



WATER POLLUTION ABATEMENT PLAN

for
Sonterra Storage Annex
1439 E Sonterra Blvd.
San Antonio, Texas 78258

November 2024

TBPE #F-20752

APPLICATION COVER PAGE

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 will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **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:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- 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 denied/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 affected 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: Sonterra Storage Annex					2. Regulated Entity No.:				
3. Customer Name: Brundage Management Co.					4. Customer No.:				
5. Project Type: (Please circle/check one)	<input checked="" type="radio"/> New	Modification			Extension		Exception		
6. Plan Type: (Please circle/check one)	<input checked="" type="radio"/> WPAP	<input type="radio"/> CZP	<input type="radio"/> SCS	<input type="radio"/> UST	<input type="radio"/> AST	<input type="radio"/> EXP	<input type="radio"/> EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	<input type="radio"/> Residential		<input checked="" type="radio"/> Non-residential			8. Site (acres):		1.378	
9. Application Fee:	4,000		10. Permanent BMP(s):			4'x6' Contech Jellyfish filter			
11. SCS (Linear Ft.):	N/A		12. AST/UST (No. Tanks):			N/A			
13. County:	Bexar		14. Watershed:			Mud Creek			

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)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Barton Springs/ Edwards Aquifer <input type="checkbox"/> Hays Trinity <input type="checkbox"/> Plum Creek	<input type="checkbox"/> Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	<input type="checkbox"/> Austin <input type="checkbox"/> Buda <input type="checkbox"/> Dripping Springs <input type="checkbox"/> Kyle <input type="checkbox"/> Mountain City <input type="checkbox"/> San Marcos <input type="checkbox"/> Wimberley <input type="checkbox"/> Woodcreek	<input type="checkbox"/> Austin <input type="checkbox"/> Bee Cave <input type="checkbox"/> Pflugerville <input type="checkbox"/> Rollingwood <input type="checkbox"/> Round Rock <input type="checkbox"/> Sunset Valley <input type="checkbox"/> West Lake Hills	<input type="checkbox"/> Austin <input type="checkbox"/> Cedar Park <input type="checkbox"/> Florence <input type="checkbox"/> Georgetown <input type="checkbox"/> Jerrell <input type="checkbox"/> Leander <input type="checkbox"/> Liberty Hill <input type="checkbox"/> Pflugerville <input type="checkbox"/> Round Rock

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	<input checked="" type="checkbox"/>	—	—	—	—
Region (1 req.)	<input checked="" type="checkbox"/>	—	—	—	—
County(ies)	<input checked="" type="checkbox"/>	—	—	—	—
Groundwater Conservation District(s)	<input checked="" type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Trinity-Glen Rose	<input type="checkbox"/> Edwards Aquifer Authority	<input type="checkbox"/> Kinney	<input type="checkbox"/> EAA <input type="checkbox"/> Medina	<input type="checkbox"/> EAA <input type="checkbox"/> Uvalde
City(ies) Jurisdiction	<input type="checkbox"/> Castle Hills <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Helotes <input type="checkbox"/> Hill Country Village <input type="checkbox"/> Hollywood Park <input checked="" type="checkbox"/> San Antonio (SAWS) <input type="checkbox"/> Shavano Park	<input type="checkbox"/> Bulverde <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Garden Ridge <input type="checkbox"/> New Braunfels <input type="checkbox"/> Schertz	NA	<input type="checkbox"/> San Antonio ETJ (SAWS)	NA

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.

Chad Respondek, PE

Print Name of Customer/Authorized Agent

Chad Respondek

10/23/2024

Signature of Customer/Authorized Agent

Date

****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):

GENERAL INFORMATION

General Information Form

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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:

Print Name of Customer/Agent: Chad Respondek, PE

Date: 11/11/2024

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Sonterra Storage Annex
2. County: Bexar County
3. Stream Basin: Mud Creek
4. Groundwater Conservation District (If applicable): _____
5. Edwards Aquifer Zone:
 Recharge Zone
 Transition Zone
6. Plan Type:
 WPAP
 SCS
 Modification
 AST
 UST
 Exception Request

7. Customer (Applicant):

Contact Person: Scott Hayne
Entity: Brundage Management
Mailing Address: 254 Spencer Lane
City, State: San Antonio, TX Zip: 78201
Telephone: 210-961-7307 FAX: _____
Email Address: scott.hayne@brundagemgt.com

8. Agent/Representative (If any):

Contact Person: Chad Respondek, PE
Entity: Balanced Site Design, LLC
Mailing Address: 12950 Country Parkway, Suite 150
City, State: San Antonio, TX Zip: 78216
Telephone: 210-844-5023 FAX: _____
Email Address: chad@balancedsitedesign.com

9. Project Location:

- The project site is located inside the city limits of San Antonio.
- The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
- The project site is not located within any city's limits or ETJ.

10. 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.

1431 E Sonterra Blvd., San Antonio, TX 78258

11. **Attachment A – Road Map.** A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. **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. The map(s) clearly show:

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

13. **The TCEQ must be able to inspect the project site or the application will be returned.** 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.

Survey staking will be completed by this date: _____

14. **Attachment C – Project Description.** Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

- Area of the site
- Offsite areas
- Impervious cover
- Permanent BMP(s)
- Proposed site use
- Site history
- Previous development
- Area(s) to be demolished

15. Existing project site conditions are noted below:

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

Prohibited Activities

16. 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).
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. 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

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

- For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
 - For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
 - For a UST Facility Plan or Modification or an AST Facility Plan or Modification, 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.
19. 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)
 - San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)
20. 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.
21. 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.

Attachment C – Project Description

The proposed improvements addressed by this Water Pollution Abatement Plan consist of a 4-story, 104,700 SF self-storage facility with associated parking on a 1.378-acre site. The proposed improvements and changes will occur within Lot 3 of the Pericos Subdivision 2, as the existing parking lot will be removed and replaced with the self-storage facility. Existing conditions of the entire site indicate the site is 44% impervious. The proposed improvements to Lot 3 will result in the site becoming 59% impervious. All areas not covered by the building footprint, sidewalks, or pavement will be stabilized with sod or landscaping when construction is completed and before the removal of temporary BMPs. On-site stormwater for Lot 3 will flow north towards the existing earthen channel to the north. Prior to flowing towards the channel however, the generated runoff will be captured by a treated by a proposed CONTECH Jellyfish filtration system. The CONTECH Jellyfish filtration system captures runoff and uses permeable media in cartridge form to separate particles from the stormwater being discharged into the existing channel. CONTECH's Jellyfish filtration system is designed to effectively remove fine sand and silt-sized particles, and a high percentage of particulate-bound pollutants such as nitrogen, phosphorus, metals and hydrocarbons. Treated water will then discharge into the existing drainage channel to the north, where it will then discharge into Mud Creek.

GEOLOGIC ASSESSMENT

Geologic Assessment

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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.

Print Name of Geologist: Tomas Hernandez, Jr. P.G.

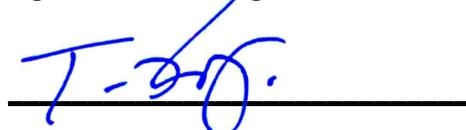
Telephone: 210.888.6100

Fax: _____

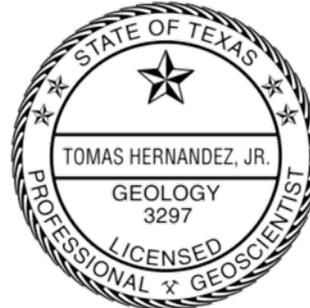
Date: 9/26/2024

Representing: TTL, Inc., TBPG Firm No 50456 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: Brundage Storage Sonterra



Project Information

1. Date(s) Geologic Assessment was performed: August 16, 2024

2. Type of Project:

WPAP
 SCS

AST
 UST

3. Location of Project:

Recharge Zone
 Transition Zone
 Contributing Zone within the Transition Zone

4. **Attachment A - Geologic Assessment Table.** Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.
5. 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.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Crawford, stony and Bexar soils, 0 to 5 percent slopes	D	40-50 inches
Eckrant very cobbly clay, 5 to 15 percent slopes	D	20 to 30 inches

Soil Name	Group*	Thickness(feet)

** 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.

6. **Attachment B – Stratigraphic Column.** A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
7. **Attachment C – Site Geology.** A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
8. **Attachment D – Site Geologic Map(s).** 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" = 30'
 Site Geologic Map Scale: 1" = 30'
 Site Soils Map Scale (if more than 1 soil type): 1" = N/A'
9. Method of collecting positional data:
 Global Positioning System (GPS) technology.

- Other method(s). Please describe method of data collection: _____
10. The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. Surface geologic units are shown and labeled on the Site Geologic Map.
12. 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.
13. The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
- There are _____ (#) 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 Chapter 76.
- There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

15. 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.

Brundage Storage Sonterra

Stratigraphic Column

Hydrogeologic Subdivision		Group, Formation, Or Member		Hydro-logic Function	Thickness (Feet)	Lithology	Field Identification	Cavern Development	Porosity/ Permeability Type	
Lower Cretaceous	II	Edwards Aquifer	Person Formation (Kep)	Cyclic and marine members, undivided	AQ	80-90	Mudstone to packstone; <i>miliolid</i> grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; crossbeds	Many subsurface; might be associated with earlier karst development	MO, BU, VUG, BP, FR, CV
	III			Leached and collapsed members, undivided	AQ	70-90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron-stained beds separated by massive limestone beds; stromatolitic limestone	Extensive lateral development; large rooms	BU, VUG, FR, BP, BR, CV
	IV			Regional dense member	CU	20-24	Dense, argillaceous mudstone	Wispy iron-oxide stains	Very few; only vertical fracture enlargement	FR, CV
	V		Kainer Formation (KeK)	Grainstone member	AQ	50-60	<i>Miliolid</i> grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	IP, IG, BU, FR, BP, CV
	VI			Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	IG, MO, VUG, FR, BR, CV
	VII			Dolomitic member	AQ	110 -130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, <i>Toucasia</i> abundant	Caves related to structure or bedding planes	IP, IC, IG, MO, BU, VUG, FR, BP, CV
	VIII			Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone mudstone and <i>miliolid</i> grainstone	Massive, nodular and mottled, <i>Exogyra texana</i>	Large lateral caves at surface; a few caves near Cibolo Creek	IP, MO, BU, BP, FR, CV
	Lower confining unit			Upper member of Glen Rose Limestone (Kgru)	CU; evaporite beds Upper Trinity AQ	350-500	Yellowish-tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	MO, BR, BO, FR, CV

[Period, Epoch, group, formation, members, and lithology modified from Whitney (1952), Imlay (1954), Lozo and Stricklin (1956), Stricklin and others (1971), Rose (1972), Stricklin and Smith (1973), Amsbury (1974), Inden (1974), Perkins (1974), Clark and others (2009), Wierman and others (2010), Clark and others (2013, 2014), Blome and Clark (2014), U.S. Geological Survey (2016); *Orbitolina minuta* (Douglas, 1960), *Orbitolina texana* (Roemer, 1852); aquifers from Maclay and Small (1976), Ashworth (1983); thickness from outcrop, Clark and others (2009), Wierman and others (2010), Clark and others (2014); hydrogeologic function modified from outcrop, Clark and others (2009), Wierman and others (2010), Clark and others (2013, 2014), Clark and Morris (2015); porosity types modified from Choquette and Pray (1970). Fabric selective: IP, interparticle porosity; IG, intergranular porosity; IC, intercrystalline porosity; SH, shelter porosity; MO, moldic porosity; BU, burrowed porosity; FE, fenestral; BP, bedding plane porosity. Not fabric selective: FR, fracture porosity; CH, channel porosity; BR, breccia; VUG, vug porosity; CV, cave porosity. *Previously published identification for the hydrostratigraphic unit (Clark, 2003, 2004; Blome and Clark, 2014); **no further subdivision; BRBs, black rotund bodies]

Note: Highlighted Cell row is the uppermost stratigraphic unit at the Site.

Brundage Storage Sonterra

Site Geology

The predominant trend for the Site is approximately N50° E based on an average of the trends of faults within the surrounding area and from published maps (Stein & Ozuna 1995). The overall potential for fluid migration to the Edwards Aquifer on the Site is low.

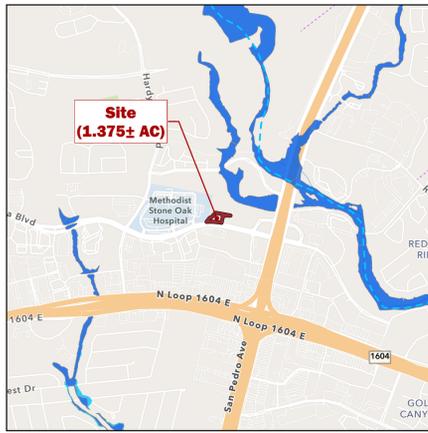
Fill material has been placed on-site to manipulate stormflow, and portions of the site are now improved with asphalt parking areas; therefore, no bedrock was encountered during the field survey. Based on literature research, the Project Site is located within the leached and collapsed member (Kplc) of the Person Formation. The Kplc is characterized as Crystalline limestone, mudstone to grainstone, chert, and collapsed breccia. In general, karst development in the Kplc is characterized by extensive lateral development and large rooms. No caves or sinkholes were identified during the field survey.

No features were identified during the geologic map review for the Site and no features were identified during the pedestrian field survey conducted on August 16, 2024.

