best Management Practices and Measures. A description of the TBMPs and measures that will be used during and construction are provided at the end of this form. For each activity listed in the sequence of construction, include appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

- 8 The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
  - X Request **to** Temporarily Seal a Feature. A request to temporarily seal a feature must be submitted to the TCEQ Regional Office. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
- 9.
- X **ATTACHMENT X, Page CZP 8 Drainage Area Map.** A drainage area map is provided in **ATTACHMENT X, Page CZP 3** to support the following requirements.
- X There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.
- 10. X **ATTACHMENT N Inspection and Maintenance for TBMPs.** A plan for the inspection of temporary BMPs and measures and for their timely maintenance, repairs, and, if necessary, retrofit is provided at the end of this form. A description of documentation procedures and recordkeeping practices is included in the SWPPP plan.
- 11. X All control measures must be properly selected, installed. and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
- 12. X If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
- 13. X Sediment must be removed from sediment traps or sedimentation ponds not later Than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
- 14. X Litter, .construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

#### SOIL STABILIZATION PRACTICES

Establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation shall be in accordance with Technical Guidance Manual for guidelines and specifications\_

15.

16. X Records must be kept at the site of the dates when major grading activities occur, thedates when construction activities temporarily or permanently cease on a portion of the

Page 2 of 4

- site, and the dates when stabilization measures are initiated.
- 17. Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

#### ADMINISTRATIVE INFORMATION

- 19. ...1L All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
- 20. ..1L If any geologic or man made features, such as caves, faults. sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
- 21. ...1L Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

## **Spill Response Actions**

Measures that will be taken to contain any spill of hydrocarbons or hazardous substances will include:

- Immediate isolation of the substance source to keep additional spill or possible infiltration from occurring. 2-3 yards of clean sand shall be kept onsite to assist in the isolation and containment of the spill material,
- 2. The substance and contaminated materials will be excavated and placed within an impervious container or impervious-lined area that is protected from stormwater runoff. Excavated materials will be covered to protect against the rain.
- 3. The hazardous substances will be positively identified.
- 4. The spill area, after the excavation, will be sampled to verify that the hazardous substance has been properly and adequately remediated.
- S. The excavated materials will be disposed of at an approved facility licensed to accept the substances Identified. All transporting and disposal will follow State requirements for hazardous material.
- 6. TCEQ San Antonio Regional Office (210-490-3096) shall be notified immediately in the event that a spill occurs.

#### SEQUENCE OF CONSTRUCTION

1.Clearing & grubbing, 2. Excavation, 3. Grading. 4. Utilities, 5. Infrastructure installation and 6. House construction.
#### TBMPs TO BE USED DURING CONSTRUCTION

- 1. Silt Fence (Installed before Construction Begins)
- 2. Rock Berms (Installed before Construction Begins)
- 3. Stabilized Construction Entrances (Installed before Construction Begins)

# INSPECITION AND MAINTENANCE SC:nEDULE

### TEMPORARY POLLUTION ABATEMENT MEASURES

		After Rainfall	Monthly	Apelien	ApeaA
Check Depth of Vegetation					
Check Depth of Silt Deposit in Rock Berms				×	
Removal of Debris and Trash				X	
Cut-off Valve	N/A				
Inlet Splash Pad	N/A	.*			
Underdrain System	N/A			-	
Structural Integrity					X
Discharge Pipe		X		X	
Drawdown Time	N/A				
Vegetated Filter Strips	N/A				
Visually inspect Silt Fencing for Damage or	Breach	Х	Х	X	X

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This TEMPORARY STORMWATER SECTION is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

JOHN B. LUCE, P.E. Print Name of Customer/Agent

uce P.E.

2/08/10

Date

### ATTACHMENT O

# PILOT-SCALE FIELD TESTING PLAN

### NOT APPLICABLE TO THIS PLAN

,

JOHN B. LUCE REGISTERED PRFESSIONAL ENGINEER CIVIL ENGINEERING CONSULTANT

Feb. 10, 2010

### ATTACHMENT P

### MINIMIZING SURFACE STREAM CONTAMINATION

The post-developed condition flows, proceed south and southeasterly to existing swales to the South of this tract. The swales transfer the runoff across FM 3351 by means of two TxDOT culverts to two seasonal tributaries of the Cibolo Creek.

The proposed Single-Family Residential subdivision will generate an insignificant increase in stormwater runoff, which after exiting each residential lot; will be carried by roadside ditches and drainage pipe to the two aforementioned tributaries and on in a southeasterly direction to the Cibolo..

Although the drainage plans are incomplete at this time, all surface runoff is to be directed to the paved and curved street gutters and then to a combination of concrete lined and earthen channels ending at the R.O.W. line of FM 3351. At that point it will be conveyed under 3351 by the two existing TxDOT culverts which discharge to the tributaries.

All silt bearing or otherwise contaminated stormwater discharge will be treated at the point source by pertinent TCEQ recommended TBMPs until all pavement is in place and areas to have permanent vegetation are restored.

See Attachment "X", Page CZP 3, Drainage Area Map Calculations for Pre & Post Developed Stromwater flows.



(830) 980-7878 jblranch@gvtc.com



# STORM WATER

This document must be retained until

\_\_\_\_March 5, 2013\_\_\_\_ in accordance with the conditions in Part V of the general permit.

POLUTION

# **PREVENTION PLAN (SWP3)**

Oak Bend Forest, LC Oak Bend Estates Fair Oaks Ranch, Texas



### FOREWORD

Since 1972, the Clean Water Act has prohibited the discharge of any pollutant to waters of the United States unless it has been authorized by a National Pollutani Discharge Elimination System (NPDES) permit. The NPDES program is designed to regulate identifiable sources that discharge pollutants into the environment and requires the implementation of controls necessary to minimize the discharge of pollutants.

The NPDES program initially targeted easily detected sources of water pollution such as municipal sewage and industrial process wastewater and was successful in improving water quality. However, the NPDES program was not addressing other significant sources of water quality impairment, such as non-point sources of runoff from agricultural and forestry operations, and storm water runoff.

In 1987, the Clean Water Act was amended to establish requirements for storm water discharges under the NPDES program. Subsequently, the EPA issued the first NPDES general permit to address construction activities disturbing 5 or more acres in 1992. This first general permit was called the Storm Water Baseline Industrial General Permit. Upon its expiration in 1998, the EPA issued the Construction General Permit to further authorize construction projects disturbing 5 or more acres.

According to the 1996 National Water Quality Inventory (305b Report), a summary of water quality surveys, approximately 40 percent of surveyed U.S. water bodies were still impaired by pollution and did not meet water quality standards. A leading source of this impairment was polluted runoff. In fact, according to the Inventory, 6 percent of impaired rivers, 11 percent of impaired lake acres, and 11 percent of impaired estuaries were affected by construction site discharges.

In 1999, the EPA promulgated the Storm Water Phase II rules which expanded the requirement to obtain an NPDES permit to construction sites which disturb only 1 acre or more. These rules established a date of December 9, 2002 for permitting authorities to issue a Phase II Construction General Permit and a date of March 10, 2003 as the deadline for operators of small construction sites to be authorized by such a permit.

On March 5, 2003, the Texas Commission on Environmental Quality (TCEQ) issued the first TPDES Construction General Permit – TXR150000. This permit incorporates federal requirements from the CWA amendments of 1987 and the Phase II requirements of 1999. Thus, the general permit authorizes the discharge of storm water associated with construction activity from sites which disturb 1 acre or more. This general permit was issued for a five year term and is set to expire at midnight on March 4, 2008.

The Texas Natural Resource Conservation Commission (now the TCEQ) was delegated authority to issue NPDES permits via the Texas Pollutant Discharge Elimination System on September 14, 1998. The TCEQ is now the permitting authority for the state of Texas with the exception of construction projects associated with oil and gas exploration and projects located on Indian Country Land.

# Acronyms & Abbreviations

BMP	Best Management Practice
BOD	Biological Oxygen Demand
BTEX	Benzene, Toluene, Ethyl-Benzene, Xylene
COD	Chemical Oxygen Demand
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Change
NOD	Notice of Deficiency
NOE	Notice of Enforcement
NOI	Notice of Intent
NOT	Notice of Termination
NOV	Notice of Violation
SWP3 / SWPPP	Storm Water Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TSS	Total Suspended Solids
TXR150000	Construction General Permit issued by TCEQ
TXR050000	Industrial General Permit issued by TCEQ (Concrete Batch Plants)
TXG110000	Concrete Batch Plant General Permit issued by TCEQ

## **Application Requirements**

Operators involved in construction activities subject to the general permit, TXR150000, must submit a NOI to the TCEQ or post a Construction Site Notice in an accessible location in order to be authorized. Posting the notice displays the operator's intent to operate under the conditions of TXR150000 to the general public and federal, state, and local enforcement authorities.

