BURGESS & NIPLE

235 Ledge Stone Drive | Austin, TX 78737 | 512.432.1000

January 19, 2023

Ryan Soutter TCEQ Austin Regional Office 12100 Park 35 Circle Austin, Texas 78753

RE:

Contributing Zone Modification AEA Daycare Dripping Springs B&N No. 60542

Dear Mr. Soutter:

This letter is submitted on behalf of Lewis RR Dripping Springs, LLC in conjunction with and in support of the enclosed Contributing Zone Modification Submittal Form.

Lewis RR Dripping Springs, LLC is planning to construct a daycare center located within Ledgestone Subdivision Phase 1. This application has been prepared according to the guidelines set forth in 30 TAC, Chapter 213, Subchapter B. Please review the application for completeness and compliance with applicable Edward Aquifer Contributing Zone regulations for development.

If you have any questions or require additional information, please call me at (512) 432-1000.

Very truly yours, **BURGESS & NIPLE**

Felix J. Manka, P.E.

Austin South District Director

1 - Original Modification to a Contributing Zone Plan Application

Manka

1 - Copy of Modification to a Contributing Zone Plan Application



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

- 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.
- 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: Ledge Stone Subdivision Phase 1				2. Regulated Entity No.: 1047986				
3. Customer Name: Lewis RR Dripping Springs, LLC			4. Customer No.:					
5. Project Type: (Please circle/check one)	New	Modification Extension			nsion	Exception		
6. Plan Type: (Please circle/check one)	WPAP CZP	SCS	UST	AST	EXP EXT		Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential	Non-1	Non-residential 8. Si			8. Sit	e (acres):	3.06
9. Application Fee:	\$4,000	10. P	10. Permanent BMP(s):			s):	Sand Filter Pond	
11. SCS (Linear Ft.):	NA	12. AST/UST (No. Tanks)			ıks):	NA		
13. County:	Hays	14. Watershed:				Barton 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%2oGWCD%2omap.pdf For more detailed boundaries, please contact the conservation district directly.

Austin Region						
County:	Hays	Travis	Williamson			
Original (1 req.)	_X_					
Region (1 req.)	_X_	_	_			
County(ies)	_X_		_			
Groundwater Conservation District(s)	Edwards Aquifer AuthorityBarton Springs/ Edwards Aquifer _X_Hays Trinity Plum Creek	Barton Springs/ Edwards Aquifer	NA			
City(ies) Jurisdiction	AustinBuda _X_Dripping SpringsKyleMountain CitySan MarcosWimberleyWoodcreek	AustinBee CavePflugervilleRollingwoodRound RockSunset ValleyWest Lake Hills	AustinCedar ParkFlorenceGeorgetownJerrellLeanderLiberty HillPflugerville Round Rock			

	San Antonio Region							
County:	Bexar	Comal	Kinney	Medina	Uvalde			
Original (1 req.)	1	_	19 <u></u>					
Region (1 req.)		_		_				
County(ies)	-	_	// // // // // // // // // // // // //					
Groundwater Conservation District(s)	Edwards Aquifer AuthorityTrinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde			
City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park	BulverdeFair Oaks RanchGarden RidgeNew BraunfelsSchertz	NA	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.
Felix J. Manka
Print Name of Customer/Authorized Agent
(H-10-73
47 (W) (W) (W) (W)
Signature of Customer/Authorized Agent Date

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:		181 - 1811 - 1811	
Delinquent Fees (Y/N):	Review Time Spent:		MM .	
Lat./Long. Verified:	SOS Customer Verification:		1016591	
Agent Authorization Complete/Notarized (Y/N):	Fee	Payable to TCEQ (Y,	/N):	
Core Data Form Complete (Y/N):	Check:			
Core Data Form Incomplete Nos.:		Less than 90 days old (Y/N):		

Modification of a Previously Approved Contributing Zone Plan for

LEDGESTONE SUBDIVISION PHASE 1 AEA DAYCARE DRIPPING SPRINGS

Prepared for:

Lewis RR Dripping Springs, LLC 1102 Martin Avenue Round Rock, TX 78681 512-796-0168

Prepared by:

Burgess & Niple, Inc. 235 Ledge Stone Drive Austin, Texas 78737 (512) 432-1000

January 2023

Modification of a Previously Approved Contributing Zone Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), 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 **Modification of a Previously Approved Contributing Zone Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

A modification of a previously approved plan is requested for (check all that apply):

	Any physical or operational modification of any best management practices or
	structure(s), including but not limited to temporary or permanent ponds, dams,
	berms, silt fences, and diversionary structures;
	Any change in the nature or character of the regulated activity from that which was
	originally approved;
	A change that would significantly impact the ability to prevent pollution of the
	Edwards Aquifer and hydrologically connected surface water; or
	igtimes Any development of land previously identified in a contributing zone plan as
	undeveloped.
1	Summary of Proposed Modifications (soloct plan type being modified). If the approved

4. Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

CZP Modification	Approved Project	Proposed Modification	
Summary			
Acres	<u>108.53, 110.07</u>	3.06	
Type of Development	Subdivision, Subdivision	Commercial	
Number of Residential	236,236	<u>0</u>	
Lots			
Impervious Cover (acres)	<u>24.26, 24.89</u>	<u>1.05</u>	
Impervious Cover (%)	<u>22.4%, 22.61%</u>	34.31%	
Permanent BMPs	Ext Det & Sand Fltr &	Sand Filter	
Other	Grassy Swale		
AST Modification	Approved Project	Proposed Modification	
Summary			
Number of ASTs	NA	N/A	
Other			
UST Modification	Approved Project	Proposed Modification	
Summary			
Number of USTs	<u>NA</u>	<u>N/A</u>	
Other			

5.	Attachment B: Narrative of Proposed Modification. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including previous modifications, and how this proposed modification will change the approved plan.
6.	Attachment C: Current Site Plan of the Approved Project. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere. The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired. The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved. The approved construction has commenced and has been completed. Attachment C illustrates that the site was not constructed as approved. The approved construction has commenced and has not been completed. Attachment C illustrates that, thus far, the site was constructed as approved. The approved construction has commenced and has not been completed. Attachment C illustrates that, thus far, the site was not constructed as approved.
7.	 ☐ Acreage has not been added to or removed from the approved plan. ☐ Acreage has been added to or removed from the approved plan and is discussed in Attachment B: Narrative of Proposed Modification.
8.	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.

ATTACHMENT A ORIGINAL APPROVAL LETTER AND APPROVED MODIFICATION LETTERS

Kathleen Hartnett White, Chairman R. B. "Ralph" Marquez, Commissioner Larry R. Soward, Commissioner Glenn Shankle, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 24, 2006

Mr. Mike Schoenfeld 290 East Bush Inc. 1300 Highway 290 West Austin, Texas 78737

Re:

Edwards Aquifer, Hays County

NAME OF PROJECT: Ledge Stone Subdivision Phase 1; North Side of Highway 290 Approximately 0.5 mile West of CR 163; Dripping Springs, Texas

TYPE OF PLAN: Request for Approval of a Contributing Zone Plan (CZP); 30 Texas

Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer

Edwards Aquifer Protection Program File No. 05112102

Dear Mr. Schoenfeld:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP application for the referenced project submitted to the Austin Regional Office by CMA Engineering, Inc. on behalf of 290 East Bush, Inc. on November 21, 2005. Final review of the CZP submittal was completed after additional material was received on February 3, February 22, March 9, and March 21, 2006. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Contributing Zone Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10% of the construction has commenced on the project or an extension of time has been requested.

PROJECT DESCRIPTION

The proposed residential subdivision project will be located on 108.53 acres and will consist of the construction of approximately 236 single family residences, associated roads and sidewalks, a wastewater treatment plant, a subsurface drip irrigation system, two extended detention water quality ponds, and a grassy swale. The proposed impervious cover for the development is approximately 24.26 acres (22.4% of the total area of the site).

Mr. Mike Schoenfeld Page 2 March 24, 2006

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the site after construction, two extended detention ponds and a grassy swale will be constructed. The individual treatment components will consist of the west pond system which has a total volume of 6.55 acre feet and the north pond system which has a total volume of 8.13 acre feet. A 415.5 feet long grassy swale with a top width of 6.67 feet and a bottom width of 2.0 feet is also proposed. The approved measures meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

SPECIAL CONDITION

Intentional discharges of sediment laden stormwater during construction are not allowed. If dewatering excavated areas and/or areas of accumulated stormwater becomes necessary, the discharge shall be filtered through appropriately selected temporary best management practices. These may include vegetative filter strips, sediment traps, rock berms, silt fence rings, etc.

STANDARD CONDITIONS

1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

- 2. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project until all regulated activities are completed.
- 3. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 4. The applicant must provide written notification of intent to commence construction of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.
- 5. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution

Mr. Mike Schoenfeld Page 3 March 24, 2006

Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

- 6. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 7. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
- 8. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 9. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the Austin Regional Office within 30 days of site completion.
- 11. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is

Mr. Mike Schoenfeld Page 4 March 24, 2006

transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

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

If you have any questions or require additional information, please contact Terry Webb of the Edwards Aquifer Protection Program of the Austin Regional Office at (512)339-2929.

Sincerely

Executive Director

Texas Commission on Environmental Quality

GS/tmw

Enclosure: Change in Responsibility for Maintenance on Permanent BMPs, TCEQ-10263

cc: Mr. Felix J. Manka, P. E., CMA Engineering, Inc.

The Honorable Jim Powers, County Judge, Hays County

Mr. Allen G. Walther, Director of Environmental Health, Hays County Environmental Health Dept.

Ms. Michelle Fisher, City Administrator, City of Dripping Springs

Ms. Beckie J. Morris, General Manager, Hays Trinity Groundwater Conservation District TCEQ Central Records, Austin, Texas

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





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 8, 2010

Mr. Mike Schoenfeld 290 East Bush, Inc. 13000 West Hwy 290 Austin, Texas 78737

Re: Edwards Aquifer, Hays County

NAME OF PROJECT: Bush Ranch Phase 2; 13000 US 290, Dripping Springs, Texas

TYPE OF PLAN: Request for Approval of a Contributing Zone Plan (CZP)

30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquiser Protection Program ID No. 11-10081701; Investigation No. 865156;

Regulated Entity No. RN 105981849

Dear Mr. Schoenfeld:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP Application for the above-referenced project submitted to the Austin Regional Office by CMA Engineering, Inc. on behalf of 290 East Bush, Inc. on August 17, 2010. Final review of the CZP was completed after additional material was received on September 29, 2010. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

PROJECT DESCRIPTION

The proposed commercial development project will have an area of approximately 8.36 acres. It will include the construction of a public roadway and a detention/water quality pond. The impervious cover will be 0.84 acres (ten percent). No wastewater is generated by this project.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a wet basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical

Mr. Mike Schoenfeld Page 2 October 8, 2010

Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The proposed wet basin is designed to capture runoff from three drainage basins and treat a proposed 80%, 75%, and 80% impervious cover from basin T1, B1 and B3, respectively. The required total suspended solids (TSS) treatment for this project is 16,141 pounds of TSS. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the future proposed developments.