Brundage Storage Sonterra

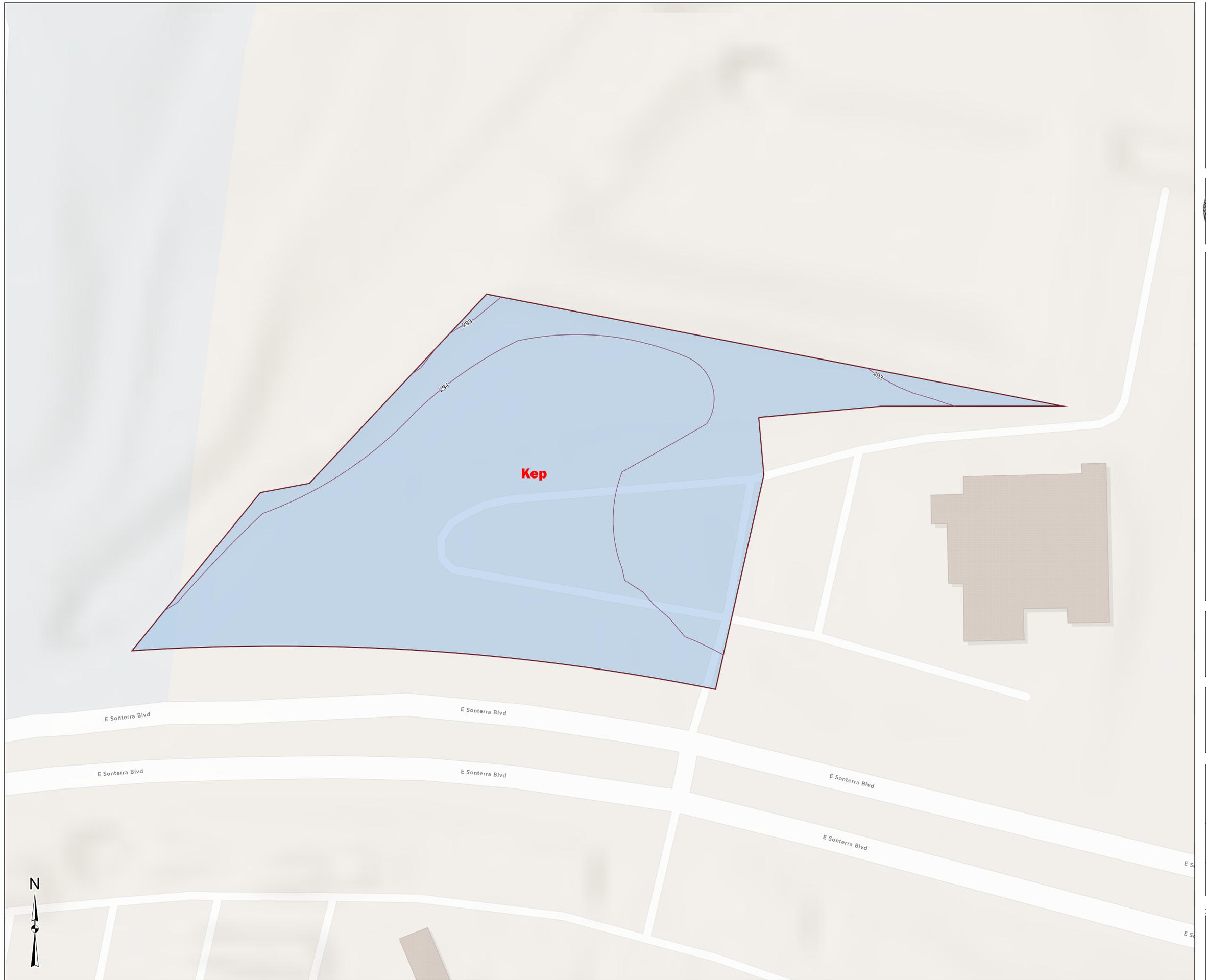
References

- Barnes, V.L., 1983, Geologic Atlas of Texas, Austin Sheet, Bureau of Economic Geology, The University of Texas at Austin, Texas.
- Collins, E.W., 1993, Geologic map of the Bulverde quadrangle, Texas, Bureau of Economic Geology, University of Texas at Austin.
- Clark, A.K., Golab, J.A., and Morris, R.R., 2016, Geologic framework and hydrostratigraphy of the Edwards and Trinity aquifers within northern Bexar and Comal Counties, Texas: U.S. Geological Survey Scientific Investigations Map 3366, 1 sheet, scale 1:24,000, pamphlet, <https://doi.org/10.3133/sim3366>.
- Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, Community Panel Number 48029C0255G, dated September 29, 2010.
- Stein, W.G., and Ozuna, G.B., 1995, Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas: U.S. Geological Survey, Water- Resources Investigations 95-4030, 8 pp., 2 figs.
- Texas Commission on Environmental Quality (TCEQ), Instructions to Geologists, TCEQ-0585 Instructions, revised October 1, 2004.
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Web Soil Survey, Soil Survey of Bexar County, Texas.
- U.S. Geological Survey, 7.5-Minute Series Topographic Quadrangle, Longhorn, Texas, 2022



LEGEND

- Intermittent Streams
- IF - Inferred Fault
- Person Formation (Kep)**
- Leached and collapsed Member
- 0.2% Annual Chance Flood Hazard
- 1% Annual Chance Flood Hazard
- Site Boundary (1.375 AC)



GEOLOGIC REFERENCES:
 CLARK, A.K., GOLAB, J.A., AND MORRIS, R.R., 2016, GEOLOGIC FRAMEWORK AND HYDROSTRATIGRAPHY OF THE EDWARDS AND TRINITY AQUIFERS WITHIN NORTHERN BEXAR AND COMAL COUNTIES, TEXAS; U.S. GEOLOGICAL SURVEY SCIENTIFIC INVESTIGATIONS MAP 3366, 1 SHEET, SCALE 1:24,000, PAMPHLET, [HTTPS://DOI.ORG/10.3133/SIM3366](https://doi.org/10.3133/SIM3366)

GEOLOGIC MAP OF NEW BRAUNFELS, TEXAS, 30 X 60 MINUTE QUADRANGLE, 2000

GEOLOGIC MAP OF THE EDWARDS AQUIFER RECHARGE ZONE, SOUTH-CENTRAL TEXAS, 2005

FLOOD MAP REFERENCE:
 FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 48029C0255G DATED SEPTEMBER 29, 2010, BEXAR COUNTY

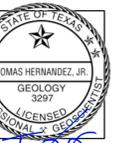
ZONE 'X': AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.



Graphic Scale
(feet)

1" = 30 Feet

Representative Fraction: 1:360



9/26/2024

FIGURE 1: SITE GEOLOGIC MAP
 BRUNDAGE STORAGE SONTERRA
 1439 E SONTERRA BLVD
 SAN ANTONIO, TEXAS 78268

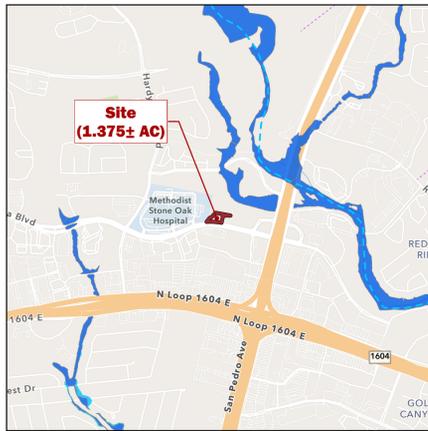
Project No: 24-09-02247.00
 Scale: 1" = 50'
 Date: 9/5/2024

Project Manager:	AM
Drawn By:	EWS
Checked By:	AM
Approved By:	AM

Revision No.	Revision Date	Comments

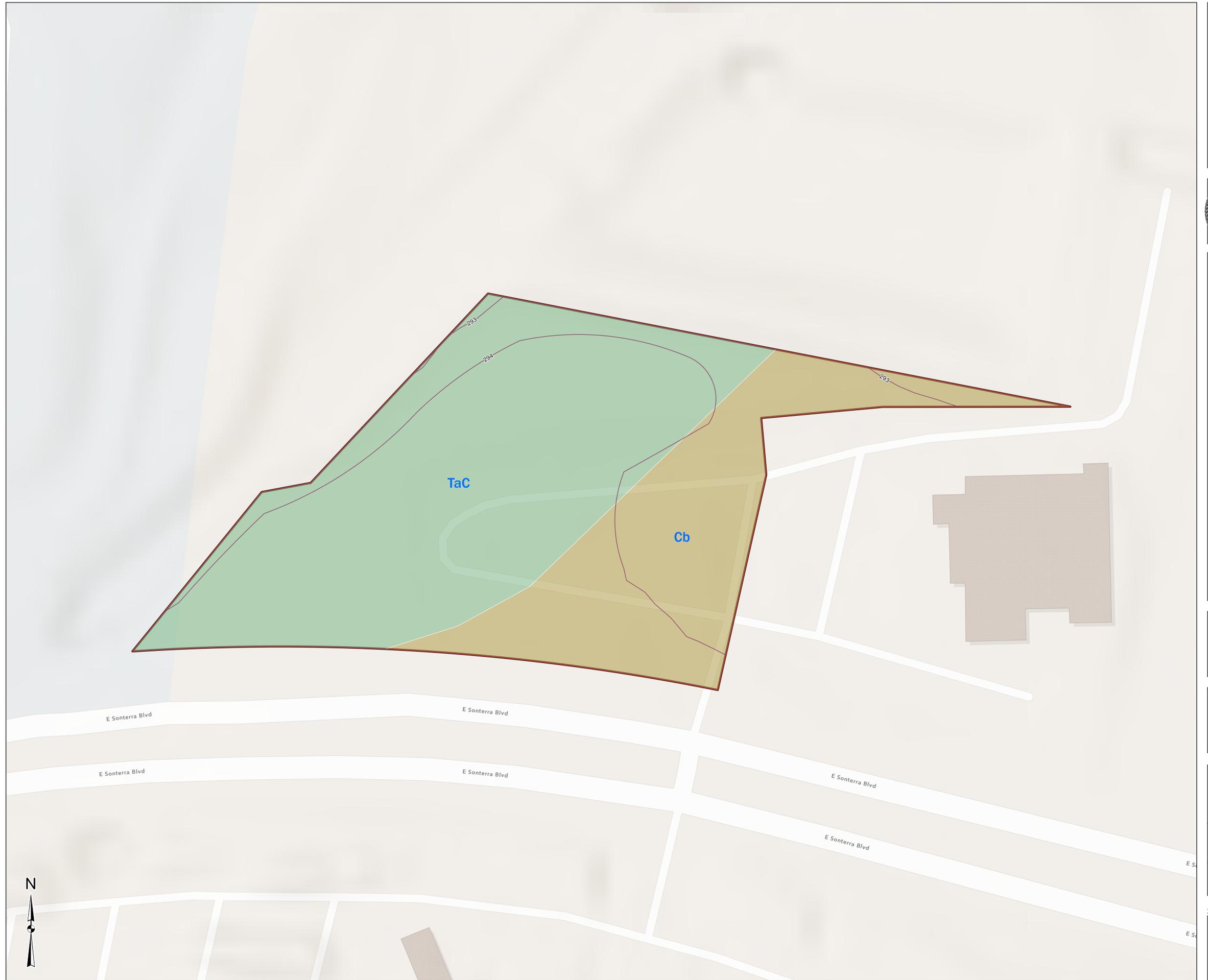
ATTACHMENT





LEGEND

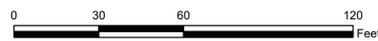
- TaC - Eckrant very cobbly clay, 5 to 15 percent slopes
- Cb - Crawford, stony and Bexar soils, 0 to 5 percent slopes
- Site Boundry (1.375 AC)



SOILS REFERENCE:
USDA Natural Resources Conservation Service

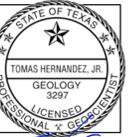
FLOOD MAP REFERENCE:
FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE
RATE MAP (FIRM) 48029C0140G DATED
SEPTEMBER 29, 2010, BEXAR COUNTY

ZONE 'X': AREAS DETERMINED TO BE OUT SIDE THE 0.2% ANNUAL CHANGE
FLOODPLAIN.



Graphic Scale
(feet)

1" = 30 Feet
Representative Fraction: 1:360



9/26/2024

FIGURE 2: SITE SOILS MAP
BRUNDAGE STORAGE SONTERRA
1439 E SONTERRA BLVD
SAN ANTONIO, TEXAS 78268

Project No: 24-09-022A7.00
Scale: 1" = 50'
Date: 9/5/2024

Project Manager:	AM
Drawn By:	EWS
Checked By:	AM
Approved By:	AM

Revision No.	Revision Date	Comments

ATTACHMENT

D

WATER POLLUTION ABATEMENT PLAN APPLICATION

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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:

Print Name of Customer/Agent: Chad Respondek, PE

Date: 10/23/2024

Signature of Customer/Agent:



Regulated Entity Name: Sonterra Storage Annex

Regulated Entity Information

1. The type of project is:

- Residential: Number of Lots: _____
- Residential: Number of Living Unit Equivalents: _____
- Commercial
- Industrial
- Other: _____

2. Total site acreage (size of property): 1.378 ac.

3. Estimated projected population: N/A

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	26,184	÷ 43,560 =	0.60
Parking	9,574	÷ 43,560 =	0.22
Other paved surfaces	0	÷ 43,560 =	0.00
Total Impervious Cover	35758	÷ 43,560 =	0.82

Total Impervious Cover 0.82 ÷ **Total Acreage** 1.378 X 100 = 60 % Impervious Cover

5. **Attachment A - Factors Affecting Surface Water Quality.** A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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: _____

9. Length of Right of Way (R.O.W.): _____ feet.

Width of R.O.W.: _____ feet.

L x W = _____ Ft² ÷ 43,560 Ft²/Acre = _____ acres.

10. Length of pavement area: _____ feet.

Width of pavement area: _____ feet.

L x W = _____ Ft² ÷ 43,560 Ft²/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. **Attachment B - Volume and Character of Stormwater.** A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on the 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:

<u>N/A</u> % Domestic	<u>N/A</u> Gallons/day
<u>N/A</u> % Industrial	<u>N/A</u> Gallons/day
<u>100</u> % Commingled	<u>1,000</u> Gallons/day
TOTAL gallons/day <u>1,000</u>	

15. Wastewater will be disposed of by:

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 from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

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.

Sewage Collection System (Sewer Lines):

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.

The SCS was previously submitted on _____.

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 (name) Treatment Plant. The treatment facility is:

Existing.

Proposed.

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

Site Plan Requirements

Items 17 – 28 must be included on the Site Plan.

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

Site Plan Scale: 1" = 30 '.

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.

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): FEMA DFIRM #48029C0255G effective 09/29/2010

19. The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.

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

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

There are _____ (#) 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.

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:

All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.

No sensitive geologic or manmade features were identified in the Geologic Assessment.

Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.

- 22. The drainage patterns and approximate slopes anticipated after major grading activities.
- 23. Areas of soil disturbance and areas which will not be disturbed.
- 24. Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
- 25. Locations where soil stabilization practices are expected to occur.
- 26. Surface waters (including wetlands).
 N/A
- 27. Locations where stormwater discharges to surface water or sensitive features are to occur.
 There will be no discharges to surface water or sensitive features.
- 28. Legal boundaries of the site are shown.

Administrative Information

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

Attachment A – Factors Affecting Surface Water Quality

The materials listed below are anticipated to be present on-site during construction and as such may present a potential pollutant source: (This is not an all-inclusive list).

1. Concrete/Masonry
2. Metal studs, Metal reinforcing bars, etc.
3. Tar
4. Fertilizers
5. Petroleum based products
6. Cleaning solvents/Detergents
7. Wood

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, including the following:

1. An effort shall be made to store only enough product required to complete the work as so defined in the approved construction documents.
2. All materials stored on-site shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
3. Products should be kept in their original containers with the original manufacturer's label.
4. Manufactures' recommendations for proper use and disposal shall be followed.
5. Substances shall not be mixed with one another unless recommended by the manufacturer.
6. Whenever possible, all of a product shall be used for disposing of its respective container.
7. The site superintendent should inspect daily to ensure proper use and disposal of on-site materials.

Attachment B – Volume and Character of Stormwater

The entire 1.378-acre site is located within the Mud Creek Watershed. Under existing drainage conditions, the onsite stormwater sheet flows to the existing filtration basin to the northeast corner of the property. The stormwater is then treated and discharged to the north where it eventually outfalls into the floodplain. A Stormwater Management Plan was prepared by Briones Consulting & Engineering in June 2006 for the Pericos Subdivision in San Antonio, Texas. However, we have updated the calculated runoff volumes to Atlas-14 and to reflect the larger acreage as the tract to the north of the original 2.36-acre lot has now been incorporated into the development.

The rational method was used to determine the 25-year and 100-year storm events for the existing and proposed conditions. The coefficients and intensities for the calculations were found in the San Antonio Drainage Manual. The proposed improvements are not expected to produce a significant adverse impact to other properties, habitable structures, or drainage infrastructure to a point 2,000 feet downstream.