Construction Site Notices are used for projects that are not part of a larger common plan which has the potential to disturb 5 acres or more. If a project is part of a larger common plan with the potential to disturb 5 or more acres, then each operator within that common plan must submit a Notice of Intent to be authorized.

## **Additional Notification**

Operators of construction projects must submit a signed copy of their NOI or Construction Site Notice to the operator of any municipal separate storm sewer system that receives the storm water effluent from the site. In addition, the construction site operator must also submit these documents to the TCEQ's Edwards Aquifer Program if the project is within the Edwards Aquifer Contributing ZONE OF Recharge Zones. Addresses for this notification are listed below by county.

Counties:	Address and Phone Number:
Comal, Bexar, Medina, Uvalde, and Kinney	TCEQ Water Program Manager San Antonio Regional Office 14250 Judson Rd. San Antonio, Texas 78233 (210) 490–3096
Williamson, Travis, and Hays	TCEQ Water Program Manager Austin Regional Office 1921 Cedar Bend Dr., Ste. 150 Austin, Texas (512) 339–2929

### **Notice of Change**

A Notice of Change letter must be submitted to the TCEQ if it is determined that relevant facts on the NOI changed or were not reported properly on the original NOI. This letter must be submitted within 14 days after the change in information or after becoming aware that it was improperly reported.

### **Notice of Termination**

Coverage under this general permit must be terminated within 30 days if:

- final stabilization has been achieved on all portions of the site that is the responsibility of the permittee; or
- another permitted operator has assumed control over all areas of the site that have not been finally stabilized; and
- all silt fences and other temporary erosion controls have either been removed, scheduled for removal as defined in the SWP3, or transferred to a new operator if the new operator has sought permit coverage. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

Final stabilization is achieved when:

All soil disturbing activities at the site have been completed and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

- Stabilization will be achieved by landscaping all disturbed areas of the site that are not part of the footprint of the structure. If the operator of the construction project is not contracted to perform or coordinate landscaping activities, notice will be provided to the homeowner of the requirements for final stabilization as identified in the item below.
- + For individual lots in a residential construction site by either:

Othe homebuilder completing final stabilization as specified above; or

- It he homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization. A copy of the correspondence provided to the homeowner is available in Section 3 of this plan.
- For construction activities on land used for agricultural purposes (e.g. pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their pre-construction agricultural use must meet the final stabilization conditions described above.

# **Purpose of the SWP3**

Storm water pollution prevention plans must be prepared for storm water discharges that will reach Waters of the United States, including discharges to MS4 systems and privately owned separate storm sewer systems that drain to Waters of the United States, to identify and address potential sources of pollution that are reasonably expected to affect the quality of discharges from the construction site, including off-site material storage areas, overburden and stockpiles of dirt, borrow areas, equipment staging areas, vehicle repair areas, fueling areas, etc., used solely by the permitted project. The SWP3 must describe and ensure the implementation of practices that will be used to reduce the pollutants in storm water discharges associated with construction activity at the construction site and assure compliance with the terms and conditions of the construction general permit. Where there is more than one SWP3 for a site, permittees must coordinate to ensure that BMPs and controls are consistent, and do not negate or impair the effectiveness of each other. Regardless of whether a single comprehensive SWP3 is developed, or separate SWP3s are developed for each operator, it is the responsibility of each operator to ensure that compliance with the terms and conditions of this general permit is met in the areas of the construction site where that operator has operational control over construction plans and specifications or day-to-day operational control.

### **Construction Site Operator**

This plan was developed in accordance with the conditions of the Texas Pollutant Discharge Elimination System Construction General Permit (TXR150000) for the following operator(s):

Oak Bend Forest, LC P.O. Box 790645 San Antonio, Texas 78279-0645

A shared SWP3 is allowed under the conditions of the construction general permit provided that each operator agrees upon the terms, roles, and responsibilities outlined in this SWP3.

In the event each operator performs duties in a common plan of development where boundaries separate the limits of construction for each operator, then it is the responsibility of each operator to implement appropriate BMPS, maintain the areas of construction for which they have operational control.

In situations where two or more operators are included in the plan and the areas of operational control overlap, the following conditions must be met. Operators with day to day control must ensure that prescribed controls and best management practices are implemented appropriately. It is also the responsibility of this operator to conduct inspections and draft reports after each storm event of 0.5 inches or more. Operators with control over plans and specifications must ensure the project specifications allow or provide that adequate BMPs may be developed to meet the requirements of Part III of this general permit. This operator must also ensure all other operators affected by the conditions of this plan are notified in a timely manner such that those operators may modify best management practices as are necessary to remain compliant with the conditions of this general permit.

The permittees listed above have agreed to operate under the conditions of this shared SWP3 and, in accordance with Part III. A. of TXR150000, demonstrate their acknowledgment of these conditions by signing under their company name above. The acknowledgment letters, which display each operator s permit number, will be kept in Section 3 of this SWP3. The date in the signature block on the NOI, which is also kept in Section 3, demonstrates the day the NOI was mailed to the TCEQ and the operator of any MS4 receiving the site s authorized discharge. No signature is required for pollution prevention plans developed for only one operator.

This plan contains descriptions of management practices and structural controls used to prevent sediment, fuel, and other pollutants from discharging from areas associated with construction activity at the following construction site.

Oak Bend Estates P.O. Box 790645 San Antonio, Texas 78279-0645

The site is located in the on Ralph Fair Rd. (FM 3351) at the Intersection of Meadow Creek Trail, City of Fair Oaks Ranch, Comal County, Texas. The site can also be located using the following coordinates:

Latitude: 29° 45' 20.31" N Longitude: 98° 37' 16.00" W The project consists of Construction of new residential streets, onsite sewer facilities, water lines, electric, telephone and gas facilities. This will be a single family residential development. Major soil disturbing activities are associated with street, drainage, utility and house construction.

# Sequence of Major Earth Disturbing Events

Construction sites, residential and commercial, typically reach each of the following milestones during the project. However, during residential construction, a developer may complete portions of the following milestones while a homebuilder completes others. An operator who completes the infrastructure for a project will have the dates for completing these milestones marked on the inspection reports. See Section 12 for the inspection reports and those dates.

- . Install Sediment and Erosion Controls;
- . Clearing, Grubbing and Grading;
- . Excavate and Install "Wet" Utilities;
- . Excavate and Install "Dry" Utilities;
- . Grade, Form and Pave Streets;
- . Building Construction;
- . Removal of Sediment and Erosion Controls;
- . Stabilization and Re-vegetation.

# **Number of Acres Disturbed**

The area being disturbed by Oak Bend Forest, LC and covered under the conditions of this plan is 148.79 acres. The total number of acres disturbed at this construction site is approximately 148.79 acres.

# Soil Data

The most common soil type(s) is listed below, along with it's characteristics.

COMFORT-ROCK Outcrop Complex, 1 to 8% slopes. Covers 76% of site. This complex consist of shallow, clayey soils and Rock outcrop on side slopes and on hilltops and ridge tops on uplands in the Edwards Plateau Land Resources Area. Slopes are convex. The areas are irregular in shape and range from 25 to 1,000 acres in size.

RUMPLE-COMFORT Association, 1 to 8% slopes makes up 12% and TARPLEY CLAY, 1 to 3% slopes comprises the remaining 12%.

# The Characteristics of these Soil Types are as follows:

CrD-Comfort-Rock outcrop complex, 1 to 8 percent slopes

#### Map Unit Setting Elevation: 300 to 8,700 feet Mean annual precipitation: 10 to 36 inches Mean annual air temperature: 52 to 73 degrees F Frost-free period: 120 to 320 days Map Unit Composition Comfort and similar soils: 70 percent Rock outcrop: 15 percent Minor components: 15 percent **Description of Comfort** Setting Landform: Ridges Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Convex Across-slope shape: Convex Parent material: Residuum weathered from limestone **Properties and qualities** Slope: 1 to 8 percent Surface area covered with cobbles, stones or boulders: 30.0 percent Depth to restrictive feature: 9 to 20 inches to lithic bedrock Drainage class: Well drained Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 20 percent Available water capacity: Very low (about 1.1 inches) Interpretive groups Land capability (nonirrigated): 6s Ecological site: Low Stony Hill 29-35" PZ (R081CY360TX) **Typical profile** 0 to 6 inches: Extremely stony clay 6 to 13 inches: Extremely stony clay 13 to 20 inches: Bedrock **Description of Rock Outcrop** Setting Landform: Ridges Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Convex Across-slope shape: Convex Parent material: Limestone Custom Soil Resource Report 12 Properties and qualities Slope: 1 to 8 percent Depth to restrictive feature: 0 to 2 inches to lithic bedrock Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr) Interpretive groups

