Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Zak Covar, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 5, 2015
Revised April 13, 2015

RECEIVED
APR 24 2015
COUNTY ENGINEER

Mr. Mark L. Wauford
Westpointe G. P. LLC, the General Partner of Westpointe Commercial LTD
6700 Courtyard Road
Chester, Virginia 23831

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Westpointe Village Self Storage; Located southwest of the intersection of Independence Drive and Highway 46; New Braunfels, Texas

TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Investigation No. 1215568; Regulated Entity No. RN105739023; Additional ID No. 13-14121101

Dear Mr. Wauford:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the San Antonio Regional Office by Bury-SAN, Inc. on behalf of Westpointe G. P. LLC, the General Partner of Westpointe Commercial LTD, on December 11, 2014. Final review of the WPAP was completed after additional material was received on January 22 and January 23, 2015. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected 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. Therefore, based on the 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 of the executive director's final action on this Edwards Aquifer Protection Plan. 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 commercial development will have an area of approximately 9.27 acres. The proposed development will consist of a commercial building with associated parking areas, driveways and infrastructure. Impervious cover for the site totals 6.74 acres (72.70 percent). This total includes 3.16 acres

of impervious cover projected for future development. Project wastewater will be disposed of by conveyance to the existing Gruene Road Water Recycling Center owned by New Braunfels Utilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a partial sedimentation/filtration basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 6,050 pounds of TSS generated from the 6.74 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The total capture volume of the basin is 36,801 cubic feet (35,494 cubic feet required). The filtration system for the basin will consist of 3,150 square feet of sand (2,910 square feet required) meeting ASTM C-33, which is 18 inches thick and an underdrain piping system covered with a minimum two inch gravel layer. The required TSS removal is 6,050 pounds and the provided TSS removal is 6,050 pounds.

GEOLOGY

According to the geologic assessment included with the application, the site is located within the Edwards Group. No geologic or manmade features were noted in the assessment by the project geologist. The San Antonio Regional Office site assessment conducted on January 29, 2015 revealed that the site was generally as described in the application.

SPECIAL CONDITIONS

I. The permanent pollution abatement measure shall be operational prior to occupancy of the facility.

II. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

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. 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 form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

5. 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 WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP 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.
7. 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 date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, 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.
9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

10. During the course of regulated activities related to this project, the applicant or 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.
11. 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. 6, above.
12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods

proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

13. No wells exist on the site. One well is in use and the other has been properly plugged. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. 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 reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden 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.
16. 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.
17. 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.

After Completion of Construction:

18. 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 San Antonio Regional Office within 30 days of site completion.
19. 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. The regulated 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 San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection 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.
21. An Edwards Aquifer protection 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 Edwards Aquifer protection 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.

22. 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.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Dianne Pavlicek-Mesa, P.G., of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4074.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region Office
Texas Commission on Environmental Quality

LB/DPM/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

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Mr. Gary Ford, P.E., City of New Braunfels
Mr. Thomas H. Hornseth, P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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PROJECT DESCRIPTION

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driveways and infrastructure. Impervious cover for the site totals 6.74 acres (72.70 percent). This total includes 3.95 acres of impervious cover projected for future development. Project wastewater will be disposed of by conveyance to the existing Gruene Road Water Recycling Center owned by New Braunfels Utilities.

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LB/DPM/eg

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12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods

proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

13. No wells exist on the site. One well is in use and the other has been properly plugged. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. 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 reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden 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.
16. 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.
17. 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.

After Completion of Construction:

18. 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 San Antonio Regional Office within 30 days of site completion.
19. 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. The regulated 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 San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection 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.
21. An Edwards Aquifer protection 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 Edwards Aquifer protection 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.

22. 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.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Dianne Pavlicek-Mesa, P.G., of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4074.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region Office
Texas Commission on Environmental Quality

LB/DPM/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Gary Freeland, P.E., Bury-SAN, Inc.
Mr. Gary Ford, P.E., City of New Braunfels
Mr. Thomas H. Hornseth, P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Zak Covar, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 5, 2015

Mr. Mark L. Wauford
Westpointe G. P. LLC, the General Partner of Westpointe Commercial LTD
6700 Courtyard Road
Chester, Virginia 23831

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Westpointe Village Self Storage; Located southwest of the intersection of Independence Drive and Highway 46; New Braunfels, Texas

TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Investigation No. 1215568; Regulated Entity No. RN105739023; Additional ID No. 13-14121101

Dear Mr. Wauford:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the San Antonio Regional Office by Bury-SAN, Inc. on behalf of Westpointe G. P. LLC, the General Partner of Westpointe Commercial LTD, on December 11, 2014. Final review of the WPAP was completed after additional material was received on January 22 and January 23, 2015. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected 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. Therefore, based on the 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 of the executive director's final action on this Edwards Aquifer Protection Plan. 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 commercial development will have an area of approximately 9.27 acres. The proposed development will consist of a commercial building with associated parking areas,

driveways and infrastructure. Impervious cover for the site totals 6.74 acres (72.70 percent). This total includes 3.95 acres of impervious cover projected for future development. Project wastewater will be disposed of by conveyance to the existing Gruene Road Water Recycling Center owned by New Braunfels Utilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a partial sedimentation/filtration basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 6,050 pounds of TSS generated from the 6.74 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The total capture volume of the basin is 36,801 cubic feet (35,494 cubic feet required). The filtration system for the basin will consist of 3,150 square feet of sand (2,910 square feet required) meeting ASTM C-33, which is 18 inches thick and an underdrain piping system covered with a minimum two inch gravel layer. The required TSS removal is 6,050 pounds and the provided TSS removal is 6,050 pounds.

GEOLOGY

According to the geologic assessment included with the application, the site is located within the Edwards Group. No geologic or manmade features were noted in the assessment by the project geologist. The San Antonio Regional Office site assessment conducted on January 29, 2015 revealed that the site was generally as described in the application.

SPECIAL CONDITIONS

I. The permanent pollution abatement measure shall be operational prior to occupancy of the facility.

II. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

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. 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 form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
5. 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 WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP 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.
7. 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 date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, 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.
9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

10. During the course of regulated activities related to this project, the applicant or 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.
11. 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. 6, above.

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
13. No wells exist on the site. One well is in use and the other has been properly plugged. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. 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 reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
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16. 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.
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<u>After Completion of Construction:</u>

18. 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 San Antonio Regional Office within 30 days of site completion.
19. 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. The regulated 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 San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection 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.
21. An Edwards Aquifer protection 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 Edwards Aquifer protection 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.
22. 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.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Dianne Pavlicek-Mesa, P.G., of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4074.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region Office
Texas Commission on Environmental Quality

LB/DPM/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Gary Freeland, P.E., Bury-SAN, Inc.
Mr. Gary Ford, P.E., City of New Braunfels
Mr. Thomas H. Hornseth, P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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SAN ANTONIO
REGION

2015 JAN 22 AM 11: 32

January 22, 2015

Project No.: R0112244-50001

Dianne Pavlicek, P.G.
TCEQ – Edwards Aquifer Protection Program
14250 Judson Road
San Antonio, Texas 78233

RECEIVED

JAN 28 2015

COUNTY ENGINEER

Re: Westpointe Village Self-Storage
Water Pollution Abatement Plan

Dear Ms. Pavlicek:

This is our response to comments received from your office on January 22, 2015. We have reviewed these comments and respond in the following manner:

WPAP Application — Dianne Pavlicek — (210) 403-4074

1. Comment. The geologic map included in the Geologic Assessment does not appear to cover the entire project area. Please delineate the project area on the geologic map. If the project area is not covered in entirety by the geologic map, then a new Geologic Assessment must be done to include the entire project area.

   Response. Please refer to the Exhibit A attached to this comment response letter; additionally, an updated Geologic Assessment Maps (5 hard copies) have been provided as well as an electronic copy to TCEQ.

2. Comment. The geologic map is at a scale of 1 inch equals 200 feet and the site plan is at a scale of 1 inch equal 50 feet. The site plan scale and the geologic map scale must be the same. Please review and revise accordingly.

   Response. An overall site plan (sheet C 2.0) with a scale of one (1) inch equals two hundred (200) feet has been provided with this comment response letter.

3. Comment. Please indicate location of sediment depth marker in the water quality pond on sheet C4.0.

   Response. The sediment depth marker location can be found in the updated pond detail sheet (sheet C4.2).

4. Comment. Only the Temporary BMP details were included in the plan. Please provide an exhibit showing the location of the Temporary BMPs.

   Response. The existing conditions, demolition, and SWPPP and Stormwater Pollution Prevention Plan Details plan sheets (sheet C1.0 and C1.1) have been provided to show Temporary BMP locations.

922 Isom Road
Suite 100
San Antonio, Texas
78216

P 210.525.9090
F 210.525.0529

Austin
San Antonio
Dallas
Houston
Temple

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SAN ANTONIO
REGION

2015 JAN 22 AM 11: 32

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

Sincerely,

Albert Gutierrez, EIT
ENGINEER ASSOCIATE
Bury-San, Inc. TBPE F-1048

Enclosed Attachments

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REGION

2015

Figure 5: Feature Locations
121-acre Weston Tract GA
Comal County, Texas
January 2015

aci consulting
austin • denver

Disclaimer:
This map is intended for planning purposes. All boundaries and designations are subject to confirmation.

F1
F2
F3
F4
F5
F6

Hunters Trl
Oak Run Pkwy
Hunters Glade
Hunters Creek Dr
Hunters Point Dr
Hunters Highway
Hunters Tree
Waxford Way
Mission Hill Run
Hunters Trophy
Hunters Rdg
Morning Star
Morning Moon
Meadow Breeze
Independence Dr
TX-46 W
TX-46 E
TX-337 Loop
Kemick Ln
Mission Hills Dr

N

400 200 0 400 Feet
1:2,400 1 inch = 200 Feet

2015.01.05
09:54:39 -06'00'

STATE OF TEXAS
STAN REECE
GEOLOGY
No. 3295
LICENSED
PROFESSIONAL GEOSCIENTIST

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

This map is intended for planning purposes only. All map data should be considered preliminary and all boundaries and designations are subject to confirmation.

N

500 250 0 500 Feet

1:6,000 1 inch = 500 feet

Subject Area

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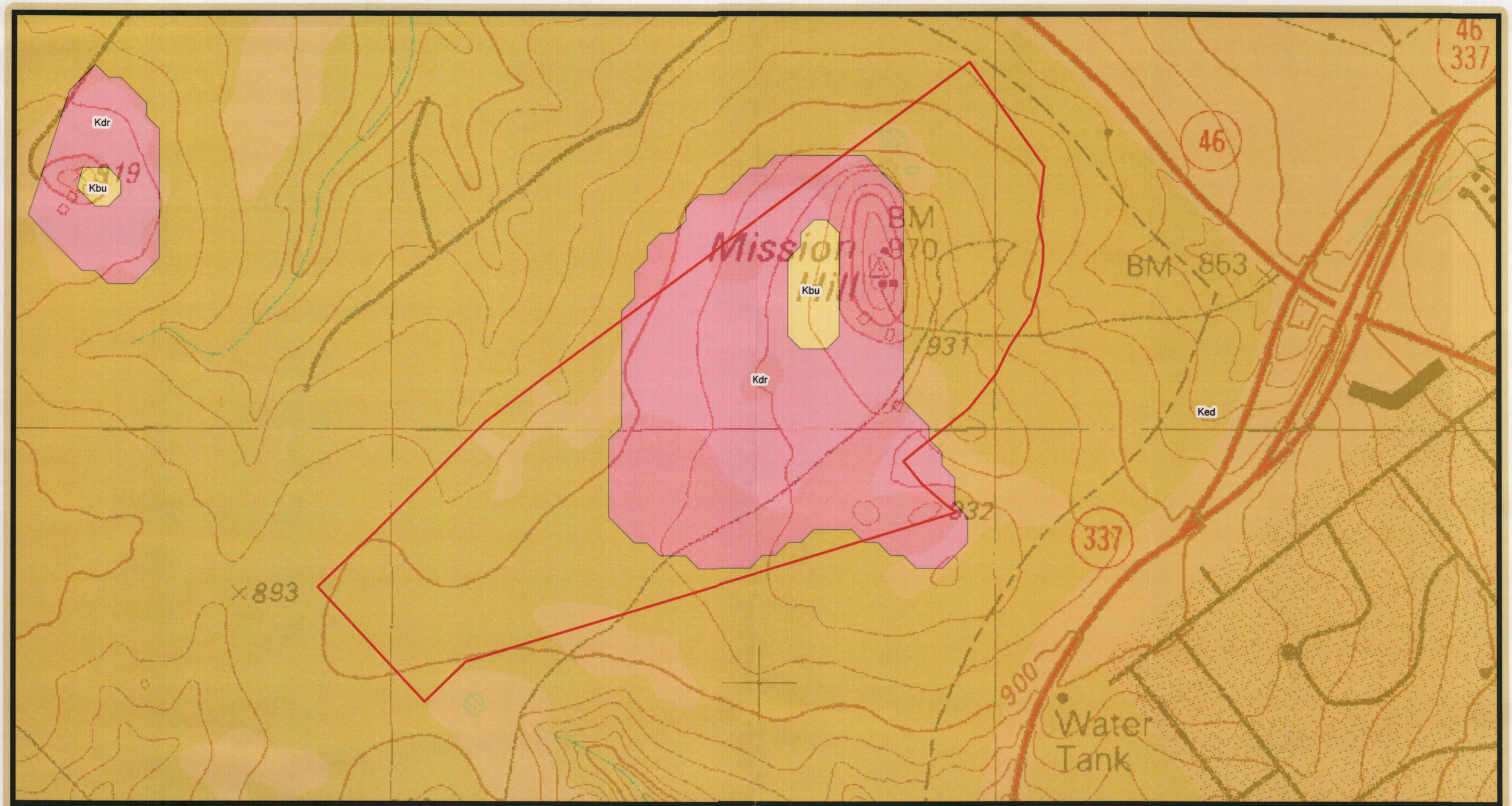
Weston 121-Acre Tract Geologic Assessment
Figure 1: Subject Area

January 2015



This map is intended for planning purposes only. All map data should be considered preliminary and all boundaries and designations are subject to confirmation.

N

500 250 0 500 Feet

1:6,000 1 inch = 500 feet

Subject Area

2015 JAN 22 AM 11:36
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SAN ANTONIO REGION

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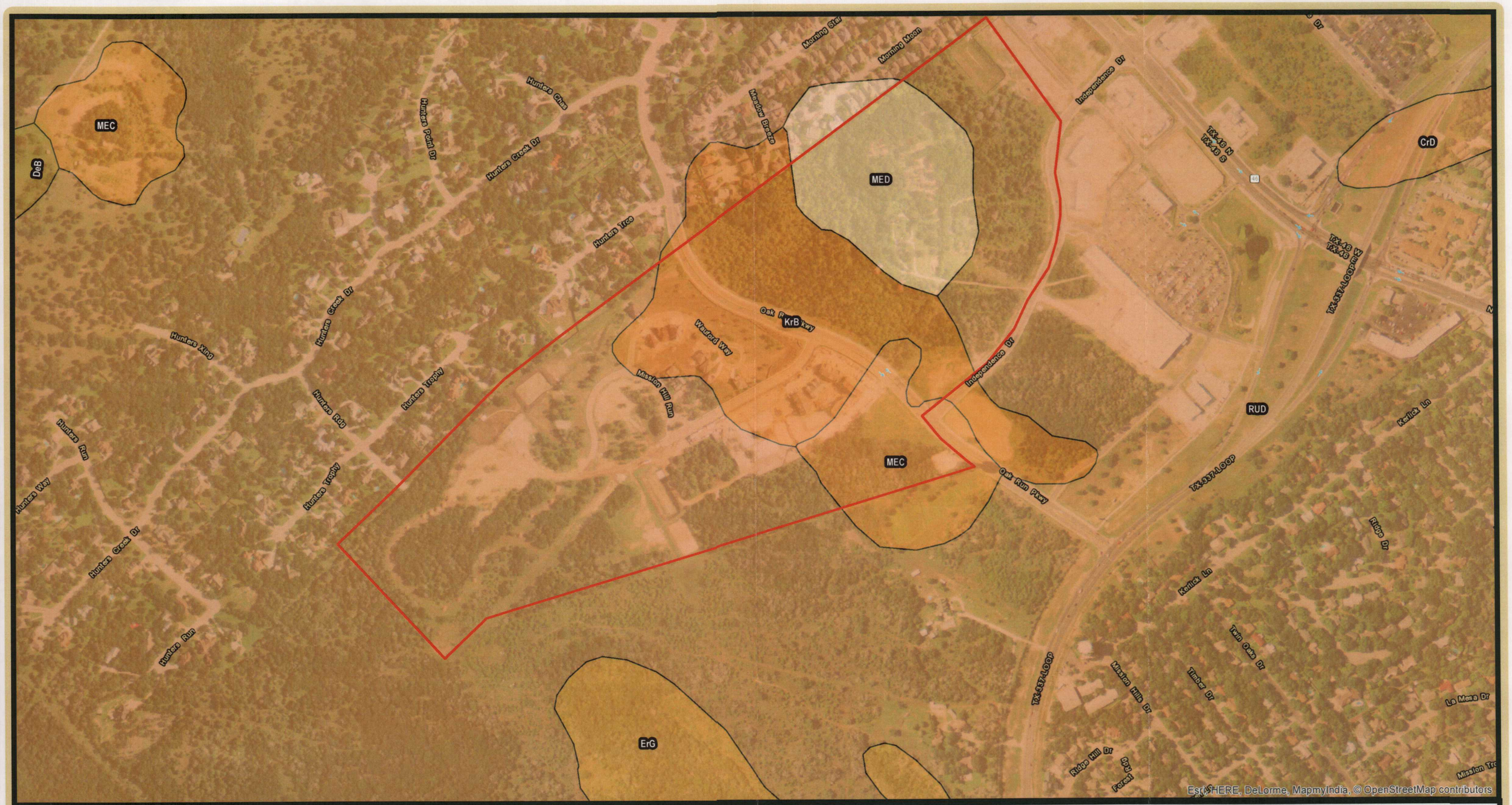
Weston 121-Acre Tract Geologic Assessment

Figure 3: Topographic Map with Formation Outcrops

January 2015



This map is intended for planning purposes only. All map data should be considered preliminary and all boundaries and designations are subject to confirmation.

N

500 250 0 500 Feet

1:6,000 1 inch = 500 feet

Subject Area

2015 JAN 22 AM 11:37
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Weston 121-Acre Tract Geologic Assessment

Figure 4: Site Soils

January 2015

TCEQ
Protecting Texas by Reducing and Preventing Pollution

Fax Cover Sheet

Number of Pages: *(including this sheet)* 2

RECEIVED
JAN 23 2015
By

Date: January 23, 2015
To: Gary Freeland, P.E.
Organization: Bury-SAN, Inc.
Fax: 210-525-0529

To: Mark L. Wauford
Organization: Westpointe G. P. LLC, The General Partner of Westpointe
Fax: 804-751-9891

From: Dianne Pavlicek, P.G.
Division : Edwards Aquifer Protection Program – San Antonio Region
Texas Commission on Environmental Quality
Phone: 210-403-4074
Fax: 210-545-4329

Re: Edwards Aquifer, Comal County

Name of Project: Westpointe Village Storage; Located southwest of the intersection of Independence Dr. and State Hwy. 46; New Braunfels, Texas

Plan Type: Request for the Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213;

RECEIVED
JAN 28 2015
COUNTY ENGINEER

EAPP File No. 13-14121101

Dear Mr. Freeland:

We are in the process of technically reviewing the WPAP you submitted on the above-referenced project. Before we can proceed with our review, the following comments relating to the application must be addressed.

1. Please note that the response to NOD1 was deficient in the amount of copies provided. Only **one** copy was provided for the following:

1) Exhibit A of the Geologic Assessment showing the WPAP site area
2) Updated sheet C2.0
3) Updated sheet C4.2
4) Updated sheets C1.0 and C1.1

Please provide **four** additional copies of items 1 – 4 above.

We ask that you submit one original and four copies of the amended materials to supplement the WPAP to this office by no later than **14 days from the date of this fax** to avoid denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, a second notice will be sent to you requiring a response within 14 days from the notice date. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn. If you have any questions or require additional information, please contact Dianne Pavlicek, P.G., of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4074.

User Name: agutierrez
Date Saved: January 14, 2015

RECEIVED
JAN 23 2015
By

RECEIVED
JAN 28 2015
COUNTY ENGINEER

G:\1122244\50001\GIS\TCEQ WPAP Exhibit A.mxd
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

BURY

922 Isom Road, Suite 100
San Antonio, Texas 78216
(210) 525-9090, Phone

TBPE #F-1048
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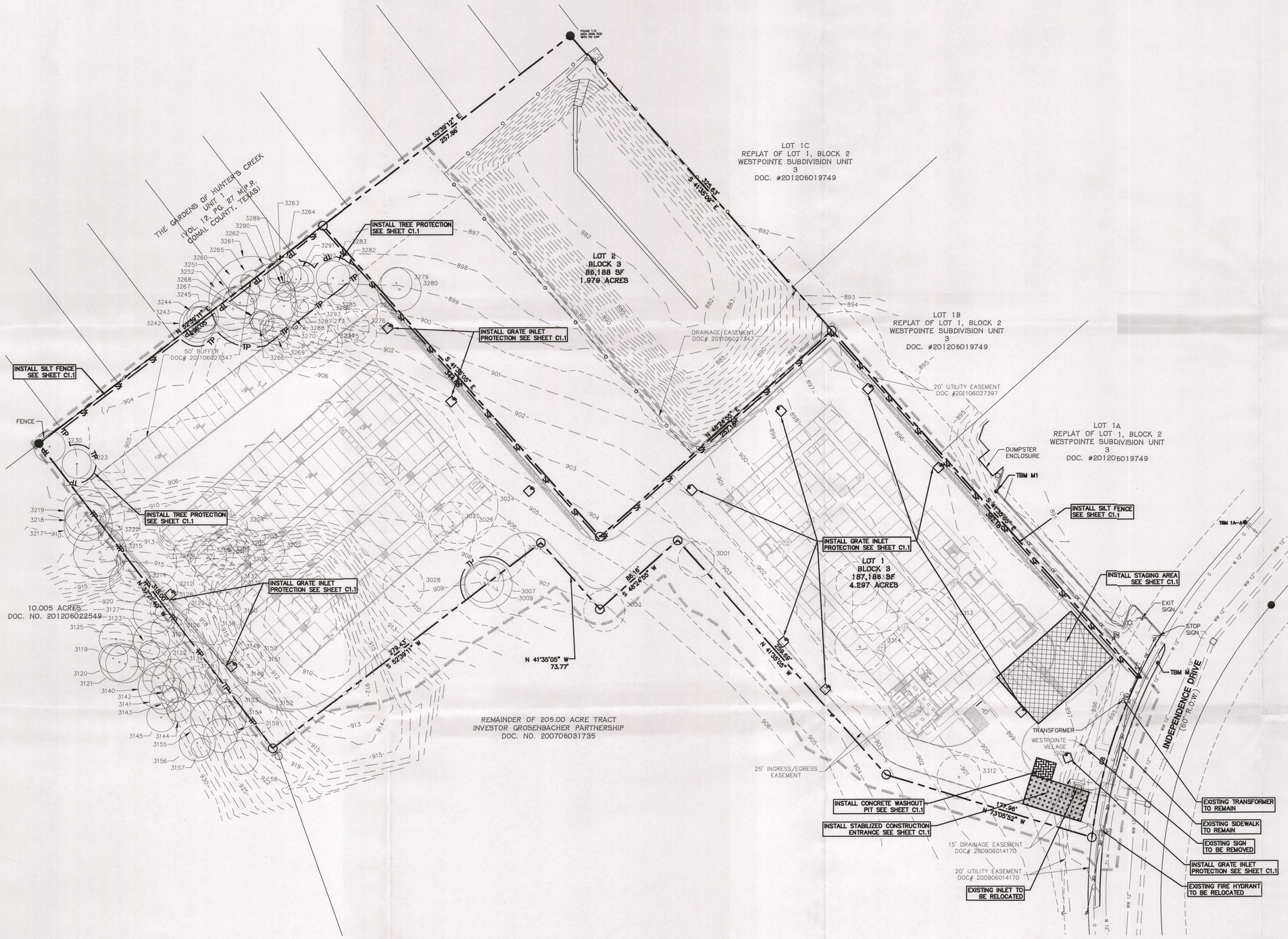
www.buryinc.com

TCEQ WPAP Exhibit A
SW of Intersection SH-46 & Independence D

Wespointe Storage

Westpointe Commercial LTD

Date: 1/14/2015
File: TCEQ WPAP Exhibit A.mxd
Scale:
Tech: AG
Project Number: R0112244-50001



LEGEND

EXISTING	PROPOSED
●	1/2" IRON ROD FOUND
○	1/2" IRON ROD SET
⊙	IRON PIPE FOUND
	BENCHMARK
	FIRE DEPARTMENT CONNECTION
	LIGHT POLE
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GAS METER
	GAS VALVE
WWMH	WASTEWATER MANHOLE
SSMH	STORMSEWER MANHOLE
	DRAINAGE INLET
	CURB INLET
	STAND UP CURB
	HANDICAPPED PARKING SPACE
	SIGN
T	TRANSFORMER PAD
E	ELECTRIC METER
OE	OVER HEAD ELEC. LINE
SS	STORM SEWER LINE
W	WATER LINE
FWS	FIRE WATER LINE
DWS	DOMESTIC WATER LINE
	LANDSCAPE WATER LINE
WW	WASTEWATER LINE
UE	UNDERGROUND ELECTRIC
UT	UNDERGROUND TELEPHONE
G	GAS LINE
	PROPERTY LINE
678	CONTOUR
704	SPOT ELEVATION
	FLOW DIRECTION
	CONCRETE SURFACE
	RETAINING WALL
	LIMITS OF CONSTRUCTION
	TO BE REMOVED
SF	SILT FENCE (SEE DETAIL C1.1.1)
TP	TREE PROTECTION (SEE DETAIL C1.1.8)
IP	INLET PROTECTION (SEE DETAIL C1.1.4 & C1.1.5)
	STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL C1.1.3)
	STAGING AREA (SEE DETAIL C1.1.7)
	CONCRETE TRUCK WASHOUT PIT (SEE DETAIL C1.1.6)
	ROCK BERM (SEE DETAIL C1.1.2)
	TREE TO BE REMOVED
	TREE TO REMAIN

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

BENCHMARKS:

BM JL-03 – SQUARE CUT ON THE SOUTHERLY CURB RETURN AT THE INTERSECTION OF HUNTER'S TRACE AND OAK RUN PARKWAY
ELEVATION = 893.67 FEET. (NOT SHOWN)

TBM 1A-A CUT "X" ON NORTH FLANGE BOLT OF A FIRE HYDRANT LOCATED IN THE NORTHWESTERLY RIGHT OF WAY OF INDEPENDENCE DRIVE, ±375' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=893.59'

TBM 1A-B CUT "SQUARE" ON LIGHT STANDARD CONCRETE BASE LOCATED ±78' NORTHWEST OF INDEPENDENCE DRIVE, ±321' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=890.59'

TBM M PK NAIL SET AT THE BACK OF CURB IN THE NORTHWESTERLY RIGHT OF WAY OF INDEPENDENCE DRIVE, ±507' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=894.10'

TBM M1 PK NAIL SET AT THE BACK OF CURB IN THE SCHLOTZSKY'S PARKING LOT ±910' NORTHWEST OF INDEPENDENCE DRIVE AND ±501' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=891.14'

LEGAL DESCRIPTION:

OF A 4.297 ACRE TRACT OF LAND SITUATED IN THE CITY OF NEW BRAUNFELS, COMAL COUNTY, TEXAS, BEING OUT OF THE ANDRES SANCHEZ SURVEY NO. 286, AND BEING A PORTION OF THAT CERTAIN 205.00 ACRE TRACT RECORDED IN DOCUMENT NO. 200706031735 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS

RECEIVED
JAN 28 2015
COUNTY ENGINEER

BURY
922 Isom Road, Suite 100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-1048

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STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED
PROFESSIONAL ENGINEER
01/06/2015

RECEIVED
JAN 23 2015

WESTPOINTE STORAGE

INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO.12244-50001

DATE : 12.01.14

DRAWN : ENW

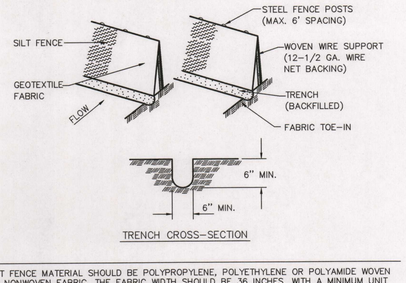
REVISIONS:

EXISTING CONDITIONS, DEMOLITION, AND S.W.P.P.P.