Existing Conditions:

Table 1: Existing Conditions							
Drainage Area	Drainage Area (ACRES)	C	Q (CFS)				
			1-YR	2-YR	5-YR	25-YR	100-YR
1	0.76	0.48	1.94	2.31	2.89	4.05	5.11
2	0.62	0.87	2.88	3.41	4.27	5.99	7.55

Proposed Conditions:

Table 2: Proposed Conditions							
Drainage Area	Drainage Area (ACRES)	C	Q (CFS)				
			1-YR	2-YR	5-YR	25-YR	100-YR
1	0.05	0.53	0.14	0.17	0.21	0.30	0.37
2	0.69	0.77	2.84	3.36	4.22	5.92	7.44
3	0.64	0.76	2.60	3.08	3.86	5.42	6.82

TEMPORARY STORMWATER SECTION

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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:

Print Name of Customer/Agent: Chad Respondek, PE

Date: 11/11/2024

Signature of Customer/Agent:



Regulated Entity Name: Sonterra Storage Annex

Project Information

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:

The following fuels and/or hazardous substances will be stored on the site: _____

These fuels and/or hazardous substances will be stored in:

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

- 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.
- 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.
- Fuels and hazardous substances will not be stored on the site.
- 2. **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
- 3. 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. **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

- 5. **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 attached.
 - For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.
 - For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- 6. 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: Dry Comal 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. **Attachment D – Temporary Best Management Practices and Measures.** 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 is attached:

- 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.
 - 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.
 - A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
 - 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.
- Attachment E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
 - There will be no temporary sealing of naturally-occurring sensitive features on the site.
9. **Attachment F - Structural Practices.** A description of 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 is attached. Placement of structural practices in floodplains has been avoided.
10. **Attachment G - Drainage Area Map.** A drainage area map supporting the following requirements is attached:
- For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
 - 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.
 - 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.
 - 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.

- There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.
11. **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 have 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 attached.
- N/A
12. **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
13. 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. 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. 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. 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. **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.

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

Administrative Information

20. All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
21. 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. 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.

Attachment A - Spill Response Actions

In the event of an accidental leak or spill:

- Spill must be contained and cleaned up immediately.
- Spills will not be merely buried or washed with water.
- Contractor shall take action to contain spill. Contractor may use sand or other absorbent material stockpiled on site to absorb spill. Absorbent material should be spread over the spill area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When the analysis results are known the contaminated soils and cleanup materials will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify them in the event of a significant hazardous/reportable quantity spill. Additional notifications as required by the type and amount of spill will be conducted by owner or owner's representative.

In the event of an accidental significant or hazardous spill:

- The contractor will be required to report significant or hazardous spills in reportable quantities to:
 - Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) 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.
 - For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.

- Notification should first be made by telephone and followed up with a written report. 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.
- Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.
- Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. Contractor shall review this section.

Attachment B – Potential Sources of Contamination

Other potential sources of contamination during construction include:

- | | | |
|-----------------------------|---|---|
| <i>Potential Source</i> | • | <i>Asphalt products used on this project.</i> |
| <i>Preventative Measure</i> | • | <i>After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.</i> |
| <i>Potential Source</i> | • | <i>Oil, grease, fuel and hydraulic fluid Contamination from construction equipment and vehicle dripping.</i> |
| <i>Preventative Measure</i> | • | <i>Vehicle maintenance when possible will be performed within the construction staging area.</i> |
| | • | <i>Construction vehicles and equipment shall be checked regularly for leaks and required immediately.</i> |
| <i>Potential Source</i> | • | <i>Accidental leaks or spills of oil, petroleum products and substances listed under 40 CFR parts 110, 117, and 302 used or stored temporarily on site.</i> |
| <i>Preventative Measure</i> | • | <i>Contractor to incorporate into regular safety meetings, a discussion of spill prevention and appropriate disposal procedures.</i> |
| | • | <i>Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures.</i> |
| | • | <i>Hazardous materials and wastes shall be stored in covered containers and protected from vandalism.</i> |
| | • | <i>A stockpile of spill cleanup materials shall be stored on site where it will be readily accessible.</i> |
| <i>Potential Source</i> | • | <i>Miscellaneous trash and litter from construction workers and material wrappings.</i> |
| <i>Preventive Measure</i> | • | <i>Trash containers will be placed throughout the site to encourage proper trash disposal.</i> |
| <i>Potential Source</i> | • | <i>Construction debris.</i> |
| <i>Preventive Measure</i> | • | <i>Construction debris will be monitored daily</i> |

- by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis.*
- Potential Source*
- *Spills/Overflow of waste from portable toilets*
- Preventative Measure*
- *Portable toilets will be placed away from high traffic vehicular areas and storm drain inlets.*
 - *Portable toilets will be placed on a level ground surface.*
 - *Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.*

Attachment C – Sequence of Major Activities

The Sequence of major activities which disturb soil during construction on this site will be divided into two stages. The first is site preparation that will include installation of TBMPs, clearing and grubbing of vegetation where applicable. This will disturb approximately 1.378-acres. The second is construction that will include construction of the building with associated surface parking, new pavement area, landscaping and site cleanup. This will disturb approximately 1.378-acres.

Attachment D – Temporary Best Management Practices and Measures

- 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.

Upgradient water will cross the project site from the undeveloped property to the north. Upgradient water will be intercepted through stormdrains and routed to the proposed water quality basins.

- 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.

Site preparation, which is the initiation of all activity on the project, will disturb the largest amount of soil. Therefore, before any of this work can begin, the clearing and grading contractor will be responsible for the installation of all on-site control measures. The methodology for pollution prevention of on-site stormwater will include: (1) erection of silt fences, or sediment control rolls, along the downgradient boundary of construction activities for temporary erosion and sedimentation controls, (2) installation of rock berms with silt fencing downgradient from areas of concentrated stormwater flow for temporary erosion control, (3) installation of gravel bags and inlet protection and downgradient inlets, (4) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, and (5) installation of construction staging area(s).

Prior to the initiation of construction, all previously installed control measures will be repaired or reestablished for their designed or intended purpose. This work, which is the remainder of all activity on the project, may also disturb additional soil. The construction contractor will be responsible for the installation of all remaining on-site control measures that includes installation of the concrete truck washout pit(s), as construction phasing warrants.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.

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

There were no naturally-occurring sensitive features observed on the site and no surface streams on, or adjacent, to the project limits. All Temporary BMPs utilized are adequate for the drainage areas served.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended soils to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.

- 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.

There were no naturally-occurring sensitive features observed on the site and no surface streams on, or adjacent, to the project limits. All Temporary BMPs utilized are adequate for the drainage areas served.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.

Attachment F – Structural Practices

The following structural measures will be installed prior to the initiation of site preparation activities:

- Erection of silt fences, or sediment control rolls, along the downgradient boundary of construction activities and rock berms with silt fence for secondary protection, as shown on Sheet C-2.0.
- Installation of inlet protection and gravel filter bags, at downgradient inlets of construction activities, as located on Sheet C-2.0.
- Installation of stabilized construction entrance/exit(s) and construction staging area(s), as located Sheet C-2.0.

The following structural measures will be installed at the initiation of construction activities or as appropriate based on the construction sequencing:

- Installation of concrete truck washout pit(s), as required and shown on Sheet C-2.0.

Attachment G – Drainage Area Map

No more than ten (10) acres will be disturbed within a common drainage area at one time as construction of civil infrastructure (utilities, parking, drainage, etc.) will precede building construction. The site is comprised of one drainage area. All TBMPs utilized are adequate for the drainage area served.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

No interim on-site stabilization measures, which are continuous, will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest period of time and maximizing use of natural vegetation. As soon as practical, all disturbed soil will be stabilized as per project specifications in accordance with pages 1-35 to 1-60 of TCEQ's Technical Guidance Manual (TGM) RG-348 (2005). Mulching, netting, erosion blankets and seeding are acceptable.

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 fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within twenty-one (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 reasonably arid conditions, stabilization measures must be initiated as soon as practicable. Stabilization measures in this instance shall comply with temporary stabilization as defined in TXR150000 or as defined otherwise in the landscape plans where applicable.

Inspection Report

Prevention Pollution Measure	Inspected in Compliance (Y/N)	Corrective Action Required	
		Description (use additional sheet if necessary)	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.

PERMANENT STORMWATER SECTION

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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:

Print Name of Customer/Agent: Chad Respondek, PE

Date: 11/11/2024

Signature of Customer/Agent



Regulated Entity Name: Sonterra Storage Annex

Permanent Best Management Practices (BMPs)

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

- Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
 N/A
- 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.
 The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____

N/A

3. Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

N/A

4. 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.

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

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

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

5. 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.

Attachment A - 20% or Less Impervious Cover Waiver. The 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 attached.

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

The site will not be used for multi-family residential developments, schools, or small business sites.

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

- A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
 - No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
 - 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, and an explanation is attached.
7. **Attachment C - BMPs for On-site Stormwater.**
- A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
 - 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, and an explanation is attached.
8. **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 attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.
- N/A
9. 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.
- The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.
 - Attachment E - Request to Seal Features.** A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.
10. **Attachment F - Construction Plans.** All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:
- Design calculations (TSS removal calculations)
 - TCEQ construction notes
 - All geologic features
 - All proposed structural BMP(s) plans and specifications
- N/A

11. **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:
- Prepared and certified by the engineer designing the permanent BMPs and measures
 - Signed by the owner or responsible party
 - Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
 - A discussion of record keeping procedures
- N/A
12. **Attachment H - Pilot-Scale Field Testing Plan.** Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
- N/A
13. **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 attached. 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.
- N/A

Responsibility for Maintenance of Permanent BMP(s)

Responsibility for maintenance of best management practices and measures after construction is complete.

14. The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.
- N/A
15. A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.
- N/A

Attachment C – BMPs for On-site Stormwater

1. 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 attached. On-site stormwater will sheet flow over concrete pavement where it will be captured by the stormwater system onsite. Once captured, all stormwaters will be directed towards the CONTECH Jellyfish filtration system that will treat the stormwater before discharging into the adjacent floodway. CONTECH's Jellyfish filtration system is designed to effectively remove fine sand and silt-sized particles, and a high percentage of particulate-bound pollutants such as nitrogen, phosphorus, metals, and hydrocarbons. Treated water will then eventually discharge into the Comal River.

Attachment D – BMPs for Surface Streams

2. A description of the BMPs and measures that prevent pollutants from either entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed. The proposed site does not have any surface streams nor does it abut any surface stream. Site runoff will be treated prior to release into Comal River by the use of the CONTECH Jellyfish filtration system.

Attachment G – Inspection, Maintenance, Repair and Retrofit Plan

Inspection and Maintenance Overview:

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm events.

Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present.
- Observe if there is any physical damage to the deck or cartridge lids.
- Observe the amount of debris in the Maintenance Access Wall (MAW) or inlet bay for vault system.

Maintenance activities include:

- Removal of oil, floatable trash, and debris.
- Removal of collected sediments.
- Rinsing and re-installing the filter cartridges.
- Replace filter cartridge tentacles, as needed.

Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; or per the approved project stormwater quality documents (if applicable), whichever is more frequent.

1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
2. Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
3. Inspection is recommended after each major storm event.
4. Inspection is required immediately after an upstream oil, fuel, or other chemical spill.

Inspection Procedure

The following procedure is recommended when performing inspections:

1. Provide traffic control measures, as necessary.

2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
3. Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
4. Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
5. Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.

Dry weather inspections

- Inspect the cartridge deck for standing water, and/or sediment on the deck.
- No standing water under normal operating conditions.
- Standing water inside the backwash pool, but not outside the backwash pool indicates, that the filter cartridges need to be rinsed.
- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment ($\geq 1/16''$) accumulated on the deck surface should be removed.

Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the drain down cartridges (i.e., cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the drain down cartridges and each of the hi-flo cartridges (i.e., cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the following:

1. Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
2. Floatable trash, debris, and oil removal.
3. Deck cleaned and free from sediment.
4. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.

- 5. Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
- 6. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
- 7. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

Brundage Management Company

Name of Owner



Signature of Owner

10-4-24

Date



Chad Respondek, P.E.

Balanced Site Design LLC. TBPE F-20752



Signature/Seal of Professional Engineer

09/26/2024

Date

The Professional Engineer is signing as the preparer of the document. The owner/agent is signing as the responsible party to ensure that the inspection, maintenance, repair, and retrofit plan items mentioned above will be compiled with per the regulations of TCEQ.



Jellyfish[®] Filter Maintenance Guide





JELLYFISH® FILTER INSPECTION & MAINTENANCE GUIDE

Jellyfish units are often just one of many structures in a more comprehensive stormwater drainage and treatment system.

In order for maintenance of the Jellyfish filter to be successful, it is imperative that all other components be properly maintained. The maintenance and repair of upstream facilities should be carried out prior to Jellyfish maintenance activities.

In addition to considering upstream facilities, it is also important to correct any problems identified in the drainage area. Drainage area concerns may include: erosion problems, heavy oil loading, and discharges of inappropriate materials.

TABLE OF CONTENTS

Inspection and Maintenance Overview	3
Inspection Procedure.....	3
Maintenance Procedure.....	4
Cartridge Assembly & Cleaning.....	5
Inspection Process	7

1.0 Inspection and Maintenance Overview

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

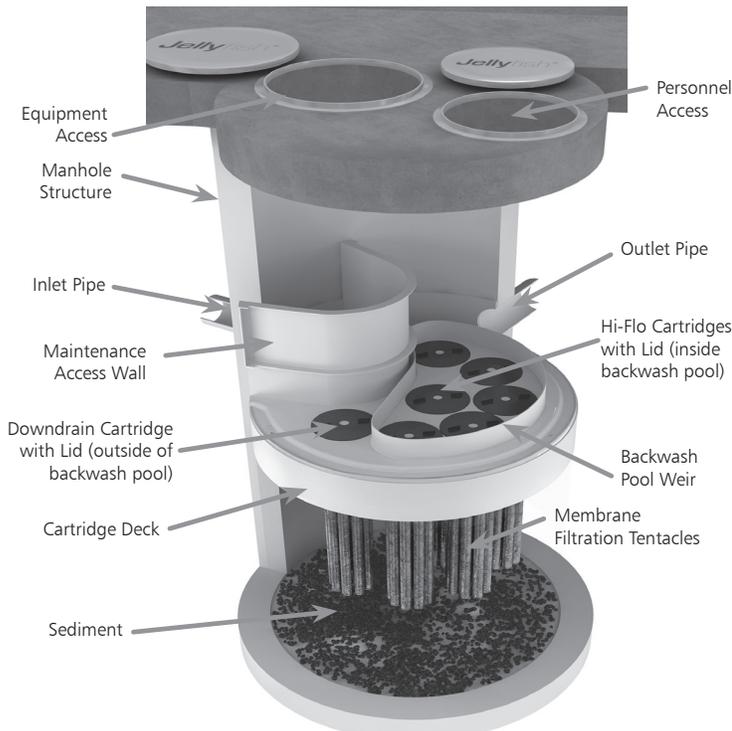
Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm events.

Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present
- Observe if there is any physical damage to the deck or cartridge lids
- Observe the amount of debris in the Maintenance Access Wall (MAW) or inlet bay for vault systems

Maintenance activities include:

- Removal of oil, floatable trash and debris
- Removal of collected sediments
- Rinsing and re-installing the filter cartridges
- Replace filter cartridge tentacles, as needed



Note: Separator Skirt not shown

2.0 Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; *or per the approved project stormwater quality documents (if applicable), whichever is more frequent.*

1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
2. Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
3. Inspection is recommended after each major storm event.
4. Inspection is required immediately after an upstream oil, fuel or other chemical spill.

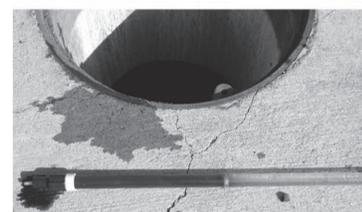
3.0 Inspection Procedure

The following procedure is recommended when performing inspections:

1. Provide traffic control measures as necessary.
2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
3. Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
4. Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
5. Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.

3.1 Dry weather inspections

- Inspect the cartridge deck for standing water, and/or sediment on the deck.
- No standing water under normal operating conditions.
- Standing water inside the backwash pool, but not outside the backwash pool indicates, that the filter cartridges need to be rinsed.



Inspection Utilizing Sediment Probe

- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment ($\geq 1/16''$) accumulated on the deck surface should be removed.