Land capability (nonirrigated): 6s Ecological site: Low Stony Hill 29-35" PZ (R081CY360TX) **Typical profile** 0 to 6 inches: Extremely stony clay 6 to 13 inches: Extremely stony clay 13 to 20 inches: Bedrock **Description of Rock Outcrop** Setting Landform: Ridges Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Convex Across-slope shape: Convex Parent material: Limestone Custom Soil Resource Report 12 **Properties and qualities** Slope: 1 to 8 percent Depth to restrictive feature: 0 to 2 inches to lithic bedrock Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr) Interpretive groups Land capability (nonirrigated): 8s **Typical profile** 0 to 80 inches: Bedrock **Minor Components** Unnamed, minor components Percent of map unit: 15 percent

RUD—Rumple-Comfort association, 1 to 8 percent slopes Map Unit Setting Elevation: 1,000 to 2,300 feet Mean annual precipitation: 23 to 36 inches Mean annual air temperature: 63 to 70 degrees F Frost-free period: 210 to 265 days **Map Unit Composition** Rumple and similar soils: 60 percent Comfort and similar soils: 20 percent Minor components: 20 percent **Description of Rumple** Setting Landform: Plains Down-slope shape: Convex Across-slope shape: Linear Parent material: Residuum weathered from limestone **Properties and qualities** Slope: 1 to 8 percent Depth to restrictive feature: 20 to 40 inches to lithic bedrock Drainage class: Well drained Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 5 percent



Available water capacity: Very low (about 1.4 inches) Interpretive groups Land capability (nonirrigated): 6s Custom Soil Resource Report 16 Ecological site: Gravelly Redland 29-35" PZ (R081CY359TX) **Typical profile** 0 to 10 inches: Very gravelly clay loam 10 to 28 inches: Very gravelly clay 28 to 36 inches: Bedrock **Description of Comfort** Setting Landform: Ridges Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Convex Across-slope shape: Convex Parent material: Residuum weathered from limestone **Properties and gualities** Slope: 1 to 8 percent Surface area covered with cobbles, stones or boulders: 30.0 percent Depth to restrictive feature: 9 to 20 inches to lithic bedrock Drainage class: Well drained Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 20 percent Available water capacity: Very low (about 1.1 inches) Interpretive groups Land capability (nonirrigated): 6s Ecological site: Low Stony Hill 29-35" PZ (R081CY360TX) **Typical profile** 0 to 7 inches: Extremely stony clay 7 to 12 inches: Extremely stony clay 12 to 20 inches: Bedrock **Minor Components** Unnamed, minor components Percent of map unit: 20 percent TaB—Tarpley clay, 1 to 3 percent slopes

### Map Unit Setting

*Elevation:* 1,000 to 1,800 feet *Mean annual precipitation:* 28 to 35 inches *Mean annual air temperature:* 64 to 70 degrees F *Frost-free period:* 220 to 240 days Custom Soil Resource Report 17 **Map Unit Composition** 

Tarpley and similar soils: 85 percent Minor components: 15 percent Description of Tarpley Setting Landform: Plains Down-slope shape: Convex Across-slope shape: Linear Parent material: Residuum weathered from limestone Properties and qualities Slope: 1 to 3 percent Depth to restrictive feature: 13 to 20 inches to lithic bedrock Drainage class: Well drained Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 2 percent Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm) Available water capacity: Very low (about 2.3 inches) Interpretive groups Land capability (nonirrigated): 4e Ecological site: Redland 29-35" PZ (R081CY361TX) **Typical profile** 0 to 6 inches: Clay 6 to 17 inches: Clav 17 to 21 inches: Bedrock Minor Components Unnamed, minor components Percent of map unit: 15 percent

### **Authorized Discharges**

The TPDES Construction General Permit only authorizes the point source discharge of storm water associated with construction activities and the following effluents:

- Discharges from fire fighting activities;
- + Fire hydrant flushing;
- Vehicle, external building and pavement wash water where Detergents are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are remove according to regulation). And where the purpose is to remove mud, dirt and dust;
- Water used to control dust;
- Potable water sources including waterline flusting;

Air conditioning condensate; and

• Uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

Point source discharges of any other effluent to waters of the United States are strictly prohibited. Concrete, paint, and mortar, and any other construction material washout effluent will be controlled to prevent it from discharging from the site, thus creating a manageable discharge adjacent to waters in the State of Texas. All non-storm water discharges will be controlled to prevent flooding or erosion. Any non-storm water effluent that contains adequate suspended solids will not be allowed to discharge from the site without proper treatment. Proper treatment will include filtering the effluent through existing media identified on the site map in Section 2 and may include silt fence, vegetative buffer strips, or other identified filter media.

### **RECEIVING WATER BODIES**

Authorized discharges from this construction site will reach Cibolo Creek.

### **Receiving Water Body Degradation and 303(d) List**

The State of Texas must assemble and evaluate all existing and readily available water quality-related data to identify pollutants that cause a particular waterbody to not meet the water quality standards. Section 303(d) of the Clean Water Act (CWA) requires states to develop a list of waters not meeting these standards or not supporting their designated uses. This list is referred to as the 303(d) list. Once a waterbody is placed on the 303(d) list, the Texas Commission on Environmental Quality must take action to reduce the identified pollutant to levels which are safe to the environment.

The mechanism for reducing these pollutants is through the development and implementation of a Total Maximum Daily Load (TMDL). A TMDL is the amount of a particular pollutant that a particular stream, lake, estuary or other waterbody can 'handle' without violating state water quality standards. The TMDL will identify all sources of impairing pollutant and identify ways to keep it from entering the watershed. For point source pollution (regulated), the TMDL may require tougher restrictions on all permitted activities that may discharge the pollutant of concern. For non-point source (unregulated), the TMDL may require local governments to participate in public education to reduce the source of the pollutant. Ultimately this responsibility lies on the shoulders of everyone who lives, works, or plays in a watershed that drains into an impaired waterbody.

The receiving stream is currently on the latest EPA approved 303(d) list identified in Section 8 of this plan. The pollutant(s) of concern is bacteria.

The pollutant of concern in the discharge of storm water from construction activities is total suspended solids. The receiving water body is currently not impaired for TSS, does not have a TMDL for TSS, or does not have an established TMDL implementation plan. Thus, the discharge from this site will not contribute pollutant loadings to the receiving water body which would require authorization under a separate permit or require it to be consistent with an approved TMDL implementation plan. A list of the latest EPA approved list of impaired water bodies [303(d) list] is available in Section 8.

### **Edwards Aquifer and Local Ordinances**

This storm water pollution prevention plan is in accordance with local, state, and federal storm water regulations. The table below is a summary of the additional ordinances in which the operator of this site is subject to.

	This site is located within the Edwards Aquifer Recharge or Transition Zones.
Water Pollution Abatement Plan	This site covered under this SWP3 is subject to the TCEQ's Water Pollution Abatement Plan.
Local Regulations	This site is subject to San Antonio Water Sys. ordinances.

Specifications required through local ordinances or the Edwards Aquifer Program and require approval from a Professional Engineer, must not be altered without the approval of the regulatory authority enforcing such ordinances or the Professional Engineer who designed the site.

# **Sensitive Environmental Features**

Typically construction in this region will encounter two sensitive environmental features:

- Aquifer A saturated permeable geologic unit that can transmit, store, and yield to a well, the quality and quantities of groundwater sufficient to provide for a beneficial use. An aquifer can be composed of unconsolidated sands and gravels, permeable sedimentary rocks such as sandstones and limestones, and/or heavily fractured volcanic and crystalline rocks. Groundwater within an aquifer can be confined, unconfined, or perched.
- Recharge feature Those natural or artificial features either on or beneath the ground surface at the site under evaluation which, due to their existence, provide or create a significant pathway between the ground surface and the underlying groundwater within an aquifer. Significant artificial pathways include, but are not limited to, wells and excavation or material pits. Significant natural pathways include, but are not limited to, faults, fractures, sinkholes or other macro pores that allows direct surface.

Upon encountering a sensitive environmental feature during the construction process, construction personnel must contact the appropriate TCEQ regional office described in the Additional Notification section above and the appropriate local authorities.

# **Primary Pollutant Source**

The primary storm water contaminant expected to be generated during the proposed construction project is the entrainment of solids (soil particles) which will affect the turbidity of the run-off water. This type of contamination will be generated when storm water comes in contact with disturbed soils or with stockpiles of construction materials such as fill dirt, sand, rock, etc. For this project, disturbed soils will result from:

- Clearing of vegetation from the construction site;
- Excavating soils for construction;
- Moving soils via truck across the site;
- Dumping, spreading and shaping of soils to form roads, foundations, etc.;
- Stockpiling of sand, gravel and rock for use in construction; and
- Driving of vehicles and equipment over the site (tracking of sediment).