SHEET NO.

C1.0

C1.1.1 SILT FENCE
SCALE: N.T.S.



TRENCH CROSS-SECTION

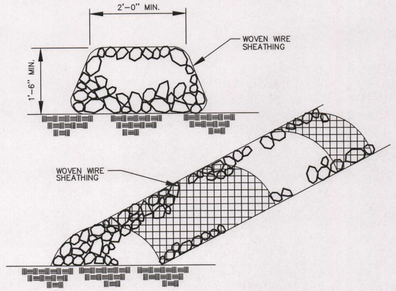
NOTES:

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN2, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR YBAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT2, AND BRINDELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2"X4" WELDED WIRE, 12 GAUGE MINIMUM.
4. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
5. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS 1/4 ACRE/100 FEET OF FENCE.
6. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OF ROCK OUTCROP), WEIGH FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
7. THE TRENCH MUST BE A MINIMUM OF 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.
8. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
9. SILT FENCES SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE

INSPECTION AND MAINTENANCE GUIDELINES:

1. INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
3. REPLACE AND TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
4. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT.

C1.1.2 ROCK BERM
SCALE: N.T.S.



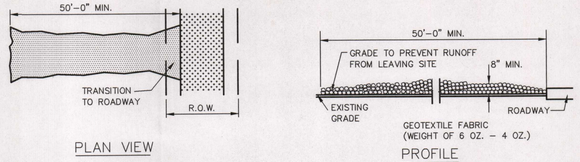
NOTES:

1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
2. CLEAN, OPEN GRADED 3 TO 5 INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5 TO 8 INCH DIAMETER ROCKS MAY BE USED.
3. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOWLINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.
4. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
5. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM (FIGURE 1-28), TO A HEIGHT NOT LESS THAN 18".
6. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
7. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
8. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

INSPECTION AND MAINTENANCE GUIDELINES:

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
3. REPAIR ANY LOOSE WIRE SHEATHING.
4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

C1.1.3 STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.



PLAN VIEW

PROFILE

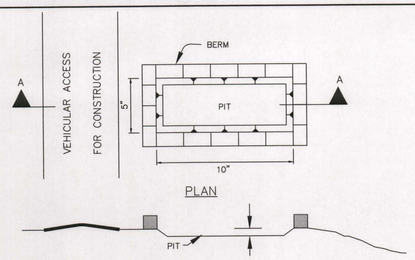
NOTES:

1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD2, A MULLEN BURST RATING OF 140 LB/IN2, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4 INCH DIAMETER WASHED STONE OR COMMERCIAL RACK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.
5. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
6. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
7. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
8. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO THE DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
9. PLACE GEOMETRIES FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
10. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
11. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
12. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES:

1. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH 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.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

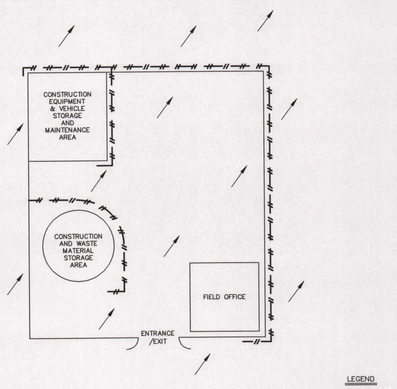
C1.1.4 CURB INLET PROTECTION BARRIER
SCALE: N.T.S.



NOTES:

1. WHEN A SANDBAG IS FILLED WITH MATERIAL, THE OPEN END OF THE SANDBAG SHOULD BE STAPLED OR TIED WITH NYLON OR POLY CHORD.
2. INLET PROTECTION SHALL BE PLACED OVER THE MOUTH OF THE INLET WITH A 2 FOOT OVERLAP ON EITHER SIDE.
3. THE FABRIC COVER AND SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE.
4. THE SKIRT SHALL BE WEIGHTED WITH ONE 18"X24"X6" SANDBAG EVERY 3 FEET.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF FOUR INCHES, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
7. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE 6 ABOVE.

C1.1.5 GRATE INLET PROTECTION BARRIER
SCALE: N.T.S.



NOTE:

1. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
2. AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ABOVE. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
3. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS IT'S FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

C1.1.6 CONCRETE TRUCK WASHOUT PIT
SCALE: N.T.S.

PLAN

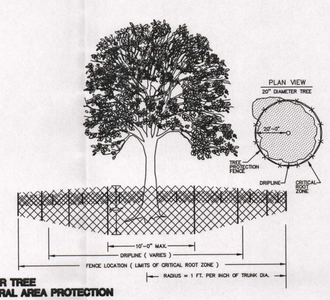
SECTION A-A

GENERAL NOTES:

1. DETAIL ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.
4. PIT SHALL BE INSTALLED WITH IMPERMEABLE LINER PER TCEQ REQUIREMENTS..

C1.1.7 TYPICAL CONSTRUCTION STAGING AREA
SCALE: N.T.S.

C1.1.8 TREE PROTECTION
SCALE: N.T.S.



NOTES FOR TREE AND NATURAL AREA PROTECTION

1. PROTECTION FENCE SHALL BE ORANGE CONSTRUCTION FENCE WITH POSTS.
2. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
3. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO STANDARDS FOR TREE PROTECTION.
4. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
5. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIP LINES.
6. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE), FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:
   (A) SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
   (B) ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING
   (C) WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
   (D) OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
7. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   (A) WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED;
   (B) WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZED ROOT DAMAGE);
   (C) WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEEN THE FENCE AND THE BUILDING;
   (D) WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS.

SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE

8. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
9. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
10. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
11. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
12. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
13. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.).
14. ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES
15. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

STORM WATER POLLUTION PREVENTION NOTES

1. PRIOR TO CONSTRUCTION, MAKE CERTAIN THE NOTICE OF INTENT (NOI) OR CONSTRUCTION SITE NOTICE (CSN) HAS BEEN FILED AND POSTED ONSITE FOR PUBLIC VIEWING AND THE TPDES REPORT AND SWPPP ARE AVAILABLE AT THE TRAILER.
2. INSTALL STORM WATER POLLUTION PREVENTION CONTROLS PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, EXCAVATION).
3. THE PLACEMENT OF STORM WATER POLLUTION PREVENTION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED STORM WATER POLLUTION PREVENTION CONTROL PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR AND ENGINEER AFTER INSTALLATION OF THE STORM WATER POLLUTION PREVENTION CONTROLS AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK.
5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE ENGINEER AS APPROPRIATE. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE STORM WATER POLLUTION PREVENTION CONTROL PLAN MAY BE REQUIRED BY THE ENGINEER DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.
6. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT INTERVALS OF AT LEAST ONCE EVERY TWO (2) WEEKS AND IMMEDIATELY AFTER SIGNIFICANT RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF PROPERLY.
8. WHERE SILT FENCE CANNOT BE PROPERLY INSTALLED USE TRIANGULAR FILTRATION DIKE.
9. SOIL DISTURBANCES SHALL BE MINIMIZED BY EXPOSING ONLY THE SMALLEST PRACTICAL AREA OF LAND REQUIRED FOR THE CLEARING AND GRADING ACTIVITY AND FOR THE CONSTRUCTION ACTIVITY, FOR THE SHORTEST PRACTICAL PERIOD OF TIME.
10. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND EXCEPT AS PROVIDED BELOW, WILL BE INITIATED NO MORE THAN THE END OF THE NEXT WORK DAY AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
11. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN FOURTEEN (14) DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
12. TRAFFIC LEAVING THE CONSTRUCTION SITE WILL EXIT THROUGH A STABILIZED CONSTRUCTION EXIT AS LOCATED ON THE PLANS. WHEN SOILS HAVE COLLECTED ON THE STABILIZED VEHICULAR EXIT TO AN EXTENT WHICH REDUCES ITS INTENDED EFFECTIVENESS, THE SURFACE WILL BE CLEANED AND REESTABLISHED FOR THE INTENDED PURPOSE.
13. MUD/DIRT INADVERTENTLY TRACKED OFF-SITE AND ONTO PUBLIC STREETS SHALL BE REMOVED IMMEDIATELY.
14. PERMANENT EROSION CONTROL:
    ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.
    (A) A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE PLACED IN ALL DRAINAGE CHANNELS (EXCEPT ROCK) AND BETWEEN THE CURB AND RIGHT-OF-WAY LINE.
    (B) THE SEEDING FOR PERMANENT EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS UNLESS SPECIFIED OTHERWISE BY THE PROJECT'S LANDSCAPE PLAN:

    BROADCAST SEEDING:
    I. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 2 POUNDS PER 1000 SF OF UNHULLED BERMUDA AND 7 POUNDS PER 1000 SF OF WINTER RYE WITH A PURITY OF 95% WITH 90% GERMINATION.
    II. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 2 POUNDS PER 1000 SF WITH A PURITY OF 95% WITH 85% GERMINATION.

    (C) FERTILIZER SHALL BE A PELLETED OR GRANULAR SLOW RELEASE WITH AN ANALYSIS OF 15- 15-15 TO BE APPLIED ONCE AT PLANTING AND ONCE DURING THE PERIOD OF ESTABLISHMENT AT A RATE OF 1 POUND PER 1000 SF.

    (D) MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SF.

    HYDRAULIC SEEDING:
    I. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 1 POUND PER 1000 SF OF UNHULLED BERMUDA AND 7 POUNDS PER 1000 SF OF WINTER RYE WITH A PURITY OF 95% WITH 90% GERMINATION.
    II. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 1 POUND PER 1000 SF WITH A PURITY OF 95% WITH 85% GERMINATION.

    (E) FERTILIZER SHALL BE A WATER SOLUBLE FERTILIZER WITH AN ANALYSIS OF 15-15-15 AT A RATE OF 1.5 POUNDS PER 1000 SF.

    (F) MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SF, WITH SOIL TACKIFIER AT A RATE OF 1.4 POUNDS PER 1000 SF.

    (G) THE PLANTED AREA SHALL BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN-DAY INTERVALS DURING THE FIRST TWO MONTHS RAINFALL OCCURRENCES OF 1/2 INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK. (COORDINATE WITH IRRIGATION PLAN)

    (H) RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1 1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.

    (I) SEEDING SHALL APPLY TO ALL AREAS WITHIN DISTURBED PROJECT AREA NOT COVERED BY PAVEMENT, BUILDING PAD OR PROJECT LANDSCAPING PLANS.

    (J) TWO SEEDINGS SHOULD OCCUR DURING PROJECT. FIRST SHOULD OCCUR WITHIN 14 DAYS AFTER PONDS ARE GRADED AND SECOND BY FINAL PUNCH LIST.
15. THE EPA GENERAL PERMIT REQUIRES THAT A TEMPORARY OR PERMANENT SEDIMENT BASIN BE INSTALLED IN ANY DRAINAGE LOCATION WHERE MORE THAN 10 ACRES IN THE UPSTREAM DRAINAGE ARE DISTURBED AT ONE TIME. THE SEDIMENT BASIN MUST PROVIDE AT LEAST 3,600 CUBIC FEET OF STORAGE FOR EVERY ACRE OF LAND, WHICH IT DRAINS.
16. CONSTRUCTION WASTE MANAGEMENT AND IMPLEMENTATION OF EPA'S BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL DURING CONSTRUCTION IS REQUIRED.

SPECIFICATIONS:

STORM WATER POLLUTION PREVENTION PLAN / TPDES

FURNISH AND INSTALL TEMPORARY AND PERMANENT STORM WATER POLLUTION PREVENTION CONTROL MEASURES SHOWN IN THE PLANS. CONSTRUCT IMPROVEMENTS IN COMPLIANCE WITH THE INTENT OF SUCH POLLUTION CONTROL MEASURES, TPDES PERMITS, OR OTHER LOCAL WATERWAY DEVELOPMENT PERMITS.

EXECUTION:

1. CONTRACTOR IS RESPONSIBLE FOR ALL POLLUTION PREVENTION MEASURES SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
2. SUBMIT A STORM WATER TPDES GENERAL PERMIT NOTICE OF INTENT (NOI) AT LEAST TWO DAYS PRIOR TO START OF CONSTRUCTION TO THE APPROPRIATE AGENCY SHOWN ON THE SWPPP, IF REQUIRED.
3. POST SIGNED AND COMPLETED NOI POSTING NOTICE OR CONSTRUCTION SITE NOTICE (CSN) AT CONSTRUCTION ENTRANCE FOR PUBLIC VIEWING, AND KEEP A COPY OF THE SWPPP AT THE JOB SITE AT ALL TIMES.
4. INSTALL AND MAINTAIN POLLUTION CONTROL MEASURES IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND WITH PROJECT SPECIFICATIONS.
5. INSTALL EROSION CONTROL MEASURES AND CONSTRUCTION ENTRANCES AS SHOWN IN THE SWPPP PRIOR TO BEGINNING CONSTRUCTION. POLLUTION CONTROL MEASURES SHALL BE REPAIRED, RESTABLISHED, ADJUSTED OR REINSTALLED WITH EACH SUBSEQUENT PHASE OF CONSTRUCTION IN ACCORDANCE WITH THE SWPPP.
6. CONTRACTOR IS RESPONSIBLE FOR ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE, AND SHALL REMOVE THE ACCUMULATION OF OFF-SITE SEDIMENT PROMPTLY.
7. MAINTAIN SEDIMENT TRAPS OR SEDIMENTATION BASINS.
8. OFF-SITE MATERIAL STORAGE AREAS USED SOLELY BY THE PROJECT ARE CONSIDERED PART OF THE PROJECT.
9. MAINTAIN RECORDS OF PROJECT MILESTONE DATES AND FIELD CHANGES AS REQUIRED BY THE SWPPP.
10. INSPECT POLLUTION CONTROL MEASURES EVERY 14 DAYS AND WITHIN 24 HOURS AFTER A STORM EVENT GREATER THAN 0.5 INCHES OF RAINFALL. AN INSPECTION REPORT SHALL BE RECORDED AS REQUIRED BY THE SWPPP.
11. DEFICIENCIES NOTED DURING THE INSPECTION WILL BE CORRECTED AND DOCUMENTED WITHIN SEVEN CALENDAR DAYS OR BEFORE THE NEXT ANTICIPATED STORM EVENT.

RECEIVED
JAN 28 2015
COUNTY ENGINEER

RECEIVED
JAN 23 2015
BY

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922 Isom Road, Suite 100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-1048
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STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED
PROFESSIONAL ENGINEER
01/06/2015

WESTPOINTE STORAGE
INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO.12244-50001
DATE : 12.01.14
DRAWN : ENW
REVISIONS:

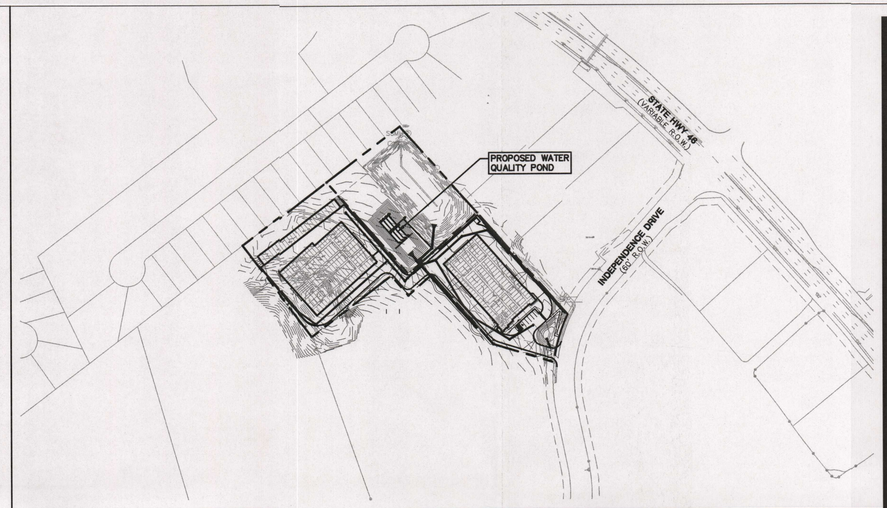
STORM WATER POLLUTION PREVENTION PLAN DETAILS

SHEET NO.
C1.1

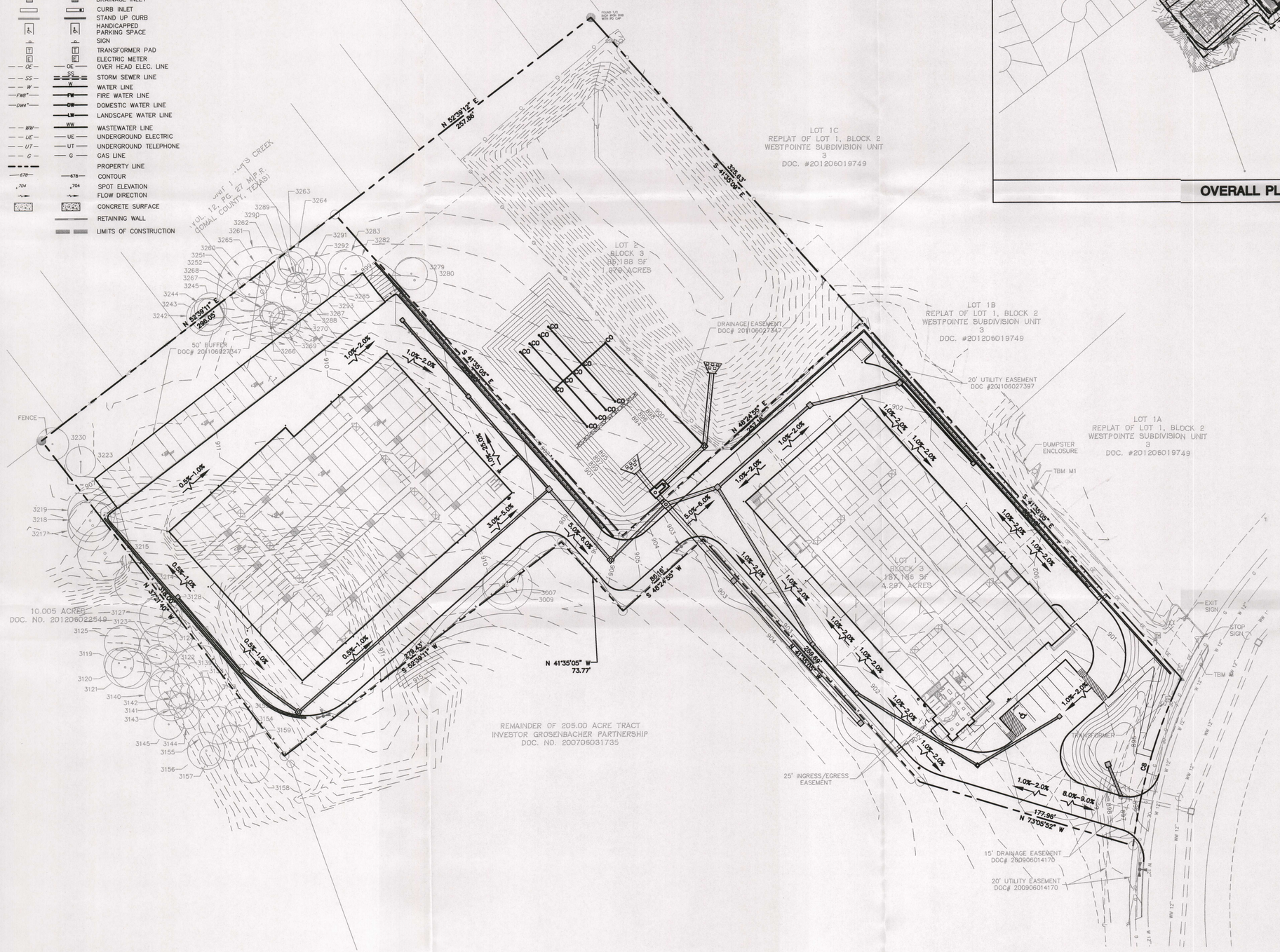
LEGEND

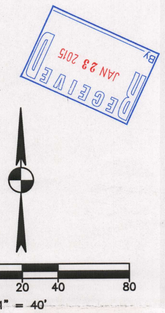
EXISTING PROPOSED

●	1/2" IRON ROD FOUND
○	1/2" IRON ROD SET
⊙	IRON PIPE FOUND
◕	BENCHMARK
	FIRE DEPARTMENT CONNECTION
☼ ★	LIGHT POLE
⌀	POWER POLE
⏚	DOWN GUY
	FIRE HYDRANT
⊘	WATER VALVE
	WATER METER
	GAS METER
G	GAS VALVE
WMMH ○	WMMH ● WASTEWATER MANHOLE
SSMH ○	SSMH ● STORMSEWER MANHOLE
	DRAINAGE INLET
	CURB INLET
	STAND UP CURB
♿	HANDICAPPED PARKING SPACE
-o-	SIGN
T	TRANSFORMER PAD
E	ELECTRIC METER
— OE —	OVER HEAD ELEC. LINE
— SS —	STORM SEWER LINE
— W —	WATER LINE
— FWD" —	FIRE WATER LINE
— DW#" —	DOMESTIC WATER LINE
	LANDSCAPE WATER LINE
— WW —	WASTEWATER LINE
— UE —	UNDERGROUND ELECTRIC
— UT —	UNDERGROUND TELEPHONE
— G —	GAS LINE
	PROPERTY LINE
— 678 —	CONTOUR
.704	SPOT ELEVATION
	FLOW DIRECTION
	CONCRETE SURFACE
	RETAINING WALL
	LIMITS OF CONSTRUCTION



OVERALL PLAN (SCALE 1"-200')





THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

BENCHMARKS:

BM JL-03 – SQUARE CUT ON THE SOUTHERLY CURB RETURN AT THE INTERSECTION OF HUNTER'S TRACE AND OAK RUN PARKWAY
ELEVATION = 893.67 FEET. (NOT SHOWN)

TBM 1A-A CUT "X" ON NORTH FLANGE BOLT OF A FIRE HYDRANT LOCATED IN THE NORTHWESTERLY RIGHT OF WAY OF INDEPENDENCE DRIVE, ±375' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=893.59'

TBM 1A-B CUT "SQUARE" ON LIGHT STANDARD CONCRETE BASE LOCATED ±78' NORTHWEST OF INDEPENDENCE DRIVE, ±321' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=890.59'

TBM M PK NAIL SET AT THE BACK OF CURB IN THE NORTHWESTERLY RIGHT OF WAY OF INDEPENDENCE DRIVE, ±507' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=894.10'

TBM M1 PK NAIL SET AT THE BACK OF CURB IN THE SCHLOTZSKY'S PARKING LOT ±910' NORTHWEST OF INDEPENDENCE DRIVE AND ±525' SOUTHWEST OF STATE HIGHWAY 46.
ELEV=891.14'

RECEIVED
JAN 28 2015
COUNTY ENGINEER

LEGAL DESCRIPTION:

OF A 4.297 ACRE TRACT OF LAND SITUATED IN THE CITY OF NEW BRAUNFELS, COMAL COUNTY, TEXAS, BEING OUT OF THE ANDRES SANCHEZ SURVEY NO. 286, AND BEING A PORTION OF THAT CERTAIN 205.00 ACRE TRACT RECORDED IN DOCUMENT NO. 200706031735 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS

BURY
922 Isom Road, Suite 100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-1048

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STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED
PROFESSIONAL ENGINEER
01/21/2015

WESTPOINTE STORAGE

INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO. 112244-50001

DATE : 12.01.14

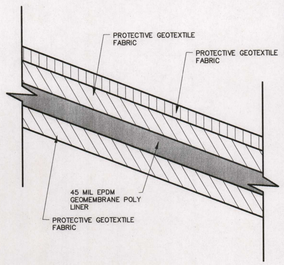
DRAWN : ENW

REVISIONS:

OVERALL SITE PLAN

SHEET NO.