3.2 Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

4.0 Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the following:

1. Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
2. Floatable trash, debris, and oil removal.
3. Deck cleaned and free from sediment.
4. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
5. Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
6. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
7. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

5.0 Maintenance Procedure

The following procedures are recommended when maintaining the Jellyfish Filter:

1. Provide traffic control measures as necessary.
2. Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures.
Caution: Dropping objects onto the cartridge deck may cause damage.

3. Perform Inspection Procedure prior to maintenance activity.
4. To access the cartridge deck for filter cartridge service, descend into the structure and step directly onto the deck. Caution: Do not step onto the maintenance access wall (MAW) or backwash pool weir, as damage may result. Note that the cartridge deck may be slippery.
5. Maximum weight of maintenance crew and equipment on the cartridge deck not to exceed 450 lbs.

5.1 Filter Cartridge Removal

1. Remove a cartridge lid.
2. Remove cartridges from the deck using the lifting loops in the cartridge head plate. Rope or a lifting device (available from Contech) should be used. **Caution: Should a snag occur, do not force the cartridge upward as damage to the tentacles may result. Wet cartridges typically weigh between 100 and 125 lbs.**
3. Replace and secure the cartridge lid on the exposed empty receptacle as a safety precaution. Contech does not recommend exposing more than one empty cartridge receptacle at a time.

5.2 Filter Cartridge Rinsing

1. Remove all 11 tentacles from the cartridge head plate. Take care not to lose or damage the O-ring seal as well as the plastic threaded nut and connector.



Cartridge Removal & Lifting Device



2. Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
3. Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. **Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane.**

4. Collected rinse water is typically removed by vacuum hose.
5. Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

5.3 Sediment and Floatables Extraction

1. Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
2. Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.



Vacuuming Sump Through MAW

3. Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
4. Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or inlet bay.
5. Remove the sediment from the bottom of the unit through the MAW or inlet bay opening.



Vacuuming Sump Through MAW

6. For larger diameter Jellyfish Filter manholes (≥ 8 -ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the receptacle.

5.4 Filter Cartridge Reinstallation and Replacement

1. Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and debris.
2. Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. **Caution: Do not force the cartridge downward; damage may occur.**
3. Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
4. If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

5.5 Chemical Spills

Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response agency and contact Contech.

5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

Jellyfish Filter Components & Filter Cartridge Assembly and Installation

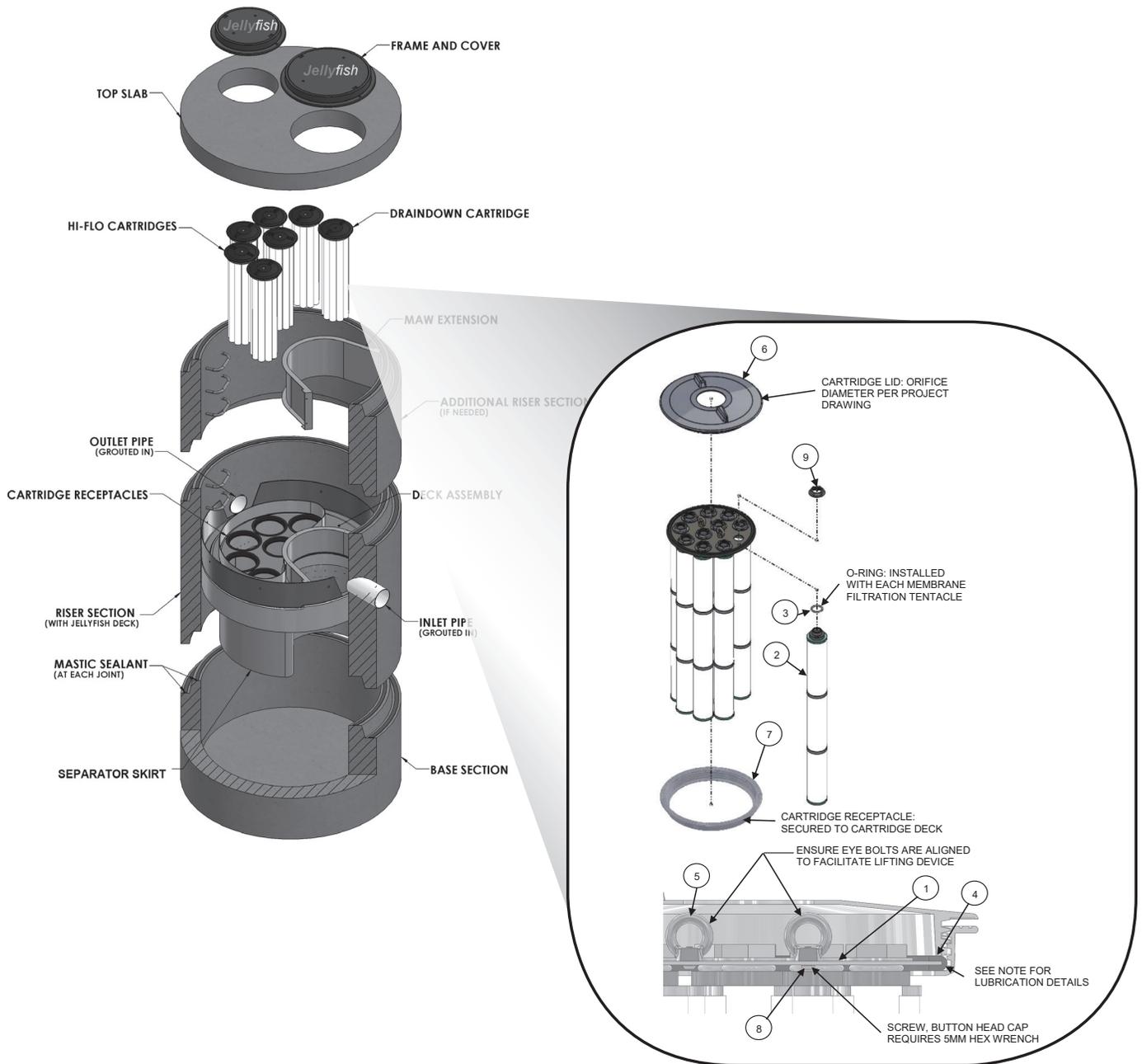


TABLE 1: BOM

ITEM NO.	DESCRIPTION
1	JF HEAD PLATE
2	JF TENTACLE
3	JF O-RING
4	JF HEAD PLATE GASKET
5	JF CARTRIDGE EYELET
6	JF 14IN COVER
7	JF RECEPTACLE
8	BUTTON HEAD CAP SCREW M6X14MM SS
9	JF CARTRIDGE NUT

TABLE 2: APPROVED GASKET LUBRICANTS

PART NO.	MFR	DESCRIPTION
78713	LA-CO	LUBRI-JOINT
40501	HERCULES	DUCK BUTTER
30600	OATEY	PIPE LUBRICANT
PSLUBXL1Q	PROSELECT	PIPE JOINT LUBRICANT

NOTES:

Head Plate Gasket Installation:

Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) and liberally apply a lubricant from Table 2: Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lid (Item 6). Follow Lubricant manufacturer's instructions.

Lid Assembly:

Rotate Cartridge Lid counter-clockwise until both male threads drop down and properly seat. Then rotate Cartridge Lid clockwise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

Jellyfish Filter Inspection and Maintenance Log

Owner:				Jellyfish Model No:		
Location:				GPS Coordinates:		
Land Use:	Commercial:		Industrial:		Service Station:	
	Roadway/Highway:		Airport:		Residential:	

Date/Time:						
Inspector:						
Maintenance Contractor:						
Visible Oil Present: (Y/N)						
Oil Quantity Removed:						
Floatable Debris Present: (Y/N)						
Floatable Debris Removed: (Y/N)						
Water Depth in Backwash Pool						
Draindown Cartridges externally rinsed and recommissioned: (Y/N)						
New tentacles put on Draindown Cartridges: (Y/N)						
Hi-Flo Cartridges externally rinsed and recommissioned: (Y/N)						
New tentacles put on Hi-Flo Cartridges: (Y/N)						
Sediment Depth Measured: (Y/N)						
Sediment Depth (inches or mm):						
Sediment Removed: (Y/N)						
Cartridge Lids intact: (Y/N)						
Observed Damage:						
Comments:						



Support

- Drawings and specifications are available at www.conteches.com/jellyfish.
- Site-specific design support is available from Contech Engineered Solutions.
- Find a Certified Maintenance Provider at www.conteches.com/ccmp

Jellyfish[®]

CONTECH[®]
ENGINEERED SOLUTIONS

800.338.1122

www.ContechES.com

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Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater, wastewater treatment and earth stabilization products. For information on other Contech segment offerings, visit ContechES.com or call 800.338.1122

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AGENT AUTHORIZATION

Owner Authorization Form

Texas Commission on Environmental Quality

for Required Signature

Edwards Aquifer Protection Program

Relating to 30 TAC Chapter 213

Effective June 1, 1999

Land Owner Authorization

I, Dr. Charles McCash of McCash Properties, LLC
Owner Signatory Name Land Owner Name (Legal Entity or Individual)

am the owner of the property located at

Pericos Subdivision 2, Lot 5, recorded in the Plat Records of Bexar County, Texas as Document No. 20240041528

Legal description of the property referenced in the application

and am duly authorized in accordance with §213.4(c)(2) and §213.4(d)(1) or §213.23(c)(2) and §213.23(d) relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize Brundage Management, Inc.
Applicant Name (Legal Entity or Individual)

to conduct WPAP permitting with associated permanent BMP
Description of the proposed regulated activities

at 1431 E Sonterra Blvd., San Antonio, TX 78258
Precise location of the authorized regulated activities

Land Owner Acknowledgement

I understand that McCash Properties, LLC
Land Owner Name (Legal Entity or Individual)

is ultimately responsible for compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation is subject to administrative rule or orders and penalties as provided under §213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.

Land Owner Signature

CMcCash
Land Owner Signature

10/3/2024
Date

THE STATE OF § Texas
County of § Bexar

BEFORE ME, the undersigned authority, on this day personally appeared Dr. Charles McCash 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.

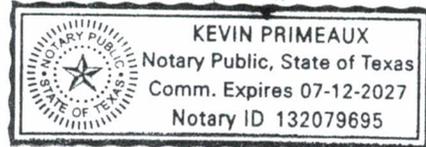
GIVEN under my hand and seal of office on this 3 day of October 2024

[Signature]
NOTARY PUBLIC
Kevin Primeaux
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 7-12-2027

Attached: (Mark all that apply)

- Lease Agreement
- Signed Contract
- Deed Recorded Easement
- Other legally binding document



SIGNATURE PAGE:


Applicant's Signature

10-4-24
Date

THE STATE OF TEXAS §

County of BEXAR §

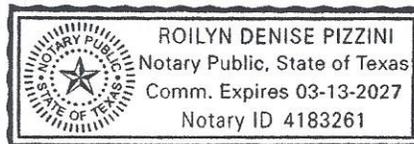
BEFORE ME, the undersigned authority, on this day personally appeared Scott Hayne known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 4th day of October, 2024.


NOTARY PUBLIC

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____



APPLICATION FEE

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Sonterra Storage Annex

Regulated Entity Location: 1439 E Sonterra Blvd., San Antonio, TX 78258

Name of Customer: Brundage Management; Attn. Scott Hayne

Contact Person: Scott Hayne

Phone: 210-961-7307

Customer Reference Number (if issued): CN _____

Regulated Entity Reference Number (if issued): RN _____

Austin Regional Office (3373)

Hays

Travis

Williamson

San Antonio Regional Office (3362)

Bexar

Medina

Uvalde

Comal

Kinney

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:

Austin Regional Office

San Antonio Regional Office

Mailed to: TCEQ - Cashier

Overnight Delivery to: TCEQ - Cashier

Revenues Section

12100 Park 35 Circle

Mail Code 214

Building A, 3rd Floor

P.O. Box 13088

Austin, TX 78753

Austin, TX 78711-3088

(512)239-0357

Site Location (Check All That Apply):

Recharge Zone

Contributing Zone

Transition Zone

<i>Type of Plan</i>	<i>Size</i>	<i>Fee Due</i>
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	1.378 Acres	\$ 4,000
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: 10/23/2024

Application Fee Schedule

Texas Commission on Environmental Quality

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

<i>Project</i>	<i>Project Area in Acres</i>	<i>Fee</i>
One Single Family Residential Dwelling	< 5	\$650
Multiple Single Family Residential and Parks	< 5	\$1,500
	5 < 10	\$3,000
	10 < 40	\$4,000
	40 < 100	\$6,500
	100 < 500	\$8,000
	≥ 500	\$10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1	\$3,000
	1 < 5	\$4,000
	5 < 10	\$5,000
	10 < 40	\$6,500
	40 < 100	\$8,000
	≥ 100	\$10,000

Organized Sewage Collection Systems and Modifications

<i>Project</i>	<i>Cost per Linear Foot</i>	<i>Minimum Fee- Maximum Fee</i>
Sewage Collection Systems	\$0.50	\$650 - \$6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

<i>Project</i>	<i>Cost per Tank or Piping System</i>	<i>Minimum Fee- Maximum Fee</i>
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

Exception Requests

<i>Project</i>	<i>Fee</i>
Exception Request	\$500

Extension of Time Requests

<i>Project</i>	<i>Fee</i>
Extension of Time Request	\$150

Attachment A- Road Map



SITE LOCATION

TCEQ SAN ANTONIO



3 mi

EXISTING IMPERVIOUS COVER	0.10 AC.
TOTAL ACREAGE	0.76 AC.
% OF IMPERVIOUS COVER	12.6%

EXISTING IMPERVIOUS COVER	0.52 AC.
TOTAL ACREAGE	0.62 AC.
% OF IMPERVIOUS COVER	83.3%

Drainage Area	Drainage Area (ACRES)	Imp. Cvr. %	T.O.C. min	C	Q (CFS)				
					1-YR	2-YR	5-YR	25-YR	100-YR
1	0.76	12.6	8	0.48	1.97	2.31	1.65	4.06	5.11
2	0.62	83.3	5	0.87	2.91	3.42	2.44	6.01	7.55



SCALE: 1"=30'
0 15 30 60

LEGEND

- PROPERTY BOUNDARY
- WASTEWATER LINE
- OVERHEAD ELECTRIC
- EXISTING FENCELINE
- EASEMENT LINE
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- IRON ROD FOUND
- WOODEN POWER POLE
- SIGN (AS NOTED)
- BENCHMARK
- GAS VALVE
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- FIRE HYDRANT
- LIGHT POLE
- IRRIGATION CONTROL VALVE (ICV)
- CLEAN OUT
- O.P.R.B.C.T. OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS
- D.P.R.B.C.T. DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS
- N.C.B. NEW CITY BLOCK
- VOL. VOLUME
- DRAINAGE AREA
- PERVIOUS COVER
- IMPERVIOUS COVER

Balanced Site Design, LLC
12950 Country Parkway
Suite 150
San Antonio, TX 78216
210.530.1312



REV.	DESCRIPTION	DATE

BRUNDAGE MANAGEMENT
254 SPENCER LANE
SAN ANTONIO, TEXAS 78201

EXISTING DRAINAGE AREA MAP & IMPERVIOUS COVER EXHIBIT
E SONTERRA MOB
1439 E SONTERRA BLVD
SAN ANTONIO, TX. 78258

DATE: 01/11/2024

SHEET: **EXB- 1.0**



A1

EXISTING DRAINAGE AREA MAP & IMPERVIOUS COVER EXHIBIT

SCALE: 1" = 30'

E:\2015\BRUNDAGE 1439 E SONTERRA\DESIGN\PLANNING AND EXHIBITS\2015\EXH-1.0 EX DRAINAGE AREAS.DWG

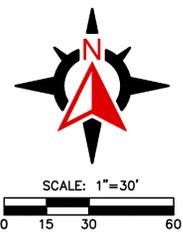
A TEXAS REGISTERED ENGINEERING FIRM (REGISTRATION NO. F-20762) Copyright 2022 - BALANCED SITE DESIGN, LLC. All Rights Reserved.