Mechanisms which will result in increased sediment loadings in storm water include:

- direct impingement of rain onto material stock piles and/or disturbed sloped areas where the force of the rain impact results in the dislodging and entrainment of particles;
- direct erosion of disturbed areas by storm water flow (this can be from either sheet flow or channelized flow); and
- the tracking of site soils or materials via equipment or vehicle tires onto non-disturbed areas or onto paved areas where they are washed into drainage ditches.

### **Other Pollutant Sources and Management Practices**

#### Acid and Caustic Chemicals

Acid and caustic chemicals used must not be stored onsite. Acid will be removed from the site each day or stored in secure covered structure.

#### Asphalt

Asphalt will not be applied when there is danger of rainfall. All asphalt and associated products such as surface sealants and tar will be stored where offsite migration from runoff is minimized. Spills of asphalt, oil and tar will be cleaned up immediately.

#### Antifreeze

No onsite vehicle and equipment maintenance is permitted. Vehicles and equipment must be removed offsite for maintenance. Should antifreeze spill during vehicle or equipment operation, the spill will be cleaned up immediately.

#### Brick and Other Siding Material

Brick and other siding materials are typically stored in discrete stacks prior to use. After their use in construction, excess amounts and waste shall be properly disposed of as solid waste.

#### **Construction Materials**

Construction materials will be stored in discrete piles and stacks consistent with good housekeeping practices. Bags of concrete, paint, solvents, etc. if stored onsite, will be stored such that they are not in contact with storm water or do not possess a potential for contamination of storm water.

#### Solid Waste

All solid waste will be collected and stored inside metal roll-offs, dumpsters, plywood containers, or other designated disposal containers. Containers are to be picked up on a regular schedule by a registered solid waste company. Trash and debris is to be picked up at each site at the end of each workday to prevent trash from being transported offsite by water or wind. Wind fencing may be used to keep waste materials from leaving the site. In addition to examples described in this section, solid waste can also be:

- Insulation
- Sheetrock
- Piping
- Ducts
- Flooring
- Electrical materials
- Lumber

- Concrete
- Rebar and other wire materials

#### Windows/Glass

Windows are not considered a pollutant; however, glass from broken windows shall be collected and properly disposed of as solid waste.

#### Concrete

Concrete for drives, roadway, and walkways should be mixed and poured when there is no danger of rainfall. A designated concrete washout pit will be utilized to control the wastewater effluent and keep it from discharging from the site. Concrete subcontractors will be monitored to ensure that they use good management practices when washing their chutes. Solid concrete waste shall be excavated and properly disposed.

#### Concrete Curing Compound

Concrete curing compound, if stored onsite must be kept under cover. Otherwise, concrete curing compound will be removed from the site each day or stored in secure covered structure. Spills will be cleaned up immediately.

#### Fertilizer, Herbicides, & Pesticides

No other chemicals or fertilizers are to be stored onsite. Chemicals will be removed from the site each day or stored in secure covered structure. Fertilizers, herbicides, pesticides will be used only in the minimum amount recommended by the manufacture. These chemicals will be applied in a manner to limit contact with storm water.

#### **Glue Adhesives**

Glue adhesives, if stored onsite must be kept under cover. Otherwise, glue adhesives will be removed from the site each day or stored in secure covered structure. Any spills will be cleaned up immediately.

#### Grease

No onsite vehicle and equipment maintenance is permitted. Vehicles and equipment must be removed offsite for maintenance. Should fluids spill during vehicle or equipment operation, the spill will be cleaned up immediately.

#### Hydrocarbons

There is a potential for some degree of hydrocarbon contamination in the form of oil and grease from vehicles and equipment, and from fuel spillage on the site. Oil and grease contamination are generally the result of equipment failure which results in a direct discharge, or of routine and non-routine vehicle and equipment maintenance operations. Releases of oil and/or grease to the ground during maintenance activities are usually the result of either accidental spillage while adding or draining fluids, or by intentional discharge of spent fluids or fluid residues. Releases of fuel occur as a result of spillage during on-site fueling operations or leakage from temporary fuel storage tanks. Since most large construction equipment operates hydraulically, there is also the potential that release of hydraulic fluids may occur. Primary release mechanisms include failure (rupture) of hydraulic hoses, seal failures on hydraulic pistons, and spillage during maintenance activities.

If fuel tanks are moved on-site, they will be placed within a bermed area. Earthen berms will be constructed to provide a containment volume sufficient to contain the entire contents of any fuel storage tank plus rainfall that might occur coincidentally with a spill (6 to 10 inches of height beyond what is required for fuel containment). If a drain valve is installed in the berm, the valve will be locked in the closed position unless storm water is being drained under the direct observation of an operator. Clean storm water is defined as storm water that does not exhibit any visual or olfactory evidence of contamination (no sheen, floating or submerged oils, etc.).

If equipment is fueled from mobile truck-mounted tanks, fueling will take place in a designated area where fuel spills can be trapped. Alternatively, fueling can take place at other locations, if secondary containment is provided by use of a catch pan at the point of transfer and the transfer operation is manned and observed for leaks and spills.

All leaks and spills of fuel and hydraulic fluids to the soil will be cleaned up and placed in a drum for disposal off-site. Spills of 25 gallons or more to the ground must be reported. Drums containing spill residue material must be properly kept closed and sealed, except when adding additional materials. Disposal must occur at a location that has the proper TCEQ authorization for disposal of this material.

#### Joint Compound

Joint compounds, if stored onsite must be kept under cover. Otherwise, joint compounds will be removed from the site each day or stored in secure covered structure. Any spills will be cleaned up immediately.

#### Lead Acid Batteries

Lead-acid batteries must not be stored onsite. Batteries, if removed from vehicles or equipment must be disposed of or recycled in a proper manner in accordance with state and federal law.

#### Lumber

Lumber is typically stored in discrete stacks prior to use. After their use in construction, excess amounts and waste shall be properly disposed of as solid waste.

#### Other Hazardous Materials

Hazardous products will be kept in original containers unless they are not re-sealable. Original labels shall be retained as they contain important information. Surplus product must be disposed of in accordance with manufactures' specifications and local, state, and federal regulations.

All hazardous materials will be stored under cover or taken from the site at the end of each work day to avoid contact with storm water.

Spills and leaks of hazardous materials will be cleaned up immediately. Spills and leaks on paved surfaces will be cleaned up with dry absorbent. Spills and leaks on soil will be cleaned up by scoop and shovel. Contaminated media will be disposed of in an approved manner. Releases above set limits will be reported to local, state and federal authorities, see Section 5 of this SWPPP.

#### Paint, Thinner, and Solvents

Paints, thinners, and solvents will be stored under cover and removed from the site daily or stored in secure covered structures. Solvents will not be discharged to the environment but will be disposed of properly according to manufacturers specifications and local, state and federal regulations. Containers are to be tightly sealed. If paints, thinners or solvents cannot be removed from the site, they will be stored inside a structure and secured to prevent exposure to storm water. Waste paints, thinners, and solvents will be removed from the site for proper disposal. No waste products will be disposed of in trash containers except as open, empty containers.

#### **Roofing Tar**

Roofing tar, if stored onsite must be kept under cover. Otherwise, roofing tar will be removed from the site each day or stored in secure covered structure. Any spills will be cleaned up immediately.

#### **Roofing Materials**

Roofing materials shall be managed to prevent any offsite transport of the material. All excess material shall be properly disposed of as solid waste.

#### Sand and Base Material

Sand used for concrete and base material for the foundation shall be stored in secure areas away from streets and outfalls to prevent offsite transport.

#### Sanitary Waste

Wastes from the portable toilets will be collected on a regular basis by a registered waste management company. Spilled or leaked sanitary effluent will be cleaned up immediately to prevent any effluent from leaving the site

# **Best Management Practices & Structural Controls for** the Primary Pollutant Source

Controls and management practices outlined below shall be used to reduce or control the transport of sediment from the construction site. Permanent and temporary structural controls will be installed prior to the commencement of soil disturbing activities. The controls shall be implemented or installed utilizing good engineering practices, according to the manufacturer's specifications, using specifications listed in this plan, or in accordance with a local erosion and sedimentation control plan or a water pollution and abatement plan. For details on which of the following controls were implemented and for the placement of these controls, see the detailed site map in Section 2 of this SWP3. Temporary structural controls will be removed following final stabilization. Final stabilization dates can be found in the inspection reports in the last section of the plan.