C2.0



GEOMEMBRANE POLY LINER SPECIFICATION

- ULTRAVIOLET RESISTANT
- THICKNESS = 45 MIL MINIMUM
- JOINTS SHALL BE WATER TIGHT AT SEAMS.
- ANCHOR TO WALLS
- WATERTIGHT SEAL BETWEEN POLY LINER AND TRANSITION SURFACES.
- BEDDING MATERIAL SHALL BE SUITABLE COMPACTED MATERIAL (NOT SAND) IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
- PROTECTIVE GEOTEXTILE FABRIC TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

C11.2.1 LINER DETAIL
SCALE: N.T.S.

C11.2.2 NOT USED
SCALE: N.T.S.

GEOTEXTILE FABRIC SHALL MEET THE FOLLOWING SPECIFICATIONS:

PROPERTY	TEST METHOD	UNIT	SPECS.
MATERIAL			NONWOVEN GEOTEXTILE
UNIT WEIGHT		OZ/SQ.YD.	8 (MIN.)
FILTRATION RATE		IN/SEC	0.08 (MIN.)
GRAB STRENGTH	ASTM D-1682	LB.	400 (MIN.)
PUNCTURE STRENGTH	ASTM D-751(MOD.)	LB.	125 (MIN.)
MULLEN BURST STRENGTH	ASTM D-751	PSI.	400 (MIN.)
TENSILE STRENGTH	ASTM D-1682	LB.	300 (MIN.)
EQUIV. OPENING SIZE	US STANDARD SIEVE	NO.	80 (MIN.)

SAND BED AND GEOTEXTILE FABRIC

THE TWO LAYERS MUST BE SEPARATED FROM EACH OTHER USING SUITABLE GEOTEXTILE FABRIC MEETING THE FOLLOWING SPECIFICATIONS:

FIRST (TOP) LAYER- FINE SAND, 0.02-0.04 INCH, 18 INCH DEPTH, TEST METHOD ASTM C-33

SECOND LAYER- 1/2-2 INCH GRAVEL, AT LEAST 1 INCH DEPTH TO 2 INCH DEPTH SURROUNDING UNDERDRAIN PIPING

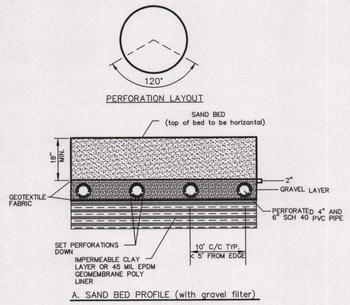
FOR SEDIMENTATION AND FILTRATION PONDS CLAY LINERS SHALL MEET THE FOLLOWING SPECIFICATIONS:

TABLET 1-7

CLAY LINER SPECIFICATION

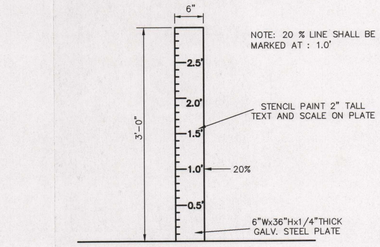
PROPERTY	TEST METHOD	UNIT	SPECS.
PERMEABILITY	ASTM D-2434	Cm/Sec	1×10^{-6}
PLASTICITY INDEX OF CLAY	ASTM D-423 & D-424	%	NOT LESS THAN 15
LIQUID LIMIT OF CLAY	ASTM D-2216	%	NOT LESS THAN 30
CLAY PARTICLES PASSING	ASTM D-422	%	NOT LESS THAN 30
CLAY COMPACTION	ASTM D-2216	%	95% OF STANDARD PROCTOR DENSITY

THE CLAY LINER SHALL HAVE A MINIMUM THICKNESS OF 12 INCHES.

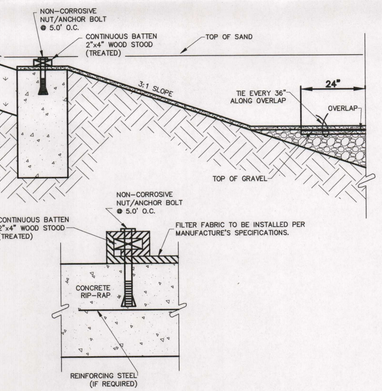


A. SAND BED PROFILE (with gravel filter)

C11.2.3 FILTRATION POND SAND BED
SCALE: N.T.S.

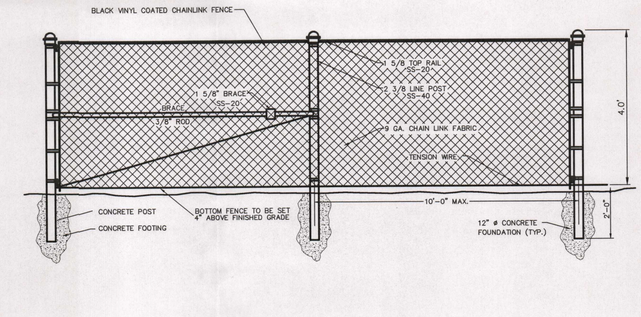


C11.2.4 SEDIMENT DEPTH MARKER
SCALE: N.T.S.

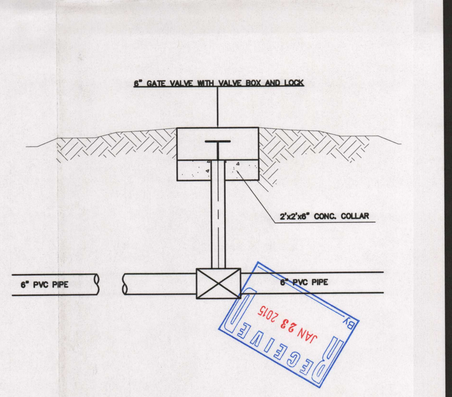


C11.2.5 FILTER FABRIC & ANCHORING DETAIL
SCALE: N.T.S.

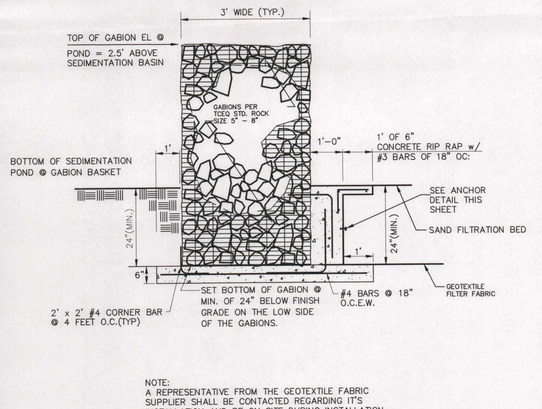
C11.2.6 NOT USED
SCALE: N.T.S.



C11.2.7 CHAIN LINK FENCE
SCALE: N.T.S.

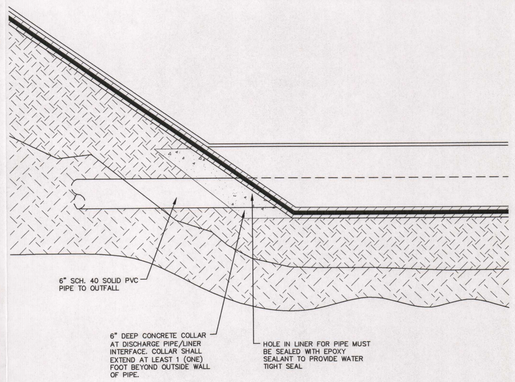


C11.2.8 6" GATE VALVE DETAIL
SCALE: N.T.S.

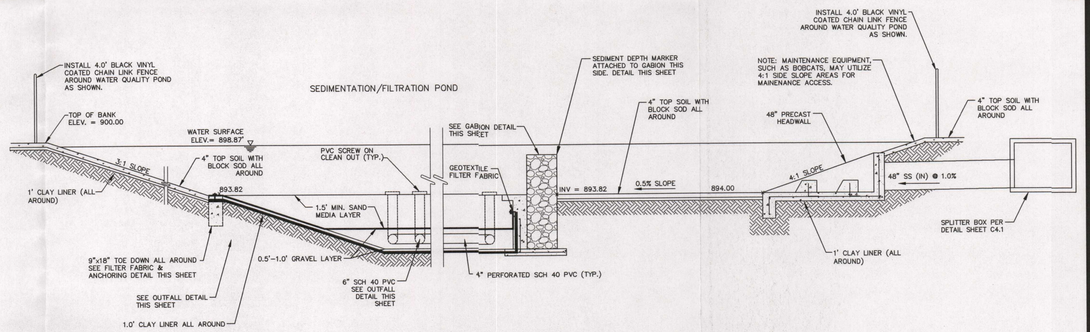


NOTE:
A REPRESENTATIVE FROM THE GEOTEXTILE FABRIC SUPPLIER SHALL BE CONTACTED REGARDING IT'S INSTALLATION AND BE ON SITE DURING INSTALLATION.

C11.2.9 GABION BASKET WALL DETAIL
SCALE: N.T.S.



C11.2.10 OUTFALL DETAIL
SCALE: N.T.S.



C11.2.11 SECTION "A-A"
SCALE: N.T.S.

BURY
922 Isom Road, Suite 100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-1048
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STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED PROFESSIONAL ENGINEER
01/21/2015

WESTPOINTE STORAGE
INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO. 112244-50001
DATE : 12.01.14
DRAWN : ENW
REVISIONS:

WATER QUALITY POND DETAILS

SHEET NO.
C4.2

Bryan W. Shaw, Ph.D., *Chairman*
Toby Baker, *Commissioner*
Zak Covar, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 11, 2014

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: Westpointe Village Self Storage, located approximately 700 feet southwest of the State Highway 46 and Independence Drive intersection, New Braunfels, Texas

PLAN TYPE: Application for Approval of Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
EAPP Additional ID: 13-14121101

Dear Mr. Hornseth:

The referenced 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. More information regarding this project may be obtained from the TCEQ Central Registry website at http://www.tceq.state.tx.us/permitting/central_registry/.

Please forward your comments to this office by January 11, 2015.

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

Todd Jones
Water Section Work Leader
San Antonio Regional Office

TJ/eg

RECEIVED
DEC 15 2014
COUNTY ENGINEER

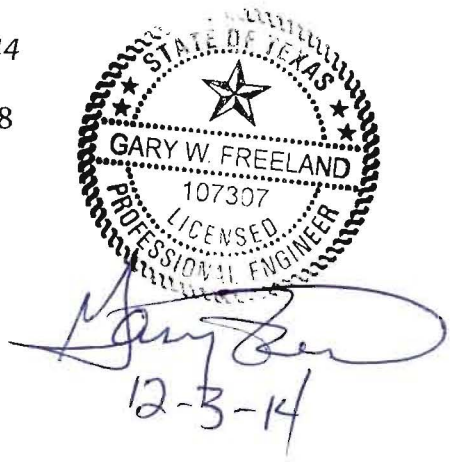
BURY

WATER POLLUTION ABATEMENT PLAN

Westpointe Village Self Storage
New Braunfels, Comal, Texas

December 2014

TBPE F-1048



I:\112244\50001\AD Reports\WPAP\December 2014\Cover (2).doc.mm

LET'S SOLVE IT.

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

1. Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

   To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

   An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or if not withdrawn the application will be denied and the application fee will be forfeited.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available to you:

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the effected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: Westpointe Village Storage					**2. Regulated Entity No.:**			
3. Customer Name: Westpointe Commercial, LTD.					**4. Customer No.: 604362186**			
5. Project Type: (Please circle/check one)	New		Modification		Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST / AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		Non-residential		**8. Site (acres):**		9.27 Acres	
9. Application Fee:	$5,000.00		**10. Permanent BMP(s):**		Water Quality Pond			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**		N/A			

13. County:	Comal	14. Watershed:	Guadalupe River

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

	__San Antonio (SAWS) __Shavano Park				

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Print Name of Customer/Authorized Agent Gary W. Freeland, P.E.
Signature of Customer/Authorized Agent Date 12-2-14

FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Administratively Complete:		
Received From:		Correct Number of Copies:		
Received By:		Distribution Date:		
EAPP File Number:		Complex:		
Admin. Review(s) (No.):		No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General 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 Data Form should be submitted with the renewal form)* ☐ Other

2. Attachments **Describe Any Attachments:** *(ex. Title V Application, Waste Transporter Application, etc.)*

☒ Yes ☐ No — Water Pollution Abatement Plan (WPAP) Application

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 604362186		RN

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)

6. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check only one of the following:*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: _____

7. General Customer Information

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☒ No Change**

If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:	☐ Corporation	☐ Individual	☐ Sole Proprietorship- D.B.A
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☐ Other:

9. Customer Legal Name *(If an individual, print last name first: ex: Doe, John)* *If new Customer, enter previous Customer below* *End Date:*

10. Mailing Address:

City | State | ZIP | ZIP + 4

11. Country Mailing Information *(if outside USA)* **12. E-Mail Address** *(if applicable)*

13. Telephone Number ( ) - **14. Extension or Code** **15. Fax Number** *(if applicable)* ( ) -

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)*

20. Number of Employees

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

21. Independently Owned and Operated?

☐ Yes ☐ No

SECTION III: Regulated Entity Information

22. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information ☐ No Change** *(See below)*

**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)*

Westpointe Village Storage

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	N/A							
	Independence Drive							
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	
25. Mailing Address:	Westpointe Commercial, LTD							
	c/o The M L & E Company, PO Box 1390							
	City	Chesterfield	State	VA	ZIP	23832	ZIP + 4	9103

26. E-Mail Address:	N/A		
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*	
(804) 414-3040	N/A	(804) 751- 9874	
30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)	33. Secondary NAICS Code (5 or 6 digits)
1542	1541	236220	236220

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

Commercial Development

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	One (1) tract of land located approx. 700 feet southwest of intersection of State Highway 46 and Independence Drive, New Braunfels, Comal County, Texas

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.7160		38. Longitude (W) In Decimal:	-98.1627	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	42	57.76	-98	09	45.82

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Industrial Hazardous Waste	☐ Municipal Solid Waste
☐ New Source Review – Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS	☐ Sludge
☐ Stormwater	☐ Title V – Air	☐ Tires	☐ Used Oil	☐ Utilities
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☒ Other: WPAP

SECTION IV: Preparer Information

40. Name:	Gary Freeland, P.E.	41. Title:	Senior Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 525-9090		(210) 525-0529	gfreeland@buryinc.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	Westpointe Commercial, LTD by Westpointe, G.P., LLC	Job Title:	Manager		
Name *(In Print)*:	Mark L. Wauford			Phone:	(804) 414-3040
Signature:	Mark L. Wauford			Date:	11/14/14

GENERAL INFORMATION FORM

General Information Form
For Regulated Activities on the
Edwards Aquifer Recharge and Transition Zones
and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B)
Effective June 1, 1999

REGULATED ENTITY NAME: Westpointe Village Storage
COUNTY: Comal STREAM BASIN: Blieders Creek

EDWARDS AQUIFER: __ RECHARGE ZONE
__ TRANSITION ZONE

PLAN TYPE: _X_ WPAP __ AST __ EXCEPTION
__ SCS __ UST __ MODIFICATION

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Mark L. Wauford
Entity: Westpointe G.P LLC, The General Partner of Westpointe Commercial LTD.
Mailing Address: 6700 Courtyard Road
City, State: Chester, Virginia 23831 Zip: 23831
Telephone: (804) 414-3040 FAX: (804) 751-9891

Agent/Representative (If any):

Contact Person: Gary Freeland, P.E.
Entity: Bury-SAN, Inc.
Mailing Address: 922 Isom Road, Suite 100
City, State: San Antonio, Texas Zip: 78216
Telephone: (210 525-9090 FAX: 210-525-0529

2. _X_ This project is inside the city limits of City of New Braunfels.
__ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
__ This project is not located within any city's limits or ETJ.

3. The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

The site is located southwest of the intersection of Independence Drive and Highway 46 in the City of New Braunfels.

4. _X_ **ATTACHMENT A - ROAD MAP**. A road map showing directions to and the location of the project site is attached at the end of this form.

5. _X_ **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards

Recharge Zone is attached behind this sheet. The map(s) should clearly show:

X Project site.
X USGS Quadrangle Name(s).
X Boundaries of the Recharge Zone (and Transition Zone, if applicable).
X Drainage path from the project to the boundary of the Recharge Zone.

6. X Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment. **The TCEQ must be able to inspect the project site or the application will be returned.**

7. X **ATTACHMENT C - PROJECT DESCRIPTION**. Attached at the end of this form is a detailed narrative description of the proposed project.

8. Existing project site conditions are noted below:
__ Existing commercial site
__ Existing industrial site
__ Existing residential site
__ Existing paved and/or unpaved roads
X Undeveloped (Cleared)
__ Undeveloped (Undisturbed/Uncleared)
__ Other: _____

PROHIBITED ACTIVITIES

9. X I am aware that the following activities are prohibited on the **Recharge Zone** and are not proposed for this project:

(1) waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
(2) new feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
(3) land disposal of Class I wastes, as defined in 30 TAC §335.1;
(4) the use of sewage holding tanks as parts of organized collection systems; and
(5) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

10. N/A I am aware that the following activities are prohibited on the **Transition Zone** and are not proposed for this project:

(1) waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
(2) land disposal of Class I wastes, as defined in 30 TAC §335.1; and
(3) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

ADMINISTRATIVE INFORMATION

11. The fee for the plan(s) is based on:

X For a Water Pollution Abatement Plan and Modifications, the total acreage of the site

where regulated activities will occur.

___ For an Organized Sewage Collection System Plans and Modifications, the total linear footage of all collection system lines.

___ For a UST Facility Plan or an AST Facility Plan, the total number of tanks or piping systems.

___ A request for an exception to any substantive portion of the regulations related to the protection of water quality.

___ A request for an extension to a previously approved plan.

12. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

___ TCEQ cashier

___ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)

_X_ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

13. _X_ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

14. _X_ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

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 **GENERAL INFORMATION FORM** is hereby submitted for TCEQ review. The application was prepared by:

Gary Freeland, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

12-2-14
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.

ATTACHMENT A

ROAD MAP

G:\112244\50001\GIS\ROADMAP.mxd
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

User Name: ewarford
Date Saved: September 23, 2014

BURY
922 Isom Road, Suite 100
San Antonio, Texas 78216
(210) 525-9090, Phone
TBPE #F-1048
Copyright © 2014
www.buryinc.com

WESTPOINTE VILLAGE SELF STORAGE
NEW BRAUNFELS, TEXAS

ROAD MAP

ATTACHMENT B

USGS/EDWARDS RECHARGE ZONE MAP
(Scale 1" = 2,000')

Recharge Zone

Transition Zone

SITE

CHARGE ZONE

NEW BRAUNFELS WEST QUAD

SCALE: 1" = 2,000'

NEW BRAUNFELS EAST QUAD

ATTACHMENT C

PROJECT DESCRIPTION

PROJECT DESCRIPTION

The Westpointe Village project consists of ±9.27 acres located along Independence Drive - southwest of Independence Drive and SH 46 intersection. The subject tract is within the full purpose jurisdiction of the City of New Braunfels, Comal County, Texas. The project site is located in the Edwards Aquifer Recharge Zone (EARZ), and is within the Guadalupe River Watershed by way of both Dry Comal Creek and Blieders Creek. Currently, the site is undeveloped with natural vegetation and trees. There is no existing impervious cover on site. The project will include the construction of an access driveway to the commercial site, three (3) Storage Buildings and construction of the proposed water quality pond.

A partial sedimentation basin will be used as a Permanent Best Management Practices (BMPs) onsite to treat storm water generated from the proposed development. These BMPs have been designed in accordance with TCEQ's Technical Guidance Manual to remove 80% of the increased Total Suspended Solids (TSS). The proposed water quality pond has been designed to provide treatment to the entire ±9.27 acre site. This includes the development of the ±4.89 acre storage site now as well as account for future development of the adjacent ±3.95 acre property within the drainage basin. Approximately ±0.43 acres within the project limits will direct release and this has been accounted for in the pond calculations. Moreover, storm water from this site will be detained in an existing detention pond prior being released into an existing drainage system. For design purposed, the adjacent ±3.95-acres site is being accounted for at 80% impervious cover for the design of this pond. Lastly, there are approximately ±4.14 acres upstream of this site that is assumed to be pervious that bypasses through the site. The design calculation spreadsheet takes this ±4.14 acre site into account for the sizing of the pond.

The accompanying WPAP describes the measures taken to design the proposed onsite water quality pond. Water quality is being provided through the proposed filtration/sedimentation pond designed according to Chapter 3.3 of the Technical Guidance on Best Management Practices as prepared by Texas Commission on Environmental Quality (TCEQ) and the City of New Braunfels. The water quality calculations are based on a total area of ±9.27 acres of on-site area draining to the pond at an ultimate build of 73% impervious cover, as well as the upstream ±4.14 acres that will bypass through the pond. The impervious cover will be a combination of building roof and paved areas (asphalt and concrete).

GEOLOGIC ASSESSMENT

Please note, the Geological Assessment is for the overall Weston 121-Acre Tract. The Westpointe Village Storage project is a small portion the overall Weston 121-Acre Tract. The project name Westpointe Village Storage will be the name noted on all of the forms with the exception of the overall Geological Assessment forms.

aci
consulting

GEOLOGIC ASSESSMENT
FOR THE
WESTON 121-ACRE TRACT

Comal County, Texas

October 2007

Prepared for:

Investor Grosenbacher &
Integrated Realty Group
11202 Disco Drive
San Antonio, Texas 78216

Prepared by:

aci consulting
1001 Mopac Circle, Suite 100
Austin, Texas 78746

Geologic Assessment
For Regulated Activities
on The Edwards Aquifer Recharge/transition Zones
and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

REGULATED ENTITY NAME: Weston 121 acre Tract- Comal County, Texas

TYPE OF PROJECT: _X_ WPAP __ AST __ SCS __ UST

LOCATION OF PROJECT: _X_ Recharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. _X_ Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.

2. Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (*Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A*, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Krum clay (Krb), 1 to 3 percent slopes	C	4-5
Medlin-Eckrant association (MEC), undulating	D	1-2
Medlin-Eckrant association (MED), hilly	D	4-5
Rumple-Comfort association (RUD), undulating	D	2.5

* Soil Group Definitions (Abbreviated)

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

3. _X_ A **STRATIGRAPHIC COLUMN** is attached at the end of this form that shows formations, members, and thicknesses. The outcropping unit should be at the top of the stratigraphic column.

4. _X_ A **NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY** is attached at the end of this form. The description must include a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure, and karst characteristics of the site.

5. _X_ Appropriate **SITE GEOLOGIC MAP(S)** are attached:

The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1" : 400'

Applicant's Site Plan Scale	1" = 200'
Site Geologic Map Scale	1" = 200'
Site Soils Map Scale (if more than 1 soil type)	1" = 200'

6. Method of collecting positional data:
   - X Global Positioning System (GPS) technology.
   - __ Other method(s).

7. X The project site is shown and labeled on the Site Geologic Map.

8. X Surface geologic units are shown and labeled on the Site Geologic Map.

9. X Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
   __ Geologic or manmade features were not discovered on the project site during the field investigation.