PROPOSED IMPERVIOUS COVER	0.00 AC.
PROPOSED PERVIOUS COVER	0.05 AC.
TOTAL ACREAGE	0.05 AC.
% OF IMPERVIOUS COVER	0.00%

PROPOSED IMPERVIOUS COVER	0.45 AC.
PROPOSED PERVIOUS COVER	0.24 AC.
TOTAL ACREAGE	0.69 AC.
% OF IMPERVIOUS COVER	65.2%

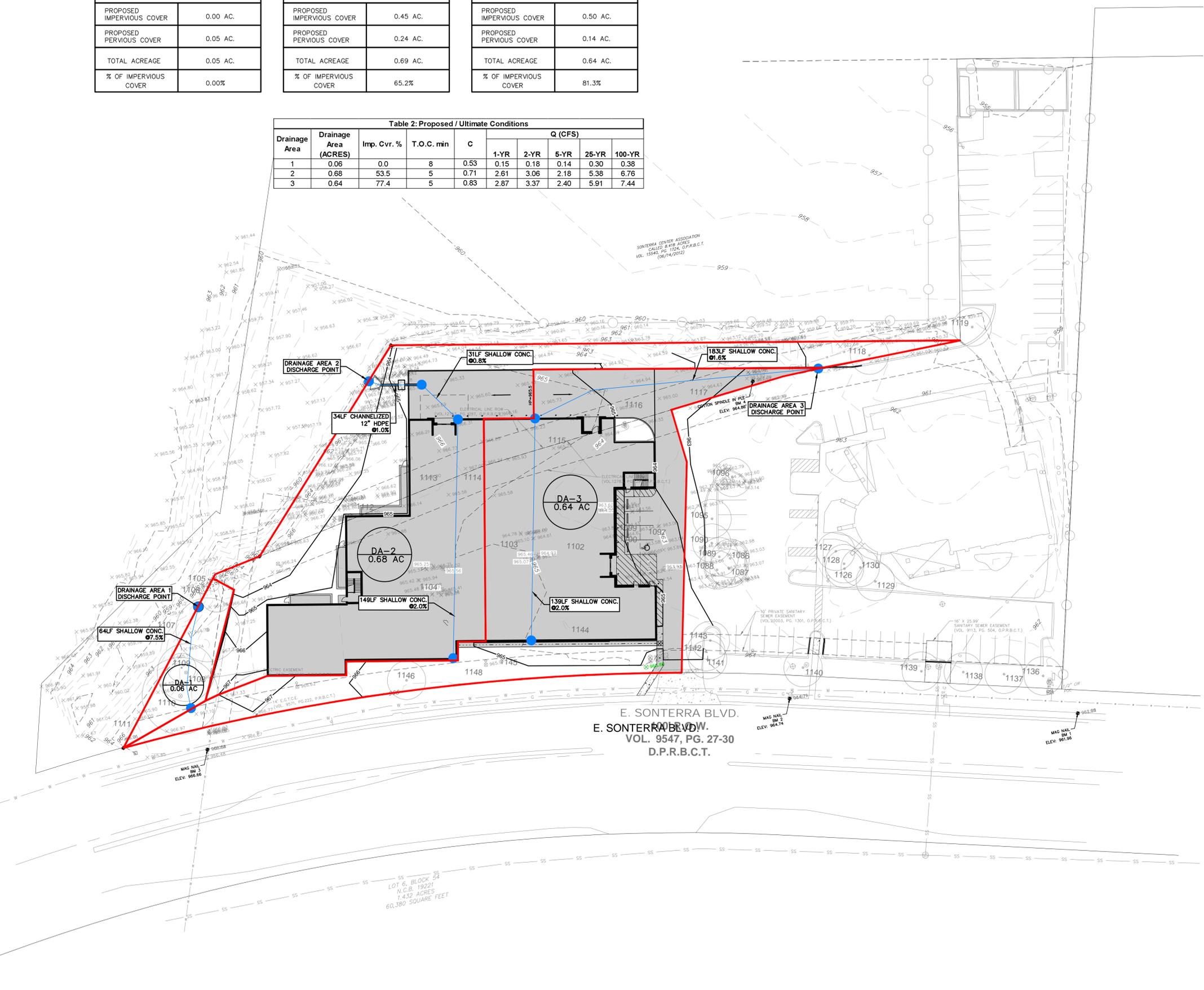
PROPOSED IMPERVIOUS COVER	0.50 AC.
PROPOSED PERVIOUS COVER	0.14 AC.
TOTAL ACREAGE	0.64 AC.
% OF IMPERVIOUS COVER	81.3%

Drainage Area	Drainage Area (ACRES)	Imp. Cvr. %	T.O.C. min	C	Q (CFS)				
					1-YR	2-YR	5-YR	25-YR	100-YR
1	0.06	0.0	8	0.53	0.15	0.18	0.14	0.30	0.38
2	0.68	53.5	5	0.71	2.61	3.06	2.18	5.38	6.76
3	0.64	77.4	5	0.83	2.87	3.37	2.40	5.91	7.44



LEGEND

- PROPERTY BOUNDARY
- WASTEWATER LINE
- OVERHEAD ELECTRIC
- EXISTING FENCELINE
- EASEMENT LINE
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- IRON ROD FOUND
- WOODEN POWER POLE
- SIGN (AS NOTED)
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- N.C.B. NEW CITY BLOCK
- VOL. VOLUME
- DRAINAGE AREA
- PERVIOUS COVER
- IMPERVIOUS COVER



Balanced Site Design, LLC
 12950 Country Parkway
 Suite 150
 San Antonio, TX 78216
 210.530.1312



REV.	DESCRIPTION	DATE

BRUNDAGE MANAGEMENT
 254 SPENCER LANE
 SAN ANTONIO, TEXAS 78201

PROPOSED / ULTIMATE DRAINAGE AREA MAP & IMPERVIOUS COVER EXHIBIT
 E SONTERRA MOB
 1439 E SONTERRA BLVD
 SAN ANTONIO, TX. 78258

DATE: 01/11/2024

SHEET: **EXB- 2.0**

A1

PROPOSED / ULTIMATE DRAINAGE AREA MAP & IMPERVIOUS COVER EXHIBIT

SCALE: 1" = 30'

E:\2015 BRUNDAGE 1439 E SONTERRA\DESIGN\PLANNING AND EXHIBITS\2015\EXH-10 PROP DRAINAGE AREAS.DWG

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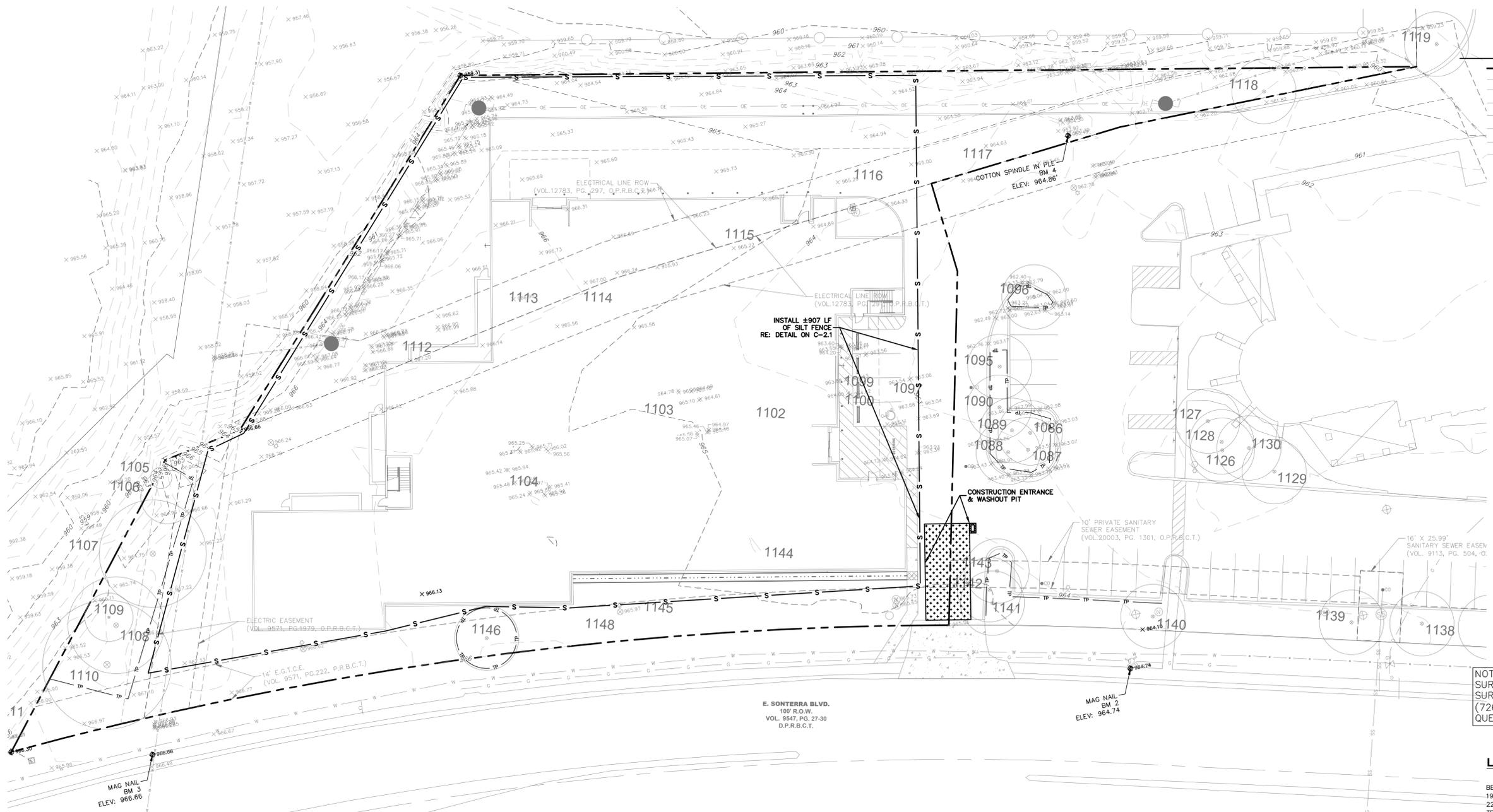


SCALE: 1"=20'
0 10 20 40



LEGEND

- PROPERTY BOUNDARY
- WASTEWATER LINE
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- EXISTING FENCELINE
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- N.C.B. NEW CITY BLOCK
- VOL. VOLUME
- S SILT FENCE
- IP INLET PROTECTION
- TREE PROTECTION FENCING
- STABILIZED CONSTRUCTION ENTRANCE
- CONCRETE TRUCK WASHOUT PIT



NOTE: SURVEY WAS PERFORMED BY DATAPoint SURVEYING & MAPPING. CONTACT AT (726)-777-4240 FOR ANY SURVEY QUESTIONS, COORDINATION OR NEEDS.

LEGAL DESCRIPTION

BEING A TOTAL OF 2.81 ACRES, BEING LOT 2, BLOCK 54, N.C.B. 19221, PERICOS SUBDIVISION, RECORDED IN VOLUME 9571, PAGE 222 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS AND A 0.488 ACRE TRACT OF LAND RECORDED IN DOCUMENT NUMBER 20110008588, OFFICIAL PUBLIC RECORDS, BEXAR COUNTY, TEXAS OUT OF THE SENEGAS I & A CO SURVEY NO. 17, ABSTRACT NO. 726, BEXAR COUNTY, TEXAS, ESTABLISHING LOT 5 & Lot 6, BLOCK 54, NEW CITY BLOCK 19221, IN THE CITY OF SAN ANTONIO, BEXAR COUNTY, TEXAS

FLOOD INFORMATION

PROJECT IS LOCATED OUTSIDE REGULATORY FLOOD ZONES BASED ON FEMA FIRM 48029C0255G DATED 09/29/2010.

BENCHMARK INFORMATION

BM #1 N:13771581.79 E:2136805.16 ELEVATION:961.96'	BM #3 N:13771664.85 E:2136264.74 ELEVATION:966.66'
BM #2 N:13771625.62 E:2136629.48 ELEVATION:964.74'	BM #4 N:13771824.67 E:2136644.98 ELEVATION:964.86'



**Know what's below.
Call before you dig.**

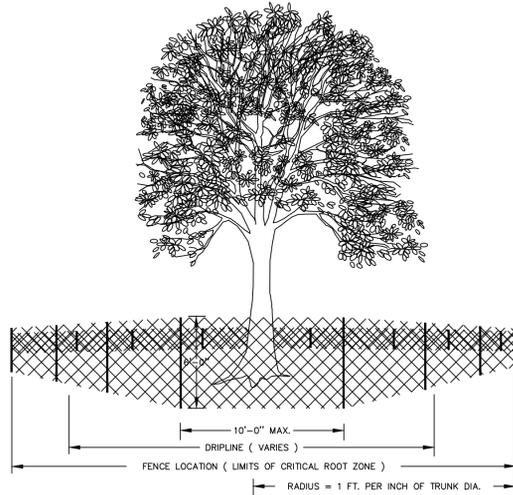
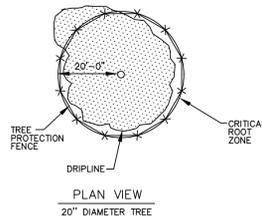
STORM WATER POLLUTION PREVENTION NOTES

- PRIOR TO CONSTRUCTION, MAKE CERTAIN THE NOTICE OF INTENT (NOI) OR CONSTRUCTION SITE NOTICE (CSN) HAS BEEN FILED AND POSTED ON-SITE FOR PUBLIC VIEWING AND THE TPDES REPORT AND SWPPP ARE AVAILABLE AT THE TRAILER.
 - INSTALL STORM WATER POLLUTION PREVENTION CONTROLS PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, EXCAVATION).
 - THE PLACEMENT OF STORM WATER POLLUTION PREVENTION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED STORM WATER POLLUTION PREVENTION CONTROL PLAN.
 - 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.
 - 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 CONTRACTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES. IN ALL CASES THE CONTRACTOR SHALL REDLINE CHANGES TO THE SWPPP TO REFLECT THE LATEST FIELD ADJUSTMENTS.
 - 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.
 - PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF PROPERLY.
 - WHERE SILT FENCE CANNOT BE PROPERLY INSTALLED USE TRIANGULAR FILTRATION DIKE OR HAY BALES
 - 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.
 - 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 FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN TWENTY-ONE (21) DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
 - 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.
 - MUD/DIRT INADVERTENTLY TRACKED OFF-SITE AND ONTO PUBLIC STREETS SHALL BE REMOVED IMMEDIATELY.
 - PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.
 - 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.
 - 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:
 - 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.
 - 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.
 - FERTILIZER SHALL BE A PELLETTED 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.
 - MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SF.
 - HYDRAULIC SEEDING:
 - 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.
 - 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.
 - FERTILIZER SHALL BE A WATER SOLUBLE FERTILIZER WITH AN ANALYSIS OF 15-15-15 AT A RATE OF 1.5 POUNDS PER 1000 SF.
 - 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.
 - 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)
 - 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.
 - SEEDING SHALL APPLY TO ALL AREAS WITHIN DISTURBED PROJECT AREA NOT COVERED BY PAVEMENT, BUILDING PAD OR PROJECT LANDSCAPING PLANS INCLUDING RIGHT-OF-WAYS AND OFFSITE EASEMENTS.
 - AT LEAST TWO SEEDINGS SHOULD OCCUR DURING PROJECT. THEY SHOULD OCCUR WITHIN 14 DAYS AFTER PONDS ARE GRADED AND PRIOR TO BY FINAL PUNCH LIST.
- 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 IF LAND, WHICH IT DRAINS.
- CONTRACTOR'S FILING OF NOTICE OF TERMINATION (NOT) SHALL OCCUR UPON CLIENT'S ACCEPTANCE OF REVEGETATION.