A storm drain system is proposed to be constructed with this project to carry stormwater from drainage basin T1 to the wet basin. Drainage systems will be constructed when drainage basins B1 and B3 are developed to convey runoff to the wet basin. Stormwater enters the wet basin in the sediment forebay that is separated from the main pool of the wet basin by a rock gabion. The capacity at the permanent pool elevation is required to be 69,233 cubic feet and 146,566 cubic feet is provided. Above the permanent pool elevation a water quality volume 83,080 is required and 83,217 is provided. A 4'x4' concrete inlet box riser serves as an outlet structure and is connected to a 30 inch concrete outlet pipe. An 18 inch concrete drain pipe ties to the outlet pipe with a gate valve to allow draining of the pond for maintenance.

A site investigation was conducted by a representative of the Austin Regional Office on September 14, 2010, to document the conditions at the site. The site investigation determined that the existing conditions were as described in the application and construction plans.

SPECIAL CONDITIONS

- All permanent pollution abatement measures shall be operational prior to occupancy of the facility.
- II. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.
- III. This approval letter is being issued for regulated activities (as defined in Chapter 213) and for best management practices presented in the application. This approval does not constitute a water right permit or authorization from the TCEQ Dam Safety Program. Failure to obtain all necessary authorizations could result in enforcement actions. For more information on Water Rights Permits, please refer to:

http://www.tceq.state.tx.us/permitting/water_supply/water_rights/wr_amiregulated.html For more information on the Dam Safety program, please refer to:

http://www.tceq.state.tx.us/compliance/field_ops/dam_safety/damsafetyprog.html

IV. A CZP must be submitted all development associated with this common plan of development.

STANDARD CONDITIONS

- Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits,

Mr. Mike Schoenfeld Page 3 October 8, 2010

- registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.
- 3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

- 4. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 6. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.
- 7. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

- 8. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 9. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction

Mr. Mike Schoenfeld Page 4 October 8, 2010

chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

- 10. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 12. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.
- 13. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 5, above.

After Completion of Construction:

- Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the Austin Regional Office within 30 days of site completion.
- 15. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 16. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone Plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

- 17. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 18. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact Mr. Jerel Rackley, P.E. of the Edwards Aquifer Protection Program of the Austin Regional Office at (512) 339-2929.

Sincerely

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

MRV/jlr

Enclosure: Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Ms. Jacy Warwick, P.E., CMA Engineering, Inc., Austin

Mr. Rick Broun, Co-General Manager, Hays Trinity Groundwater Conservation District

Ms. Michelle Fischer, City Administrator, City of Dripping Springs

TCEQ Central Records, Building F. MC212

Bryan W. Shaw, Ph.D., P.E., *Chairman*Toby Baker, *Commissioner*Jon Niermann, *Commissioner*Stephanie Bergeron Perdue, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 18, 2018

Mr. Mike Schoenfeld Vice President 290 East Bush, Inc. 102A Cordillera Ridge Boerne, Texas 78006

Re:

Edwards Aquifer, Hays County

NAME OF PROJECT: Bush Ranch Phase 2; 13000 US 290; Dripping Springs, Texas TYPE OF PLAN: Clarification to an Approved Modification to a Contributing Zone Plan (CZP-MOD); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer Edwards Aquifer Protection Program ID No. 11001048; Regulated Entity No. 105981849

Dear Mr. Schoenfeld:

The Texas Commission on Environmental Quality (TCEQ) received your request to correct an error on the approval letter dated June 8, 2018 for the above referenced project. Your request stated the impervious cover amounts in the Project Description were incorrect. Please see a corrected Project Description below:

PROJECT DESCRIPTION

The CZP MOD proposes to add an additional 3.10 acres of impervious cover which includes construction of several commercial buildings, parking, driveways, and underground utilities. The proposed project will increase the on-site impervious acreage from 0.84 acres to 3.94 acres. This modification approval also includes a portion of Rocky Ridge Road that is being treated by the wet basin. Project wastewater will be disposed of by conveyance to the existing Hays County MUD No.4 Wastewater Treatment Plant. In addition to the described activities, temporary erosion and sedimentation controls will be installed prior to commencing site disturbance and maintained during construction.

Please amend the CZP-MOD approval letter by attaching this Clarification.

If you have any questions or require additional information, please contact Ms. Anusuya Iyer of the Edwards Aquifer Protection Program of the Austin Regional Office at (512) 339-2929.

Sincerely,

Robert Sadlier, Water Section Team Leader

Austin Region Office

Texas Commission on Environmental Quality

RCS/aki

Bryan W. Shaw, Ph.D., P.E., *Chairman*Toby Baker, *Commissioner*Jon Niermann, *Commissioner*Stephanie Bergeron Perdue, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 5, 2018

Mr. Mike Schoenfeld Vice President 290 East Bush, Inc. 102A Cordillera Ridge Boerne, Texas 78006

Re: Edwards Aquifer, Hays County

NAME OF PROJECT: Bush Ranch Phase 2; 13000 US 290, Dripping Springs, Texas TYPE OF PLAN: Application for Modification (MOD) of a previously Approved Contributing Zone Plan (CZP);

30 Texas Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer Edwards Aquifer Protection Program ID No. 11001048; RN105981849

Dear Mr. Schoenfeld:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP MOD Application for the above-referenced project submitted to the Austin Regional Office by CMA Engineering, Inc. on behalf of 290 East Bush, Inc., on March 15, 2018. Final review of the CZP MOD was completed after additional material was received on May 30, 2018. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213 Subchapter B. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The CZP approval for the commercial development was originally issued on October 8, 2010 (Edwards Aquifer Protection Program ID No. 11-10081701) for a total project area of 8.36 acres with 0.84 acres of impervious cover. The approval included a wet basin that was designed to capture runoff from three drainage basins and treat a proposed 80%, 75%, and 80% impervious cover from T1, B1, and B3, respectively

PROJECT DESCRIPTION

The CZP MOD proposes to add an additional 3.94 acres of impervious cover which includes construction of several commercial buildings, parking, driveways, and underground utilities.

Mr. Mike Schoenfeld Page 2 June 5, 2018

This modification approval also includes a portion of Rocky Ridge Road that is being treated by the wet basin. The proposed project will increase the on-site impervious acreage from 0.84 acres to 4.78 acres. Project wastewater will be disposed of by conveyance to the existing Hays County MUD No.4 Wastewater Treatment Plant. In addition to the described activities, temporary erosion and sedimentation controls will be installed prior to commencing site disturbance and maintained during construction.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater, surface water will be conveyed to a wet basin that was designed using the TCEQ technical guidance document, "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005)", approved, and constructed as part of the original CZP application for this project (EAPP ID No. 11-10081701). The wet basin is designed to treat 17.658 acres of impervious cover at full buildout. The capacity at the permanent pool elevation is required to be 69,233 cubic feet and 146,566 cubic feet are provided. Above the permanent pool elevation, a water quality volume of 83,080 cubic feet is required for full buildout and 83,217 cubic feet of WQV are provided. Treatment design calculations were sealed by Lauren Winek, P.E. on May 29, 2018, to demonstrate that the proposed treatment load removal meets the required treatment load removal. The approved measures meet the TCEQ required 80% removal of the increased load in TSS caused by the project.

SPECIAL CONDITIONS

- I. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.
- II. Additional phases of this development will require approval of a CZP or CZP Modification as applicable prior to conducting additional regulated activities on the site.
- III. All sediment and/or media removed during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

- 4. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 5. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

Mr. Mike Schoenfeld Page 3 June 5, 2018

- 6. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.
- 7. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

- 8. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 9. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 10. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
- 11. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 12. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 13. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.
- 14. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and

Mr. Mike Schoenfeld Page 4 June 5, 2018

approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 5, above.

After Completion of Construction:

- 15. Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the Austin Regional Office within 30 days of site completion.
- 16. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 17. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone Plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 18. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 19. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Ms. Anusuya K. Iyer of the Edwards Aquifer Protection Program of the Austin Regional Office at (512) 339-2929.

Sincerely,

Robert Sadlier,

Water Section Team Leader

Austin Region Office

Texas Commission on Environmental Quality

RCS/aki

Enclosure:

Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-

10263

Mr. Mike Schoenfeld Page 5 June 5, 2018

Ms. Lauren Winek, P.E., CMA Engineering, Inc., 235 Ledge Stone Drive cc:

Austin, Texas 78737

Ms. Brooke Leftwich, Environmental Compliance Specialist, Hays County
Ms. Michelle Fischer, City Administrator, City od Dripping Springs
Mr. Rick Broun, General Manager, Hays Trinity Groundwater Conservation District

Jon Niermann, Chairman Emily Lindley, Commissioner Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 29, 2018

Mr. Mike Schoenfeld Vice President 290 East Bush, Inc. 102A Cordillera Ridge Boerne, Texas 78006

Re: Edwards Aquifer, Hays County

NAME OF PROJECT: Ledge Stone Subdivision Phase 1; Ledge Stone Drive at Rocky

Ridge Trail; Dripping Springs, Texas

TYPE OF PLAN: Application for Modification (MOD) of a Previously Approved Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213

Subchapter B Edwards Aquifer

Edwards Aquifer Protection Program ID No. 11001268; RN104798640

Dear Mr. Schoenfeld:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP MOD Application for the above-referenced project submitted to the Austin Regional Office by CMA Engineering, Inc. on behalf of 290 East Bush, Inc., on August 31, 2018. Final review of the CZP MOD was completed after additional material was received on November 9, 12, 26, and 29, 2018. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213 Subchapter B. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The CZP approval for the commercial development was originally issued on March 24, 2006 (Edwards Aquifer Protection Program ID No. 11-05112102) for a total project area of 108.53 acres with 24.26 acres of impervious cover. The approval included 236 single family residences, a wastewater treatment plant, surface drip irrigation system, two extended detention basins and a grassy swale.