#### Run-on/Run-off Diversion

Reducing the amount of storm water entering the site from areas not associated with construction activity will limit the erosion potential of storm water flow. Diversions may include the creation of a drainage swale or the installation of hay bales to move storm water around disturbed areas.

Level spreaders shall be used at the outlet ends of the any diversion dike/diversion swale to convert concentrated flow to sheet flow.

#### Limiting Exposure of Disturbed Areas

Exposure of disturbed areas can be limited by:

- Isturbing only limited portions of the construction area at anyone time, and/or
- Ininimizing the time required to complete construction.

Construction activities can be phased and occur expeditiously to limit the exposure of disturbed areas. An aggressive schedule is ideal to limit the duration of exposed earth. When possible, areas proposed for fill and grading will not occur simultaneously. Once one area is graded and then stabilized, the next area will commence. Stabilization of individual areas as they are graded will decrease the size of the disturbed area and thereby limit the exposure of disturbed areas.

#### Sedimentation Basin

The TPDES Construction General Permit requires that sites with more than 10 disturbed acres at one time, which are served by a common drainage area, must have a permanent or temporary sediment basin, or equivalent method of control. The basin must provide storage for a calculated volume of runoff from a 2-year, 24 hour storm event from each disturbed acre drained. Where rainfall data is not available or a calculation cannot be performed, a sediment basin providing 3,600 cubic feet of storage per acre drained is required where attainable until final stabilization of the site.

Drainage basins may be implemented during the design phase of this project. If a sedimentation basin is not incorporated into the site, due to feasibility in areas described above, then controls measures will be installed and management practices implemented to substitute for the lack of a sedimentation basin.

#### Silt Fences

Silt fence is a temporary barrier made of non-woven polypropylene, polyethylene or polyamide material that is water permeable but will trap water-borne sediment. It is used to intercept and retain water-borne sediment from disturbed areas of limited extent. This control device is used during the period of construction near the downslope perimeter of a disturbed area and the downgradient side of stockpile material to intercept sediment while allowing water to pass through. All specified silt fence will remain in place until the disturbed area is permanently stabilized.

Silt fence will not be used where there is a concentration of water in a channel or drainageway, or where soil conditions prevent a minimum toe-in depth of 4-6 inches or installation of support posts to a depth of 12 inches. If concentrated flow occurs after installation, corrective action must be taken. For example, this condition may be corrected by placing rock berms in the areas of concentrated flow.

Silt fence shall be maintained to ensure its effectiveness in collecting suspended solids from the storm water flow. Built up sediment will be removed once it reaches one half the height of the fence or if the fence becomes ineffective.

The following design criteria will be observed:

- Height 24-inch minimum height measured from the existing or graded ground surface.
- O Toe-in Minimum of 12 inches of material in a trench that has a minimum depth of 4–6 inches.
- Ø Material Polypropylene, polyethylene or polyamine non-woven geotextile fabric, maximum width 36 inches, minimum unit weight of 4.5 ounce per yard, mullen burststrength exceeding 200 pounds per square inch, ultraviolet stability exceeding 70 percent and equivalent opening size exceeding 40. The edges will be treated to prevent unraveling.
- Support Steel fence posts spaced a maximum of 6 feet apart and embedded a minimum of 1 foot. The steel fence posts may be spaced a maximum of 8 feet apart if the material and dimension of the post are in accordance with the ASTM Standard Specification (for steel fence posts). In this case, the post will be made of hot-rolled steel, at least 4 feet long with T or Y-bar type cross-section, surface painted or galvanized, minimum nominal weight 1.25 pound per foot and Brindell Hardness exceeding 140. Woven wire backing (galvanized 2-inch by 4-inch welded wire, 12 gauge minimum) will be used to support the material.
- Outlet Silt fence will be placed in such a manner that surface run–off that percolates through will flow onto an undisturbed stabilized area or stabilized outlet.

In addition, the following general construction and operating notes will be followed:

- Steel posts that support the silt fence will be installed on a slight angle toward the anticipated run-off source. Posts must be embedded a minimum of 1 foot.
- The toe of the silt fence will be trenched in with a spade or mechanical trencher, so that the downslope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (for example pavement), weight fabric flap with washed gravel on uphill side to prevent flow under fence.
- In trench will be a minimum of 4–6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
- Silt fence will be securely fastened to each steel support post or to woven wire, which in turn will be attached to the steel fence post.

- Inspection will be made weekly or bi-weekly or after each rainfall event, and repair or replacement will be made promptly as needed.
- Silt fence will be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.
- Accumulated silt will be removed when it reaches a depth of 6 inches. The silt will be disposed of at an approved site or in such a manner as to not contribute to additional siltation.

#### Stabilized Construction Entrance

A stabilized construction entrance is a stabilized pad of crushed stone located at the construction vehicle entrance/egress to the site. Its purpose is to reduce or eliminate the tracking or flowing of sediment onto public rights-of-way. This control will only be utilized if excessive sediment is tracked onto public rights-of-ways from the construction entrance.

The following design criteria will be observed:

- Stone Size Stone (or other aggregate) size shall be large enough not to stick in vehicle tires and be tracked offsite.
- Orainage Entrance must be properly graded, or incorporate a drainage swale or other storm water management or sediment control device(s) to prevent sediment from leaving the site.
- O Maintenance The entrance will be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone (as conditions demand), and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way will be removed.

#### Storm Drain Inlet Protectors

Storm drain inlet protectors are temporary barriers used to prevent sediment and other construction site related debris from entering the storm sewer. Much like silt fence, inlet protectors are water permeable but will trap water-borne sediment. Installation and maintenance are essential to the effectiveness of this control. Without maintenance, sediment will collect on the fabric and could block the natural flow of the water into the storm drain and cause flooding conditions. Poor installation of the control will allow storm water associated with construction activities to bypass the fabric altogether.

#### Velocity Dissipaters / Filtration Berms / Gabions

Velocity dissipaters / filtration berms / gabions shall be used in areas with channelized flow to reduce the flow's potential for erosion. Many products, such as hay bales and rock berms can be used to achieve the desired speed and direction of the flow. Velocity dissipaters shall be used at major outfalls from the construction site to prevent erosion inside the receiving stream and to settle any solids that are being transported in the storm water flow.

#### Mulch / Compost / Organic Filter Tubes

Mulch is defined as organic or non-organic soil covering which protects the exposed earth from erosion. Organic materials commonly used for mulch include wood chips, ground up landscape trimmings, shredded bark, coarse compost material, straw, and shredded paper. Non-organic materials include crushed concrete and brick, stones and gravel, lava rock, and plastic film.

Compost is defined as the product resulting from the controlled biological decomposition of organic wastes. Compost feedstock materials include yard and landscape trimmings, agricultural crop residues, paper pulp, food scraps, wood chips, manure, and "bio-solids." Compost can be used in controlling soil loss and erosion. It can be spread evenly across large sections of exposed soils or can be used as a filtering mechanism for sheet flow.

#### Vegetative Buffer Strip

Grassed buffer strips (vegetated filter strips, filter strips, and grassed filters) are vegetated surfaces that are designed to treat sheet flow from adjacent surfaces. Filter strips function by slowing runoff velocities and allowing sediment and other pollutants to settle and by providing some infiltration into underlying soils. Filter strips were originally used as an agricultural treatment practice and have more recently evolved into an urban practice. Filter strips can provide relatively high pollutant removal.

#### **Dust Suppression**

If onsite dust generation becomes a problem, steps will be taken to limit dust, such as water spraying and use of ground cover.

#### Street Cleaning

Even with the use of controls to reduce the amount of sediment leaving disturbed areas, there is still potential for sediment to reach the street. Cleaning shall be done by street sweeping, shoveling, or other techniques whenever unusually excessive amounts of sediment are tracked into the street.

# **Site Inspections and Reports**

During the course of this construction project, site inspections will be conducted in accordance with the TPDES Construction General Permit and in accordance with local ordinances. Site inspections are required to ensure that best management practices and structural controls prescribed by this SWP3 are effective. Items of concern identified during the site inspection will be noted in the inspection report.

Inspection reports itemize activities at the site into three categories:

- Good Habits;
- · Bad Habits; and
- Corrective Action.

Good habits are management practices, not necessarily prescribed by this plan, that are effective pollution prevention techniques. Itemizing good habits in the inspection report is a way to educate construction personnel on actions which create ideal pollution prevention scenarios.

Bad habits are practices that would not warrant a citation from the regulatory agency; however, if not addressed, a culmination of these actions could lead to enforcement action. This section allows the permittee to educate their construction personnel on actions that need to be avoided in the future.

Corrective action items are those that are subject to enforcement action and need to be corrected immediately. Once an item is listed under corrective action, permittees have 7 days to correct the problem in accordance with Part III.F.8. of the construction general permit.