STORM WATER POLLUTION PREVENTION PLAN / TPDES

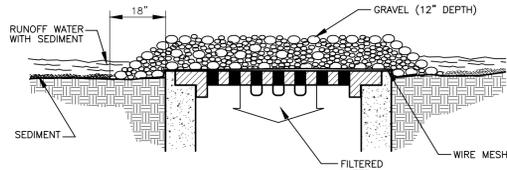
FURNISH AND INSTALL TEMPORARY AND PERMANENT STORM WATER POLLUTION PREVENTION CONTROL MEASURES SHOWN IN THE PLANS. CONSTRUCT IMPROVEMENTS IN COMPLIANCE WITH THE INTENT OF SUCH POLLUTION CONTROL MEASURES, TPDES PERMITS, OR OTHER LOCAL WATERWAY DEVELOPMENT PERMITS.

- EXECUTION**
- CONTRACTOR IS RESPONSIBLE FOR ALL POLLUTION PREVENTION MEASURES SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
 - 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.
 - 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.
 - INSTALL AND MAINTAIN POLLUTION CONTROL MEASURES IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND WITH PROJECT SPECIFICATIONS.
 - 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.
 - CONTRACTOR IS RESPONSIBLE FOR ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE, AND SHALL REMOVE THE ACCUMULATION OF OFF-SITE SEDIMENT PROMPTLY.



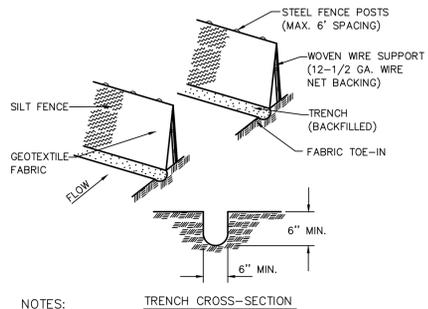
TREE PROTECTION
NOT TO SCALE

1 TREE PROTECTION
NOT TO SCALE



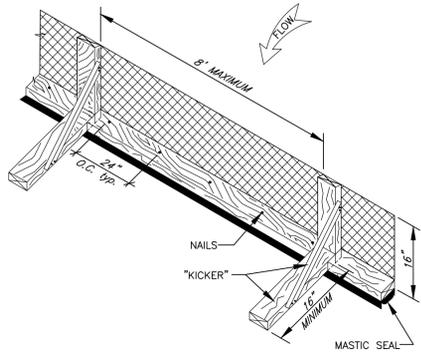
- NOTE:**
- WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
 - AGGREGATE 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.
 - IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

2 INLET PROTECTION/SEDIMENT FILTER
NOT TO SCALE



- NOTES:**
- 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.
 - 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 (e.g. pavement). WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW 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 UNDER FENCE.
 - 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. COMPACTED MATERIAL.
 - INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 - SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
 - 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.
 - CONTRACTOR SHALL PROVIDE TRIANGULAR SEDIMENT FILTER DIKE WHERE SILT FENCE IS REQUIRED BUT NOT INSTALLABLE.

3 SILT FENCE
NOT TO SCALE



4 SILT FENCE ON PAVEMENT DETAIL
NOT TO SCALE

NOTE:
SURVEY WAS PERFORMED BY DATAPPOINT SURVEYING & MAPPING. CONTACT AT (726)-777-4240 FOR ANY SURVEY QUESTIONS, COORDINATION OR NEEDS.

LEGAL DESCRIPTION

BEING A TOTAL OF 2.81 ACRES, BEING LOT 2, BLOCK 54, N.C.B. 19221, PERICOS SUBDIVISION, RECORDED IN VOLUME 9571, PAGE 222 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS AND A 0.488 ACRE TRACT OF LAND RECORDED IN DOCUMENT NUMBER 20110008588, OFFICIAL PUBLIC RECORDS, BEXAR COUNTY, TEXAS OUT OF THE SENEGAS I & A CO SURVEY NO. 17, ABSTRACT NO. 726, BEXAR COUNTY, TEXAS, ESTABLISHING LOT 5 & Lot 6, BLOCK 54, NEW CITY BLOCK 19221, IN THE CITY OF SAN ANTONIO, BEXAR COUNTY, TEXAS

FLOOD INFORMATION

PROJECT IS LOCATED OUTSIDE REGULATORY FLOOD ZONES BASED ON FEMA FIRM 48029C0255G DATED 09/29/2010.

BENCHMARK INFORMATION

BM #1	BM #3
N:13771581.79	N:13771664.85
E:2136805.16	E:2136264.74
ELEVATION:961.96'	ELEVATION:966.66'
BM #2	BM#4
N:13771625.62	N:13771824.67
E:2136629.48	E:2136644.98
ELEVATION:964.74'	ELEVATION:964.86'



**Know what's below.
Call before you dig.**

DALLENBACH-COLE
ARCHITECTURE

315 NORTH STREET - SUITE 1
SAN ANTONIO, TEXAS 78215
WWW.DCARCH.COM P. 210.469.8284



**STORAGE HUB
SONTERRA ANNEX**

1431 E SONTERRA BLVD.
SAN ANTONIO, TX 78258

PROJECT NO. 230155

DATE: 11.11.2024

DRAWN: BSD

REVISIONS:
**100%
REVIEW**

SWPPP DETAILS

SHEET NO.

C-3.1



PROJECT NO. 230155

DATE: 11.11.2024

DRAWN: BSD

REVISIONS:

**100%
REVIEW**

GRADING PLAN

SHEET NO.

C-5.0



SCALE: 1"=20'
0 10 20 40

LEGEND

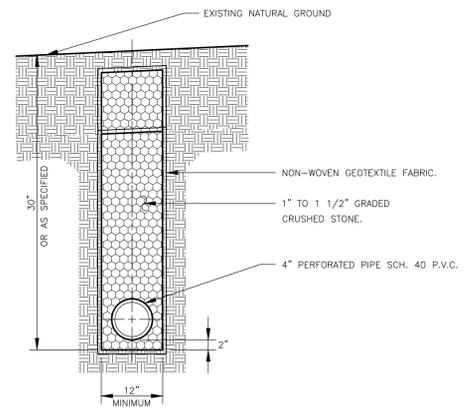
- PROPERTY BOUNDARY
- WASTEWATER LINE
- OVERHEAD ELECTRIC
- EXISTING FENCELINE
- EASEMENT LINE
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- IRON ROD FOUND
- WOODEN POWER POLE
- SIGN (AS NOTED)
- BENCHMARK
- GAS VALVE
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- FIRE HYDRANT
- LIGHT POLE
- IRRIGATION CONTROL VALVE (ICV)
- CLEAN OUT
- O.P.R.B.C.T. OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS
- D.P.R.B.C.T. DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS
- N.C.B. NEW CITY BLOCK
- VOL. VOLUME
- STEM WALL LIMITS WITH FRENCH DRAIN RE: DETAIL 1 THIS SHEET
- MATCH GRADE
- 964 PROPOSED CONTOUR
- X 964.00 PROPOSED SPOT ELEVATION
- MAX 2% SLOPE IN ALL DIRECTIONS FOR ADA ACCESS

NOTE: STEM WALL TO EXTEND MINIMUM OF 6" ABOVE PROPOSED GRADE TO ALLOW FOR VARIANCES WITH LANDSCAPE INSTALL ADJACENT TO BUILDING.

NOTE: SURVEY WAS PERFORMED BY DATAPoint SURVEYING & MAPPING. CONTACT AT (726)-777-4240 FOR ANY SURVEY QUESTIONS, COORDINATION OR NEEDS.

KEY NOTES

- 1 MAX. 2% ALL DIRECTIONS
- 2 LEVEL LANDING - MAX. 2%
- 3 MAX. 2% CROSS SLOPE. MAX. 5% RUNNING SLOPE
- 4 3' SIDEWALK DRAIN
- 5 STAIRS RE: ARCH PLANS
- 6 3' CONCRETE V-SWALE @ 0.50%
- 7 RETAINING WALL RE: STRUCTURAL PLANS



FRENCH DRAIN
NOT TO SCALE



**Know what's below.
Call before you dig.**

LEGAL DESCRIPTION

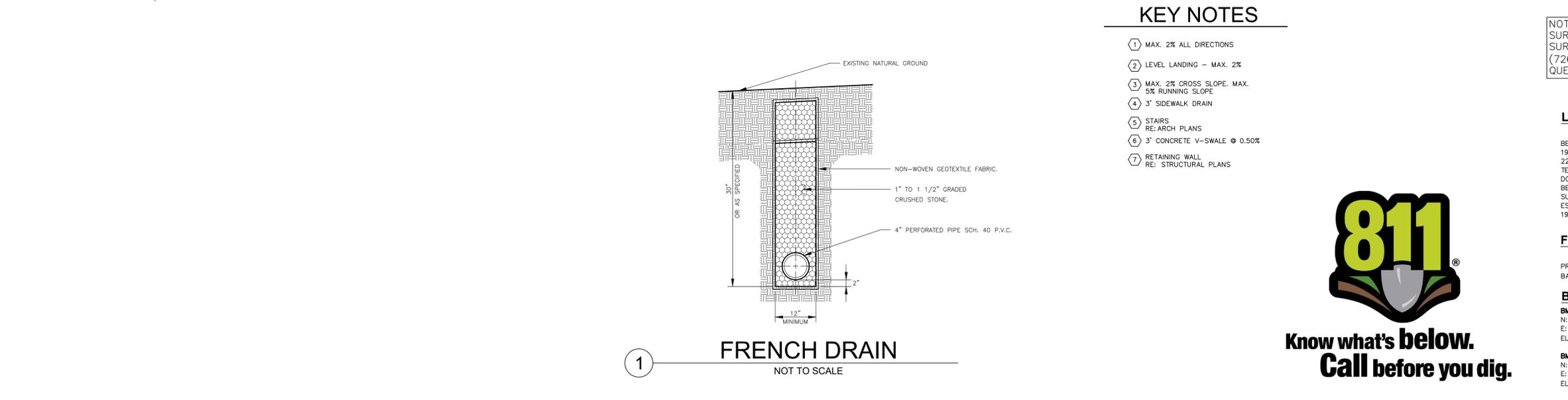
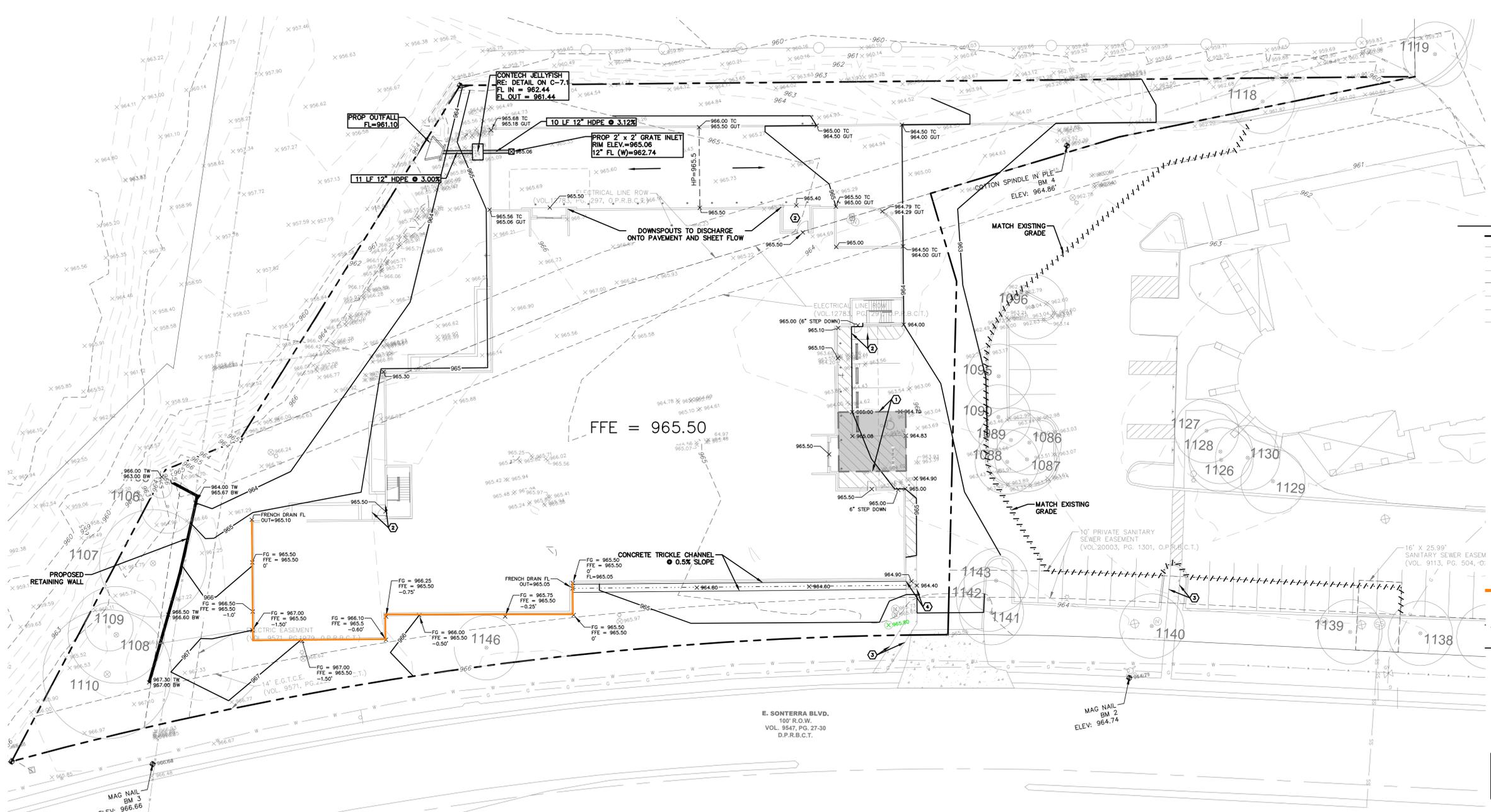
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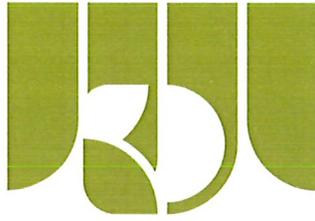
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N: 13771625.62	N: 13771824.67
E: 2136629.48	E: 2136644.98
ELEVATION: 964.74'	ELEVATION: 964.86'





**KOONTZ BRYANT
JOHNSON WILLIAMS
ENGINEERING REPORT**

TO: Contech Engineered Solutions LLC
9100 Centre Pointe Drive, Suite 400
West Chester, Ohio 45069

DATE: October 21, 2024

KBJW NO: 31995-001-01-1024

ATTN: Robbin DeArmond
Stormwater Design Engineer

Re: Review of TSS Removal Calculations and Shop Drawings for a Jellyfish® Filter (822347); Storage Hub Sonterra Annex, San Antonio, Texas; KBJW Report No. 31995-001-01-1024

Koontz Bryant Johnson Williams, Inc. (KBJW, formerly CBC Engineers and Associates, Ltd.) is pleased to submit our report for the above referenced project. The purpose of this report is to provide a peer review of the TSS removal calculations and shop drawings for a proposed Jellyfish® Filter at the above referenced project location. We have evaluated the calculations and shop drawings, and agree they conform to the requirements of TCEQ RG-348 and to accepted industry standards for this product type. We have not made an independent verification of the data used to perform the calculations, and understand all initial assumptions and data are correct as presented to us. The proposed Jellyfish® filter (JFPD0406-1-1 with 2 hi-flo and 1 drain down 54" cartridges) treatment flow rate (0.45 cfs) meets or exceeds the required water quality treatment flow rate for the drainage basin (0.36 cfs) as shown in the attached calculations. No structural design calculations or details have been reviewed in conjunction with this project and others than KBJW are responsible for all other aspects of this project including but not limited to the structural design and buoyancy evaluation. We have accordingly signed and sealed this report containing the calculations and shop drawings, and they are attached in Appendix A and Appendix B of this report, respectively.