Mr. Mike Schoenfeld Page 2 November 29, 2018

PROJECT DESCRIPTION

The CZP MOD is to request an approval for an additional 0.63 acres of impervious cover from Rocky Ridge trail. The impervious cover was always treated by a sand filter basin but was not included in the original CZP approval letter. The two extended detention basins approved in EAPP ID No. 11-05112102 were modified into sand filter basins for higher removal efficiency. The sand filters (west and north) are approved with this application.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater, surface water will be conveyed to a west sand filter basin that was designed and constructed using the TCEQ technical guidance document, "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005)". The sand filter basin is designed to treat 18.68 acres of impervious cover at full buildout. The required water quality volume is 69,274 cubic feet and 104,420 cubic feet are provided. The total TSS load removal required is 15,493 lbs. and the total TSS load removal provided is 17,000 lbs.

The area draining to the north sand filter pond is 44.15 acres with 14.26 acres of impervious cover. The required water quality volume is 58,793 cubic feet and provided water quality volume is 99,324 cubic feet The total TSS load removal required is 12,800 lbs. and the total TSS load removal provided is 13,670 lbs.

Treatment design calculations were sealed by Lauren Winek, P.E. on November 20, and 28, 2018, to demonstrate that the proposed treatment load removal meets the required treatment load removal. The approved measures meet the TCEQ required 80% removal of the increased load in TSS caused by the project.

SPECIAL CONDITIONS

- All permanent pollution abatement measures shall be operational prior to occupancy of the facility.
- Additional phases of this development will require approval of a CZP or CZP Modification as applicable prior to conducting additional regulated activities on the site.
- III. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

STANDARD CONDITIONS

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

Mr. Mike Schoenfeld Page 3 November 29, 2018

Prior to Commencement of Construction:

- 4. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 5. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 6. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.
- 7. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

- 8. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 9. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 10. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
- 11. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.

Mr. Mike Schoenfeld Page 4 November 29, 2018

- 12. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 13. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.
- 14. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 5, above.

After Completion of Construction:

- 15. 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 Austin Regional Office within 30 days of site completion.
- 16. Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the Austin Regional Office within 30 days of site completion.
- 17. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 18. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone Plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 19. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

Mr. Mike Schoenfeld Page 5 November 29, 2018

20. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Ms. Anusuya K. Iyer of the Edwards Aquifer Protection Program of the Austin Regional Office at (512) 339-2929.

Sincerely

Robert Sadlier,

Water Section Team Leader

Austin Region Office

Texas Commission on Environmental Quality

RCS/aki

Enclosure:

Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-

10263

Change in Responsibility for Maintenance on Permanent Best Management Practices and Measures

The applicant is no longer responsible for maintaining the permanent best management practice (BMP) and other measures. The project information and the new entity responsible for maintenance is listed below.

Customer:		
Regulated Entity Name	9:	
Site Address:		
City, Texas, Zip:		
County:		
Approval Letter Date:		
BMPs for the project:		
New Responsible Party	y:	
Name of contact:		****
Mailing Address:		
City, State:	Zip)*
Telephone:	FAX:	
Signature of New Resp	ponsible Party Date	

I acknowledge and understand that I am assuming full responsibility for maintaining all permanent best management practices and measures approved by the TCEQ for the site, until another entity assumes such obligations in writing or ownership is transferred.

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

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

TCEQ-10263 (10/01/04)

Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 27, 2022

Mr. Daniel Campbell Ledgestone East, LTD 4314 Medical Parkway, Suite 200 Austin, Texas 78756

Re: Edwards Aquifer, Hays County

NAME OF PROJECT: Ledge Stone Subdivision Phase 1; Located on the N side of US 290 approximately 0.5 miles W of CR 163; ETJ of Dripping Springs, Texas

TYPE OF PLAN: Request for Modification of an Approved Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer

Telia Hammorative code (1716) chapter 213 Subchapter B Lawards

Regulated Entity No. RN104798640; Additional ID No. 11003078

Dear Mr. Campbell:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP Modification for the above-referenced project submitted to the Austin Regional Office by Burgess & Niple, Inc. on behalf of Ledgestone East, LTD on April 28, 2022. Final review of the CZP Modification was completed after additional material was received on June 14, 2022. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The Ledge Stone Subdivision Phase 1 CZP was approved by letter dated March 24, 2006, for a 108.53-acre site for the construction of 236 single-family residences, associated roads, wastewater treatment plant, and a subsurface drip irrigation system. Permanent BMPs included two (2) extended detention basins and a grassy swale. A CZP Modification was approved by letter dated November 29, 2018, to modify the two (2) extended detention basins into sand filter basins (west and north).

Mr. Daniel Campbell June 27, 2022 Page 2

PROJECT DESCRIPTION

This modification is for an 8.74-acre site with 5.30 acres (60.64 percent) of impervious cover. The commercial project proposes the construction of five (5) buildings, associated parking, and driveways. Project wastewater will be disposed of by conveyance to the Hays County MUD No. 4 Wastewater Treatment Plant owned and operated by the Hays County MUD No. 4.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, one (1) existing sand filter basin (11001268 west basin), designed using the TCEQ technical guidance document, <u>Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005)</u>, will be utilized to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 4,757 pounds of TSS generated from the 5.30 acres of impervious cover. The approved measure meets the required 80 percent removal of the increased load in TSS caused by the project.

SPECIAL CONDITIONS

- This modification is subject to all Special and Standard Conditions listed in the CZP approval letter dated March 24, 2006, and subsequent modification dated November 29, 2018.
- II. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

- 4. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 5. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 6. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to

Mr. Daniel Campbell June 27, 2022 Page 3

- the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.
- 7. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

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

After Completion of Construction:

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

Mr. Daniel Campbell June 27, 2022 Page 4

- 15. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 16. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone Plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 17. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 18. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact the Edwards Aquifer Protection Program Austin Regional Office at (512) 339-2929.

Sincerely, Lillian Butter

Lillian Butler, Section Manager

Edwards Aquifer Protection Program

Texas Commission on Environmental Quality

LIB/dpm

Enclosure: Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Felix Manka, P.E., Burgess & Niple, Inc.

Change in Responsibility for Maintenance on Permanent Best Management Practices and Measures

The applicant is no longer responsible for maintaining the permanent best management practice (BMP) and other measures. The project information and the new entity responsible for maintenance is listed below.

Customer:				
Regulated Entity Name):			
Site Address:				
City, Texas, Zip:				
County:				
Approval Letter Date:				
BMPs for the project:				
New Responsible Party	/:			
Name of contact:	- Allen		535-90	
Mailing Address:				
City, State:				_ Zip:
Telephone:			FAX:	
Signature of New Resp	onsible Party	Date		

I acknowledge and understand that I am assuming full responsibility for maintaining all permanent best management practices and measures approved by the TCEQ for the site, until another entity assumes such obligations in writing or ownership is transferred.

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

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

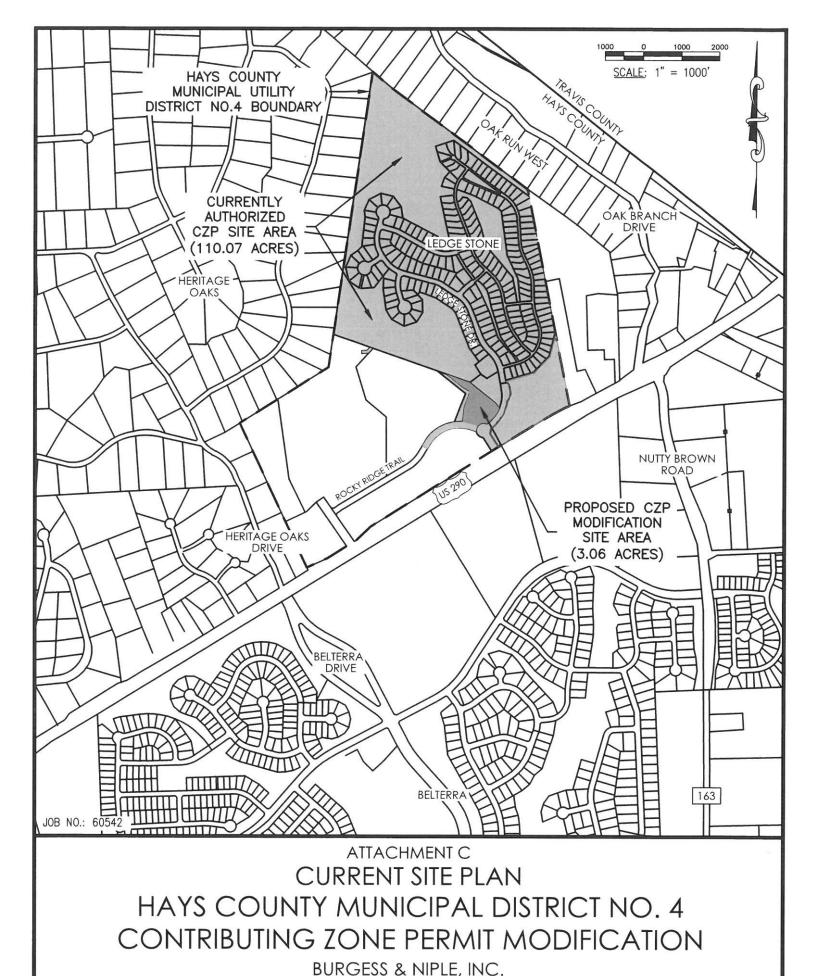
ATTACHMENT B NARRATIVE OF PROPOSED MODIFICATION

Attachment B: Narrative of Proposed Modification

Lewis RR Dripping Springs, LLC intends to build a daycare center on a 3.06-acre site within Bush Ranch, a 108.53-acre development. The site is located on the north side of the Ledge Stone Drive roundabout, east of Anthem Apartments. The entire site is within the CZP Zone and has not been previously developed. The site utilizes existing BMPs that were permitted with the original CZP (EAPP ID No. 05112102) and subsequent modification (EAPP ID No. 11001268). Under the original CZP, the total site area was 108.53 acres with 24.26 acres of impervious cover. Subsequently, a 2018 CZP Modification Approval counted for a total site area of 110.07 acres with 22.61 acres of impervious cover.