10. __ The Recharge Zone boundary is shown and labeled, if appropriate.

11. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):

   X There are 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
   - __ The wells are not in use and have been properly abandoned.
   - X The wells are not in use and will be properly abandoned.
   - __ The wells are in use and comply with 16 TAC Chapter 76.

   __ There are no wells or test holes of any kind known to exist on the project site.

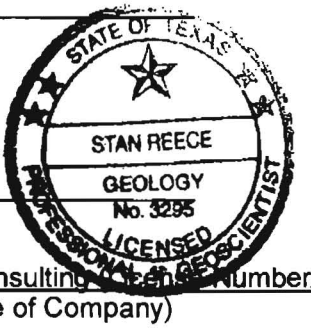
ADMINISTRATIVE INFORMATION

12. X Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

Date(s) Geologic Assessment was performed: September 13 and 17 and October 10, 2007
Date(s)

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. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Stan Reece, P.G.
Print Name of Geologist



(512) 347-9000
Telephone

(512) 306-0974
Fax

Signature of Geologist

12/9/14
Date

Representing: aci consulting (TBPG License Number: 50260)
(Name of Company)

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.

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Geologic Assessment
For Regulated Activities
on The Edwards Aquifer Recharge/transition Zones
and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

REGULATED ENTITY NAME: Weston 121 acre Tract – Comal County, Texas

TYPE OF PROJECT: X WPAP __ AST __ SCS __ UST

LOCATION OF PROJECT: X Recharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. X Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.

2. Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (*Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A*, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group *	Thickness (feet)
Krum clay (Krb) – 1 to 3 percent slopes	C	4-5 ft
Medlin-Eckrant association (MEC), undulating	D	1-2 ft
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The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

Applicant's Site Plan Scale	1" = 200'
Site Geologic Map Scale	1" = 200'
Site Soils Map Scale (if more than 1 soil type)	1" = 200'

6. Method of collecting positional data:
X Global Positioning System (GPS) technology.
__ Other method(s).

7. X The project site is shown and labeled on the Site Location Map.

8. X Surface geologic units are shown and labeled on the Site Topographic Map.

9. X Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Feature Map and are described in the attached Geologic Assessment Table.
__ Geologic or manmade features were not discovered on the project site during the field investigation.

10. __ The Recharge Zone boundary is shown and labeled, if appropriate.

11. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):

X There are water wells present within the project corridor study area and the locations are shown and labeled. (Check all of the following that apply.)
__ The wells are not in use and have been properly abandoned.
X The wells are not in use and will be properly abandoned.
__ The well are in use and complies with 16 TAC §76.
__ There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

12. X One (1) original and three (3) copies of the completed assessment have been provided.

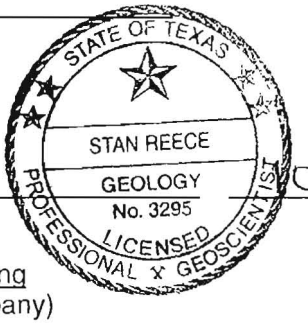
Date(s) Geologic Assessment was performed: September 13 and 17, and October 10, 2007
Date(s)

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. My signature certifies that I am qualified as a geologist as defined by 30 TAC 213.

Stan Reece P.G.
Print Name of Geologist

(512) 347-9000
Telephone

(512) 306-0974
Fax



Signature of Geologist

10/11/07
Date

Representing: aci consulting
(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer Protection Program, please contact us at 512/939-2929 (Austin) or 210/403-4024 (San Antonio).

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aci consulting

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aci consulting

October 17, 2007

Geologic Assessment for the Weston 121-acre Tract in Comal County, Texas

1.0 INTRODUCTION

The purpose of this task is to identify "karst" features during a pedestrian survey for the property known as the Weston 121-acre tract in New Braunfels, Comal County, Texas. The Weston 121-acre property, hereafter referred to as the subject area, is located at the northwest corner of State Loop 337 and Highway 46 in New Braunfels, Comal County, Texas (Figure 1).

2.0 SCOPE

This report is intended to satisfy the requirements for a Geologic Assessment, which shall be included as a component of a Water Pollution Abatement Plan (WPAP). The scope of the report consists of a site reconnaissance and field survey and review of existing data and reports. Features identified during the field survey are ranked utilizing the Texas Commission on Environmental Quality (TCEQ) matrix for Edwards Aquifer Recharge Zone Features. The ranking of the features determines their viability as a recharge feature.

3.0 INVESTIGATION METHOD

The following investigation methods and activities were used to develop this report:

- A review of existing files and literature to determine the regional geology and known caves associated with the property;
- A review of past geological field reports, cave studies, and correspondence regarding the existing geologic features on the property;
- A site reconnaissance performed by a registered professional geologist to identify and examine caves, recharge features, and other significant geological features; and,
- Evaluation of collected field data and a ranking of features using the TCEQ Ranking Table 0585 for the Edwards Aquifer Recharge Zone.

4.0 PROPOSED SURVEY AREA USE

The site will be utilized for the construction of a commercial / retail complex.

5.0 REGIONAL AND SITE GEOLOGY

The site lies within the Edwards aquifer recharge zone as defined by the TCEQ (TCEQ 2001). The geologic strata associated with the Edwards aquifer include the Georgetown Formations overlying the Edwards Limestone Group, interfingering with the Comanche Peak Formation in Williamson County. These rocks are underlain by the Walnut Formation, which has members including the Whitestone Member, Keys Valley Marl Member, the Cedar Park Member, the Bee Cave Member and the Bull Creek Member. The Glen Rose Formation, another marine limestone, is located below the Walnut Formation. The dominant structural trend of known faults in the area is to the northeast on a bearing of approximately 40 to 50 degrees to the northeast (USGS, New Braunfels West Quadrangle, 1993).

Surface geology of the area is dominated by consistent outcrops of the Edwards Limestone Formation (Ked), Del Rio Clay (Kdr) and Buda Limestone (Kbu). Outcrops of the Edwards Limestone on the site occur as light-gray to gray, thick bedded limestone. Some outcrops are dolomitic in nature. Outcrops of Del Rio clay on the property appear as blocky medium-gray to light gray silty clay. Buda Limestone on the property outcrops as fine-grained dark to medium gray partially weathered limestone. Figure 2 depicts the stratigraphic column for the site. A topographic map with formation outcrops is included as Figure 3.

6.0 KARST FEATURES IN COMAL COUNTY, TEXAS

In limestone terrains, karst is expressed by erratically developed cavernous porosity and the manifestations of sinkholes, voids, and erratic surface drainage. Karst landscapes are typical of the Edwards Limestone, occurring across a vast region of Central Texas west of the Balcones Escarpment, and these processes are critical to understanding the Edwards Aquifer within its various segments. The features produced by karst processes (voids, holes, and solution layers) eventually provide conduits for surface water runoff and "point recharge" for the Edwards aquifer. The identification and protection of these features in established recharge areas is critical to maintaining groundwater quality and species habitat. The United States Fish and Wildlife Service (USFWS) and the TCEQ require protective strategies within these areas to ensure recharge and endangered species habitat protection prior to, during, and upon completion of construction activities. The subject area is located in Comal County which is not within an area where endangered karst invertebrates exist or may be known to exist.

7.0 SITE SOILS

The description of the site soils are derived from two sources:

- Utilization of the "Soil Survey of Comal County, Texas," January, 1984, compiled by the United States Department of Agriculture (USDA) Natural Resource Conservation Service; and,
- Field observations made during the site reconnaissance.

Four soil units are identified within the subject area:

Krum clay (Krb) – 1 to 3 percent slopes – These gently sloping soils occur on stream terraces and valley hills. Typically, the surface layer consists of dark gray clay about 16 inches thick with subsoil, to a depth of 58 inches, consisting of grayish, brown clay. This soil is typically well-drained with moderate permeability.

Medlin-Eckrant association, undulating (MEC) – This association consists of very shallow and deep soils on upland areas in the Edwards Plateau area. The typical surface layer of Medlin consists of nine inches of grayish, brown clay. The subsoil is olive clay to a depth of approximately 24 inches, and mottled pale olive and pale yellow clay to a depth of 38 inches. The Medlin soil is well-drained with rapid surface runoff and slow permeability.

The Eckrant soil consists of a surface layer of dark brown extremely stony clay approximately 17 inches thick with underlying material consisting of fractured limestone bedrock. The Eckrant soil is well drained with rapid surface runoff and moderately slow permeability.

Medlin-Eckrant association, hilly (MED) – This association consists of very shallow and deep soils in the Edwards Plateau area. Typically, the Medlin soils has a grayish brown surface layer about 11 inches thick that is stony clay in the upper part and clay in the lower part. The subsoil is a light yellowish brown clay that has yellowish brown and olive mottles. The underlying material is a light gray shaly clay that has yellow and olive yellow mottles. The Medlin soil is well-drained with rapid surface runoff and very slow permeability.

The surface layer of the Eckrant soil is very dark extremely stony clay about 16 inches in thickness with underlying material consisting of fractured limestone bedrock. The Eckrant soil is well drained with rapid surface runoff and moderately slow permeability.

Rumple-Comfort association (RUD), undulating – This association consists of shallow and moderately deep upland soils in the Edwards Plateau area. Rumple soils make up approximately 60 percent of the association, Comfort soils make up 20 percent, and other soils, mainly Tarpley soils, make up 20 percent. The typical surface layer of the Rumple soil consists of dark reddish-brown cherty clay loam about 10 inches thick. The subsoil to a depth of 28 inches is dark reddish-brown extremely stony clay.

The surface layer of the Comfort soil is dark brown, extremely stony clay to about 7 inches. The subsoil to a depth of 12 inches is dark, reddish-brown, mildly alkaline, extremely stony clay. The underlying material is indurated non-calcareous fractured limestone throughout. All soils in this association are well-drained with moderate surface runoff.

A site soils map is included as Figure 4.

8.0 PREVIOUS SITE INVESTIGATIONS

There are no known previous site investigations conducted for this property according to information received from the property developer.

9.0 DESCRIPTION OF SITE FEATURES

All features listed below were identified and assessed by aci personnel during a site visit conducted on September 13 and 17, and October 10, 2007. A total of 5 geologic features and one hand dug water well/cistern were identified within the property boundaries during the reconnaissance for this geologic assessment. A feature location map is included as Figure 5. All feature descriptions are identified as follows:

Feature 1
GPS: N 29.71298 W -98.16708

This feature is a sinkhole with a length, width and vertical depth of 5 feet, 4 feet, and 1.5 feet, respectively. Infill material consists of cobbles, loose soil, leaf litter, and other organic material. The feature is located on a hillside, and the drainage area appears to be less than 1.6 acres. Relative infiltration rate of this feature is low (17 points). The TCEQ Geologic Assessment sensitivity rating is 37.

Recommendations: No further activities are recommended for this feature.

Feature 2
GPS: N 29.71223 W -98.16835

This feature is a series of six solution-enlarged cavities, the largest of which has a length, width and vertical depth of 2 feet, 1 foot, and greater than 4 feet, respectively. Infill material consists of cobbles, breakdown, sand, and gravel. Drainage area appears to be less than 1.6 acres. Relative infiltration rate of this feature is intermediate (30 points). The TCEQ Geologic Assessment sensitivity rating is 50.

Recommendations: A minimum setback of 50-feet corresponding to the associated drainage area is recommended for this feature.

Feature 3
GPS: N 29.71187 W -98.16875

This feature is a natural bedrock feature with a length, width and vertical depth of 20 feet, 5 feet, and 1 foot, respectively. The feature is located on a hillside, and the drainage area appears to be less than 1.6 acres. Relative infiltration rate of this feature is low (15 points). The TCEQ Geologic Assessment sensitivity rating is 30.

Recommendations: No further activities are recommended for this feature.

Feature 4
GPS: N 29.71395 W -98.16253

This feature consists of a solution cavity with a length, width and vertical depth of 1 foot, 0.75 foot, and 2 feet, respectively. The feature has a horizontal extent in excess of 5 feet. This feature also appears to be utilized as an animal burrow. Infill material consists of leaf litter and other organic material. This feature is located on a hillside, and the drainage area to the feature appears to be less than one acre. The relative infiltration rate is moderate (25 points) and the TCEQ sensitivity rating is 45.

Recommendations: Excavation of the feature to determine extent and recharge potential or installation of a minimum 50-foot setback corresponding to the drainage area.

Feature 5
GPS: N 29.71401 W -98.16268

This feature is small collapsed sinkhole with a solution cavity. The solution cavity has a length, width and vertical depth of 1 foot, 1 foot, and 1.5 feet, respectively. The collapsed area has a length, width and vertical depth of 6 feet, 6 feet and 1.5 feet, respectively. Infill material within the solution cavity consists or soil, leaf litter, and other organic material. This feature is located on a hillside, and the drainage area for the

feature appears to be less than one acre. Infiltration rate is moderate (26 points) and the TCEQ sensitivity rating is 46.

Recommendations: Excavation of feature to determine extent and recharge potential or installation of a minimum 50-foot setback corresponding to the drainage area.

Feature 6
GPS: N 29.71452 W -98.16544

This feature is a manmade feature in bedrock (hand dug well/cistern). The depth of the feature is unknown as it was full of water. Infiltration rate is high (35 points) and the TCEQ sensitivity rating is 65.

Recommendations: If this feature is not going to be preserved as part of development on the site, then it should be plugged and abandoned by a licensed water well driller prior to commencement of development activities.

10.0 SUMMARY OF FINDINGS

A total of 6 geologic or manmade features identified within the subject area. Three of the features were rated as sensitive under TCEQ guidelines.

11.0 RECOMMENDATIONS

Recommendations for each feature are included below the individual feature descriptions.

aci consulting

12.0 REFERENCES

United States Geological Survey (USGS), New Braunfels West Quadrangle (1993), Bureau of Economic Geology, The University of Texas at Austin.

Soil Conservation Service. 1984. Soil Survey of Comal County, Texas. United States Department of Agriculture. Texas Agriculture Experiment Station.

(TCEQ) Texas Commission on Environmental Quality. 2001. "Edwards Aquifer Protection Program, Chapter 213 Rules - Recharge Zone, Transition Zone, Contributing Zone, and Contributing Zone within the Transition Zone." Map. Digital data. November 28, 2001. Austin, Texas.

aci consulting

TABLE

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Weston 121-acre Tract

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C *	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	PRO	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	≥40	<1.6	≥1.6	
F-1	29.71298	-98.16708	SH	20	Kdr	5	4	1.5					C,O	17	37	X		X		Hillside
F-2	29.71223	-98.16835	SC	20	Kdr	2	1	4+				2	C	30	50		X	X		Flat
F-3	29.71187	-98.16875	O	5	Kdr	20	5	1	NE - 30				N	15	30	X		X		Hillside
F-4	29.71395	-98.16253	SC	20	Kdr	1	0.8	2				1	O	25	45		X	X		Hillside
F-5	29.71401	98.16268	SH	20	Kdr	6	6	1.5				1	O	26	46			X		Hillside
F-6	29.71452	98.16544	MB (WW)	30	Kdr	6	6	N/A					X	35	65	X		X		Flat

* DATUM:_____

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

STATE OF TEXAS
STAN REECE
GEOLOGY
No. 3295
LICENSED
PROFESSIONAL GEOSCIENTIST

Date 10/11/2007

Sheet 1 of 1

TCEQ-0585-Table (Rev. 10-01-04)

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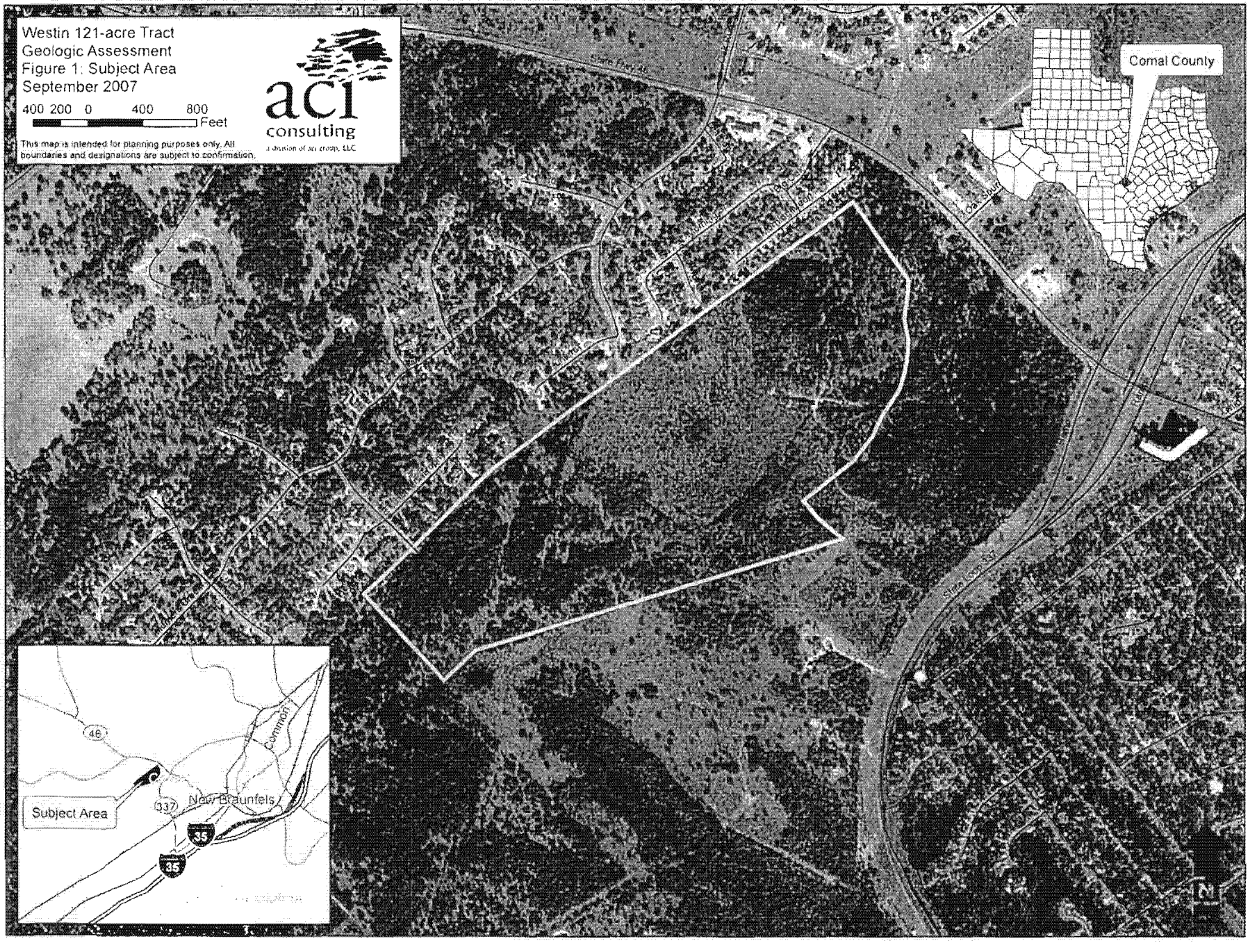
FIGURES


Westin 121-acre Tract
Geologic Assessment
Figure 1: Subject Area
September 2007
400 200 0 400 800
Feet
This map is intended for planning purposes only. All boundaries and designations are subject to confirmation.
aci
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Comal County
Subject Area
New Braunfels
46
337
35
35
Common

Figure 2
Stratigraphic Column
Weston Tract (121-acre portion)

System	Group or Formation	Thickness	Description
Upper Cretaceous	Buda Limestone (Kbu)	0 - 15 feet	Fine-grained, hard, pyritiferous, light tan to gray limestone. Scattered pelecypods noted during reconnaissance.
Lower Cretaceous	Del Rio Clay (Kdr)	Unknown	Dark gray to olive brown, calcareous clay, some pyretic.
Lower Cretaceous	Edwards Limestone (Ked)	Unknown	Mostly hard and dense, thin bedded, dark gray, fine to medium grained limestone, some dolomitic. Tree cover is sparse in western portion of formation.

Recharge Zone

Transition Zone

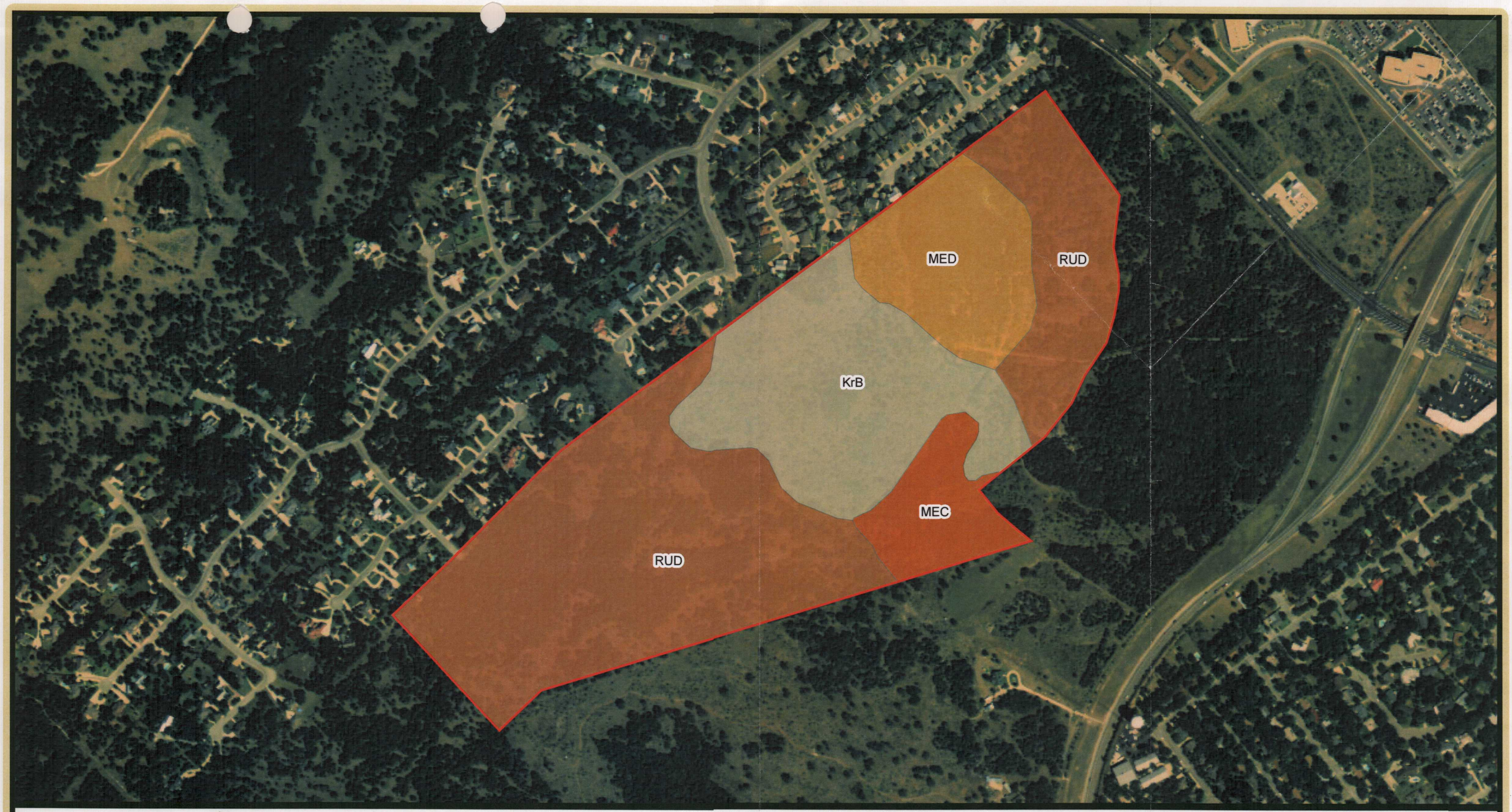
SITE

CHARGE ZONE

NEW BRAUNFELS WEST QUAD

SCALE: 1" = 2,000'

NEW BRAUNFELS EAST QUAD



This map is intended for planning purposes only. All map data should be considered preliminary and all boundaries and designations are subject to confirmation.

N

500 250 0 500 Feet

1:6,000 1 inch equals 500 feet

Subject Area

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Weston 121-Acre Tract
Figure 4: Site Soils

November 2011

Figure 6: Feature Locations
Weston Tract GA
Comal County, Texas
October 2007

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Disclaimer:
This map is intended for planning purposes. All boundaries and designations are subject to confirmation.

F6
F5
F4
F1
F2
F3

200 100 0 200 400 600
Feet
1:3,000
1 inch equals 250 Feet
N

Weston 121-acre Tract
Geologic Assessment
Figure 3: Topographic Map with
Formation Outcrops
September 2007

0 100 200 400 600
Feet

This map is intended for planning purpoese only. All boundaries are designations are subject to confirmation.