Inspection reports also serve as a way to document the start and completion dates of major construction milestones. Reports also provide a narrative description of the location of porta-johns, dumpsters, material storage piles, concrete washout pits, and other potential pollutant sources.

## **Retention of Records**

All records and copies of all reports required by the general permit must be kept for a minimum of three years once the construction operations covered under this plan have reached final stabilization. Records that must be kept include:

- Storm Water Pollution Prevention Plan (SWPPP),
- · Records of all data used to complete the Notice of Intent (NOI), and
- Inspection reports.



# **Plan Availability**

The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. The SWP3 must be made readily available at the time of an on-site inspection to:

- The Texas Commission on Environmental Quality;
- A federal, state, or local agency approving sediment and erosion plans, grading plans, or storm water management plans;
- Local government officials; and
- The operator of a municipal separate storm sewer receiving discharges from the site.

Notice of Intent (NOI) for Storm Water	TCEQ Office Use Only Permit No.: TXR15
Discharges Associated with Construction	RN:
Activity under TPDES General Permit	CN:
<b>TCEQ</b> (TXR150000)	Ref No:
MET Sign up now for ePermits NOI at www6.tceq.state.tx.us/ste	
Get Instant Permit Coverage and only pay a \$225 applicatio	\$ \$ \$ \$ \$ \$ \$ \$
If filing a paper NOI you can pay the application fee on line? Go to https://www	w6.teeq.state.tx.us/epay/
IMPORTANT: •Use the INSTRUCTIONS to fill out each question in this form. •Use the attached CUSTOMER CHECKLIST to make certain all you filled out all requi •Incomplete applications WILL delay approval or result in automatic Denial.	ired information.
Renewal of General Permit	
Is this NOI to renew an ACTIVE permit? Yes - What is your permit number? Permit No. TXR15	
✓ No - a permit number will be issued.	-
Application Fee if mailing a paper NOI:	
You must pay the \$325 Application Fee to TCEQ for the application to be considered con	
Payment and NOI must be mailed to separate addresses. See instructions for correct mail	ing addresses.
Provide your payment information below, for us to verify payment of the application	ı fee:
Mailed: Check/Money Order No.: 1111 Company Name on checking account: NEL	JIMANN Partners, Ltd.
EPAY: Voucher No.: Is the Payment Voucher copy attached?	Yes
. OPERATOR (applicant)	
1. If the applicant is currently a customer with TCEQ, what is the Customer Number (CN	) issued to this entity?
CN (Search Central Registry)	· · ·
2. What is the Legal Name of the entity (applicant) applying for this permit?	
Oak Bend Forest, LC	
The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming	g the entity.)
3. What is the name and title of the person signing the application?	
The person must be an official meeting signatory requirements in TAC 305.43(a).)	
Name: Jim Grona Job Title: Managing Me	ember
4. What is the Operator's (applicant) mailing address as recognized by the US Postal Ser	vice? (verify at <u>1'SPS.com</u> )
Address: P.O. Box 790645 Suite No./Bldg. No./Mail Code:	
City: San Antonio State: TX ZIP C	<sup>Code:</sup> 78279-0645
Country Mailing Information (if outside USA). Country Code: F	Postal Code:
5. Phone No.: (210) 771-0033 Extension:	
6. Fax No.: (210) 366-9549 E-mail Address: jmgrona@	)gvtc.com
7. Indicate the type of Customer:	
Corporation Federal Government General	l Partnership Partnership overnment
CEQ-20022 (03/05/2008)	Page 1

8. Independent Operator: Yes No (If governmental entity, subsidiary, or part of a larger corporation, check "No".)				
9. Number of Employees: 70-20; 21-100; 101-250; 251-500; or 501 or higher				
2. Customer Business Tax and Filing Numbers (This item is not applicable to Individuals, Government, GP or Sole Proprietor.)				
REQUIRED for Corporations and Limited Partnerships (Verify the entity's status and filing no. with TX SOS at 512/463-5555)           State Franchise Tax ID Number:         32021820876   Federal Tax ID: 271609167				
02021020010				
TX SOS Charter (filing) Number:     0800727974       DUNS Number (if known):				
B. APPLICATION CONTACT				
If TCEQ needs additional information reg	<u> </u>	ication	n, who should be con	ntacted?
I. Name: John B. Luce, P.E.	Title: Pres.			Company: John Luce Consulting Engr
2. Phone No.: (830) 980-7878		Extens	sion:	
3. Fax No.: 830 980-7842		E-mai	Address: jblranch	Dgvtc.com
C. REGULATED ENTITY (RE) INFO	RMATION ON			
1. TCEQ Issued RE Reference Number (I	RN): RN			
(Search Central Registry)				
2. Name of Project or Site (the name as k	nown by the con	nmuni	ty where this facility	y/project is located):
Oak Bend Estates				
(example: phase and name of subdivision or name of	of project that's unic	que to th	ne site)	
3. Does the site have a physical address?	-			
If Yes, complete Section A for a physical address.				
If No, complete Section B for site location informa	tion.			
Section A: Enter the physical address for the site.	(verify it with US	PS.com	or other delivery sour	cc)
Street Number:		S	treet Name:	
City:		Z	CIP Code:	
Section B: Enter the site location information.				
If no physical address (Street Number & Street Nar (Ex.: phase 1 of Woodland subdivision located				
On FM 3351 @ Meadow Creek T			-	- ·
City where the site is located or nearest city to s			ZIP Code where site is	
Fair Oaks Ranch, TX				78015
4. Identify the county where the site is loo	4. Identify the county where the site is located: Comal			
5. Latitude: 29d 45' 20.31" N			Longitude: 98d 37	7' 16.00" W
6. What is the primary business of this entity? In your own words, briefly describe the primary business of the Regulated Entity:				
(Do not repeat the SIC and NAICS code) Single-Family Housing Construction				
7. What is the mailing address for the regulated entity?				
Is the RE mailing address the same as the Operator?  Yes, address is the same as Operator No, provide the address				
Street Number:		Street Na		
City:	State:		anc.	ZIP Code:
D. GENERAL CHARACTERISTICS	State.			
1. Is the site located on Indian Country La If the site is on Indian country lands, you must of		No through		not submit this NOI. Contact EPA, Region VI
2. What is the Standard Industrial Classification (SIC) code (see instructions for common codes): (Search Osha.gov)				
Primary: 1521 Secondary:				

3(a) What is the total number of acres disturbed? <u>149</u>
3(b) Is the project site part of a larger common plan of development or sale?
Yes, the total number of acres disturbed can be less than 5 acres.
If No, the total number of acres disturbed must be 5 or more. If the total number of acres disturbed is less than 5 then the project site does not qualify for coverage through this Notice of Intent. Coverage will be denied. See the requirements in the general permit for small construction sites.
4. Discharge Information (all information MUST he provided or the permit will be denied)
<ul><li>4(a) What is the name of the water body(s) to receive the storm water runoff or potential runoff from the site?</li><li>Cibolo Creek</li></ul>
4(b) What is the segment number(s) of the classified water body(s) that the discharge or potential discharge will eventually
reach? 1908
4(c) Are any of the surface water bodies receiving discharges from the construction site on the latest EPA-approved CWA 303(d) list of impaired waters?
Yes No If Yes, provide the name of the impaired water body(s).
4(d) Is the discharge into an MS4? Yes No
If Yes, what is the name of the MS4 Operator?
Note: The general permit requires you to send a copy of the NOI to the MS4 Operator.
4(e) Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer?
Yes No
If the answer is Yes, please note that a copy of the agency approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) must be included or referenced in the Storm Water Pollution Prevention Plan.
CERTIFICATION
CERTIFICATION Check "Yes" to the certifications below. Failure to certify to all items will result in denial.
Check "Yes" to the certifications below. Failure to certify to all items will result in denial.           I certify that I have obtained a copy and understand the terms and conditions of the general permit (TXR150000).
Check "Yes" to the certifications below. Failure to certify to all items will result in denial.          I certify that I have obtained a copy and understand the terms and conditions of the general permit (TXR150000).         Yes       I certify that the full legal name of the entity (Operator) applying for this permit has been provided and is legally authorized to do business in Texas.
<ul> <li>Check "Yes" to the certifications below. Failure to certify to all items will result in denial.</li> <li>Yes I certify that I have obtained a copy and understand the terms and conditions of the general permit (TXR150000).</li> <li>Yes I certify that the full legal name of the entity (Operator) applying for this permit has been provided and is legally authorized to do business in Texas.</li> <li>Yes I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.</li> </ul>
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<ul> <li>Check "Yes" to the certifications below. Failure to certify to all items will result in denial.</li> <li>         Yes         I certify that I have obtained a copy and understand the terms and conditions of the general permit (TXR150000).     </li> <li>         Yes         I certify that the full legal name of the entity (Operator) applying for this permit has been provided and is legally authorized to do business in Texas.     </li> <li>         Yes         I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.     </li> <li>         Yes         I certify that a storm water pollution prevention plan has been developed and will be implemented prior to construction, and that is compliant with any applicable local sediment and erosion control plans, as required in the general permit TXR150000.     </li> <li>         Operator Certification:     </li> </ul>
<ul> <li>Check "Yes" to the certifications below. Failure to certify to all items will result in denial.</li> <li>Yes I certify that I have obtained a copy and understand the terms and conditions of the general permit (TXR150000).</li> <li>Yes I certify that the full legal name of the entity (Operator) applying for this permit has been provided and is legally authorized to do business in Texas.</li> <li>Yes I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.</li> <li>Yes I certify that a storm water pollution prevention plan has been developed and will be implemented prior to construction, and that is compliant with any applicable local sediment and erosion control plans, as required in the general permit TXR150000.</li> </ul>
Check "Yes" to the certifications below. Failure to certify to all items will result in denial.
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Check "Yes" to the certifications below. Failure to certify to all items will result in denial.          Yes       I certify that I have obtained a copy and understand the terms and conditions of the general permit (TXR130000).         Yes       I certify that the full legal name of the entity (Operator) applying for this permit has been provided and is legally authorized to do business in Texas.         Yes       I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.         Yes       I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.         Yes       I certify that a storm water pollution prevention plan has been developed and will be implemented prior to construction, and that is compliant with any applicable local sediment and erosion control plans, as required in the general permit TXR150000.         Operator Certification:       I.         I, Jim Grona       Manacinc Member         Typed or printed name       (Required & must be legible)         retify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.         I further c
Check "Yes" to the certifications below. Failure to certify to all items will result in denial.