This modification is for a 3.06 -acre project located north of the existing sedimentation filtration basin. The proposed modifications will add 1.05 acres of impervious cover. The proposed site will not significantly alter drainage patterns as depicted in the original CZP, and the entire site will drain to the pond. The pond is sized sufficiently to treat the additional impervious cover proposed with this modification in accordance with the water quality standards in RG-348 -Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices (Revised July 2005).

ATTACHMENT C CURRENT SITE PLAN OF THE APPROVED PROJECT (SEE ATTACHMENT AND RELATED CONSTRUCTION PLANS)



235 LEDGE STONE DRIVE AUSTIN, TEXAS 78737 (512) 432-1000 JANUARY 2023

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), 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 **Contributing Zone Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Felix Manka

Date: 0/-/9-23

Signature of Customer/Agent:

Regulated Entity Name: Ledge Stone Subdivision Phase 1

Project Information

1. County: Hays

2. Stream Basin: Long Branch

3. Groundwater Conservation District (if applicable): Hays Trinity GCD

4. Customer (Applicant):

Contact Person: R. Kip Lewis

Entity: <u>Lewis RR Dripping Springs, LLC</u> Mailing Address: 1102 Martin Avenue

City, State: Round Rock, Texas Zip: 78681 Telephone: 512-796-0168 Fax: ____

Email Address: kip@lewisinv.com

5.	Agent/Representative (If any):
	Contact Person: Felix Manka Entity: Burgess & Niple, Inc. Mailing Address: 235 Ledge Stone Drive City, State: Austin, Texas Zip: 78737 Telephone: 512-432-1000 Fax: 512-432-1015 Email Address: felix.manka@burgessniple.com
6.	Project Location:
	 ☐ The project site is located inside the city limits of ☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of <u>Dripping Springs</u>. ☐ The project site is not located within any city's limits or ETJ.
7.	The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.
	The site is located on the north side of the Ledge Stone Drive roundabout, east of Anthem Apartments.
8.	Attachment A - Road Map. A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.
9.	Attachment B - USGS Quadrangle Map. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) clearly show:
	✓ Project site boundaries.✓ USGS Quadrangle Name(s).
10.	Attachment C - Project Narrative. A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application are 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
11.	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/Not cleared) Other: 	
12. The type of project is: Residential: # of Lots:	
Residential: # of Living Unit Equivalents: Commercial Industrial Other:	-
13. Total project area (size of site): 3.06 Acres	
Total disturbed area: <u>1.94</u> Acres	

14. Estimated projected population: <u>NA</u>

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

Table 1 - Impervious Cover

Impervious Cover of			
Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	11,984	÷ 43,560 =	0.27
Parking	18,630	÷ 43,560 =	0.43
Other paved surfaces	15,310	÷ 43,560 =	0.35
Total Impervious Cover	45,924	÷ 43,560 =	1.05

Total Impervious Cover $\underline{1.05}$ ÷ Total Acreage $\underline{3.06}$ X 100 = $\underline{34.97}$ % Impervious Cover

- 16. Attachment D Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water quality is attached. If applicable, this includes the location and description of any discharge associated with industrial activity other than construction.
- 17. Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

For Road Projects Only

Complete questions 18 - 23 if this application is exclusively for a road project.

/ /
/A

18. 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.
19. Type of pavement or road surface to be used:
Concrete Asphaltic concrete pavement Other:
20. Right of Way (R.O.W.):
Length of R.O.W.: feet. Width of R.O.W.: feet. $L \times W = Ft^2 \div 43,560 Ft^2/Acre = acres.$
21. Pavement Area:
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.
22. A rest stop will be included in this project.
A rest stop will not be included in this project.
23. 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
24. Attachment E - 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 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
25. Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied. N/A

	placed within a containm times the storage capaci	ent structure that is size	ed to capture one and
5		Tai	tal x 1.5 = Gallons
4			
3			
2			
1			
AST Number	Size (Gallons)	Substance to be Stored	Tank Material
Table 2 - Tanks and	Substance Storage		T
27. Tanks and substance	e stored:		
⊠N/A			
greater than or equal to		inc motandion of Ac	io, with volume(s)
Gallons	- 33 if this project includ		
	oveground Stor	age Tanks/ASI	(s) > 500
☐ Proposed.			
Existing.			
The sewage collection	on System (Sewer Lines): on system will convey the lant. The treatment fac	e wastewater to the Ha	ys Co. MUD No. 4
Each lot in the size. The sys	nis project/development tem will be designed by ad installed by a licensed	a licensed professional	engineer or registered
will be used licensing aut the land is su the requiren	to treat and dispose of t hority's (authorized age uitable for the use of pri	he wastewater from thi nt) written approval is a vate sewage facilities an	ttached. It states that
On-Site Sewage	Facility (OSSF/Septic Tar	nk):	
26. Wastewater will be	disposed of by:		

	stem, the containm umulative storage c		ed to capture one ar ns.	nd one-half (1 1/2)
for providin		nment are propose	ent Methods. Alter d. Specifications sh	
	ons and capacity of o		ure(s):	
Length (L)(Ft.)	Width(W)(Ft.)	Height (H)(Ft.)	L x W x H = (Ft3)	Gallons
30. Piping:			To	otal: Gallons
Some of the structure. The piping v The piping v The contain	piping to dispenser vill be aboveground vill be underground ment area must be	rs or equipment wil	side the containmer Il extend outside the in a material imper nent structure will b	e containment vious to the
	t H - AST Containme t structure is attach		ings. A scaled draw following:	ing of the
☐ Internal ☐ Tanks cle ☐ Piping cl	100 NOTE NOTE NO	0.000	wall and floor thickr collection of any sp	
storage tanl			or collection and recontrolled drainage	5 15
	rent of a spill, any sp 4 hours of the spill a		ved from the contain perly.	inment structure

In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.
Site Plan Requirements
Items 34 - 46 must be included on the Site Plan.
34. \square The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: $1'' = \underline{30}'$.
35. 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 Map No. 48209C0128F Dated September 2, 2005.
36. The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.
The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot contour intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.
37. A drainage plan showing all paths of drainage from the site to surface streams.
38. The drainage patterns and approximate slopes anticipated after major grading activities.
39. Areas of soil disturbance and areas which will not be disturbed.
40. \(\sum \) Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
41. \times Locations where soil stabilization practices are expected to occur.
42. Surface waters (including wetlands).
⊠ N/A
43. Locations where stormwater discharges to surface water.
There will be no discharges to surface water.
44. Temporary aboveground storage tank facilities.
Temporary aboveground storage tank facilities will not be located on this site.

45. Permanent aboveground storage tank facilities.
Permanent aboveground storage tank facilities will not be located on this site.
46. Legal boundaries of the site are shown.
Permanent Best Management Practices (BMPs)
Practices and measures that will be used during and after construction is completed.
47. Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
□ N/A
48. 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
49. 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
50. 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.

51.	e executive director may waive the requirement for other permanent BMPs for multi- nily residential developments, schools, or small business sites where 20% or less pervious cover is used at the site. This exemption from permanent BMPs must be corded in the county deed records, with a notice that if the percent impervious cover creases 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 gional office of these changes.
	 Attachment I - 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.
52.	Attachment J - BMPs for Upgradient Stormwater.
	 A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is 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.
53.	Attachment K - BMPs for On-site Stormwater.
	A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached. Permanent BMPs or measures are not required to prevent pollution of surface wate or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.
54.	Attachment L - BMPs for Surface Streams. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.
	N/A
55.	Attachment M - Construction Plans . Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are

	attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.
	N/A
56. 🔀	Attachment N - Inspection, Maintenance, Repair and Retrofit Plan. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:
	Prepared and certified by the engineer designing the permanent BMPs and
	measures Signed by the owner or responsible party Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit. Contains a discussion of record keeping procedures
	N/A
57. 🗌	Attachment O - 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.
\boxtimes	N/A
58.	Attachment P - Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is 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 result in water quality degradation.
	N/A
	oonsibility for Maintenance of Permanent BMPs and sures after Construction is Complete.
59.	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.
60. 🔀	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.

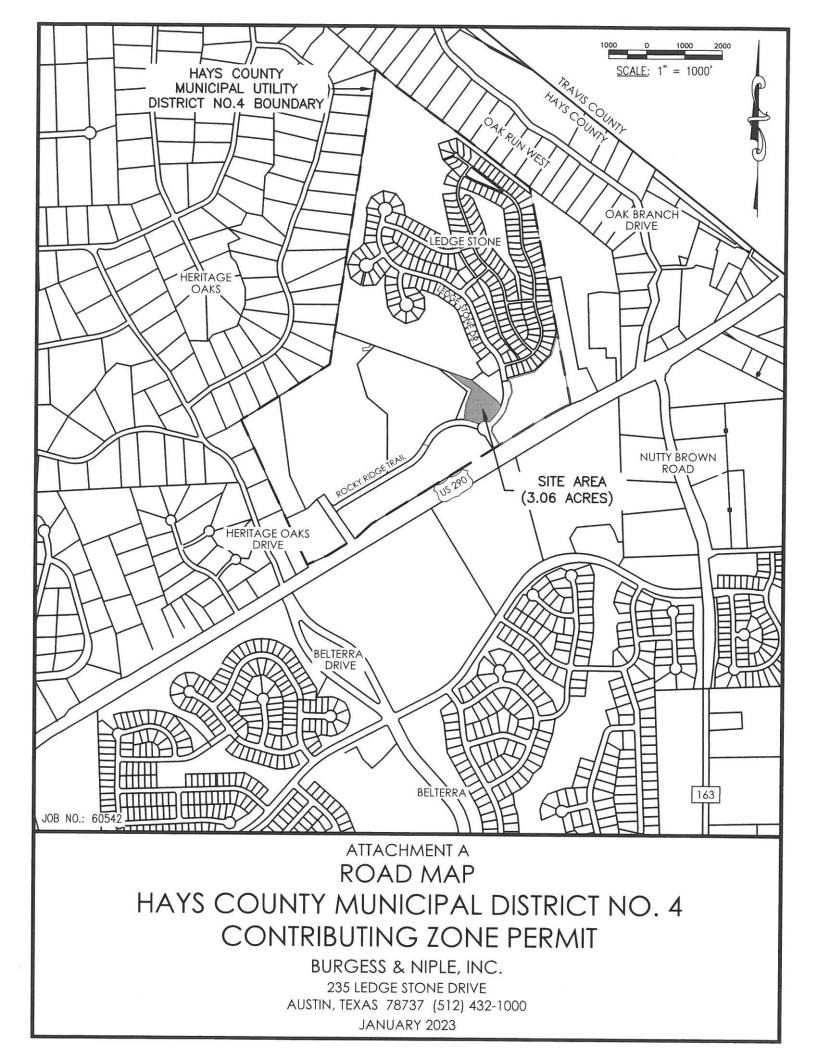
or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