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N

Ked

Kbu

Kdr

Ked

Mission Hill

BM 931

932

337

900

916

Wat
Tank

WATER POLLUTION ABATEMENT PLAN APPLICATION

Water Pollution Abatement Plan Application
for Regulated Activities
on the Edwards Aquifer Recharge Zone
and Relating to 30 TAC §213.5(b), Effective June 1, 1999

REGULATED ENTITY NAME: Westpointe Village Storage

REGULATED ENTITY INFORMATION

1. The type of project is:
   ___ Residential: # of Lots: _____
   ___ Residential: # of Living Unit Equivalents: _____
   X Commercial
   ___ Industrial
   ___ Other: _____

2. Total site acreage (size of property): 9.27

3. Projected population: N/A

4. The amount and type of impervious cover expected after construction are shown below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	76,408	÷ 43,560 =	1.754
Parking	1,261	÷ 43,560 =	0.028
Other paved surfaces	215,922	÷ 43,560 =	4.957
Total Impervious Cover	290,544	÷ 43,560 =	6.74
Total Impervious Cover ÷ Total Acreage x 100 = (6.74 ÷ 9.27) 100			73%

5. X **ATTACHMENT A - Factors Affecting Water Quality.** A description of any factors that could affect surface water and groundwater quality is provided at the end of this form.

6. X Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

FOR ROAD PROJECTS ONLY (N/A)
Complete questions 7-12 if this application is exclusively for a road project.

7. 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.

8. Type of pavement or road surface to be used:
   ___ Concrete
   ___ Asphaltic concrete pavement
   ___ Other: _____

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DEC 15 2014
COUNTY ENGINEER

9. Length of Right of Way (R.O.W.): ____ feet.
Width of R.O.W.: ____ feet.
L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = ____ acres.

10. Length of pavement area: ____ feet.
Width of pavement area: ____ feet.
L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = ____ acres.
Pavement area ____ acres ÷ R.O.W. area ____ acres x 100 = ___% impervious cover.

11. __ A rest stop will be included in this project.
__ A rest stop will **not** be included in this project.

12. __ 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

13. X **ATTACHMENT B - 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 provided at the end of this form. The estimates of stormwater runoff quality and quantity should be based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

14. The character and volume of wastewater is shown below:

100% Domestic	420 gallons/day
___% Industrial	_____ gallons/day
___% Commingled	_____ gallons/day
TOTAL	420 gallons/day

15. Wastewater will be disposed of by:

N/A **On-Site** Sewage Facility (OSSF/Septic Tank):

__ **ATTACHMENT C - Suitability Letter from Authorized Agent.** An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.

__ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

X Sewage Collection System (Sewer Lines):

X Private service laterals from the wastewater generating facilities will be connected to an existing SCS.

__ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

X The SCS was previously submitted on May 21, 2009.

___ The SCS was submitted with this application.
___ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

The sewage collection system will convey the wastewater to the Gruene Wastewater ~~(name)~~ Treatment Plant. The treatment facility is:

__X__ existing.
___ proposed.

16. __X__ All private service laterals will be inspected as required in 30 TAC §213.5.

SITE PLAN REQUIREMENTS

Items 17 through 27 must be included on the Site Plan.

17. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = __40__'.

18. 100-year floodplain boundaries
___ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
__X__ No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s):
Federal Emergency Management Agency Community Panel No. 48091C0435F, Effective Date September 25, 2009

19. __X__ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.
___ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
__X__ There are __0__(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
___ The wells are not in use and have been properly abandoned.
___ The wells are not in use and will be properly abandoned.
___ The wells are in use and comply with 16 TAC §76.
__X__ There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:
__X__ All **sensitive** geologic or manmade features identified in the Geologic Assessment are shown and labeled. However, there are no sensitive geologic or manmade features on project site.
N/A No **sensitive** geologic or manmade features were identified in the Geologic Assessment.
N/A **ATTACHMENT D - Exception to the Required Geologic Assessment.** An exception to the Geologic Assessment requirement is requested and explained at the end of this form.

22. __X__ The drainage patterns and approximate slopes anticipated after major grading activities.

24. X Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

25. X Locations where soil stabilization practices are expected to occur.

26. N/A Surface waters (including wetlands).

27. N/A Locations where stormwater discharges to surface water or sensitive features.
X There will be no discharges to surface water or sensitive features.

ADMINISTRATIVE INFORMATION

28. X Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

29. X Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

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 **WATER POLLUTION ABATEMENT PLAN APPLICATION FORM** is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Gary Freeland, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

12-2-14
Date

ATTACHMENT A

FACTORS AFFECTING WATER QUALITY

FACTORS AFFECTING WATER QUALITY

DURING CONSTRUCTION

Non-Storm Water Discharges - The following non-storm water discharges may occur from the site during the construction period:

- Non-point discharge of paint and solvents
- Water used to wash vehicles or control dust
- Water from utility line flushing during initial line testing
- Petroleum drippings from vehicle movement
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred)
- Groundwater (from dewatering of excavation)
- Silt Runoff form soil disturbance
- Trash and Debris (Litter) and discarded Food and Tobacco Products

All non-storm water discharge will be directed to the Erosion and Sedimentation Controls (Best Management Practices) to remove any suspended solids contained therein. Material management practices will be utilized to reduce the risk of spills, or other accidental exposure of the materials listed above to storm water runoff. These and any other sources of pollutants that may affect storm water quality will be screened and filtered by temporary BMPs, which will be installed prior to the commencement of site clearing.

POST CONSTRUCTION

Non-Storm Water Discharges after construction has been completed which can affect water quality include:

- Lawn fertilizer and pesticides
- Petroleum drippings from vehicle movement
- Cleaning products used out-of-doors not captured in sanitary sewer
- Landscape Maintenance

Post-construction storm Water discharges typically will transport sediment in the form of dirt and dust accumulated on streets and other impervious flatwork, rooftops and sediment from erosion of grassy areas. That material will be transported through the stormsewer system to the water quality pond, where most of the pollutants will be removed.

ATTACHMENT B

VOLUME AND CHARACTER OF STORM WATER

VOLUME AND CHARACTER OF STORM WATER

The project site is defined by one (1) major existing drainage area and it generally drains towards the north side of the property. Using the City of New Braunfels runoff coefficients and incorporating their K-value to the equation, the existing drainage area will produce a peak flow of ±37.23 cubic feet per second (cfs) during a 100-year storm event. The table below shows the runoff calculations for this tract. This existing drainage area naturally conveys storm water off-site via overland flow, eventually discharging into Blieders Creek (DA-1). An Existing Drainage Area Map is within the site plan set. In the proposed conditions, storm water is to be captured via grate inlets which will convey all water to the water quality and detention pond, and ultimately to Blieders Creek.

The proposed pond is a partial sedimentation/filtration water quality pond and discharges to the existing detention pond. It is located at the northwest corner of the site. The existing detention pond has been sized to over detain to account for 80% impervious cover of ±9.27 acres.

The existing detention pond has been designed such that the proposed flows will not exceed the existing flows at the existing outfall. A Proposed Drainage Area Map is provided in the Site Plan set. The water quality calculations are based on a total area of ±9.27 acres draining to the sedimentation/filtration pond at an ultimate build out of 73% impervious cover, ±6.74 acres. The impervious cover will be a combination of building roof and paved areas (asphalt and concrete) on the storage tract and the ±3.33 acres of the existing adjacent drainage area to be accounted as 80% I.C. Erosion Controls will be installed to decrease and/or prevent sediment runoff during construction. The TCEQ TSS Removal Calculations spreadsheet for the proposed site is located on Sheet C of the attached construction plans. Please reference the following sheets in the attached construction plans for more details on the drainage, pond calculations and design:

Existing Drainage Area Map Exhibit
Proposed Drainage Area Map Exhibit
Water Quality Pond – Sheet C4.0
Water Quality Pond Notes & Details – Sheets C4.1, C4.2

EXISTING AND PROPOSED CONDITIONS: Q = KCIA

Existing Drainage Area	K	C	I	A	Q_{100}
	1.25	0.36	6.17	13.41	37.23
Proposed Drainage Area	K	C	I	A	Q100
	1.25	0.72	9.5	13.41	114.66

ATTACHMENT C

SUITABILITY LETTER FROM AUTHORIZED AGENT
(Not Applicable)

ATTACHMENT D

EXCEPTION TO THE REQUIRED GEOLOGIC ASSESSMENT
(Not Applicable)

TEMPORARY STORM WATER SECTION

Temporary Stormwater Section

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: Westpointe Village Self-Storage

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:

   N/A Aboveground storage tanks with a cumulative storage capacity of less that 250 gallons will be stored on the site for less than one (1) year.

   N/A Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

   N/A Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An **Aboveground Storage Tank Facility Plan** application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

   X Fuels and hazardous substances will not be stored on-site.

2. X **ATTACHMENT A - 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.

4. X **ATTACHMENT B - 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.

   N/A There are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

5. X **ATTACHMENT C - 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: Blieders Creek.

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 structural BMPs must be shown**

on the site plan.

7. X **ATTACHMENT D - Temporary Best Management Practices and Measures.** A description of the TBMPs and measures that will be used during and after 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.

   X TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information has been provided in the attachment at the end of this form

   a. A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

   b. A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

   c. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

   d. A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

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.

   N/A **ATTACHMENT E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

   X There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. X **ATTACHMENT F - Structural Practices.** Describe the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site. Placement of structural practices in floodplains has been avoided.

10. X **ATTACHMENT G - Drainage Area Map**. A drainage area map is provided at the end of this form to support the following requirements.

    N/A For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

    N/A For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

    N/A For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

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.

11. N/A **ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure has been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are provided as at the end of this form.

12. X **ATTACHMENT I - Inspection and Maintenance for BMPs.** 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 plan.

13. 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.

14. 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).

15. 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.

16. 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

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. X **ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for the site is attached at the end of this form.

18. X Records must be kept at the site of 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.

19. X Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

ADMINISTRATIVE INFORMATION

20. X All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. X If any geologic or manmade 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.

22. X 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.

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:

Gary W. Freeland, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

12-2-14
Date

ATTACHMENT A

SPILL RESPONSE ACTIONS

RECEIVED
DEC 15 2014
COUNTY ENGINEER

SPILL RESPONSE ACTIONS

Potential Source:

Spills of Hydrocarbons or other hazardous substances and materials.

Preventative Measures:

The following practices will be used to reduce the risks associated with hazardous materials, if hazardous materials are needed for the work:

Education/General Measures

1. Products will be kept in original containers unless they are not re-sealable.
2. Original labels and material safety data will be retained.
3. Modify the Storm Water Pollution Prevention Plan to include the information dealing with, and the steps needed to correct, the encountered hazardous waste spill.
4. Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.
5. Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
6. Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
7. Establish a continuing education program to indoctrinate new employees.
8. Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.
9. To the extent that the work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR parts 110,117, and 302, as well as sanitary and septic wastes should be contained and cleaned up immediately.
10. Store hazardous materials and wastes in covered containers and protect from vandalism.
11. Place a stockpile of spill cleanup materials where it will be readily accessible.
12. Train employees in spill prevention and cleanup.
13. Designate responsible individuals to oversee and enforce control measures.
14. Spills should be covered and protected from storm water run-on during rainfall to the extent that it doesn't compromise clean up activities.
15. Do not bury or wash spills with water.

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16. Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.

17. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

18. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

19. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

20. Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

If surplus product must be disposed of, manufacturers' or local and state recommended methods for proper disposal will be followed.

Spill Measures:

In the event that hazardous wastes are encountered, they will be disposed of in the manner specified by local or state regulations.

Cleanup

1. Clean up leaks and spills immediately.

2. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

1. Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

2. Use absorbent materials on small spills rather than hosing down or burying the spill.

3. Absorbent materials should be promptly removed and disposed of properly.

4. Follow the practice below for a minor spill:

5. Contain the spread of the spill.

6. Recover spilled materials.

7. Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately

1. Contain spread of the spill.

2. Notify the project foreman immediately.

3. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.

4. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.

5. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

Spills of hazardous waste in amounts that equal or exceed Reportable Quantity (RQ), as defined by the EPA through issued regulations (40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302), will be handled in the following steps:

1. Notify the National Response Center immediately at 1-800-424-8802.

2. Notify TCEQ immediately at 1-210-490-3096 between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

3. Submit a written description of the release to the EPA Region 11 office providing the date and circumstances of the release and the steps to be taken to prevent another release:

   Attn: Hazardous Waste Dept.
   1445 Ross Ave. STE 1200
   Dallas, TX 75202
   1-214-665-2224 (Region 6 Emergency Line)

4. The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

5. Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tceq.state.tx.us/response/spills.html.

Vehicle Measures:

Vehicle and Equipment Maintenance

1. If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the run-on of storm water and the runoff of spills.

2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately.

3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

5. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

6. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

7. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute storm water. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

8. Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

1. If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the run-on of storm water and the runoff of spills.

2. Discourage "topping off" of fuel tanks.

3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

POTENTIAL SOURCES OF CONTAMINATION

Potential Source:	Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle dripping.
Preventative Measures:	Vehicle maintenance when possible will be performed within the construction staging area or at a local maintenance shop.
Potential Source:	Miscellaneous trash and litter from construction workers and material wrappings.
Preventative Measures:	Trash containers will be placed throughout the site to encourage proper trash disposal.
Potential Source:	Silt leaving the site; construction debris.
Preventative Measures:	Contractor will monitor all vehicles leaving the site to prevent tracking silt and mud onto public streets. The contractor will ensure that trucks will be washed down to minimize the amount of silt leaving the site.
Potential Source:	Connection to existing sewer lines.
Preventive Measures:	Contractor shall tie into existing sewer line per NBU Regulations and Standards via a sanitary sewer manhole. A manhole detail is provided by NBU and shown in the construction details. Any leakage of sewage from the existing wastewater line due to the connection will be cleaned up immediately.
Potential Source:	Construction related portable toilets.
Preventive Measures:	Any on-site portable toilets will be in good working order with no defects that cause leaks. All portable toilets will be maintained to ensure no overflowing of sewage.
Potential Source:	Concrete and asphalt products.
Preventive Measures:	Shall be hauled in a manner consistent with the manufacturer's recommendations. Disposal of waste material shall be in conformance with All State and Local Laws.

ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES

SEQUENCE OF MAJOR ACTIVITIES

The sequence of work described below will be accomplished through the timing of proposed work relating the maintenance of service (i.e. proposed utility installation as compared to the removal/abandonment of existing utilities). Below is a general sequence of e vents to be followed:

1. Obtain all required permits.
2. Install all Erosion Control Measures and Devices that can be installed prior to site clearing.
3. Clear site for streets and pond.
4. Install any remaining Control Measures and Devices that could not be installed prior to site clearing.
5. Grade site. Install Erosion Control around catch basins.
6. Install Erosion Control around catch basins.
7. Install pavement.
8. Install commercial structures.
9. Inspect and maintain all erosion control measures until all disturbed offsite and onsite areas have been hydro-mulched or sodded in accordance with the landscape plan and a mowable stand of grass is achieved.
10. The environmental project manager will schedule a mid-construction conference to coordinate changes in the construction schedule and evaluate effectiveness of the erosion control plan after possible construction alterations to the site. Participants shall include the city inspector, project engineer, general contractor and environmental project manager. The anticipated completion date and final construction sequence and inspection schedule will be coordinated with the appropriate City Inspector.

TOTAL SITE AREA/TOTAL DISTURBED AREA

The total area of the site is ±9.27 acres. Excavation, grading, or other activities throughout the construction process will disturb approximately ±5.76 acres. Post-construction impervious coverage will total ±3.34 acres.

ATTACHMENT D

TEMPORARY BEST MANAGEMENT
PRACTICES AND MEASURES

TEMPORARY BMPS

At the beginning of the project, Temporary Best Management Practices (BMPs) will be installed according to the attached Temporary BMP Details and placed as shown on the TBMP Site Plan.

The site is located southwest corner of State Highway 46 and Independence Drive intersection. Upgradient water from the undeveloped site upstream of the proposed development will be captured into a storm sewer system and routed northward to the proposed water quality pond and existing detention pond.

On-site Water

Silt fencing will be placed along the boundary line of the tracts. Inlet protection will be placed as necessary to protect the proposed inlets onsite. These Temporary BMPs will be installed along the down-gradient boundary of the property to filter all runoff that originates on site as indicated in the report. The temporary construction entrance will be installed to prevent tracking materials offsite. Additionally, a concrete truck washout area will be placed onsite and be accessible to all existing traffic leaving the site. By this, the Temporary BMPs will prevent pollution of surface water that originates on-site due to the construction of the project.

The following sections were taken from the TNCC Manual, "Complying with Edward Aquifer Rules: Technical Guidance on Best Management Practices."

- Construction Exit should be used at all designated access points.
- Silt Fence (interior) Areas of minor sheet flow. < ¼ acre/100 feet of fence < 20% slopes.
- Silt Fence (exterior) Down slope borders of site; up slope border is necessary to divert offsite drainage. For larger areas use diversion swale or berm. < ¼ acre/100 feet of fence < 20% slopes.
- Rock Berm Drainage swales and ditches with and below site. < 5 acres < 30% slopes.
- Inlet Protection Prevent sediment from entering storm drain system. < 1 acre.
- Spill Prevention Used on all sites to reduce spills.
- Concrete Washout Use on all concrete pouring operations.

A. A description of how BMPs and measures will prevent pollution of surface water, groundwater or storm water that originates upgradient from the site and flows across the site.

   1. The upgradient storm water will be directed to the previously mentioned temporary BMPs.

B. A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated storm water runoff from the site.

   1. Silt fence and stabilized construction entrances shall be used to prevent pollution of surface water, groundwater or storm water that originates on-site or flows off-site by locating the TBMPs downstream of the flows leaving the site.

The TBMPs will reduce the amount of contaminated runoff leaving the site by acting as a filter for sediment before the flows are released into the existing storm sewer system or the adjacent property. Also included is a stabilized construction entrance to reduce the amount of mud tracked onto surrounding streets by construction vehicles. Inspection and maintenance of the on-site controls shall be performed during the site clearing and rough grading process.

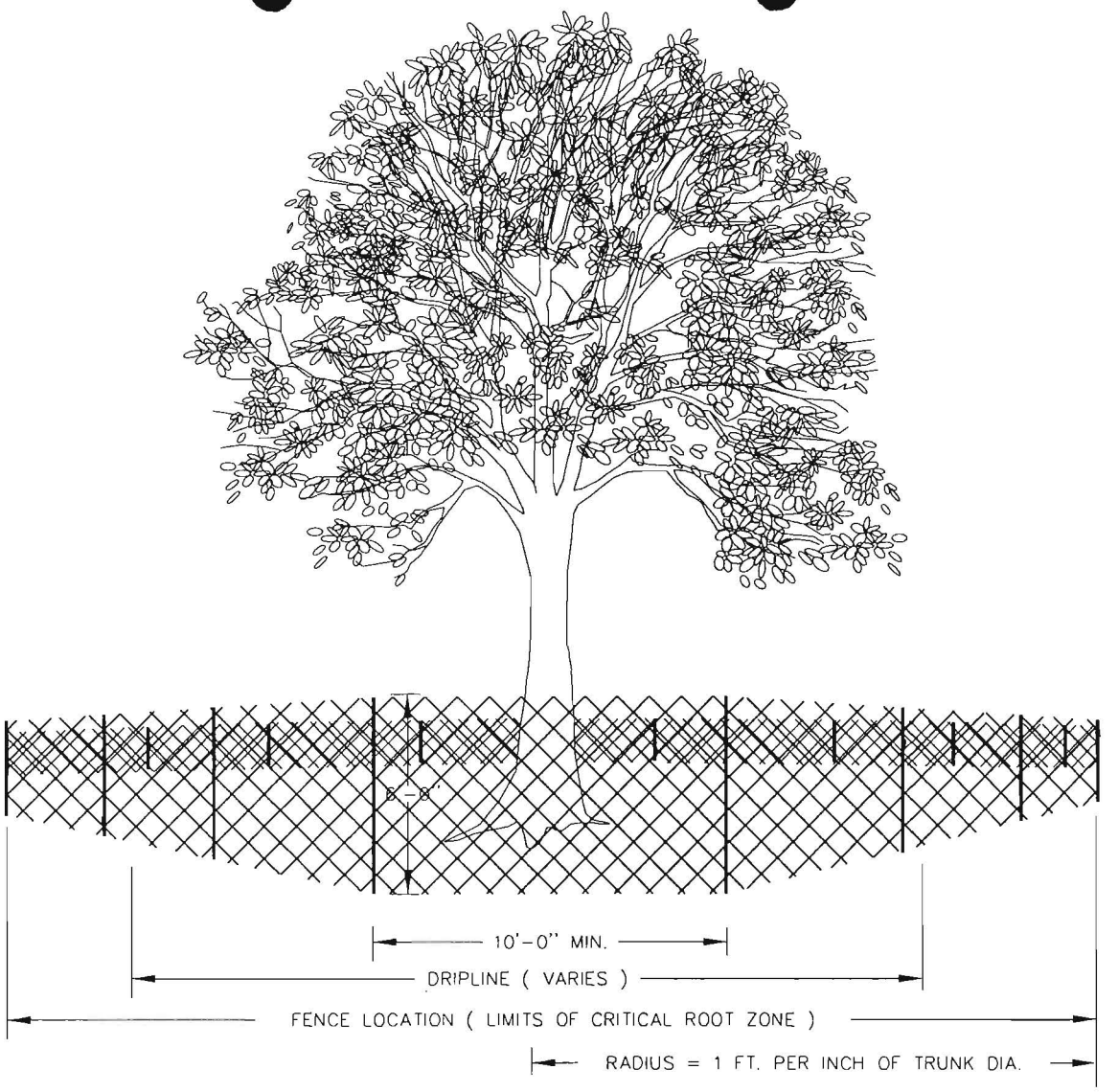
All TBMPs will be maintained by the Contractor as will be described in the Contractor's Storm water Pollution Prevention Plan (SWPPP). The initial installation of Erosion and Sedimentation Controls, will act as a sediment trap, and help to prevent pollution of surface waters from runoff originating on-site to the greatest extent practicable.

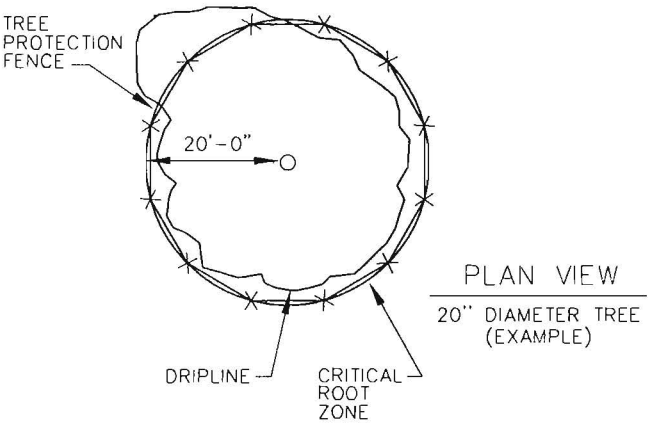
C. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

1. By locating the TBMPs downstream of the flows leaving the site, the TBMPs will reduce the amount of contaminated runoff leaving the site by acting as a filter for sediment before the flows are released. Also included is a stabilized construction entrance to reduce the amount of mud tracked onto surrounding streets by construction vehicles. Inspection and maintenance of the on-site controls shall be performed during the site clearing and rough grading process. All TBMPs will be maintained by the Contractor as will be described in the Contractor's SWPPP. The initial installation of Erosion and Sedimentation Controls, will act as a sediment trap, and help to prevent pollution of surface waters from runoff originating onsite to the greatest extent practicable.