	Genera	l Permit Payment		
1 11			NOI Anniher Fee	
Use this form to	submit your Application Fee only if you a	re mailing your payment.		
•Staple your che •Do not mail thi	s I through 5 below: eck in the space provided at the bottom of t is form with your NOI form. is form to the same address as your NOI.	this document.		
Mail this fo	rm and your check to:			
BY REGULAR	U.S. MAIL	BY OVE	RNIGHT/EXPRESS MAIL	
Financial Admin Cashier's Office P.O. Box 13088	-	Financial Cashier's 12100 Pa	mmission on Environmental Quality Administration Division Office, MC-214 rk 35 Circle	
Austin, TX 787 Fee Code: GPA		Austin, T Permit: TXR150000	A 78755	
	ey Order No: 1111	WHILE I ANTIJUVV		
2. Amount of C	heck/Money Order: \$325			2000/01/11/11/2000/01/10/00/01/10/00/01/10/01/11/10/00/0
3. Date of Chec	k or Money Order. 01/18/2010			
4. Name on Ch	eck or Money Order: NELJIMANN Partners, Lic	<u>i.</u>		
5. NOI INFOR	MATION			
A COPY OF TH		D CAUSE DUPLICATE	PERMIT ENTRIES.	
Project/Site (RE	:) Physical Address:		<b></b>	ALMAN HUR MANAGAMAN HUR - LANGA ALMAN HUMAN AND HUMAN
On FM 3351	@ Meadow Creek Trail, 0.4 miles north	of Cibolo Creek.		
- L	<b> </b>		Fueld for desails	1111
	NELJIMANN PA PO BOX SAN ANTONIO,	790645	DATE	30-9/114
ТС	AY O THE RDER OFCEQ			\$ 325.00*
1	Three Hundred Twenty Fir	ve and no/100 -	, allun voon 1990-aanti 4990-4999 and 2009 and 2009 and 2009 and	DOLLARS
	NIA Erest Mational Bank		) .	<b>N</b>
	Frost National Bank San Antonio, Texas 78296 www.frostbank.com		- This dem	Andrea .

Agent Authorization Form For Required Signature Edwards Aquifer Protection Program Relating to 30 TAC Chapter 213 Effective June 1, 1999
I Jim Grona Jim Grona Print Name
Managing Member, Title - Owner/President/Other
of <u>Oak Bend Forest,LC</u> Corporation/Partnership/Entity Name
have authorized <u>John B. Luce, P.E.</u> Print Name of Agent/Engineer
ofJ. Luce, LLC dba John Luce Consulting Engineer, Firm No. F-6067 Print Name of Firm
to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:



- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- 2. For applicants who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person propering the application, and this form must accompany the completed application.

nonc Applicant's Signature

07/10/10

THE STATE OF <u>TEXAS</u> §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared <u>Jim Gromm</u> known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 10th day of February, 2010

Na linte Drenundy NOTARY PUBLIC



NVA ANITA DUENNENBERG

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: Z-20-2013

Texas Commission on Environmental Quality Edwards Aquifer Protection Program Application Fee Form

NAME OF PROPOSED REGULATED ENTITY: <u>OAK BE</u> REGULATED ENTITY LOCATION: City of Fair Oaks Rar NAME OF CUSTOMER: OAK BEND FOREST, LC CONTACT PERSON: <u>Jim Grona</u> (Please Print)		0) 771-0033				
Customer Reference Number (if issued):		(nine digits)				
Regulated Entity Reference Number (if issued): RN	(nine	e digits)				
Austin Regional Office (3373)	Travis 🗌 Williamson					
San Antonio Regional Office (3362) 🗌 Bexar 🗹	Comal 🗌 Medina 🔲	Kinney 🗌 Uvalde				
Application fees must be paid by check, certified check, or money order, payable to the <b>Texas Commission on</b> <b>Environmental Quality</b> . Your canceled check will serve as your receipt. <b>This form must be submitted with</b> <b>your fee payment</b> . This payment is being submitted to (Check One):						
Austin Regional Office San Antonio Regional Office						
Mailed to TCEQ:Overnight Delivery to TCEQ:TCEQ - CashierTCEQ - CashierRevenues Section12100 Park 35 CircleMail Code 214Building A, 3rd FloorP.O. Box 13088Austin, TX 78753Austin, TX 78711-3088512/239-0347						
Site Location (Check All That Apply):  Recharge Zon	ne 🗹 Contributing Zone	Transition Zone				
Type of Plan	Size	Fee Due				
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	148.79 Acres	\$8,000.00				
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$				
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	\$				
Sewage Collection System	L.F.	\$				
Lift Stations without sewer lines	Acres	\$				
Underground or Aboveground Storage Tank Facility	Tanks	\$				
Piping System(s)(only)	Each	\$				
Exception	Each	\$				
Extension of Time	Each	\$				

 $\sim$ DA \$ignature

ΰ Date

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.

#### Texas Commission on Environmental Quality Edwards Aquifer Protection Program Application Fee Schedule 30 TAC Chapter 213 (effective 05/01/2008)

#### Water Pollution Abatement Plans and Modifications Contributing Zone Plans and Modifications

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	< 5	\$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	\$1,500 \$3,000 \$4,000 \$6,500 \$8,000 \$10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	<pre>&lt; 1 1 &lt; 5 5 &lt; 10 10 &lt; 40 40 &lt; 100 ≥ 100</pre>	\$3,000 \$4,000 \$5,000 \$6,500 \$8,000 \$10,000

#### **Organized Sewage Collection Systems and Modifications**

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	\$0.50	\$650 - \$6,500

#### Underground and Aboveground Storage Tank System Facility Plans and Modifications

PROJECT	COST PER TANK OR PIPING SYSTEM	MINIMUM FEE MAXIMUM FEE
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

#### Exception Requests

PROJECT	FEE
Exception Request	\$500

#### **Extension of Time Requests**

PROJECT	FEE
Extension of Time Request	\$150

#### Texas Commission on Environmental Quality Edwards Aquifer Protection Program **Application Fee Schedule** 30 TAC Chapter 213 (effective 05/01/2008)

#### Water Pollution Abatement Plans and Modifications **Contributing Zone Plans and Modifications**

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	< 5	\$650
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#### **Organized Sewage Collection Systems and Modifications**

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE	
Sewage Collection Systems	\$0.50	\$650 - \$6,500	

#### Underground and Aboveground Storage Tank System Facility Plans and Modifications

PROJECT	COST PER TANK OR PIPING SYSTEM	MINIMUM FEE MAXIMUM FEE
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

	NELJIMANN PARTNERS LT	rD	1112
a	SAN ANTONIO, TEXAS 78279	DATE Feb 10 2010	30-9/11
TO THE ORDER			5 8,000.00*
14.4	ight Thousand and no/100	<u> </u>	_DOLLARS
	Frost National Bank San Antonio, Texas 78296 www.frostbank.com	A Den Show	n
FOR_	*001112# #11400093#	010462934#	