Administrative Information

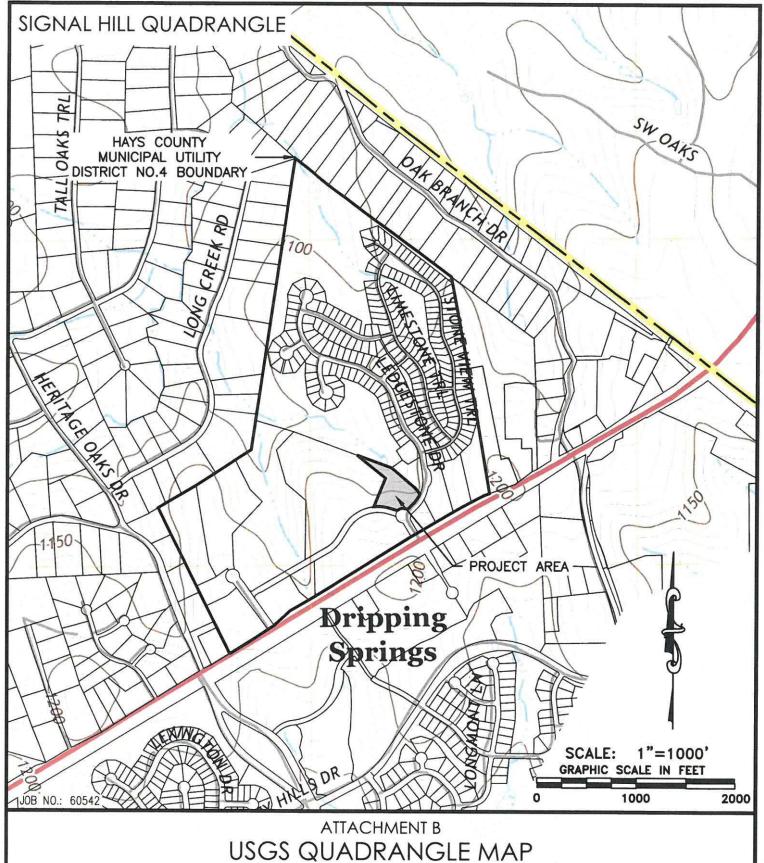
61. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.
62. Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.
63. The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

The Temporary Stormwater Section (TCEQ-0602) is included with the application.

ATTACHMENT A ROAD MAP



ATTACHMENT B USGS QUAD MAP



HAYS COUNTY MUNICIPAL DISTRICT NO. 4
CONTRIBUTING ZONE PERMIT

BURGESS & NIPLE, INC.

235 LEDGE STONE DRIVE AUSTIN, TEXAS 78737 (512) 432-1000 JANUARY 2023

ATTACHMENT C PROJECT NARRATIVE

Attachment C: PROJECT NARRATIVE

This project site totals approximately 3.06 acres of land out of 186.61 acres of land known as Bush Ranch. The site is located in Hays County on the north side of the Ledge Stone Drive roundabout, east of Anthem Apartments.

The project consists of the construction of a daycare center including, parking, utilities, driveways, playgrounds and a storm sewer system. As part of a previous CZP authorization, a water quality pond was constructed that will serve as the BMP for this site. The storm water for the additional impervious cover included with this CZP application will be treated by the existing water quality pond. No modifications to the existing water quality pond will be necessary to achieve the required pollutant removal.

Historically this tract has not been developed. This submittal is intended to demonstrate compliance with these Contributing Zone Measures requirement. Permanent BMPs consist of one (1) sedimentation filtration pond. The attached construction plans include the SWPPP, the project site boundaries, limits of construction, drainage plan, and temporary BMPs.

ATTACHMENT D FACTORS AFFECTING SURFACE WATER QUALITY

Attachment D: FACTORS AFFECTING SURFACE WATER QUALITY

Surface water quality can be affected in two ways: during construction and after construction. Each is considered separately.

During Construction: Normal factors for construction affect surface water quality. They include:

- Erosion of Disturbed Areas: Soil from areas where vegetation is removed during construction tends to wash away during rainfall.
- Sedimentation in Stormwater Runoff: Soils and debris washed away during rainfall will be retained onsite by the use of silt fence as shown in the attached construction plans.

After Construction: Factors affecting surface water quality after construction is completed include:

- Erosion of Disturbed Areas: After completion of construction, the disturbed areas will then be revegetated. Temporary controls will be maintained until revegetation is established.
- Increased Impervious Cover: The impervious cover will be treated through the use of Permanent BMPs. The proposed BMPs will consist of one (1) sediment filtration pond.

ATTACHMENT E VOLUME AND CHARACTER OF STORMWATER

Attachment E: VOLUME AND CHARACTER OF STORMWATER

The drainage plan and calculations have been provided in the attached plans. Soil for this site consist of clay loams of the Brackett-Rock outcrop – Real complex, steep (BtG), which are classified as Hydrologic Soil Group "C". Runoff coefficient (c) values were determined using the City of Austin Drainage Criteria Manual (DCM) Table 2-2.

Existing Conditions: The site drains generally to the north towards a swale flowing northwest to the existing sediment filtration pond. There is also a drainage swale on the west side of the site that carries runoff from Rocky Ridge Trail and a portion of the site to the swale on the north side and the existing sediment filtration pond.

Proposed Conditions: All drainage systems have been designed in accordance with the City of Austin DCM and are designed to convey the 100-year storm event. Refer to the drainage calculations included in the plans for detailed analysis.

ATTACHMENT F SUITABILITY LETTER FROM AUTHORIZED AGENT (NOT APPLICABLE)

ATTACHMENT H AST CONTAINMENT STRUCTURE DRAWINGS (NOT APPLICABLE)

ATTACHMENT I 20% OR LESS IMPERVIOUS COVER WAIVER (NOT APPLICABLE)

ATTACHMENT J BMPS FOR UPSTREAM STORMWATER

Attachment J: BMPS FOR UPSTREAM STORMWATER

All stormwater originating upstream will be diverted around the site or will be routed through the site to be treated by the existing sand filter ponds. The pond is sized sufficiently to treat the additional impervious cover and upstream offsite area draining to the pond.

ATTACHMENT K BMPS FOR ON SITE STORMWATER

Attachment K: BMPS FOR ON SITE STORMWATER

All stormwater from the site will be conveyed to an existing channel that conveys runoff to the existing water quality pond located downstream.

In accordance with TCEQ Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices (Revised), RG-348, dated July 2005, proposed permanent Best Management Practices (BMPs) will reduce the annual increase in Total Suspended Solids (TSS) load in storm water runoff by at least 80%. Please refer to the previously approved CZP permit No. (11001268) for detailed plans and specifications of the existing pond. Attachment M contains the as built construction drawings for the pond. The BMP was designed to provide the necessary treatment for this development and is designed to treat a total of 18.60 acres of impervious cover with 69,274 cubic feet of water quality volume (WQV). 104,420 cubic feet are provided. The total TSS load removal required is 12,979 lbs. and the total TSS load removal provided is 16,422 lbs. This project proposed less impervious cover than was projected for the site therefore no additional BMPs are necessary.

Tables 1 summarizes the amount of total impervious cover draining to the pond. Refer the attached drainage area exhibit that depicts the total amount of area and impervious cover that is associated with this BMP.

Ledge Stone Subdivision Phase 1 Stage Storage Table

Sand Filter Storage Table West Pond

Elev	Area	Inc. Vol.	Cum. Vol.			
ft	sf	cf	cf			
1118	29,375	27,250	104,420			
1117	25,125	23,998	77,170			
1116	22,872	21,026	53,171			
1115	19,180	16,435	32,146			
1114	13,689	11,262	15,711			
1113	8,835	4,449	4,449			
1112	63	0	0			

Sedimentation basin area = 8,835 square feet

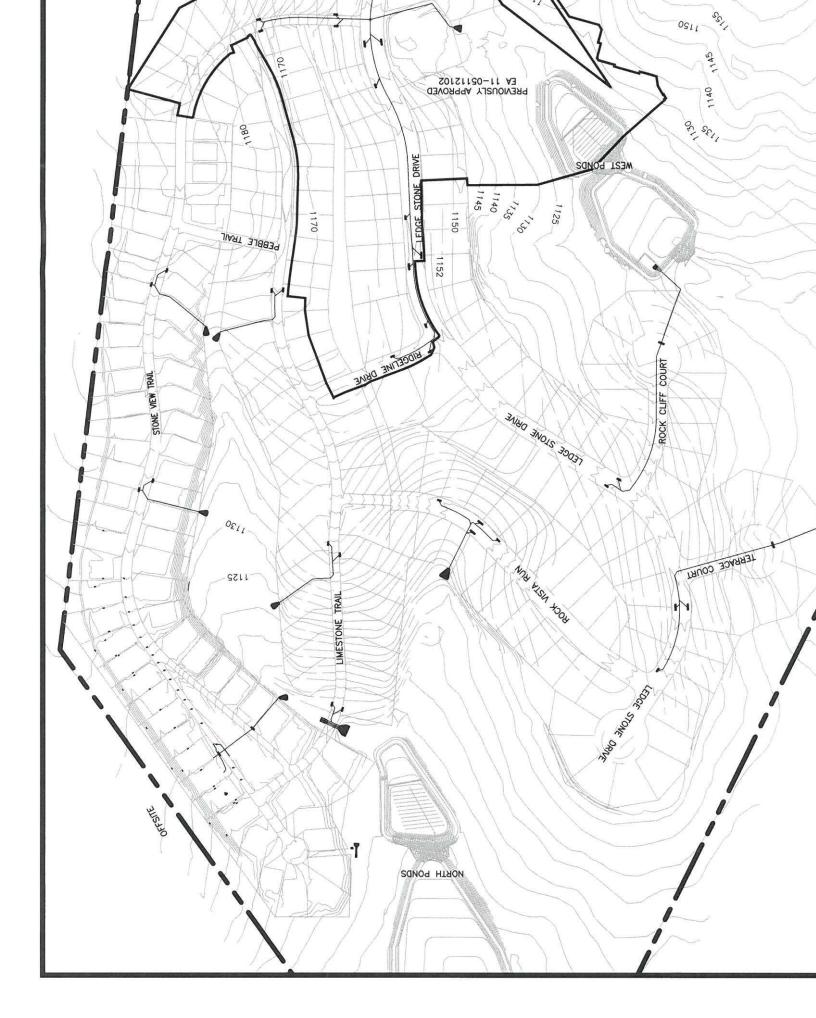


Table 1: Impervious Cover & Drainage Area to West Sand Filter Pond

Drainage Area ID	Drainage Area		Impervious Cover	Impervious Cover	
Drainage Area ID	Sqft	AC	Status	Sqft	AC
Upstream Hwy 290	144,840	3.33	Existing Offsite	71,977	1.65
Previously Approved EA 11-05112102	765,025	17.56	Previously Permitted ¹	312,291	7.17
			Proposed	412	0.01
Previously Approved EA 11001048	11,255	0.26	Previously Permitted ²	3,198	0.07
Rocky Ridge Trail Previously Approved 11001268	37,560	0.86	Previously Permitted ³	27,427	0.63
			Proposed	559	0.01
East Ledge Stone Commercial Approved 11003078	380,714	8.74	Previously Permitted ⁴	231,012	5.30
AEA Daycare Dripping Springs	133,163	3.06	Proposed	44,954	1.03
TOTALS 33.81			691,829	15.88	