If you have any questions, please contact us.

Respectfully submitted,

Koontz Bryant Johnson Williams, Inc.

Mitchell T. Hardert, P.E.
Chief Engineer

10/21/24

Koontz Bryant Johnson Williams, Inc.
TBPE Firm Number F-23121



MTH/mth

ec: Client (robbin.dearmond@conteches.com)
ec: Alex MacLeod (alex.macleod@conteches.com)
ec: Jamie Minnick (jamie.minnick@conteches.com)
1-File

APPENDIX A
CALCULATIONS

Contech Engineered Solutions Calculations for Texas Commission on Environmental Quality
TSS Removal Calculations

Project Name: **E Sonterra MOB**
Date Prepared: **10/1/2024**

1. The Required Load Reduction for the total project:

Calculations from RG-348 Page 3-29 Equation 3-3: $L_M = 27.2(A_N \times P)$
Pages 3-27 to 3-30

$L_{M\ TOTAL\ PROJECT}$ = 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 = **Bexar**
Total project area included in plan * = **0.74** acres
Predevelopment impervious area within the limits of the plan * = **0.10** acres
Total post-development impervious area within the limits of the plan * = **0.35** acres
Total post-development impervious cover fraction * = **0.47**
P = **30** inches
 $L_{M\ TOTAL\ PROJECT}$ = **204** lbs.

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 = **0.74** acres
Predevelopment impervious area within drainage basin/outfall area = **0.10** acres
Post-development impervious area within drainage basin/outfall area = **0.35** acres
Post-development impervious fraction within drainage basin/outfall area = **0.47**
 $L_{M\ THIS\ BASIN}$ = **204** lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **JF** abbreviation
Removal efficiency = **61** percent

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:
 $LR = (BMP\ efficiency) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

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 = **0.74** acres
 A_i = **0.35** acres
 A_p = **0.39** acres
 L_R = **225** lbs.



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

Desired $L_{M\ THIS\ BASIN}$ = **204** lbs.
F = **0.90**

6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area.

Offsite area draining to BMP = **0.00** acres
Offsite impervious cover draining to BMP = **0.00** acres

Calculations from RG-348
Pages Section 3.2.22

Rainfall Intensity = **1.10** inches per hour
Effective Area = **0.33** acres
Cartridge Length = **54** inches

Peak Treatment Flow Required = **0.36** cubic feet per second

7. Jellyfish

Designed as Required in RG-348
Section 3.2.22

Flow Through Jellyfish Size	Vault
Jellyfish Size for Flow-Based Configuration =	JFPD0406-2-1
Jellyfish Treatment Flow Rate =	0.45 cfs

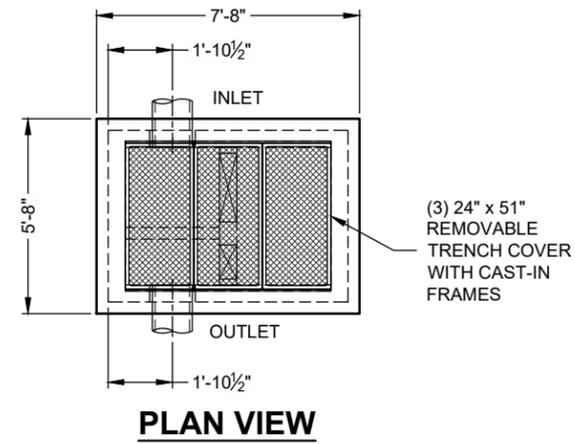
APPENDIX B

SHOP DRAWINGS

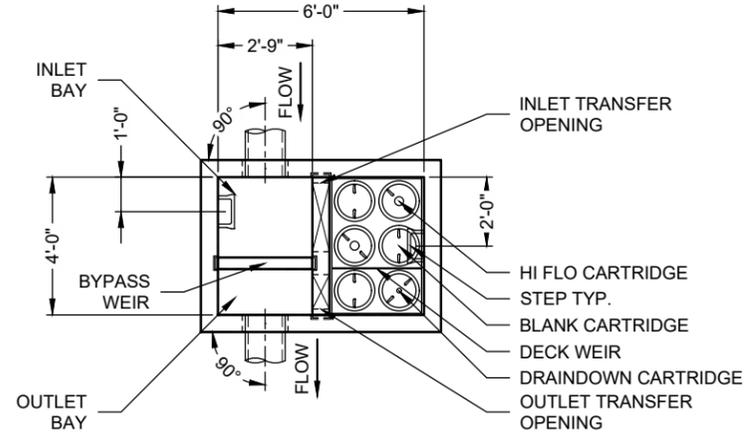
Approved By	MTH	Date	10/21/24	Rev.		Date		By		Description
Project No.	KB JW-31995-001	Rev.	-							



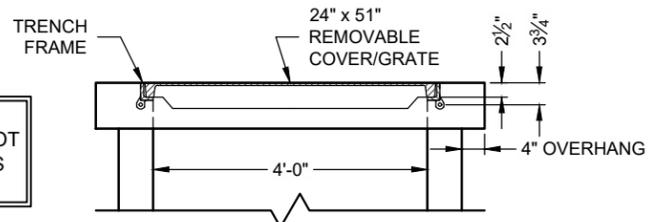
KOONTZ BRYANT JOHNSON WILLIAMS, INC.
TBPE FIRM NUMBER F-23121



PLAN VIEW



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



SECTION A-A

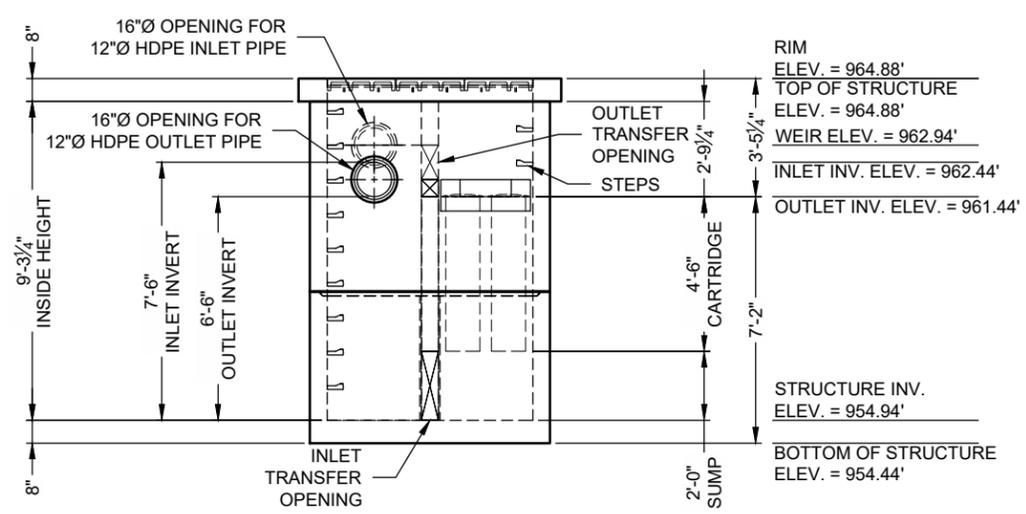
TRENCH COVERS SHIPPED SEPARATELY. TOP SLAB IS NOT TO BE LIFTED WITH COVERS INSTALLED.

MATERIAL LIST - PROVIDED BY CONTECH

COUNT	DESCRIPTION	INSTALLED BY
2	54" HI-FLO CARTRIDGE (70 mm ORIFICE)	CONTECH
1	54" DRAINDOWN CARTRIDGE (35 mm ORIFICE)	CONTECH
3	CARTRIDGE BLANK (NO ORIFICE)	CONTECH
1	JELLYFISH VAULT 6-CARTRIDGE DECK, STANDARD	CONTECH
1	JOINT SEALANT (BY PRECASTER)	CONTRACTOR
3	24"Ø X 51" TRENCH COVER, EJ #47514031	CONTRACTOR
3 PCS	2.5" X 48" TRENCH FRAME, EJ #47300311	CONTECH
11	STEPS	CONTECH
1	EPA LABEL	CONTECH

SITE DESIGN DATA

WATER QUALITY FLOW RATE	0.36 CFS
PEAK FLOW RATE	6.58 CFS
RETURN PERIOD OF PEAK FLOW	25 YRS



ELEVATION VIEW

GENERAL NOTES:

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. WWW.ContechES.COM
- JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO HS-20, ASSUMING EARTH COVER OF 0' - 5", AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
- STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
- CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
- WHEN ACTIVATED PRIOR TO SITE STABILIZATION, CONTRACTOR TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
- CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ACCORDING TO THE PROVISIONS IN THE ACTIVATION CHECKLIST AND THE QUOTED SCOPE OF WORK. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (800) 338-1122.

STRUCTURE WEIGHT

APPROXIMATE HEAVIEST PICK OF (5) PIECES = 11000 LBS.

CONTECH
CONTRACT
DRAWING

SLY
5635/492043
LAYOUT 7
CLASS 600

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MARK	DATE	REVISION DESCRIPTION	BY

4' X 6' JELLYFISH* - 822347-10
STORAGE HUB SONTERRA ANNEX
SAN ANTONIO, TX
SITE DESIGNATION: WQU

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45389
603-338-1122 513-445-7000 513-445-9855 FAX

Jellyfish Filter
THIS PRODUCT IS A REGISTERED TRADEMARK OF CONTECH ENGINEERED SOLUTIONS LLC. ALL RIGHTS RESERVED. PATENT PENDING.

DATE: 10/17/2024	
DESIGNED: RKD	DRAWN: KOL
CHECKED: RKD	APPROVED: RKD
PROJECT No.: 822347	SEQUENCE No.: 10
SHEET: 1 OF 2	

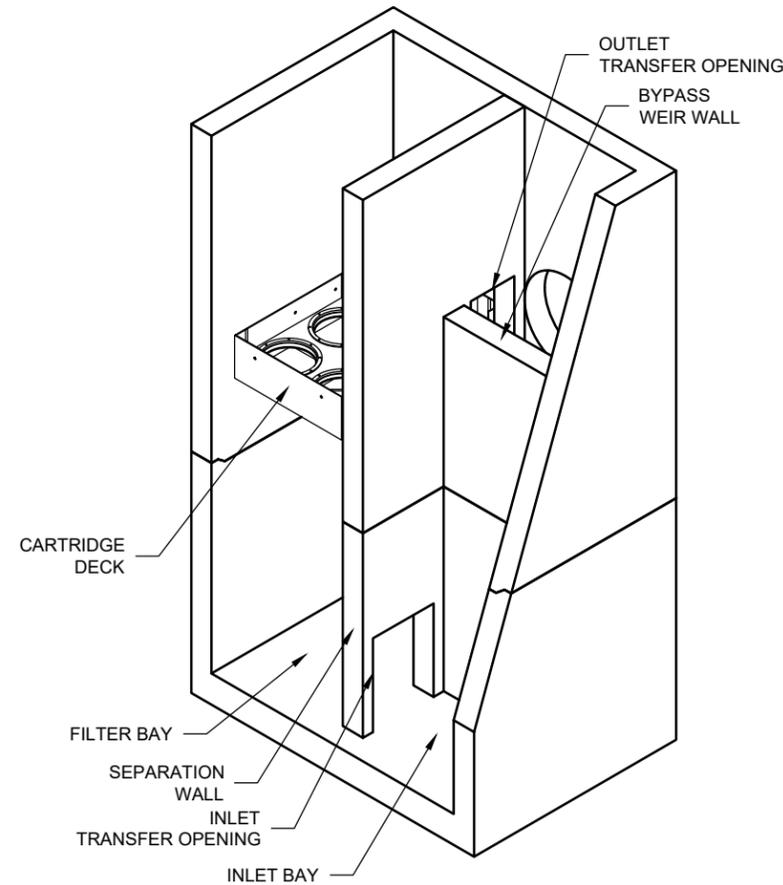
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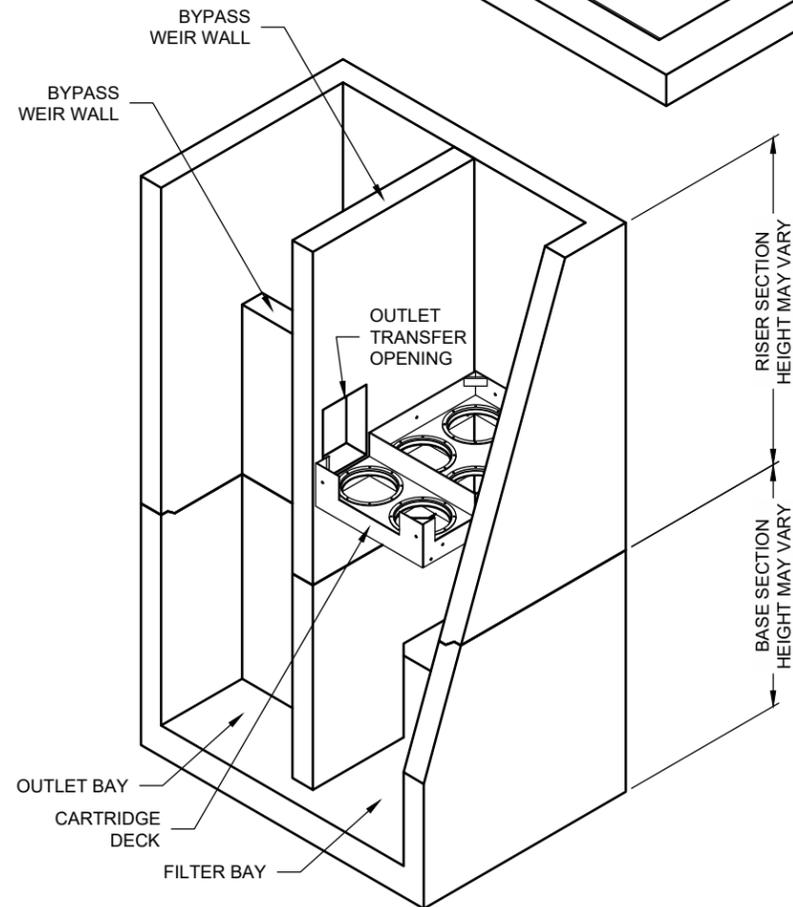
Approved By MTH	Date 10/21/24		Rev.	Date	By	Description
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KOONTZ BRYANT JOHNSON WILLIAMS, INC.
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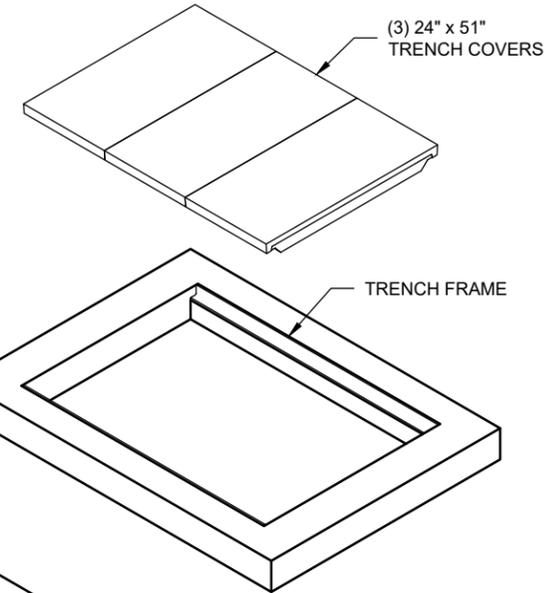