D. A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

1. There are no sensitive features according to the geologic assessment.





PLAN VIEW

20" DIAMETER TREE (EXAMPLE)

TREE PROTECTION CONSTRUCTION FENCE

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NEW BRAUFELS, TEXAS

EXHIBIT B1

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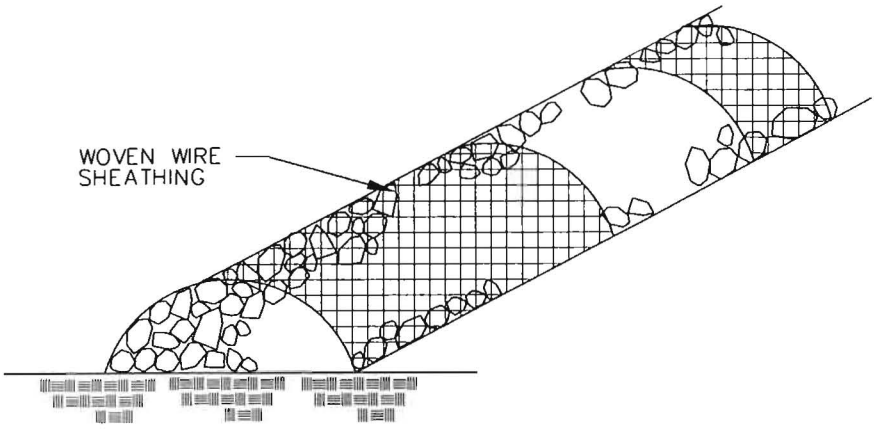

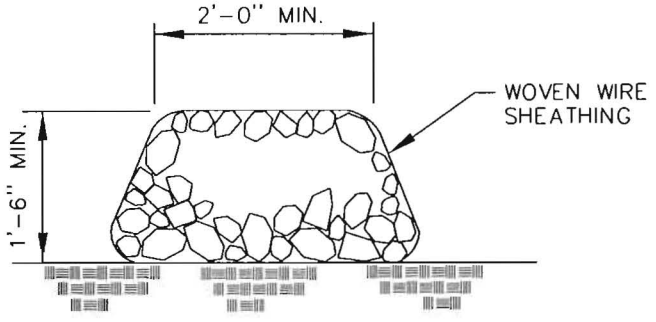

NOTES:

1. USE ONLY OPEN GRADED ROCK 4-8 INCH DIAMETER FOR STREAMFLOW CONDITION; USE OPEN GRADED ROCK 3-5 INCHES DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE - WOVEN WIRE SHEATHING, SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 6 INCHES.
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

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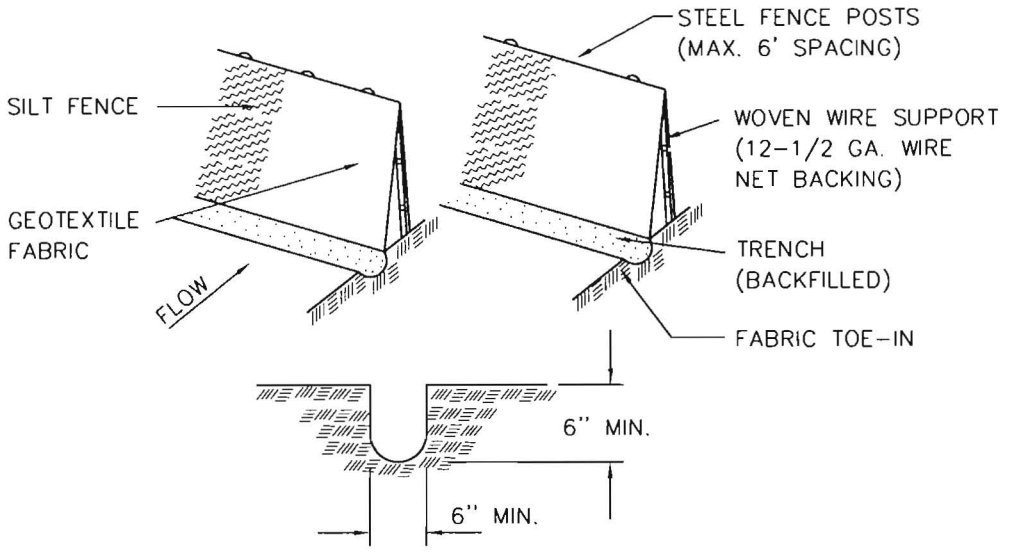

TRENCH CROSS-SECTION

GENERAL NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL 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 CAN NOT BE TREATED IN (e.g. pavement) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 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.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POSTS OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

SILT FENCE

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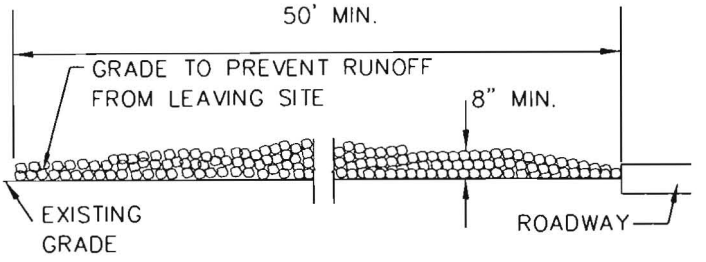

PROFILE
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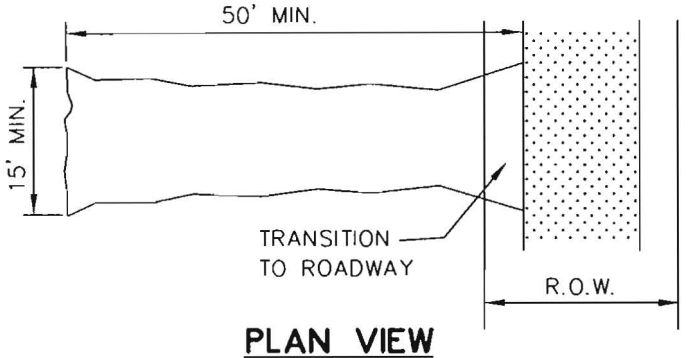

PLAN VIEW
N.T.S.

GENERAL NOTES:

1. STONE SIZE– 3 TO 5 INCH OPEN GRADED ROCK.
2. LENGTH– AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS– NOT LESS THAN 8 INCHES.
4. WIDTH– NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING– WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE– THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. 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 ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE– ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

STABILIZED CONSTRUCTION ENTRANCE

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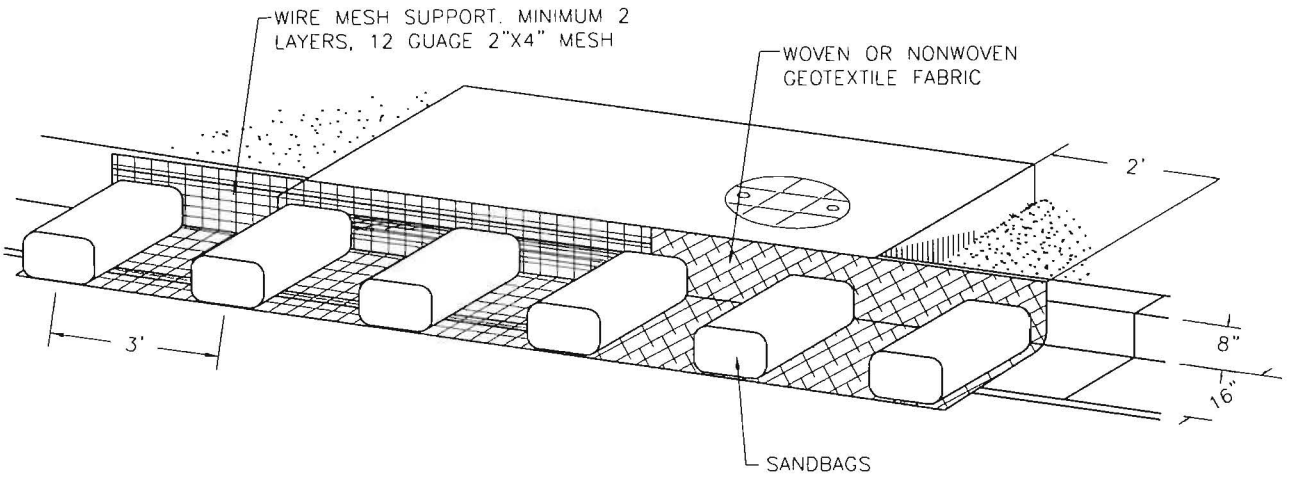

NOTES:

1. WHEN A SANDBAG IS FILLED WITH MATERIAL, THE OPEN END OF THE SANDBAG SHOULD BE STAPLED OR TIED WITH NYLON OR POLY CHORD.
2. INLET PROTECTION SHALL BE PLACED OVER THE MOUTH OF THE INLET WITH A 2 FOOT OVERLAP ONEITHER SIDE.
3. THE FABRIC COVER AND SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE.
4. THE SKIRT SHALL BE WEIGHTED WITH ONE 18"X24"X6" SANDBAG EVERY 3 FEET.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF FOUR INCHES, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
7. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE 6 ABOVE.

CURB INLET PROTECTION BARRIER

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WESTPOINTE VILLAGE STORAGE

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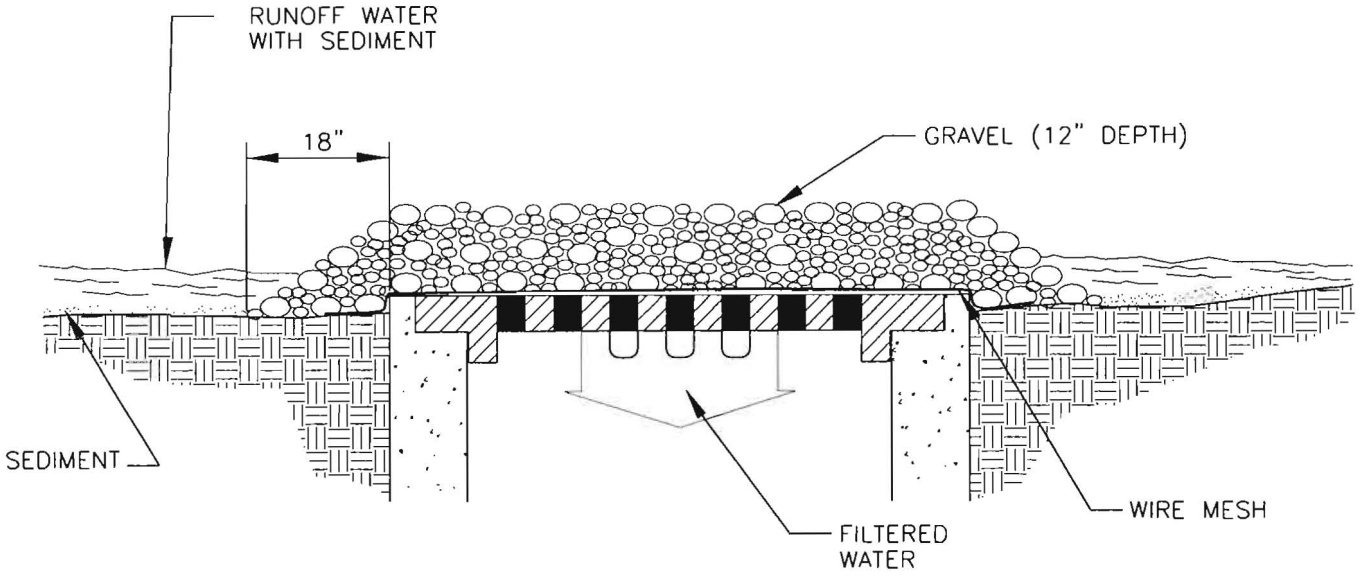
EXHIBIT B5

DATE: Nov 14, 2014	SCALE: NTS	DRAWN BY: ENW	FILE: J:\112244\50001\CE Construction Admin\TPDES Details2.dwg	PROJECT No. R0112244-50001



NOTE:

A. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 24 GAUGE SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.

B. AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ABOVE. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.

C. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS IT'S FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

INLET PROTECTION/SEDIMENT FILTER

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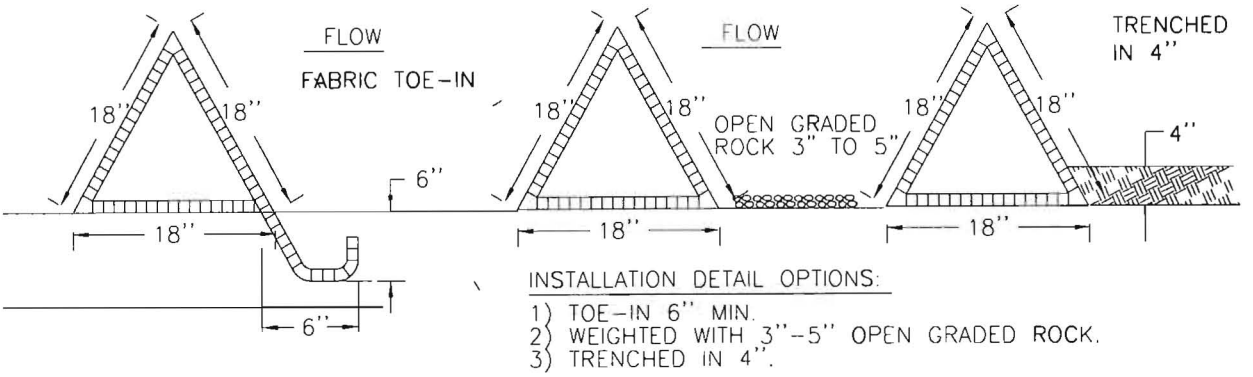
VILLAGE STORAGE

NEW BRAUFELS, TEXAS

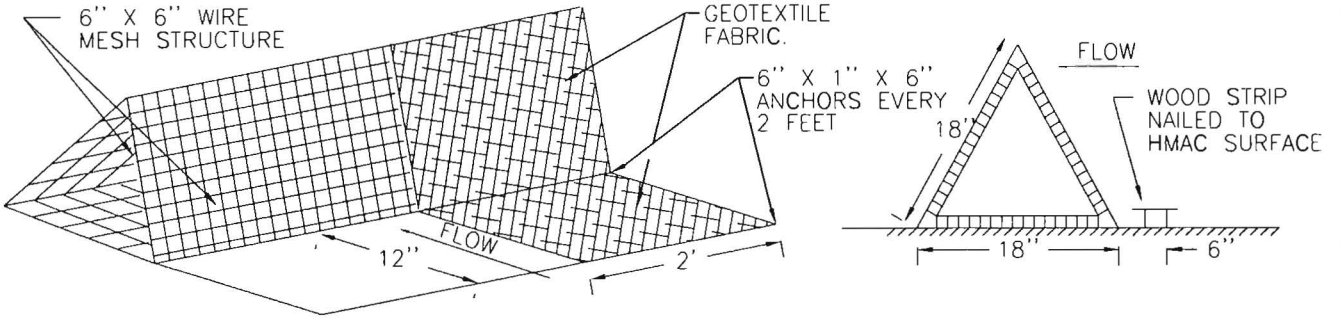
EXHIBIT B6

DATE: Nov 14, 2014	SCALE: NTS	DRAWN BY: ENW	FILE: J:\112244\50001\CE Construction Admin\TPDES Details2.dwg	PROJECT No. R0112244-50001



INSTALLATION DETAIL OPTIONS:

1) TOE-IN 6" MIN.
2) WEIGHTED WITH 3"-5" OPEN GRADED ROCK.
3) TRENCHED IN 4".



NOTES:

1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE. THE SHIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 3"-5" OPEN GRADED ROCK, OR TOED-IN 6" WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED IN 4" INCHES.
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 6 INCH WIRE STAPLES ON 2 FOOT CENTERS ON BOTH EDGES AND SKIRT, OR STAKED USING 3/8 INCH DIAMETER REBAR WITH TEE ENDS.
5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 6 INCHES TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
6. THE DIKE STRUCTURE SHALL BE 6 GA. 6" X 6" WIRE MESH, 18 INCHES ON A SIDE.
7. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF SIX INCHES, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE 8 ABOVE.

TRIANGULAR FILTER DIKE

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NEW BRAUFELS, TEXAS

EXHIBIT B7

DATE: Nov 14, 2014	SCALE: NTS	DRAWN BY: ENW	FILE: J:\112244\50001\CE Construction Admin\TPDES Data\s2.dwg	PROJECT No. R0112244-50001

CONSTRUCTION SEQUENCE

1. OBTAIN REQUIRED PERMITS.
2. INSTALL ALL EROSION CONTROL MEASURES AND DEVICES THAT CAN BE INSTALLED PRIOR TO SITE CLEARING.
3. CLEAR SITE.
4. INSTALL ANY REMAINING CONTROL MEASURES AND DEVICES THAT COULD NOT BE INSTALLED PRIOR TO SITE CLEARING.
5. GRADE SITE.
6. INSTALL ALL UNDERGROUND UTILITIES. INSTALL EROSION CONTROL AROUND CATCH BASINS AND INLETS.
7. INSTALL PAVEMENT.
8. INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED OFFSITE & ONSITE AREAS HAVE BEEN HYDROMULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLAN AND A MOWABLE STAND OF GRASS IS ACHIEVED.

EROSION AND SEDIMENTATION CONTROL NOTES

1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS FOR THIS PROJECT AS WELL AS THE CITY'S GENERAL REQUIREMENTS, WHICH PERTAIN TO THIS PROJECT.
2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURE OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED. (IN ACCORDANCE WITH LANDSCAPE PLANS)
3. BRUSH BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS, SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. ADDITIONAL MEASURES MAY BE REQUIRED IF, THEY ARE WARRANTED.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE CITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE CITY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

TPDES REQUIREMENT NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING NOTICE OF INTENT (NOI) TO TCEQ FOR THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, OR POSTING A CONSTRUCTION SITE NOTICE 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL HAVE THIS PLAN AND THE TPDES STORM WATER POLLUTION PREVENTION PLAN ON SITE AT ALL TIMES THROUGHOUT DURATION OF PROJECT.
3. ALL DISTURBED AREAS NOT ADDRESSED BY LANDSCAPE ARCHITECT SHALL BE HYDROMULCHED PER SPECIFICATION DESCRIBED IN THE GENERAL NOTES.
4. CONTRACTOR SHALL PROVIDE TRIANGULAR SEDIMENT FILTER DIKE PER EXHIBIT B7 WHERE SILT FENCE IS REQUIRED BUT NOT INSTALLABLE.
5. CONTRACTOR SHALL SUBMIT NOTICE OF TERMINATION (NOT) TO THE TCEQ UPON PROJECT COMPLETION AS DESCRIBED IN THE PROJECT TPDES STORM WATER POLLUTION PREVENTION PLAN. IF PROJECT IS A PHASE I PROJECT (> 5 ACRES), ELSE STABALIZE PROJECT TO WITHIN 10% OR COMPLETE CONSTRUCTION.
6. CONTRACTOR TO RETAIN THE TPDES STORM WATER POLLUTION PREVENTION PLAN ALONG WITH ALL COMPLETED INSPECTION REPORTS AND PLAN MODIFICATIONS DOCUMENTATION FOR A PERIOD OF THREE (3) YEARS FROM DATE OF FINAL STABILIZATION, AS REQUIRED BY THE TCEQ.

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NEW BRAUFELS, TEXAS

EXHIBIT B8

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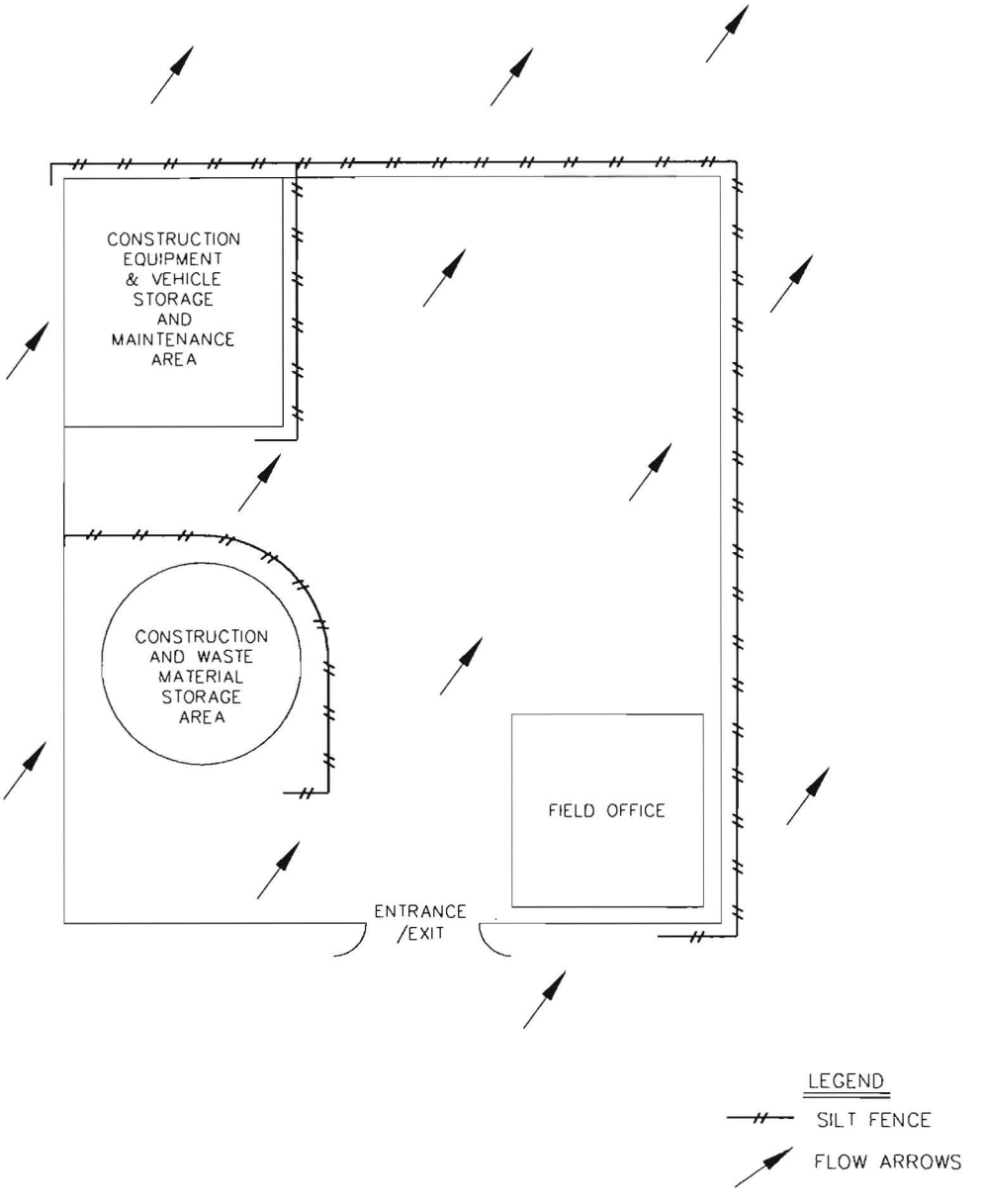

TYPICAL CONSTRUCTION STAGING AREA

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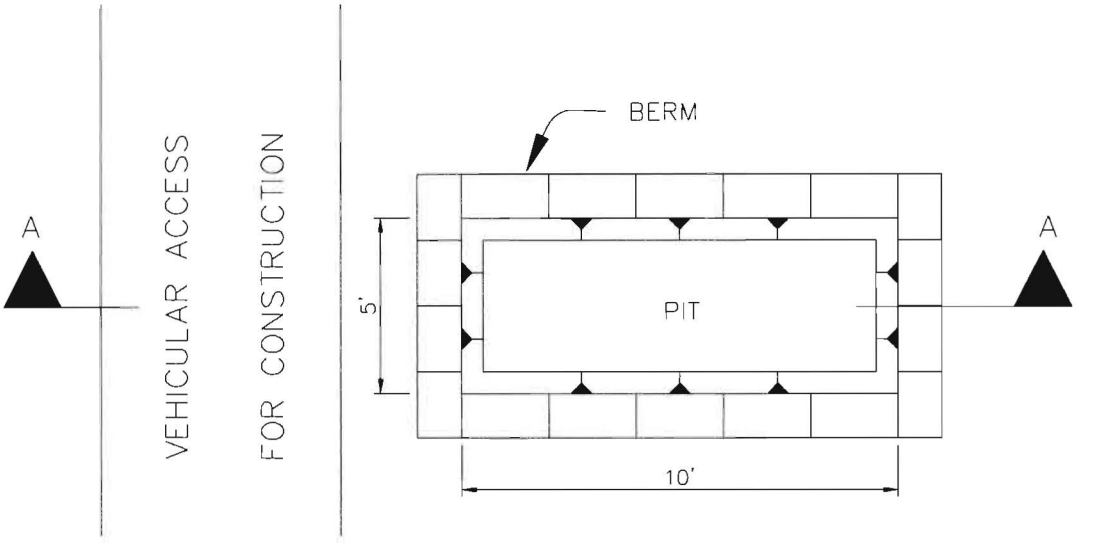
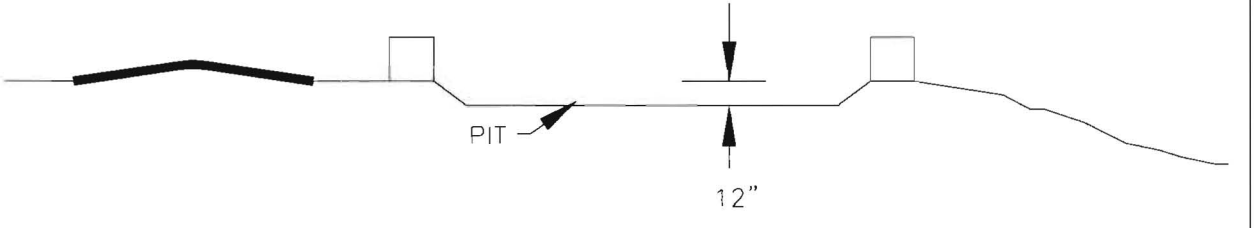
EXHIBIT B9

DATE: Nov 14, 2014	SCALE: NTS	DRAWN BY: ENW	FILE: J:\112244\50001\CE Construction Admin\TPDES Details2.dwg	PROJECT No. R0112244-50001



PLAN



SECTION A–A

GENERAL NOTES:

1. DETAIL ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.

2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.

3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

4. PIT SHALL BE INSTALLED WITH IMPERMEABLE LINER PER TCEQ REQUIREMENTS..

CONCRETE TRUCK WASHOUT PIT

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NEW BRAUNFELS, TEXAS

EXHIBIT B10

DATE: Dec 10, 2014	SCALE: NTS	DRAWN BY: ENW	FILE: G:\112244\50001\EXHIBITS\TPDES Details.dwg	PROJECT No. R0112244-50001

ATTACHMENT E

REQUEST TO TEMPORARILY SEAL A FEATURE
(Not Applicable)

ATTACHMENT F

STRUCTURAL PRACTICES

STRUCTURAL PRACTICES

Silt fencing, triangular sediment filter dikes, inlet protection devices, and stabilized construction entrances will be incorporated as temporary erosion control devices and will be removed after the permanent stabilization is established.