# **TCEQ Core Data Form**

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

<b>SECTION</b>	I: Ge	neral Information							
1. Reason for Submission (If other is checked please describe in space provided)									
New Permit, Registration or Authorization (Core Data Form should be submitted with the program application)									
Renewal	(Core D	ata Form should be submitted with		,			-	egulated	Entity Info
2. Attachmer	nts	Describe Any Attachments: (e	-	pplication, Was	te Tran	sporter Ap	plication, etc.)		
⊠Yes	No	Contributing Zone Plan	. ,						
3. Customer	Referenc	e Number (if issued)		link to search RN numbers in	4. F	Regulated	d Entity Refere	nce Numbe	r (if issued)
CN 6036	29429			Registry**	R	N 1058	79209		
SECTION	II: C	ustomer Information							
5. Effective E	Date for C	ustomer Information Updates (r	nm/dd/yyy	<b>/y)</b> 2/10/	2010				
6. Customer	Role (Pro	posed or Actual) – as it relates to the	Regulated E	Entity listed on	his form	n. Please c	heck only <u>one</u> of	the following:	
Owner		Operator		wner & Operation					
	nal Licens	ee 🗌 Responsible Party		oluntary Clea	nup Ap	plicant	Other:		
7. General C	ustomer l	nformation							
New Cust	omer		date to Cu	stomer Inform	ation			-	Entity Ownership
-	1.2	me (Verifiable with the Texas Seci	-				No Change	<u>9**</u>	
**/f "No Char	nge" and	Section I is complete, skip to Se	<u>ection III –</u>	Regulated E	ntity Ir	nformatio	<u>on.</u>		
8. Type of Customer: Corporation			Individual			S	Sole Proprietorship- D.B.A		
City Government County Government			Federal Government				tate Governmer	nt	
Other Government General Partnership					ited Partnership 🛛 Other: Limited Liability Company			y Company	
9. Customer	Legal Na	<b>me</b> (If an individual, print last name fi	rst: ex: Doe,	10000 -	new Cu elow	ustomer, e	enter previous Cu	<u>istomer</u>	End Date:
Oak Bend	Forest,	LC							
	P.O. B	ox 790645		, <b>1</b>					·
10. Mailing Address:									
CitySan AntonioStateTXZIP78279ZIP + 40645							0645		
11. Country Mailing Information (if outside USA) 12. E-Mail Address (if applicable)									
jmgrona@gvtc.com									
13. Telephone Number14. Extension or Code15. Fax Number (if applicable)									
(210)77				40.51		(	(210) 366	1998 (1991) - 11996	
16. Federal Tax ID (9 digits) 17. TX State Franchise Tax ID (11 digits) 18. DUNS Number(if applicable) 19. TX SOS Filing Number (if applicable)									
271609167 32021820876 None 0800727974									
20. Number of	124 05			ad bisks-					ed and Operated?
0-20	21-100	101-250 251-500		nd higher			∑ ⊠	es	No
<b>SECTION</b>	N III: F	Regulated Entity Infor	mation	6					

22. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application) No Change\*\* (See below) New Regulated Entity Update to Regulated Entity Name Update to Regulated Entity Information \*\*If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information. 23. Regulated Entity Name (name of the site where the regulated action is taking place)

OAK BEND ESTATES

24. Street Address of the Regulated	Unassigned								
Entity: (No P.O. Boxes)	City		State	TX	ZIP	78258	ZIP + 4		
		K BEND FOREST				1.0250			
25. Mailing		D. Box 790645			<u></u>				
Address:	City		State	TX	ZIP 78279		ZIP + 4 645		
26. E-Mail Address:		ngrona@gvtc.com	otato	174	daa 1 /	10217			
27. Telephone Numbe		ngrona(a/grocont	28. Extensio	n or Code	29	. Fax Number (if appl	cable)		
(210)771-0033					(2	210) 366-9549	анти		
30. Primary SIC Code	(4 digit:	s) 31. Secondary SIC	Code (4 digits)	32. Primary I	VAICS		econdary NAICS Code		
1521		None		(5 or 6 digits) 236115		(5 or 6) None			
34. What is the Prima	ry Bus	siness of this entity?	(Please do not rep	eat the SIC or N/	AICS de				
General Contract	ors -	Single-Family Hou	uses						
Q	uestio	ons 34 – 37 address geo	graphic locatio	n. Please refe	r to th	e instructions for a	oplicability.		
35. Description to Physical Location:	On	F.M. 3351 @ Mea	dow Creek 7	Trail, 0.4 mi	iles n	orth of Cibolo (	Creek.		
36. Nearest City			County			State	Nearest ZIP Code		
Fair Oaks Ranch			Comal			TX	78015		
37. Latitude (N) In D	ecima	l: 29.75564		38. Longit	ude (V	V) In Decimal: 9	98.62111		
Degrees	Minute					Minutes	Seconds		
29	45	20.3		98		37	16.00		
39. TCEQ Programs an apdates may not be made. If y	i <b>d ID N</b> your Pro	lumbers Check all Programs gram is not listed, check other	and write in the perr and write it in. See t	nits/registration nur he Core Data Form	mbers th	iat will be affected by the u ions for additional guidance	pdates submitted on this form or the e.		
Dam Safety			Edwards			Industrial Hazardous W	······································		
New Source Review -	- Air	OSSF	Petroleur	n Storage Tank		PWS	Sludge		
Stormwater		Title V – Air	Tires			Used Oil			
Voluntary Cleanup		Waste Water	Wastev	Wastewater Agriculture Wa			Other:		
<b>SECTION IV: I</b>	Prep	arer Informatio	n						
40. Name: John I				41	. Title:	P.E.			
42. Telephone Numbe	er.	43. Ext./Code	44. Fax Numbe	r 4	5. E-M	lail Address			
(830)980-7878			(830)980-7	′842 j	blran	ch@gvtc.com			
SECTION V: A	Luth	orized Signature	<u>}</u>						
<b>46.</b> By my signature I and that I have signate updates to the ID num	below ure au ibers i	, I certify, to the best o thority to submit this f	of my knowledg form on behalf o	of the entity sp	secifie	ed in Section II, Fie	s form is true and complete, Id 9 and/or as required for the		
	*******			α					
COMBRINE.	ULuce, LLC dba John Luce Consulting Engineer Job Title: Owner/ Engineer				er				
E		er							
	ngine	er . Luce				Phone:	(830)980-7878		
	ngine		uro,			Phone: Date:	(830)980-7878 <b>2 - 11 - 10</b>		

STATE OF TEXAS§

ATTACHMENT W

COUNTY OF BEXAR§

### **EXEMPTION FROM PERMANENT BMPs**

We hereby acknowledge that Oak Bend Estates is by TCEQ rule, exempt from providing permanent BMPs for stormwater control. This exemption is permitted since this development's total impervious cover,

including housing, streets, drives, sidewalks and all other impervious structures, cover less than 20% of the total 149 acres.

It is hereby understood that should the total proposed impervious cover of 18.5% be increased to above 20% or the land use changed, the exemption required by 30 TAC §213.4(g) (relating to Application Processing and Approval) for the whole of Oak Bend Estates to be recorded as a subdivision of the City of Fair Oaks Ranch, may no longer apply and the property owner must notify the appropriate regional office of these changes.

None Signed:

Jim Grona, Managing Member Oak Bend Forest, LC P.O. Box 790645 San Antonio, TX 78279-0645

2/10/10

Date

STATE OF TEXAS§

COUNTY OF BEXAR§

BEFORE ME, the undersigned authority, on this day personally appeared



\_\_known

To me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 10th day of Sept., 2009 February 2018

NOTARY PUBLIC

Va RIVITA DUCNNENS



Typed or Printed Name of Notary MY COMMISSION EXPIRES: 2-20-2013







# RECEIVED

MAR 0 8 2010 COUNTY ENGINEER







N 1500 SCALE: 1" = 800' **DA I** 676 AC 300' 1,814 AC EXIST. 100YR, QUIPT. D = 62.8 CFS PROPOSED. 100YR, Q at PT D = 96.6 CFS DIA 88.3 AC EXIST. 100YR. Q at PT. A = 965.5 CFS PROPOSED. 100YR. Q at PT. A = 1,056.2 CFS DA INCREASE 100YR. Q at PT. A = 90.7 CFS EXIST. 100YR. Q at PT. B = 115.4 CFS PROPOSED. 100YR. Q at PT. B = 129.1 CFS NCREASE 100YR. Q at PT. B = 13.7 CFS EXIST. 100YR. Q at PT. C = 3,335 CFS PROPOSED. 100YR. Q at PT. C = 3,369 CFS INCREASE 100YR. Q at PT. C = 34.0 CFS -