NW ISOMETRIC VIEW



SE ISOMETRIC VIEW

ISOMETRIC VIEWS ARE REPRESENTATIONAL. SEE DETAILED CONTRACT DRAWING FOR SITE SPECIFIC DIMENSIONS



CONTECH
CONTRACT
DRAWING

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MARK	DATE	REVISION DESCRIPTION	BY

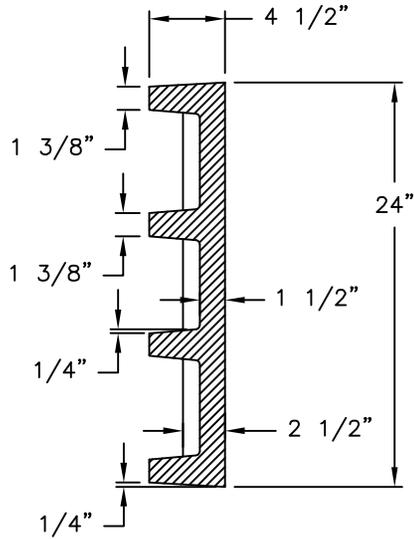
4' X 6' JELLYFISH* - 822347-10
STORAGE HUB SONTERRA ANNEX
SAN ANTONIO, TX
SITE DESIGNATION: WQU

CONTECH
ENGINEERED SOLUTIONS LLC
www.contechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45389
603-335-1122 513-445-7000 513-645-7955 FAX

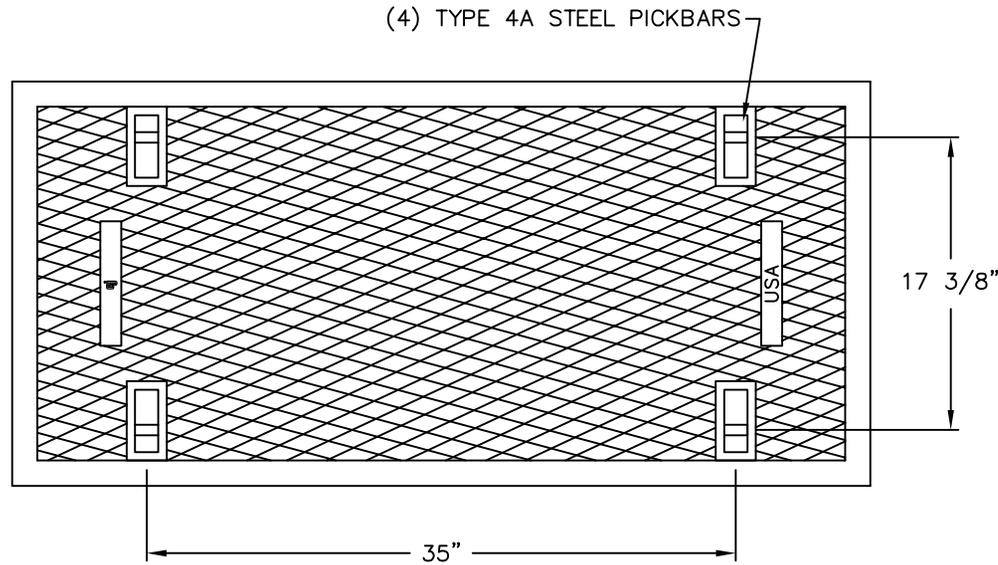
Jellyfish Filter
THIS PRODUCT CAN BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENT NOS. 8,397,726; 8,272,618; 8,272,619; 8,272,620; 8,272,621; 8,272,622; 8,272,623; 8,272,624; 8,272,625; 8,272,626; 8,272,627; 8,272,628; 8,272,629; 8,272,630; 8,272,631; 8,272,632; 8,272,633; 8,272,634; 8,272,635; 8,272,636; 8,272,637; 8,272,638; 8,272,639; 8,272,640; 8,272,641; 8,272,642; 8,272,643; 8,272,644; 8,272,645; 8,272,646; 8,272,647; 8,272,648; 8,272,649; 8,272,650; 8,272,651; 8,272,652; 8,272,653; 8,272,654; 8,272,655; 8,272,656; 8,272,657; 8,272,658; 8,272,659; 8,272,660; 8,272,661; 8,272,662; 8,272,663; 8,272,664; 8,272,665; 8,272,666; 8,272,667; 8,272,668; 8,272,669; 8,272,670; 8,272,671; 8,272,672; 8,272,673; 8,272,674; 8,272,675; 8,272,676; 8,272,677; 8,272,678; 8,272,679; 8,272,680; 8,272,681; 8,272,682; 8,272,683; 8,272,684; 8,272,685; 8,272,686; 8,272,687; 8,272,688; 8,272,689; 8,272,690; 8,272,691; 8,272,692; 8,272,693; 8,272,694; 8,272,695; 8,272,696; 8,272,697; 8,272,698; 8,272,699; 8,272,700; 8,272,701; 8,272,702; 8,272,703; 8,272,704; 8,272,705; 8,272,706; 8,272,707; 8,272,708; 8,272,709; 8,272,710; 8,272,711; 8,272,712; 8,272,713; 8,272,714; 8,272,715; 8,272,716; 8,272,717; 8,272,718; 8,272,719; 8,272,720; 8,272,721; 8,272,722; 8,272,723; 8,272,724; 8,272,725; 8,272,726; 8,272,727; 8,272,728; 8,272,729; 8,272,730; 8,272,731; 8,272,732; 8,272,733; 8,272,734; 8,272,735; 8,272,736; 8,272,737; 8,272,738; 8,272,739; 8,272,740; 8,272,741; 8,272,742; 8,272,743; 8,272,744; 8,272,745; 8,272,746; 8,272,747; 8,272,748; 8,272,749; 8,272,750; 8,272,751; 8,272,752; 8,272,753; 8,272,754; 8,272,755; 8,272,756; 8,272,757; 8,272,758; 8,272,759; 8,272,760; 8,272,761; 8,272,762; 8,272,763; 8,272,764; 8,272,765; 8,272,766; 8,272,767; 8,272,768; 8,272,769; 8,272,770; 8,272,771; 8,272,772; 8,272,773; 8,272,774; 8,272,775; 8,272,776; 8,272,777; 8,272,778; 8,272,779; 8,272,780; 8,272,781; 8,272,782; 8,272,783; 8,272,784; 8,272,785; 8,272,786; 8,272,787; 8,272,788; 8,272,789; 8,272,790; 8,272,791; 8,272,792; 8,272,793; 8,272,794; 8,272,795; 8,272,796; 8,272,797; 8,272,798; 8,272,799; 8,272,800; 8,272,801; 8,272,802; 8,272,803; 8,272,804; 8,272,805; 8,272,806; 8,272,807; 8,272,808; 8,272,809; 8,272,810; 8,272,811; 8,272,812; 8,272,813; 8,272,814; 8,272,815; 8,272,816; 8,272,817; 8,272,818; 8,272,819; 8,272,820; 8,272,821; 8,272,822; 8,272,823; 8,272,824; 8,272,825; 8,272,826; 8,272,827; 8,272,828; 8,272,829; 8,272,830; 8,272,831; 8,272,832; 8,272,833; 8,272,834; 8,272,835; 8,272,836; 8,272,837; 8,272,838; 8,272,839; 8,272,840; 8,272,841; 8,272,842; 8,272,843; 8,272,844; 8,272,845; 8,272,846; 8,272,847; 8,272,848; 8,272,849; 8,272,850; 8,272,851; 8,272,852; 8,272,853; 8,272,854; 8,272,855; 8,272,856; 8,272,857; 8,272,858; 8,272,859; 8,272,860; 8,272,861; 8,272,862; 8,272,863; 8,272,864; 8,272,865; 8,272,866; 8,272,867; 8,272,868; 8,272,869; 8,272,870; 8,272,871; 8,272,872; 8,272,873; 8,272,874; 8,272,875; 8,272,876; 8,272,877; 8,272,878; 8,272,879; 8,272,880; 8,272,881; 8,272,882; 8,272,883; 8,272,884; 8,272,885; 8,272,886; 8,272,887; 8,272,888; 8,272,889; 8,272,890; 8,272,891; 8,272,892; 8,272,893; 8,272,894; 8,272,895; 8,272,896; 8,272,897; 8,272,898; 8,272,899; 8,272,900; 8,272,901; 8,272,902; 8,272,903; 8,272,904; 8,272,905; 8,272,906; 8,272,907; 8,272,908; 8,272,909; 8,272,910; 8,272,911; 8,272,912; 8,272,913; 8,272,914; 8,272,915; 8,272,916; 8,272,917; 8,272,918; 8,272,919; 8,272,920; 8,272,921; 8,272,922; 8,272,923; 8,272,924; 8,272,925; 8,272,926; 8,272,927; 8,272,928; 8,272,929; 8,272,930; 8,272,931; 8,272,932; 8,272,933; 8,272,934; 8,272,935; 8,272,936; 8,272,937; 8,272,938; 8,272,939; 8,272,940; 8,272,941; 8,272,942; 8,272,943; 8,272,944; 8,272,945; 8,272,946; 8,272,947; 8,272,948; 8,272,949; 8,272,950; 8,272,951; 8,272,952; 8,272,953; 8,272,954; 8,272,955; 8,272,956; 8,272,957; 8,272,958; 8,272,959; 8,272,960; 8,272,961; 8,272,962; 8,272,963; 8,272,964; 8,272,965; 8,272,966; 8,272,967; 8,272,968; 8,272,969; 8,272,970; 8,272,971; 8,272,972; 8,272,973; 8,272,974; 8,272,975; 8,272,976; 8,272,977; 8,272,978; 8,272,979; 8,272,980; 8,272,981; 8,272,982; 8,272,983; 8,272,984; 8,272,985; 8,272,986; 8,272,987; 8,272,988; 8,272,989; 8,272,990; 8,272,991; 8,272,992; 8,272,993; 8,272,994; 8,272,995; 8,272,996; 8,272,997; 8,272,998; 8,272,999; 8,272,1000.

DATE:	10/17/2024		
DESIGNED:	RKD	DRAWN:	KOL
CHECKED:	RKD	APPROVED:	RKD
PROJECT No.:	822347	SEQUENCE No.:	10
SHEET:	2	OF	2

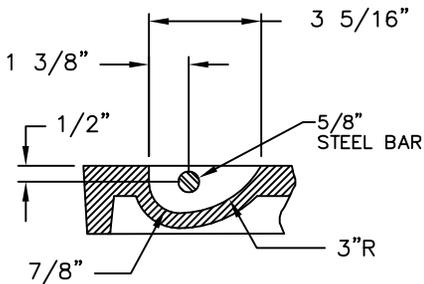
V7514 Trench Cover



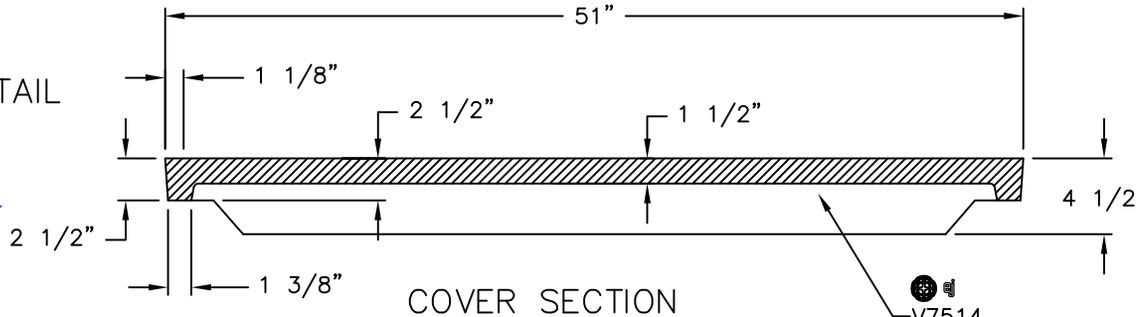
COVER SECTION



COVER TOP VIEW



TYPE 4A PICKBAR DETAIL



COVER SECTION

V7514
 PROD. NO.
 MO/DY/YR X
 ASTM A48 CL35B

Product Number

47514031

Design Features

- Materials
 Gray Iron (CL35B)
- Design Load
 Heavy Duty
- Open Area
 n/a
- Coating
 Undipped
- √ Designates Machined Surface

Certification

- ASTM A48
-
-
- Country of Origin: USA

Estimated Weight:

- 650 lbs

Drawing Revision

08/19/2009 Designer: SBB
 4/18/2018 Revised By: DAE

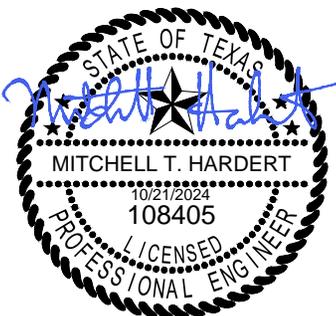
Disclaimer

Weights (lbs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJ GROUP, Inc., and embodies confidential information, registered marks, patents, trade secret information, and/or know how that is the property of EJ GROUP, Inc. Copyright © 2012 EJ GROUP, Inc. All rights reserved.

Contact

800 626 4653
 ejco.com



KOONTZ BRYANT JOHNSON WILLIAMS, INC.
 TBPE FIRM NUMBER F-23121

Approved By MTH	Date 10/21/24	 Formerly CBC Engineers	Rev.	Date	By	Description
Project No. KBJW-31995-001	Rev. -					

CORE DATA FORM



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.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN		RN

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	9/30/2024	
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		If new Customer, enter previous Customer below:	
Brundage Management; Attn. Scott Hayne			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
17426794669	#0127942700	74-2679466	
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input checked="" type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
12. Number of Employees		13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input checked="" type="checkbox"/> Other: Developer			
15. Mailing Address:	254 Spencer Lane		
	City	San Antonio	State TX ZIP 78201 ZIP + 4 2016
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		scott.hayne@brundagemgt.com	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(210) 961-7307		() -	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)
<input checked="" type="checkbox"/> New Regulated Entity <input checked="" type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)
Sonterra Storage Annex

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	1439 E Sonterra Blvd.							
	City	San Antonio	State	TX	ZIP	78258	ZIP + 4	4281
24. County	Comal							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	West of U.S. 281 N & E Sonterra Blvd.								
26. Nearest City	San Antonio					State	TX	Nearest ZIP Code	78258
27. Latitude (N) In Decimal:	29.61558			28. Longitude (W) In Decimal:	-98.47117				
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds				
29	36	56.088	-98	28	16.21				
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)				
4220	N/A		493110		N/A				
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>									
Self-storage facility									
34. Mailing Address:	1439 E Sonterra Blvd.								
	City	San Antonio	State	TX	ZIP	78258	ZIP + 4	4281	
35. E-Mail Address:	scott.hayne@brundagemgt.com								
36. Telephone Number	37. Extension or Code			38. Fax Number <i>(if applicable)</i>					
(210) 961-7307				() -					

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. See the Core Data Form instructions for additional guidance.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Chad Respondek, PE		41. Title:	Vice President
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(210) 844-5023		() -	chad@balancedsitedesign.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 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Balanced Site Design, LLC	Job Title:	Vice President
Name <i>(In Print)</i> :	Chad Respondek, PE	Phone:	(210) 844- 5023

Signature:

A handwritten signature in black ink, appearing to be 'C. H. L.', written over a horizontal line.

Date:

10/23/2024