¹Ledge Stone Subdivision Phase 1 permitted under CZP Permit No. 11-05112102

²Bush Ranch Phase 2 permitted under CZP Permit No. 11001048

³Rocky Ridge trail permitted under CZP No. 11001268

⁴East Ledge Stone Commercial permitted under CZP Permit No. 11003078

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: AEA Daycare Dripping Springs - West Sand Filter Pond Date Prepared: 1/19/2023

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell. Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet. Characters shown in red are data entry fields

1, The Required Load Reduction for the total project:

Calculations from RG-348

Pages 3-27 to 3-30

Page 3-29 Equation 3.3: L_M = 27.2(A_N x P)

where

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

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

inches acres acres acres Total project area included in plan "

Predevelopment impervious area within the limits of the plan "

Total post-development impervious area within the limits of the plan"

Total post-development impervious cover fraction" =

942 LM TOTAL PROJECT = . The values entered in these fields should be for the total project area.

lbs.

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

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

Drainage Basin/Outfall Area No. =

acres acres Total drainage basin'ouffail area = Pradevelopment impervious area within drainage basin'ouffail area = Post-development impervious area within drainage basin'ouffail area = Post-development impervious fraction within drainage basin'ouffail area = Post-development impervious fraction within drainage basin'ouffail area =

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter Removal efficiency = 89

Aqualogic Cartridge Fitter Boreaturide Contact StomFitter Constructed Wetland Extended Detention Grassy Swale Retention / Irrigation Sand Fitter Sommespor Stormceptor Vegetated Filter Strips Vortechs Wet Basin Wet Vault percent

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

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) xP x (A₁ x 34.6 + A_P x 0.54)

where

 $A_{\rm C}=$ Total On-Site drainage area in the BMP catchment area $A_{\rm F}=$ Impervious area proposed in the BMP catchment area $A_{\rm F}=$ Pervious area remaining in the BMP catchment area $L_{\rm R}=$ TSS Load removed from this catchment area by the proposed BMP

acres acres 33.81 15.88 17.93

FELIX J. MANKA SSONAL ENGIN

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

		Pages 3-34 to 3-36				Peges 3-42 to 3-46			Enter determined permeability rate or assumed value of 0.1	Pages 3-46 to 3-51		Pages 3-58 to 3-63				2 foot 8 foot				2 feet 8 feet	Pages 3-63 to 3-65		Pages 3-66 to 3-71	20 times the WQV Permanent Pool Capacity
		Calculations from RG-348		Pages 3-36 to 3-37					nter determined permeabilit							For minimum water depth of 2 feet For maximum water depth of 8 feet				For minimum water depth of 2 feet For maximum water depth of 8 feet				Permanent Pool Capacity is 1.20 times the WQV Total Capacity should be the Permanent Pool Capacity plus a second WQV.
lbs.			inches cubic feet		acres acres cubic feet	9606 57638 cubic feet (s(s) for the selected BMP. Designed as Required in RG-348	cubic feet		in/hr square feet acres	Designed as Required in RG-348	cubic feet	Designed as Required in RG-348		cubic feet	square feet	square feet Fo		cubic feet	square feet	square feet Fo	Designed as Required in RG-348	cubic feet	Designed as Required in RG-348	cubic feet Pe cubic feet To
12979	0.79	in / outfall ar	1.04 0.34 43568	Calculations from RG-348	3.33 1.65 0.50 0.36 4463	9606 57638 e(s) for the	A		N N O	Designed as F	Y V	Designed as F		57638	2420	21784 5446		57638	4357	17427	esigned as F	A	Designed as F	A A
Desired Lyr His BASIN =	H LL	6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.	Rainfall Depth = Post Development Runoff Coefficient = On-site Water Quality Volume =		Off-site impervious cover draining to BMP = Off-site impervious cover draining to BMP = Impervious fraction of off-site area = Off-site volif Coefficient = Off-site Valer Quality Volume =	Storage for Sediment = 9606 Total Capture Volume (required water quality volume(s) x 1.20) = 57638 cubic feet. The following sections are used to calculate the required water quality volume(s) for the selected BMP. The values for BMP Types not selected in cell C45 will show NA. Designed as Required in RG.	Required Water Quality Volume for retention basin =	Imgation Area Calculations:	Soli infliration/permeability rate = Frigation area =	8. Extended Detention Basin System	Required Water Quelity Volume for extended detention basin =	9. Filter area for Sand Filters	9A, Full Sedimentation and Filtration System	Water Quality Volume for sedimentation basin =	Minimum filter basin area =	Maximum sedimentation basin area = Minimum sedimentation basin area =	9B. Partial Sedimentation and Filtration System	Water Quality Volume for combined basins =	Minimum filter basin area =	Maximum sedimentation basin area = Minimum sedimentation basin area =	10. Bioretention System	Required Water Quality Volume for Bioretention Basin \approx	11. Wet Basins	Required capacity of Permanent Pool = Required capacity at WQV Elevation =

12. Constructed Wetlands

Designed as Required in RG-348

cubic feet

A

Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands =

Designed as Required in RG-348

Pages 3-74 to 3-78

tract with AquaLogic TH.

13. AquaLogicTM Cartridge System

cubic feet cartridges ** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with mainte A A A Required Sedimentation chamber capacity = Filter canisters (FCS) to treat WQV = Filter basin area (RIA $_{\rm F}$) =

square feet

14. Stormwater Management StormFilter® by CONTECH

cubic feet ¥ Required Water Quality Volume for Contech StormFilter System = THE SIZING REQUIREMENTS FOR THE FOLLOWING BMPs / LOAD REMOVALS ARE BASED UPON FLOW RATES - NOT CALCULATED WATER QUALITY VOLUMES

15. Grassy Swales

Design parameters for the swale:

Designed as Required in RG-348

Pages 3-51 to 3-54

8.00 acres 4.00 acres 1.1 in/hr 0.01 ft/ft Drainage Area to be Treated by the Swale = A = Impervious Cover in Drainage Area = Rainfall intensity = Swale Slope = Swale Slope (z) = C = (Slope E) = Design Water Depth = y Weighted Runoff Coefficient = C =

3. 0.33 ft 0.54

P_W = Wetted Perimeter = A_{CS} = cross-sectional area of flow in Swale =

13.17 sf 40.62 feet 0.32 feet 0.2 $R_{\rm H}$ = hydraulic radius of flow cross-section = $A_{\rm CS}/P_{\rm W}$ = n = Manning's roughness coefficient =

15A. Using the Method Described in the RG-348

Manning's Equation: $Q = 1.49 A_{CS} R_H^{23} S^{0.5}$

38.51 feet b = 0.134 x Q - zy = y^{1.67} S^{0.5} 4.71 cfs Q = CIA =

To calculate the flow velocity in the swale:

0.36 ft/sec V (Velocity of Flow in the swale) = Q/A $_{\rm CS}$ =

To calculate the resulting swale length

107.24 feet L = Minimum Swale Length = V (ft/sec) * 300 (sec) = If any of the resulting values do not meet the design requirement set forth in RG-348, the design parameters must be modified and the solver rerun.

15B. Alternative Method using Excel Solver

Error 1 = 4.71 cfs 0.76 cfs 6.00 ft Design Q = CiA = Manning's Equation Q = Swale Width=

Instructions are provided to the right (green comments).

3.95

To solve for bottom width of the trapazoidal swale (b) using the Excel solver: Excel can simultaneously solve the "Design "(1621f) vs. "Manning's G" (16219) by varying the "Swale Wildth" (1620). The required "Swale Wildth" occurs when the "Design O" = "Manning's G".

First, highlight Cell F219 (Error 1 value). The equation showing in the fx screen for Cell F219 should be "= \$C\$217-\$C\$219"

Then click on "Tools" and "Solver". The "Solver Parameters" screen pops up.

The value in the "Set Target cell" should be \$F\$219 "Error 1 ="

The value in the "By Changing Cells" should be \$C\$220 "Swale Width"

Click on solve.

The resulting "Swale Width" must be less than 10 feet to meet the requirements of the TGM. If the resulting "Swale Width" exceeds 10 feet then the design parameters must be revised and the solver run again.

Flow Velocity 0.36 ft/s

Instructions are provided to the right (blue comments).

	3.95			
	Error 2 ≈			
B 82	0.76 cfs	0.33 ft	0.32 cfs	97.48 ft
Design Width =	Design Discharge =	Design Depth =	Flow Velocity =	Minimum Length =

If any of the rasulting values do not meet the design requirement set forth in RG-3d8, the design parameters may be modified and the solver rerun. If any of the resulting values still do not meet the design requirement set forth in RG-3d8, widening the swale bottom value may not be possible.

Designed as Required in RG-348 16. Vegetated Filter Strips

There are no calculations required for determining the load or size of vegotative filter strips.

The 80% removal is provided when the contributing drainage eare does not seceed 27 led refiredtion of flow) and
the short flow leaving the impervious cover is directed across 15 feat of engineered filter strips with maximum slope of 20% or
across 50 feat of natural vegetation with a maximum slope of 10%. There can be a break in grade as long as no slope exceeds 20%.

if vegetative filter strips are proposed for an interim permanent BMP, they may be sized as described on Page 3-56 of RG-348.