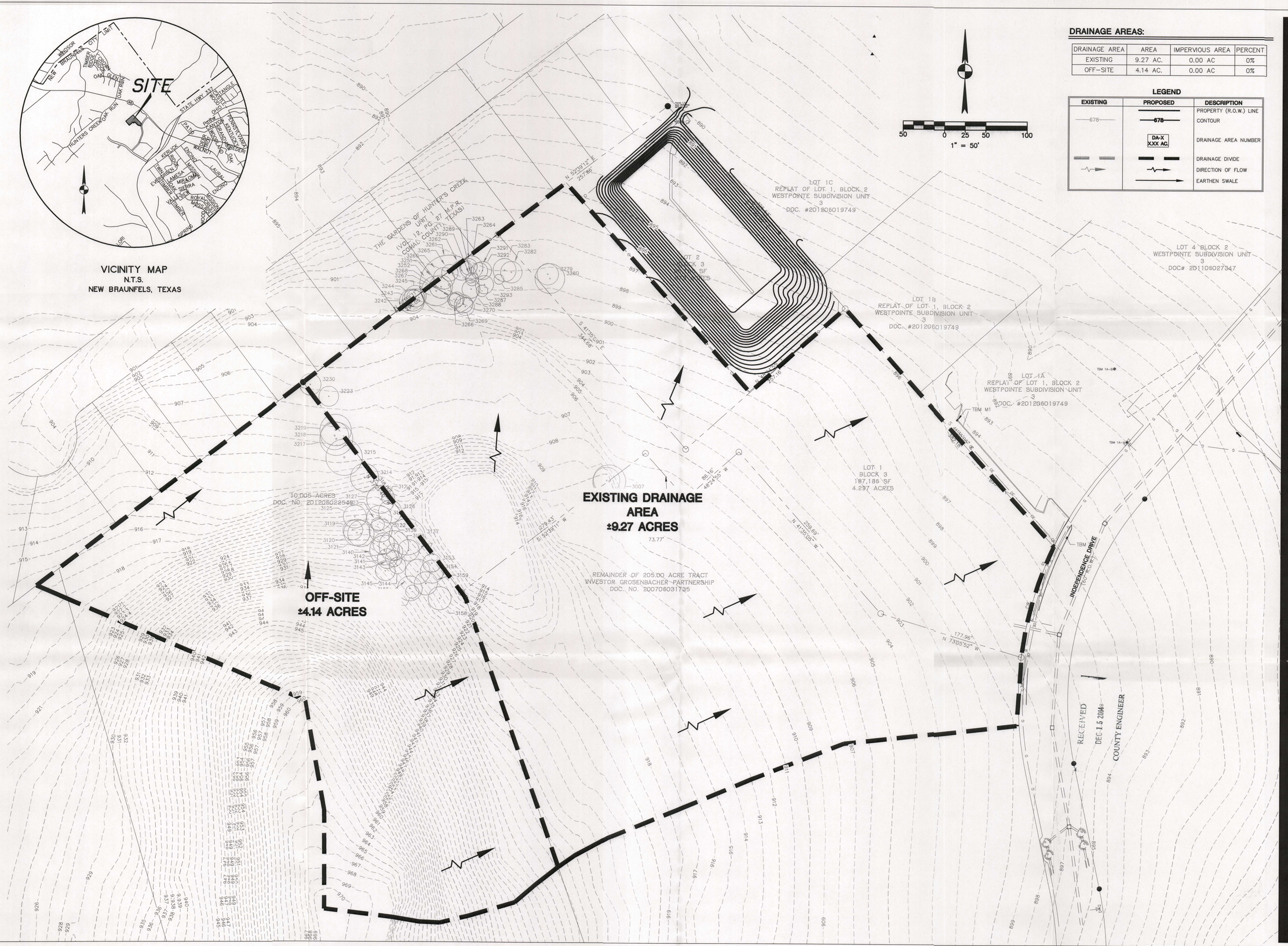
Silt fencing shall be incorporated throughout the construction process. The placement of the silt fencing shall be perpendicular to runoff flow. Refer to project construction documents for quantity and actual locations of these erosion control devices. In areas where silt fencing is to be situated but is non-installable, triangular filter dikes shall be incorporated.

Stabilized construction entrances will be employed during the construction of this site to help minimize vehicle tracking of sediments. Paved streets adjacent to these site entrances shall be cleaned and/or swept regularly to remove any excess mud, dirt or rock tracked from the site. Refer to the project construction documents for actual locations of these erosion control devices. Staging areas will be utilized in locations as decided by the project general contractor and validated by the civil engineer. If the contractor determines the need for additional stabilized construction entrances, construction staging areas or pits, their locations shall be agreed upon by the contractor and the engineer and annotated in the Storm Water Pollution Prevention Plan (SWPPP) posted on the site during construction.

ATTACHMENT G

DRAINAGE AREA MAP

VICINITY MAP
N.T.S.
NEW BRAUNFELS, TEXAS



1" = 50'

DRAINAGE AREAS:

DRAINAGE AREA	AREA	IMPERVIOUS AREA	PERCENT
EXISTING	9.27 AC.	0.00 AC	0%
OFF-SITE	4.14 AC.	0.00 AC	0%

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY (R.O.W.) LINE
678	678	CONTOUR
	DA-X XXX AC.	DRAINAGE AREA NUMBER
		DRAINAGE DIVIDE
		DIRECTION OF FLOW
		EARTHEN SWALE

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STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED
PROFESSIONAL ENGINEER
12/02/2014

WESTPOINTE STORAGE

INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO. 12244-50001
DATE : 11.21.14
DRAWN : ENW
REVISIONS:

EXISTING DRAINAGE AREA MAP

SHEET NO.

EXH-1

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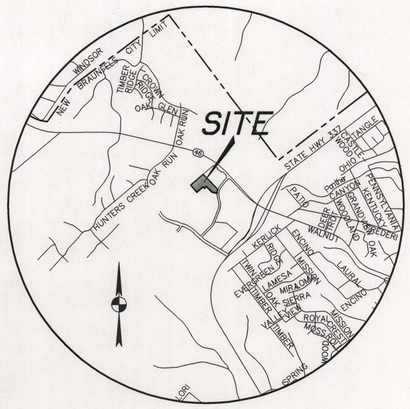
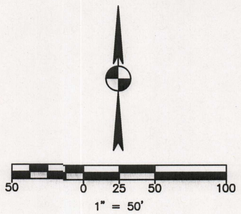


VICINITY MAP
N.T.S.
NEW BRAUNFELS, TEXAS



DRAINAGE AREAS:

DRAINAGE AREA	AREA	IMPERVIOUS AREA	PERCENT
1	4.89 AC.	3.52 AC	72%
2	0.43 AC.	0.06 AC	14%
3	3.95 AC.	3.16 AC*	80%
OFF-SITE	4.14 AC.	0.00 AC	0%

NOTE: SEE WATER QUALITY POND CALCULATION SHEET FOR POND SIZING AND LOAD REMOVAL CALCULATIONS. CALCULATIONS ARE BASED ON THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL, SECTION 3.3.2.

*ASSUMED IMPERVIOUS COVER. A WPAP MODIFICATION WILL BE REQUIRED FOR ANY IMPERVIOUS COVER NOT INCLUDED.

NOTES:

1. ALL WATER QUALITY PONDS ARE OVERSIZED TO ACCOUNT FOR THE AREAS NOT WITHIN THE CAPTURE BASINS.
2. ALL ROOFTOP DRAINAGE WILL BE COLLECTED INTO THE RESPECTIVE BUILDING ROOFTOP DRAINAGE SYSTEM AND TIE INTO THE PROPOSED DRAINAGE LINES AND COLLECTED BY THE PROPOSED WATER QUALITY PONDS

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY (R.O.W.) LINE
678	678	CONTOUR
	DA-X XXX AC.	DRAINAGE AREA NUMBER
		DRAINAGE DIVIDE
		DIRECTION OF FLOW
		EARTHEN SWALE

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107307
LICENSED
PROFESSIONAL ENGINEER
12/02/2014

WESTPOINTE STORAGE

INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO.12244-50001
DATE : 11.21.14
DRAWN : ENW
REVISIONS:

PROPOSED DRAINAGE AREA MAP

SHEET NO.

EXH-1

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ATTACHMENT H

TEMPORARY SEDIMENT POND(S)
PLANS AND CALCULATIONS
(Not Applicable)

ATTACHMENT I

INSPECTION AND MAINTENANCE FOR BMP'S

INSPECTIONS

Each contractor will designate a qualified person (or persons) to perform the following inspections:

1. Disturbed areas and areas used for storage of materials that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants entering the drainage system.

2. Erosion and sediment control measures identified in the plan will be observed to ensure that they are operating correctly.

3. Where discharge locations or points are accessible, they will be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

4. Locations where vehicles enter or exit the site will be inspected for evidence of offsite sediment tracking.

The inspection shall be conducted by the responsible person at least once every seven (7) calendar days and within 24 hours after a storm providing 1/2 inches of rainfall or greater. If one or more of the following conditions apply, the frequency of inspections shall be conducted at least once every month:

1. The site has been temporarily stabilized.

2. Where runoff is unlikely due to winter conditions (i.e. site is covered with snow, ice, or where frozen ground exists.

3. During seasonal arid periods in arid areas (areas with an average annual rainfall of 0 to 10 inches) and semi-arid areas (areas with an average annual rainfall of 10 to 20 inches).

The information required within an inspection and maintenance report are as follows:

1. Summary of the scope of the inspection.

2. Name(s) and qualifications of personnel making the inspection.

3. The date(s) of the inspection.

4. Major observations relating to the implementation of the storm water pollution prevention plan.

5. Changes required to correct damages or deficiencies in the control measures.

In addition to the required routine inspections, the following record of information will also be maintained:

1. The dates when selective clearing activities occur.

2. The dates when selective clearing activities permanently cease on a portion of the site.

Inspection and maintenance reports, as well as all records required by a Storm Water Pollution Prevention Plan (SWPPP), shall be included in the onsite SWPPP as part of the Texas Pollution Discharge Elimination System (TPDES) Report. Copies of example forms to be used for the

inspection and maintenance reports along with their related records, will be included in the onsite SWPPP and are provided for reference.

MAINTENANCE

Based on the results of the inspection, any changes required to correct damages or deficiencies in the control measures shall be made within seven (7) calendar days after the inspection. If existing erosion controls need modification or additional erosion controls are necessary, implementation shall be achieved prior to the next anticipated storm event. If, however, the execution of this requirement becomes impractical, then the implementation will occur as soon as possible, with the incident duly noted with an explanation of the impracticality, in the inspection report.

Sediment accumulation at each control will be removed and properly disposed when the depth of accumulation equals or exceeds six (6) inches. If sediment accumulation is found to be contaminated, its disposal shall be off-site in a manner which conforms to the appropriate applicable regulations.

WESTPOINTE VILLAGE STORAGE
Independence Drive
New Braunfels, Texas

Responsible Party Form and Schedule

Prevention Pollution Measure	Responsible Party Company Name										
	Start Date	Estimated Duration (Days)									
BEST MANAGEMENT PRACTICES											
Silt fences											
Rock berms											
Drain inlet protection											
Gravel filter bags											
Vehicle exits (offsite tracking)											
Concrete washout pit (leaks, failure)											
Temporary vegetation											
Permanent vegetation											
Sediment control basin											
Other structural controls											
Material storage areas (leakage)											
Equipment areas (leaks, spills)											
Construction debris											
General site cleanliness											
Trash receptacles											
Natural vegetation buffer strips											
Inspections											
SWP3 Modification & Records											
POTENTIAL EROSION SOURCES											
Clearing											
Grading											
Excavation											
Drainage Construction											
Utility Construction											
Roadway or Parking Lot Construction											
Foundation Construction											
Building Construction											
Landscaping Activities											

Identify responsible parties and indicate responsible party for each pollution prevention item listed above by marking an X under the Responsible Party Name.

WESTPOINTE VILLAGE STORAGE
Independence Drive
New Braunfels, Texas

Inspection Report

Prevention Pollution Measure	Inspected in Compliance (Y/N)	Corrective Action Required: Description (use additional sheet if necessary)	Corrective Action Required: Date Completed
BEST MANAGEMENT PRACTICES			
Silt fences			
Rock berms			
Drain inlet protection			
Gravel filter bags			
Vehicle exits (offsite tracking)			
Concrete washout pit (leaks, failure)			
Temporary vegetation			
Permanent vegetation			
Sediment control basin			
Other structural controls			
Material storage areas (leakage)			
Equipment areas (leaks, spills)			
Construction debris			
General site cleanliness			
Trash receptacles			
Natural vegetation buffer strips			
EVIDENCE OF EROSION			
Site preparation			
Roadway or Parking Lot Construction			
Utility Construction			
Drainage Construction			
Building Construction			
MAJOR OBSERVATIONS			
Sediment discharges from site			
BMPs requiring maintenance			
BMPs requiring modification			
Additional BMPs required			

"I certify 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Inspector's Name (Superintendent)	Inspector's Signature	Date
Name of Owner/Operator (Firm)	Authorized Signature	Date

Note: If there is a "NO" answer in the second column, the right columns will need to be completed and action is required within 7 days. Use additional sheets if necessary.

ATTACHMENT J

SCHEDULE OF INTERIM AND
PERMANENT SOIL STABILIZATION

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION

During Construction:

The methodology for handling pollution of on-site or up-gradient storm water during construction will include the following:

1. Silt fencing and rock berms will be used as a temporary erosion and sedimentation controls.

2. Stabilized construction entrances/exits will be put into place to reduce the dispersion of sediment from the site, and to aid in accessibility to the site.

3. A construction staging area will also be put into place for material stockpiles, machinery storage, and machinery maintenance.

4. Concrete truck washout pits will be put into place to prevent contamination of storm water runoff and to aid in the removal of sediments from the site.

5. As required by the TCEQ General Permit, disturbed areas on which construction activity has ceased (temporarily or permanently) and which will be exposed for more than 21 days shall be stabilized within 14 days. Areas receiving less than 20 inches of annual rainfall should be stabilized as soon as practicable and only to pre-project conditions.

6. If construction stops for more than 14 days, hydro-seeding, sod or other TCEQ approved method will be applied to re-stabilize vegetation.

After Construction:

This site will provide the following permanent pollution abatement measures to prevent the pollution of storm water originating on-site or upgradient from the project site:

1. Storm water will be directed to grate inlets via curbing and grading and discharged into the sedimentation/filtration basins. The sedimentation/filtration basins have been designed to capture and filter the required runoff from the individual watersheds. The basin has been designed in accordance with the TCEQ Technical Guidance Manual. Each basin will be constructed as that particular phase is built.

2. Native grasses will be used on-site to help reduce the use of fertilizers and this will in turn reduce the levels of phosphates present in the storm water runoff.

3. Where possible drainage will be directed across vegetated areas to provide some pretreatment prior to discharge into the filtration basin.

Permanent Erosion Control:

1. All disturbed areas shall be restored as noted below:

   - A minimum of 4" of topsoil shall be placed in all drainage channels (except rock) and between the curb and R.O.W. property lines.

2. Broadcast Seeding:

   - From September 15 to March 1, seeding shall be with a combination of 2 pounds per 1,000 SF of unhulled Bermuda and 7 pounds per 1000 SF of Winter Rye with a purity of 95% with 90% germination.
   - From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 2 pounds per 1000 SF with a purity of 95% with 85% germination.

3. Fertilizer shall be a pelleted or granular slow release with an analysis of 15-15-15 to be applied once at planting and once during the period of establishment at a rate of 1 pound per 1,000 SF.

4. Hydraulic Seeding:

   - From September 15 to March 1, seeding shall be with a combination of 1 pound per 1,000 SF of unhulled Bermuda and 7 pounds per 1,000 SF of Winter Rye with a purity of 95% with 90% germination.
   - From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 7 pounds per 1,000 SF with a purity of 95% with 85% germination.

5. Fertilizer shall be a water soluble fertilizer with an analysis of 15-15-15 at a rate of 1 to 1.5 pounds per 1,000 SF (45-65 pounds per acre).

6. Mulch type used shall be hay, straw, or mulch applied at a rate of 45 pounds per 1,000 SF with a soil tackifier at a rate of 1.4 pounds per 1,000 SF.

7. The planted area shall be irrigated or sprinkled in a manner that will not erode the topsoil but will sufficiently soak the soil to a depth of 6". The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of ½" or more shall postpone the watering schedule for one week.

8. Restoration shall be acceptable when the grass has grown at least 1½" high with 95% coverage, provided no bare spots larger than 16 square feet exist.

PERMANENT STORM WATER SECTION

Permanent Stormwater Section
for Regulated Activities
on the Edwards Aquifer Recharge Zone
and Relating to 30 TAC §213.5(b)(4)(C), (D)(li), (E), and (5), Effective June 1, 1999

REGULATED ENTITY NAME: Westpointe Village Storage

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

1. X Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

2. X 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.

   X The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

   N/A 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:

   _____

   _____

3. X 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.

4. N/A 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.

   N/A This site will be used for low density single-family residential development and has 20% or less impervious cover.

   N/A This site will be used for low density single-family residential development but has more than 20% impervious cover.

   X This site will not be used for low density single-family residential development.

5. N/A The executive director may waive the requirement for other permanent BMPs for multi-family 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 A - 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.

N/A This site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.

N/A This site will not be used for multi-family residential developments, schools, or small business sites.

6. **ATTACHMENT B - BMPs for Upgradient Stormwater.**

X 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 identified as **ATTACHMENT B** 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 B** at the end of this form.

___ 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 B** at the end of this form.

7. **ATTACHMENT C - BMPs for On-site Stormwater.**

X 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 identified as **ATTACHMENT C** at the end of this form.

___ 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 C** at the end of this form.

8. N/A **ATTACHMENT D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is provided at the end of this form. Each feature identified in the Geologic Assessment as "sensitive" has been addressed.

9. X The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

X The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-occurring "sensitive" or "possibly sensitive" features on this site.

N/A **ATTACHMENT E - Request to Seal Features.** A request to seal a naturally-occurring "sensitive" or "possibly sensitive" feature, that includes a justification as to why no reasonable and practicable alternative exists, is found at the end of this form. A request and justification has been provided for each feature.

10. X **ATTACHMENT F - 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 man-made or naturally occurring geologic features, all proposed structural measures, and appropriate details must be shown on the construction plans.

11. X **ATTACHMENT G - 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.

12. X 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 H - Pilot-Scale Field Testing Plan.** A plan for pilot-scale field testing is provided at the end of this form.

13. N/A **ATTACHMENT I -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 increase erosion that results in water quality degradation.

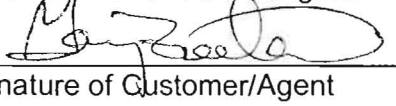
Responsibility for maintenance of permanent BMPs and measures after construction is complete.

14. X 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.

15. X 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.

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 **PERMANENT STORMWATER SECTION** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Gary W. Freeland, P.E.
Print Name of Customer/Agent



Signature of Customer/Agent

12-2-14
Date

ATTACHMENT A

20% OR LESS IMPERVIOUS COVER WAIVER
(Not Applicable)

ATTACHMENT B

BMP'S FOR UPGRADIENT STORM WATER

BMPS FOR UPGRADIENT STORM WATER

The permanent BMPs for this project will incorporate design for partial future land uses up-gradient from the site. Therefore, the drainage areas and TCC removal calculations incorporate such area into the calculation for the water quality pond. As such, there are no other surface water, groundwater, nor storm water that originates up-gradient from the site that flow through or across the project site.

The portion of the up-gradient site not accounted for in this water quality pond will need to treat their own increase in impervious cover if ever developed.

ATTACHMENT C

BMP'S FOR ON-SITE STORM WATER

BMPs FOR ON-SITE STORM WATER

Storm water runoff arising from the development of this project will be conveyed via sheet flow to the proposed storm sewer system which will convey the storm water runoff to the proposed sedimentation/filtration pond and existing detention pond located on the site. Approximately, ±9.27 acres, with 73% impervious cover, is conveyed to the water quality pond. The water quality pond was designed to treat ±4.89 acres at 72% impervious cover (±3.52 acres) and ±3.95 acres at 80% (±3.16 acres) for future land use treating a total impervious cover area of ±6.74 acres and the detention pond has been designed to capture ±9.27 acres at 80% impervious cover (±7.42 acres). The proposed water quality pond has a water quality volume of 35,494 cubic feet. Please refer to the attached construction plans for the detailed pond design and calculations. The detention pond adjacent to the water quality pond will ultimately discharge the site runoff to an existing storm sewer system, equal to pre-developed run-off rates. The water quality pond and detention pond are designed in accordance with TCEQ requirements and City of New Braunfels requirements.

ATTACHMENT D

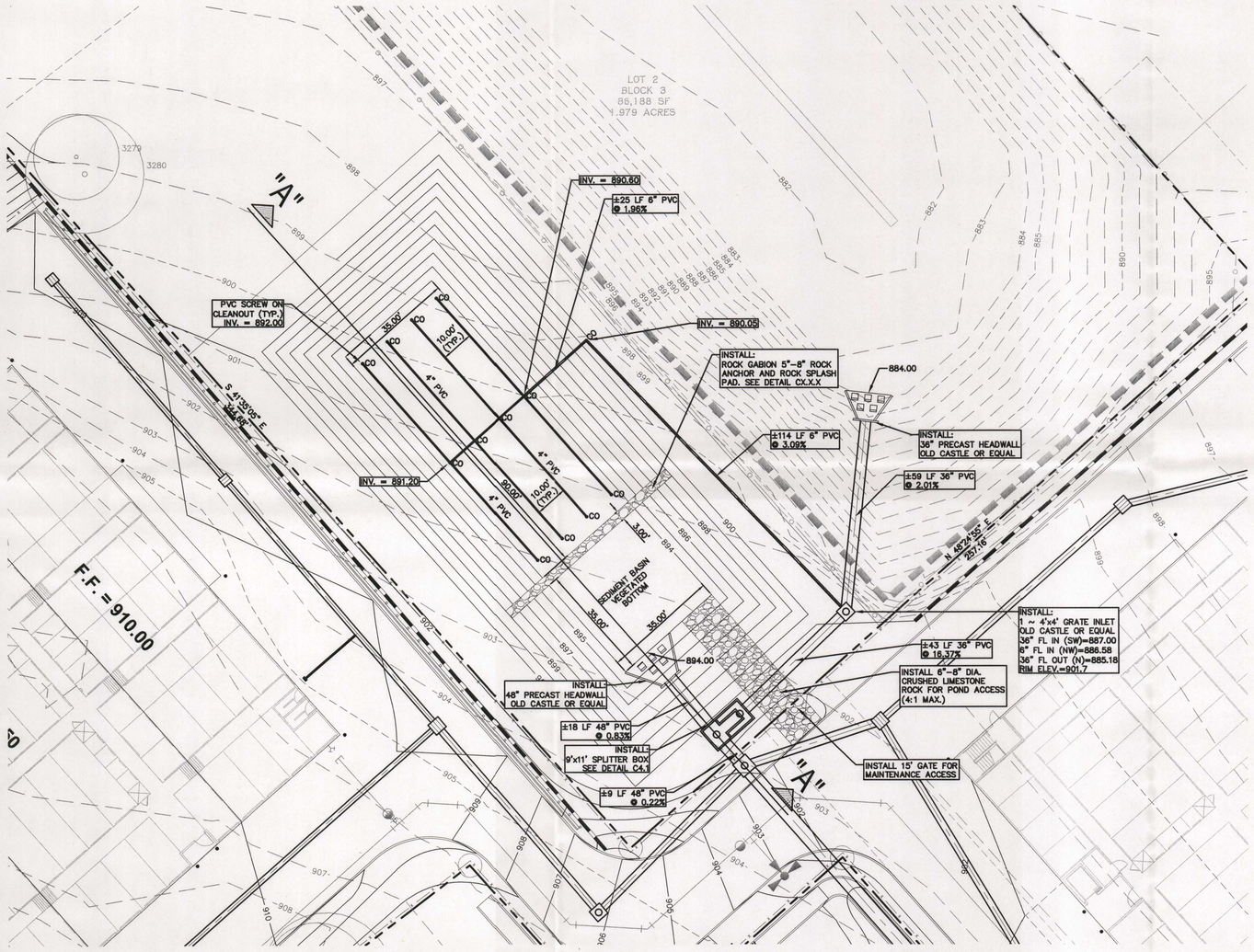
BMPs FOR SURFACE STREAMS
(Not Applicable)

ATTACHMENT E

REQUEST TO TEMPORARILY SEAL A FEATURE
(Not Applicable)

ATTACHMENT F

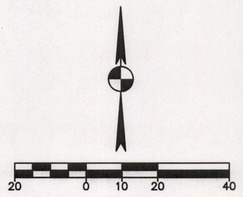
CONSTRUCTION PLANS



C4.0.1

SEDIMENTATION/ FILTRATION BASIN

SCALE: 1"=20'



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.

3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.

5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.

6. 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).

7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.

8. 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).

9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.

10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE
1. CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.

11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ 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. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

   A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;

   B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;

   C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

   AUSTIN REGIONAL OFFICE 2800 S. IH 35, SUITE 100
   AUSTIN, TEXAS 78704-5712
   PHONE (512) 339-2929
   FAX(512) 339-3795

   SAN ANTONIO REGIONAL OFFICE 14250 JUDSON ROAD
   SAN ANTONIO, TEXAS 78233-4480 PHONE (210) 490-3096
   FAX(210) 545-4329

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

THE LOCATION OF EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.

BMP CALCULATION SUMMARY

WATERSHED AREA = 13.41 ACRES	
RUNOFF DEPTH = 1.6 INCHES	
BASIN STORMWATER DEPTH = 4.87 FEET	
SAND FILTER AREA REQUIRED:	= 2,910 S.F.
SAND FILTER AREA PROVIDED:	= 3,150 S.F.
SEDIMENTATION AREA REQUIRED:	= 727 S.F.
SEDIMENTATION AREA PROVIDED:	= 1,225 S.F.
CAPTURE VOLUME REQUIRED:	= 35,494 C.F.
CAPTURE VOLUME PROVIDED:	= 36,801 C.F.
Q25	= 69.63 CFS

* VOLUME OF POND PROVIDED TO ACCOUNT FOR DEVELOPMENT OF UP TO 6.68 ACRES OF IMPERVIOUS COVER ON 9.27 ACRE TRACT

BURY
922 Isom Road, Suite 100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-1048

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STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED
PROFESSIONAL ENGINEER
12/01/2014

WESTPOINTE STORAGE

INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO.12244-50001

DATE : 12.01.14

DRAWN : ENW

REVISIONS:

WATER QUALITY POND

SHEET NO.

C4.0

RECEIVED
DEC 5 2014
COUNTY ENGINEER

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Westpointe Storage
Date Prepared: 12/1/2014

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	Comal	
Total project area included in plan * =	13.41	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	6.74	acres
Total post-development impervious cover fraction * =	0.50	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	6050	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 1

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	12.98	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	6.68	acres
Post-development impervious fraction within drainage basin/outfall area =	0.51	
$L_{M\ THIS\ BASIN}$ =	5996	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	8.84	acres
A_I =	6.68	acres
A_P =	2.16	acres
L_R =	6822	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 6050 lbs.

F = 0.89

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	1.60	inches
Post Development Runoff Coefficient =	0.57	
On-site Water Quality Volume =	29097	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	4.14	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	481	cubic feet
Storage for Sediment =	5916	
Total Capture Volume (required water quality volume(s) x 1.20) =	35494	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

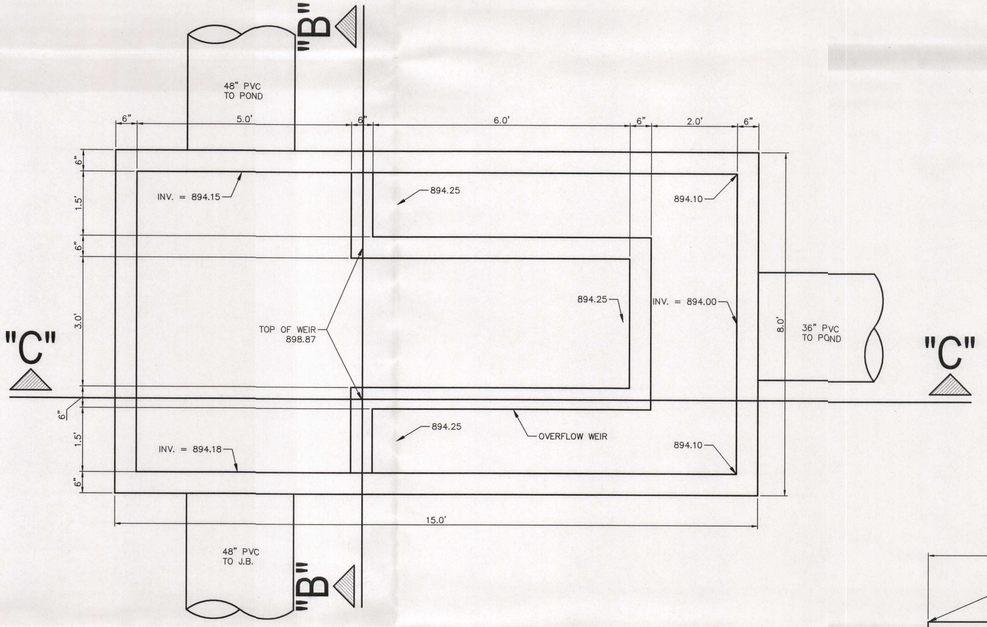
9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

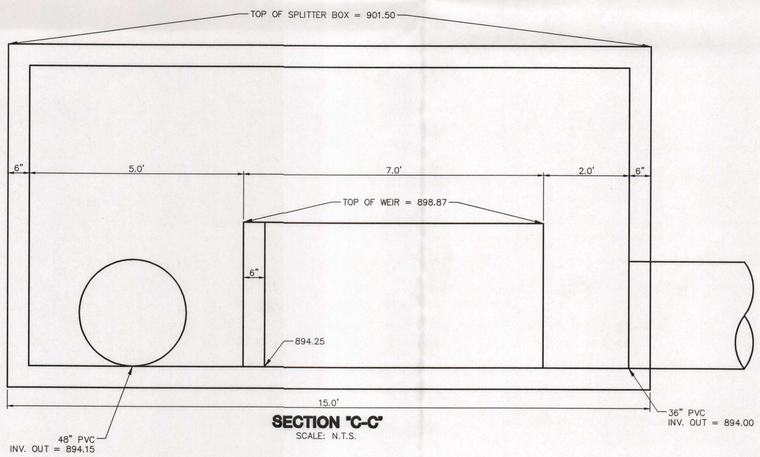
9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	35494	cubic feet	
Minimum filter basin area =	1617	square feet	
Maximum sedimentation basin area =	14549	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	3637	square feet	For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	35494	cubic feet	
Minimum filter basin area =	2910	square feet	
Maximum sedimentation basin area =	11639	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	727	square feet	For maximum water depth of 8 feet





SECTION "C-C"
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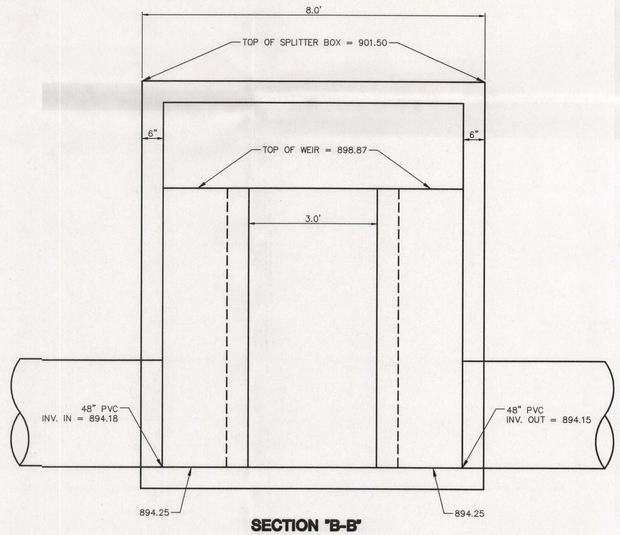

SECTION "B-B"
SCALE: N.T.S.

SPLITTER BOX DETAILS
SCALE: N.T.S.

SHARP CRESTED RECTANGULAR WEIR CALCULATION

$L_W = Q / (C * H(3/2))$

Q_{100} = 91.11 CFS
C = 3.33 WEIR COEFFICIENT
H = 1.0 FT

L_W = 18.24 FT REQUIRED
L_W = 19 FT PROVIDED

NOTE: SPLITTER BOX TO BE STRUCTURALLY DESIGNED BY LICENSED PROFESSIONAL STRUCTURAL ENGINEER.

BURY
922 Isom Road, Suite 100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-1048

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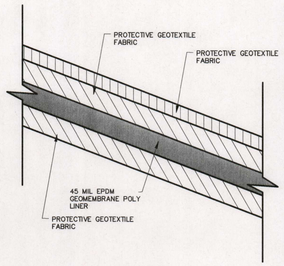
STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED
PROFESSIONAL ENGINEER
12/01/2014

WESTPOINTE STORAGE
INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO. 12244-50001
DATE : 12.01.14
DRAWN : ENW
REVISIONS:

WATER QUALITY POND DETAILS

SHEET NO.
C4.1



GEOMEMBRANE POLY LINER SPECIFICATION

- ULTRAVIOLET RESISTANT
- THICKNESS = 45 MIL MINIMUM
- JOINTS SHALL BE WATER TIGHT AT SEAMS.
- ANCHOR TO WALLS
- WATERTIGHT SEAL BETWEEN POLY LINER AND TRANSITION SURFACES.
- BEDDING MATERIAL SHALL BE SUITABLE COMPACTED MATERIAL (NOT SAND) IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
- PROTECTIVE GEOTEXTILE FABRIC TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

C4.2.1 LINER DETAIL
SCALE: N.T.S.

C4.2.2 NOT USED
SCALE: N.T.S.

GEOTEXTILE FABRIC SHALL MEET THE FOLLOWING SPECIFICATIONS:

PROPERTY	TEST METHOD	UNIT	SPECS.
MATERIAL			NONWOVEN GEOTEXTILE
UNIT WEIGHT		OZ/SQ.YD.	8 (MIN.)
FILTRATION RATE		IN/SEC	0.08 (MIN.)
GRAB STRENGTH	ASTM D-1682	LB.	400 (MIN.)
PUNCTURE STRENGTH	ASTM D-751(MOD.)	LB.	125 (MIN.)
MULLEN BURST STRENGTH	ASTM D-751	PSI.	400 (MIN.)
TENSILE STRENGTH	ASTM D-1682	LB.	300 (MIN.)
EQUIV. OPENING SIZE	US STANDARD SIEVE	NO.	80 (MIN.)

SAND BED AND GEOTEXTILE FABRIC

THE TWO LAYERS MUST BE SEPARATED FROM EACH OTHER USING SUITABLE GEOTEXTILE FABRIC MEETING THE FOLLOWING SPECIFICATIONS:

FIRST (TOP) LAYER- FINE SAND, 0.02-0.04 INCH, 18 INCH DEPTH, TEST METHOD ASTM C-33

SECOND LAYER- 1/2-2 INCH GRAVEL, AT LEAST 1 INCH DEPTH TO 2 INCH DEPTH SURROUNDING UNDERDRAIN PIPING

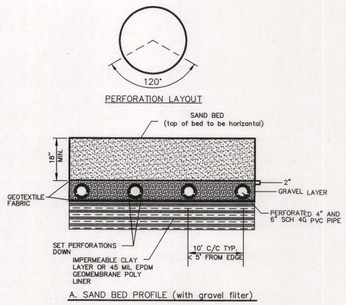
FOR SEDIMENTATION AND FILTRATION PONDS CLAY LINERS SHALL MEET THE FOLLOWING SPECIFICATIONS:

TABLET 1-7

CLAY LINER SPECIFICATION

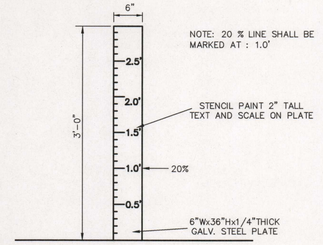
PROPERTY	TEST METHOD	UNIT	SPECS.
PERMEABILITY	ASTM D-2434	Cm/Sec	1×10^{-6}
PLASTICITY INDEX OF CLAY	ASTM D-423 & D-424	%	NOT LESS THAN 15
LIQUID LIMIT OF CLAY	ASTM D-2216	%	NOT LESS THAN 30
CLAY PARTICLES PASSING	ASTM D-422	%	NOT LESS THAN 30
CLAY COMPACTION	ASTM D-2216	%	95% OF STANDARD PROCTOR DENSITY

THE CLAY LINER SHALL HAVE A MINIMUM THICKNESS OF 12 INCHES.

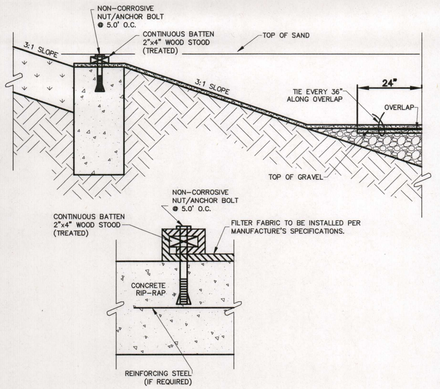


A. SAND BED PROFILE (with gravel filter)

C4.2.3 FILTRATION POND SAND BED
SCALE: N.T.S.

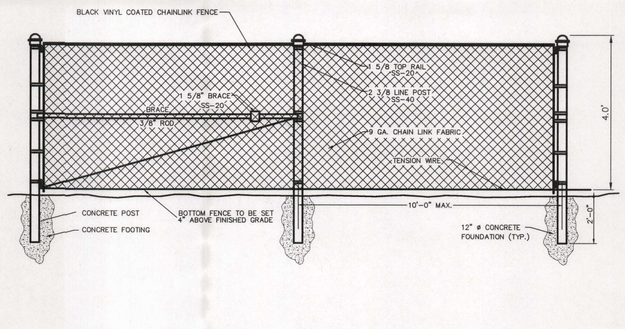


C4.2.4 SEDIMENT DEPTH MARKER
SCALE: N.T.S.

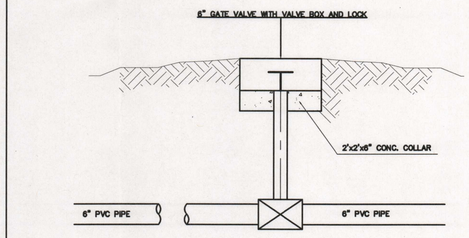


C4.2.5 FILTER FABRIC & ANCHORING DETAIL
SCALE: N.T.S.

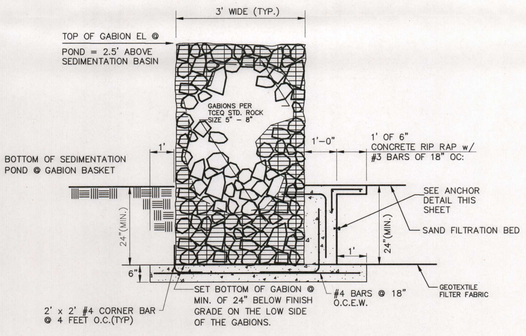
C4.2.6 NOT USED
SCALE: N.T.S.



C4.2.7 CHAIN LINK FENCE
SCALE: N.T.S.

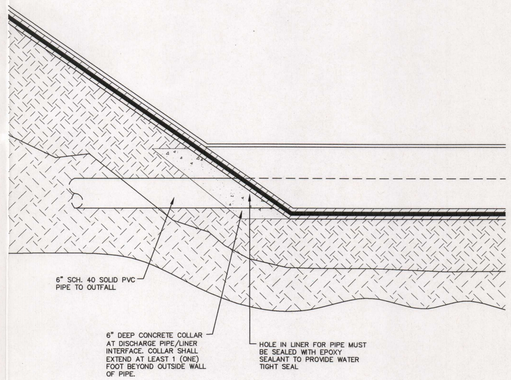


C4.2.8 6" GATE VALVE DETAIL
SCALE: N.T.S.

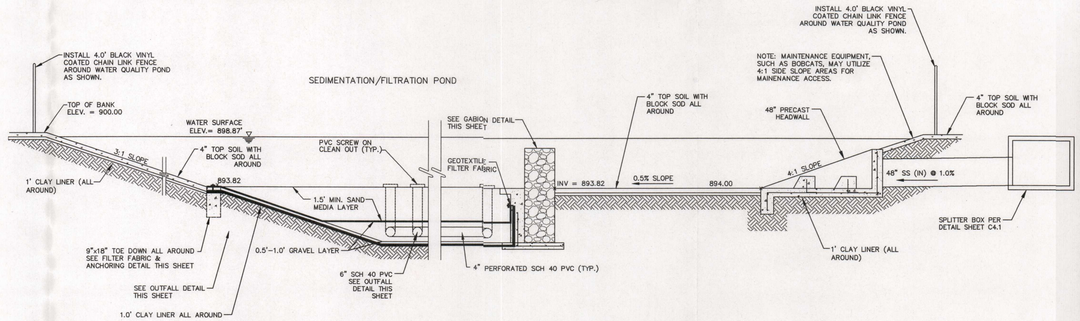


NOTE:
A REPRESENTATIVE FROM THE GEOTEXTILE FABRIC SUPPLIER SHALL BE CONTACTED REGARDING IT'S INSTALLATION AND BE ON SITE DURING INSTALLATION.

C4.2.9 GABION BASKET WALL DETAIL
SCALE: N.T.S.



C4.2.10 OUTFALL DETAIL
SCALE: N.T.S.



C4.2.11 SECTION "A-A"
SCALE: N.T.S.

BURY
922 Isom Road, Suite 100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-1048
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STATE OF TEXAS
GARY W. FREELAND
107307
LICENSED
PROFESSIONAL ENGINEER
12/01/2014

WESTPOINTE STORAGE

INDEPENDENCE DRIVE
NEW BRAUNFELS, TX 78132

PROJ. NO.12244-50001
DATE : 12.01.14
DRAWN : ENW
REVISIONS:

WATER QUALITY POND DETAILS

SHEET NO.
C4.2

ATTACHMENT G

INSPECTION, MAINTENANCE, REPAIR
AND RETROFIT PLAN

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN
FOR
WESTPOINTE VILLAGE STORAGE
NEW BRAUNFELS, TEXAS

The owner of the lot where a sedimentation/filtration basin is located is responsible for the inspection, maintenance, and repair of the water quality pond(s).

• ***First year of operation.*** The sand filter BMPs will be inspected on a *quarterly basis and after large storms for the first year of operation.*

• ***Inspections.*** BMP facilities will be inspected *at least twice a year (once during or immediately following wet weather)* to evaluate facility operation. During each inspection, erosion areas inside and downstream of the BMP will be identified and repaired or re-vegetated immediately. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) will be identified and repaired immediately. Cracks, voids and undermining will be patched/filled to prevent additional structural damage. Trees and root systems will be removed to prevent growth in cracks and joints that can cause structural damage. The inspections should be carried out with as-built pond plans in hand.

• ***Sediment Removal.*** Sediment will be removed from the inlet structure and sedimentation chamber *when sediment buildup reaches a depth of 6 inches or when the proper functioning of inlet and outlet structures is impaired. Sediment will be cleared from the inlet structure at least every year and from the sedimentation basin at least every 5 years.*

• ***Media Replacement.*** Maintenance of the filter media will be performed *when the drawdown time exceeds 48 hours.* When this occurs, the upper layer of sand will be removed and replaced with new material meeting the original specifications. Any discolored sand will also be removed and replaced. In filters that have been regularly maintained, this will be limited to the top 2 to 3 inches.

• ***Debris and Litter Removal.*** Debris and litter that accumulates near the sedimentation basin outlet device will be removed *during regular mowing operations and inspections.* (Particular attention will be paid to floating debris that can eventually clog the control device or riser.)

• ***Filter Underdrain.*** The underdrain piping network will be cleaned to remove any sediment buildup *as needed* to maintain design drawdown time.

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN
FOR
WESTPOINTE VILLAGE STORAGE
NEW BRAUNFELS, TEXAS

• ***Mowing***. Grass areas in and around sand filters will be mowed *at least twice annually* to limit vegetation height to 18 inches. Vegetation on the pond embankments will be mowed as appropriate to prevent the establishment of woody vegetation.

• ***Rock Gabion.*** Rock gabion structures, when used, will be removed from pond prior to filter media replacement, cleaned and returned to the original location after the filter media replacement is complete.

• ***Nuisance Control.*** Most public agencies surveyed indicate that control of insects, weeds, odors, and algae may be needed in some water quality ponds. Nuisance control is probably the most frequent maintenance item demanded by local residents. If the ponds are properly sized and vegetated, these problems should be rare in water quality ponds except under extremely dry weather conditions. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.). Biological friendly methods of control are preferable to chemical applications.

Non-Routine Maintenance

• ***Structural Repairs and Replacement.*** Eventually, the various inlet/outlet and riser works in the water quality basins will deteriorate and must be replaced. Some public works experts have estimated that corrugated metal pipe (CMP) has a useful life of about 25 years, while concrete barrels and risers may last from 50 to 75 years. The actual life depends on the type of soil, pH of runoff, and other factors. Polyvinyl chloride (PVC) pipe is a corrosion resistant alternative to metal and concrete pipes. Structural repair and/or replacement may be necessary for any structural objects with signs of corrosion or loss of structural integrity.

Westpointe Commercial Ltd
By Westpointe G.P. LLC

Mark L. Wauford
~~Name of Owner/Agent~~, manager

X Mark L Wauford
Signature of Owner/Agent
Manager

11-18-14
Date

ATTACHMENT H

PILOT-SCALE FIELD TESTING PLAN
(Not Applicable)

ATTACHMENT I

MEASURES FOR MINIMIZING
SURFACE STREAM CONTAMINATION
(Not Applicable)

AUTHORIZATION AND APPLICATION FORMS

Agent Authorization Form
For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I Mark L. Wauford,
Print Name

Manager,
Title - Owner/President/Other

of Westpointe, G.P., LLC, General Partner of Westpointe Commercial, LTD.,
Corporation/Partnership/Entity Name

have authorized Gary W. Freeland, P.E.
Print Name of Agent/Engineer

of Bury-SAN, Inc.
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 those submitting an application 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 preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Westpointe Commercial, LTd
By: Westpointe G.P. LLC
By: _____
Applicant's Signature
Mark L. Wanford, Manager

11/14/14
Date

THE STATE OF Virginia §
County of Chesterfield §

BEFORE ME, the undersigned authority, on this day personally appeared Mark L. Wanford 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 14th day of November, 2014.

MARIA THERESIA FULTZ
NOTARY PUBLIC
REG # 198960
MY COMMISSION EXPIRES
6/30/2017
COMMONWEALTH OF VIRGINIA

_____
NOTARY PUBLIC

Maria T. Fultz
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 6/30/17

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

NAME OF PROPOSED REGULATED ENTITY: Westpointe Village Storage
REGULATED ENTITY LOCATION: Southwest of Intersection Independence Drive and State Highway 46
NAME OF CUSTOMER: Westpointe GP, LLC
CONTACT PERSON: Gary Freeland PHONE: (210) 525-9090
(Please Print)

Customer Reference Number (if issued): CN 604362186 (nine digits)

Regulated Entity Reference Number (if issued): RN _____ (nine digits)

Austin Regional Office (3373) ☐ Hays ☐ 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 **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment.** This payment is being submitted to (Check One):

☐ **Austin Regional Office**

☐ **Mailed to TCEQ**:
TCEQ – Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ **San Antonio Regional Office**

☐ **Overnight Delivery to TCEQ**:
TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
512/239-1278

Site Location (Check All That Apply): ☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	Size		Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	N/A	Acres	$ N/A
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	N/A	Acres	$ N/A
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	9.27	Acres	$ 5,000.00
Sewage Collection System	N/A	L.F.	$ N/A
Lift Stations without sewer lines	N/A	Acres	$ N/A
Underground or Aboveground Storage Tank Facility	N/A	Tanks	$ N/A
Piping System(s)(only)	N/A	Each	$ N/A
Exception	N/A	Each	$ N/A
Extension of Time	N/A	Each	$ N/A

By: Westpointe Commercial, Ltd
By: Westpointe G.P. LLC
Mark L. Wayford
Signature Mark L. Wayford, Manager

11-14-14
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)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$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

Westpointe Commercial Ltd

Vendor No: TCEQ01 / Name: TEXA[redacted]COMMISSION ON ENVIRONMENTAL

Invoice	Ref	Inv Date	Inv Amt	Discount	Adj Amt	Amt
111314	REVIEW FEE	11/13/14	5000.00	0.00	0.00	5000.0

Acct: 10100 Check Date 11/14/14 Total 5000.00

1261

Westpointe Commercial Ltd
325 Brown Street
Petersburg, VA 23803

IBC BANK
San Antonio, TX IBC Voice - (210) 518-2525
30-1328-1140

1261

***Five Thousand & No/100 Dollars

	DATE	AMOUNT
	11/14/14	$5,000.00

PAY TO THE ORDER OF
TEXAS COMMISSION ON ENVIRONMENTAL
QUALITY
MAIL CODE 214 PO BOX 13088
AUSTIN, TX 78711-3088

Mark L Wayford
AUTHORIZED SIGNATURE

Security features. Details on back.

⑈001261⑈ ⑆114013284⑆ 2410741266⑈

Westpointe Commercial Ltd

Vendor No: TCEQ01 / Name: TEXAS COMMISSION ON ENVIRONMENTAL

1261
1261

Invoice	Ref	Inv Date	Inv Amt	Discount	Adj Amt	Amt Paid
111314	REVIEW FEE	11/13/14	5000.00	0.00	0.00	5000.00

Acct: 10100 Check Date 11/14/14 Total 5000.00

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