17. Wet Vaults

17. Wet Vaults	Designed as	besigned as Required in RG-348	48 Pages 3-30 to 3-32 & 3-79	3-79
Required Load Removal Based upon Equation 3.3 =	A	sql		
First calculate the load removal at 1.1 in/hour				
RG-348 Page 3-30 Equation 3.4; Q = CiA				
C = runoff coefficient for the drainage area = i = design rainfall intensity =		0.30 C	$C = Runoff Coefficient = 0.546 (IC)^2 + 0.328 (IC) + 0.03$	28 (IC) + 0.03

0.30 C = Runoff Coefficient = 0.546 (IC) ² + 0.328 (IC) + 0.03 1.1 inhour = ecres	0.33 cubic feet/sec		0,33 cubic feetisec 150 square feet	0.00 feet/sec	53 percent	#VALUE! Ibs
C = runoff coefficient for the drainage area = i = design rainfall intensity = A = drainage area in acres =	Q = flow rate in cubic feet per second =	RG-348 Page 3-31 Equation 3.5: VoR = Q/A	Q = Runoff rate calculated above = A = Water surface area in the wet vault =	Von = Overflow Rate =	Percent TSS Removal from Figure 3-1 (RG-348 Page 3-31) =	Load removed by Wet Vault =

If a bypass occurs at a rainfall intensity of less than 1.1 in/hours Calculate the efficiency reduction for the actual rainfall intensity rate

in/hour	3.75 percent 3.83 percent	lbs
0.5	0.75	#VALUE!
Actual Rainfall Intensity at which Wet Vault bypass Occurs =	Fraction of rainfall treated from Figure 3-2 RG-348 Page 3-32 = Efficiency Reduction for Actual Rainfall Intensity =	Resultant TSS Load removed by Wet Vault =

Designed as Required in RG-348

18. Permeable Concrete

Pages 3-79 to 3-83

If there is not the option for "Solver" under "Tools" Click on "Tools" and "Add Ins" and then check "Solver Add-in" Then proceed as instructed above.

If you would like to increase the bottom width of the transcaleds swale (b):

Ecel can simultaneously solve the "Design Or" Design Or Discharge" (C232) by varying the "Design Depth" (C233).

The required "Design Depth" for a flooto beform width occurs when the "Design O" (C217) = the "Design Discharge" (C232).

First set the desired bottom width in Cell C231, Highlight Cell F232. The equation showing in the fx screen for Cell F232 should be "= \$C\$217-\$C\$232"

Click on "Tools" and "Solver". The "Solver Parameters" screen pops up. The value in the "Set Target cell" should be \$F\$222 "Error 2". The value in the "Set Changing Cells" should be \$C\$233 "Design Depth" Click on solve.

Pages 3-55 to 3-57

The resulting "Design Depth" acceeded 2.31 feet to meet the requirements of the TGM.

If the resulting" Design Depth" acceeded 2.31 feet then the design parameters must be revised and the solver run again. First set the desired become width in Coll C231.

Highlight Cell F122. The equation showing in the A screen to TC cell F232 should be "= \$C\$217.5C\$222"

Click on "Tools" and "Solver". The "Solver Parameters" screen pops up.

The value in the "Set Target cell" should be \$F\$222.

The value in the "Set Target cell" should be \$F\$222.

The value in the "Set Changing Cells" should be \$C\$233.

"Design Depth"

The resulting "Design Depth" must be equal to or less than 0,33 feet to meet the requirements of the TGM. If the resulting "Design Depth" exceeds 0,33 feet then the design parameters must be revised and the solver run again.

(A, AND A_P VALUES ARE FROM SECTION 3 ABOVE)

16087.22 lbs $L_R = E_{TOT} \times P \times (A_1 \times 34.6 \times A_P \times 0.54) =$

ge Area= NA lbs	atment= 0.0000 ac	d Area = 0.00 lbs		Effective Area = NA EA	41	alculated	el size) = 0 Model Size	Surface Area = #N/A ft²	Overflow Rate = #VALUE! Vor	w Rate = #VALUE! Vor	sncy % = #VALUE! %	L _R Value = #VALUE! lbs	Credit = #VALUE! lbs	Uncapt.) #VALUE!	- C
20. Stormceptor Required TSS Removal in BMP Drainage Area=	Impervious Cover Overtreatment=	TSS Removal for Uncaptured Area =	BMP Sizing	Effecti	Calculated Model Size(s) =	Actual Model Size (if multiple values provided in Calculated	Model Size or if you are choosing a larger model size) ≈	Surfac	Overflo	Rounded Overflow Rate =	BMP Efficiency % =	7	TSS Load Credit =	Is Sufficient Treatment Available? (TSS Credit > TSS Uncept.)	= (treesil 22T + M I) GMB vd treesings T 22T

ac lbs AN# Required TSS Removal in BMP Drainage Area= Impervious Cover Overtreatment= TSS Removal for Uncaptured Area = BMP Sizing 21. Vortech

V×1000 Pick Model Size Effective Area = Calculated Model Size(s) = Actual Model Size (if choosing larger model size) =

7.10 ft²
#VALUE: Vor
#VALUE: %
#VALUE: lbs Surface Area = 5
Overflow Rate = #
Rounded Overflow Rate = #
BMP Efficiency % = #
L_R Value = #

TSS Load Credit =

Is Sufficient Treatment Available? (TSS Credit > TSS Uncapt.) #VALUE!

TSS Treatment by BMP (LM + TSS Uncapt.) = #VALUE!

ATTACHMENT L BMPS FOR SURFACE STREAMS

Attachment L: BMPS FOR SURFACE STREAMS

BMPs for Surface Streams: There are two post-development point of concentrated storm water discharge from the proposed development. All storm water runoff discharges into unnamed tributaries of Long Branch Creek and eventually flows into Barton Creek. The water will be released from the water quality BMPs at non-erosive velocities.

At a minimum, all points of concentrated discharge will receive treatment from temporary or permanent BMPs prior to reaching the discharge points.

ATTACHMENT M CONSTRUCTION PLANS (SEE ATTACHED)

ATTACHMENT N INSPECTION, MAINTENANCE, REPAIR, AND RETROFIT PLAN

ATTACHMENT N - INSPECTION, MAINTENANCE, REPAIR, AND RETROFIT PLAN

The BMPs that are proposed within the Bush Ranch Development shall be maintained in accordance with TCEQ publication RG-348, the Edwards Aquifer Technical Guidance Manual. Maintenance of the permanent BMPs shall be the responsibility of the owner and will be accomplished per the following maintenance plan.

Grassy Swales

Maintenance for grassy swales is minimal and is largely aimed at keeping the grass cover dense and vigorous. Maintenance practices and schedules should be developed and included as part of the original plans to alleviate maintenance problems in the future. Recommended practices include (modified from Young et al, 1996).

- Pest Management. An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.
- Seasonal Mowing and Lawn Care. Lawn mowing should be performed routinely, as needed, throughout the growing season. Grass height should not exceed 18 inches. Grass cuttings should be collected and disposed of offsite, or a mulching mower can be used. Regular mowing should also include weed control practices; however, herbicide use should be kept to a minimum (Urbonas et al., 1922). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients.
- Inspection. Inspect swales at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The swale should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections should be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.
- Debris and Litter Removal. Trash tends to accumulate in swale areas, particularly along highways.
 Any swale structures (i.e., check dams) should be kept free of obstructions to reduce floatables being
 flushed downstream, and for aesthetic reasons. The need for this practice is determined through
 periodic inspection, but should be performed no less than two times per year (Urbonas et al., 1992).
- Sediment Removal. Sediment accumulating near culverts and in channels needs to be removed when
 they build up to 3 inches at any spot, or cover vegetation. Excess sediment should be removed by
 hand or with flat-bottomed shovels. If areas are eroded, they should be filled, compacted, and
 reseeded so that the final grade is level with the bottom of the swale. Sediment removal should be
 performed periodically, as determined through inspection.
- Grass Reseeding and Mulching. A healthy dense grass should be maintained in the channel and side slopes. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during swale establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established.
- Public Education. Private homeowners are often responsible for roadside swale maintenance.
 Unfortunately, overzealous lawn care on the part of homeowners can present some problems. For example, mowing the swale too close to the ground, or excessive application of fertilizer and

pesticides will all be detrimental to the performance of the swale. Pet waste can also be a problem in swales, and should be removed to avoid contamination from fecal coliform and other waste-associated bacteria. The delegation of maintenance responsibilities to individual landowners is a cost benefit to the locality. However, localities should provide an active educational program to encourage the recommended practices.

Sand Filter Systems

Regular, routine maintenance is essential to effective, long-lasting performance of sand filters. Neglect or failure to service the filters on a regular basis will lead to poor performance and eventual costly repairs. It is recommended that sand filter BMPs be inspected on a quarterly basis and after large storms for the first year of operation. This intensive monitoring is intended to ensure proper operation and provide maintenance personnel with a feel for the operational characteristics of the filter. Subsequent inspections can be limited to semi-annually or more often if deemed necessary (Young et al., 1996).

Certain construction and maintenance practices are essential to efficient operation of the filter. The biggest threat to any filtering system is exposure to heavy sediment loads that clog the filter media. Construction within the watershed should be complete prior to exposing the filter to stormwater runoff. All exposed areas should be stabilized to minimize sediment loads. Runoff from any unstabilized construction areas should be treated via a separate sediment system that bypasses the filter media.

Another important consideration in constructing the filter bed is to ensure that the top of the media is completely level. The filter design is based on the use of the entire filter media surface area; a sloped filter surface would result in disproportionate use of the filter media.

Other recommended maintenance guidelines include:

- Inspections. BMP facilities should be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. During each inspection, erosion areas inside and downstream of the BMP must be identified and repaired or revegetated immediately. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. Cracks, voids and undermining should be patched/filled to prevent additional structural damage. Trees and root systems should be removed to prevent growth in cracks and joints that can cause structural damage.
- Sediment Removal. Remove sediment from the inlet structure and sedimentation chamber when sediment buildup reaches a depth of 6 inches or when the proper functioning of inlet and outlet structures is impaired. Sediment should be cleared from the inlet structure at least every year and from the sedimentation basin at least every 5 years.
- Media Replacement. Maintenance of the filter media is necessary when the draw-down time exceeds
 48 hours. When this occurs, the upper layer of sand should be removed and replaced with new
 material meeting the original specifications. Any discolored sand should also be removed and
 replaced. In filters that have been regularly maintained, this should be limited to the top 2 to 3 inches.
- Debris and Litter Removal. Debris and litter will accumulate near the sedimentation basin outlet device and should be removed during regular mowing operations and inspections. Particular attention should be paid to floating debris that can eventually clog the control device or riser.

- Filter Underdrain. Clean underdrain piping network to remove any sediment buildup as needed to maintain design drawdown time.
- Mowing. Grass areas in and around sand filters should be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. Vegetation on the pond embankments should be mowed as appropriate to prevent the establishment of woody vegetation.

Extended Detention Basins

Extended detention basins have moderate to high maintenance requirements, depending on the extent to which future maintenance needs are anticipated during the design stage. Responsibilities for both routine and non-routine maintenance tasks need to be clearly understood and enforced. If regular maintenance and inspection area not undertaken, the basin will not achieve its intended purposes.

There are many factors that may affect the basin's operation and that should be periodically checked. These factors can include mowing, control of pond vegetation removal of accumulated bottom sediments, removal of debris from all inflow and outflow structures, unclogging of orifice perforations, and the upkeep of all physical structures that are within the detention pond area. One should conduct periodic inspections after each significant storm. Remove floatables and correct erosion problems in the pond slopes and bottom. Pay particular attention to the outlet control perforations for signs of clogging. If the orifices are clogged, remove sediment and other debris. The generic aspects that must be considered in the maintenance plan for a detention facility are as follows:

Maintenance Requirements include:

- Inspections. Basins should be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. When possible, inspections should be conducted during wet weather to determine if the pond is meeting the target detention times. In particular, the extended detention control device should be regularly inspected for evidence of clogging, or conversely, for too rapid a release. If the design drawdown times are exceeded by more than 24 hours, then repairs should be scheduled immediately. The upper stage pilot channel, if any, and its flow path to the lower stage should be checked for erosion problems. During each inspection, erosion areas in and downstream of the BMP should be identified and repaired or revegetated immediately.
- Mowing. The upper stage, side slopes, embankment, and emergency spillway of an
 extended detention basin must be mowed regularly to discourage woody growth and
 control weeds. Grass areas in and around basins should be mowed at least twice annually
 to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic
 appeal may be necessary in landscaped areas. When mowing of grass is performed, a
 mulching mower should be used, or grass clippings should be caught and removed.
- Debris and Litter Removal. Debris and litter will accumulate near the extended detention control device and should be removed during regular mowing operations and inspections.
 Particular attention should be paid to floating debris that can eventually clog the control device or riser.

Particular attention should be paid to floating debris that can eventually clog the control device or riser.

- Erosion Control. The pond side slopes, emergency spillway, and embankment all may
 periodically suffer from slumping and erosion, although this should not occur often if the
 soils are properly compacted during construction. Regarding and revegetation may be
 required to correct the problems. Similarly, the channel connecting an upper stage with a
 lower stage may periodically need to be replaced or repaired.
- Structural Repairs and Replacement. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. These repairs should include patching of cracked concrete, sealing of voids, and removal of vegetation from cracks and joints. The various inlet/outlet and riser works in a basin will eventually deteriorate and must be replaced. Public works experts have estimated that corrugated metal pipe (CMP) has a useful life of about 25yr, whereas reinforced concrete barrels and risers may last from 50 to 75yr.
- Nuisance Control. Standing water (not desired in an extended detention basin) or soggy
 conditions within the lower stage of the basin can create nuisance conditions for nearby
 residents. Odors, mosquitoes, weeds, and litter are all occasionally perceived to be
 problems. Most of these problems are generally a sign that regular inspections and
 maintenance are not being performed (e.g., mowing, debris removal, clearing the outlet
 control device).
- Sediment Removal. When properly designed, dry extended detention basins will accumulate quantities of sediment over time. Sediment accumulation is a serious maintenance concern in extended detention dry ponds for several reasons. First, the sediment gradually reduces available stormwater management storage capacity within the basin. Second, unlike wet extended detention basins (which have a permanent pool to conceal deposited sediments), sediment accumulation can make dry extended detention basins very unsightly. Third, and perhaps most importantly, sediment tends to accumulate around the control device. Sediment deposition increases the risk that the orifice will become clogged, and gradually reduces storage capacity reserved for pollutant removal. Sediment can also be resuspended if allowed to accumulate over time and escape through the hydraulic control to downstream channels and streams. For these reasons, accumulated sediment needs to be removed from the lower state when sediment buildup fills 20% of the volume of the basin or at least every 10 years.

|--|

X July Scharfeld 8/29/2018

Vice President
290 East Bush Inc.

ATTACHMENT O PILOT-SCALE FIELD TESTING PLAN (NOT APPLICABLE)

ATTACHMENT P MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Attachment P: MEASURES FOR MINIMIZING STREAM CONTMINATION

BMPs for Surface Streams: All storm water runoff discharges into an unnamed tributary of Long Branch Creek and eventually flows into Barton Creek. The water will be released from the water quality BMPs at non-erosive velocities.

At a minimum, all points of concentrated discharge will receive treatment from temporary or permanent BMPs prior to reaching the discharge points.

TPDES Stormwater Pollution Prevention Plan

for

Ledge Stone Subdivision Phase 1 AEA Daycare Dripping Springs

Prepared for:

Lewis RR Dripping Springs, LLC 1102 Martin Avenue Round Rock, TX 78681 (512) 796-0168

Prepared by:

Burgess & Niple, Inc. 235 Ledge Stone Drive Austin, Texas 78737 (512) 432-1000

Ledge Stone Subdivision Phase 1 AEA Daycare Dripping Springs Stormwater Pollution Prevention Plan

1. Site Description

a) Activity Description:

This project consists of construction of a daycare center including parking, utilities, driveways, playgrounds and a storm sewer system.

b) Potential Pollutions:

The potential sources of stormwater pollution from the construction of this project will be displaced soil from the construction site, petroleum products from the operation of equipment and vehicles that may be used in this type of construction. Such vehicles may include concrete trucks, dump trucks, and pick-ups that carry personnel and materials.

c) Construction Schedule and Sequencing:

Sequence	Activity
1	Installation of erosion and sedimentation controls
2	Clearing and rough grading
3	Installation of underground utilities and drainage
4	Construction of roadways and final grading
5	Construction of building pads and buildings
6	Site restorations and revegetation of disturbed areas
7	Removal and proper disposal of erosion and sedimentation controls once permanent vegetation is established

d) Project Size

Total Property Size: 3.06acres

Total Construction Site Area: 1.94 acres

Total Disturbed Area: 1.94 acres

e) Soil Data and Map

See Exhibit A for a soils map and soil data for the site.

f) Location Map

See Exhibit B for a location map of the site.

g) Detailed Site Map

i. Drainage patterns and approximate slopes after major grading activities

Drainage patterns and proposed grades can be seen on the attached set of plans.

ii. Areas where soil disturbance will occur

Areas of soil disturbance can be seen on the attached set of plans.

iii. Locations of all controls and buffers

Location of all controls and buffers can be seen on the attached set of plans.

iv. Locations where temporary or permanent stabilization practices are expected to be used

Temporary and permanent stabilization areas can be seen on the attached set of plans.

v. Locations of construction support activities, including off-site activities

The contractor is responsible for listing the location(s) and descriptions of asphalt and concrete plants, equipment staging area(s), material storage yard(s), material borrow area(s), and excavated material disposal area(s) that will provide construction support to the site once known. The contractor is also responsible for assuring that the support providers to the site located beyond 1-mile of the construction site perimeter are authorized under the General Permit.

vi. Surface waters (including wetlands) either at, adjacent, or in close proximity to the site, and also indicating those that are impaired waters

The site drains to a tributary of Barton Creek. The location of these surface waters can be seen on the attached set of plans. There are no impaired waters in close proximity to the site.

vii. Locations where stormwater discharge from the site directly to a surface water body or municipal separate storm sewer system

Locations of proposed stormwater discharge can be seen on the attached set of plans.

viii. Designated points on the site where vehicles will exit onto paved roads

Construction entrances and exits can be seen on the attached set of plans.

h) Location and Description of Support Activities

The contractor is responsible for listing the location(s) and description of asphalt and concrete plants, equipment staging area(s), material storage yard(s), material borrow area(s), and excavated material disposal area(s) that will provide construction support to the site once

known. Locations and descriptions records shall be maintained with the SWPPP and shall adhere to guidance found in the General Permit. The contract is also responsible for assuring that the support providers to the site located beyond 1-mile of the construction site perimeter are authorized under the General Permit. Contractor shall refer to the General Permit for additional guidance and requirements.

i) Receiving Waters

Receiving waters for this project are a tributary of Barton Creek.

j) Copy of TPDES General Permit

A copy of the TCEQ's General Permit to Discharge under the Texas Pollutant Discharge Elimination System is included in Exhibit C.

k) Copy of the NOI

The copy of the NOI is included as Exhibit D.

I) Stormwater and Allowable Non-Stormwater Discharge Locations

All stormwater discharges, storm inlets, and swales can be seen on the attached set of plans. There will be no other non-stormwater discharges as part of this project.

m) Locations of All Pollutant-Generating Activities

The contractor is responsible for listing the location(s) and description of asphalt and concrete plants, equipment staging area(s), material storage yard(s), material borrow area(s), and excavated material disposal area(s) that will provide construction support to the site once known. All other possible pollutant generating activities will be done in the construction staging/storage area, which will be cleaned up and restored to its original state or better after construction is complete.

2. BMP Description

a) General Requirements

i) Erosion and sediment controls

Temporary erosion and sedimentation controls will be added to the site prior to any major construction activities. These will include silt fence and rock berms, to retain sediment from disturbed areas on site. Inlet protection will also be used for any storm sewer inlets installed. Construction exits will also be used to prevent sediment being tracked off site by any vehicles that might be leaving the site. These are the typical erosion and sedimentation control devices used in this area for the soil and topography found on site. The location of these erosion and sedimentation controls can be found on the attached construction plans. These temporary erosion and sedimentation controls will be removed once construction is complete, and the disturbed areas have been properly revegetated.

- ii) Control measures have been properly selected, installed, and maintained according to the manufacturer's and designer's specifications.
- iii) Controls have been developed to minimize the offsite transport of litter, construction debris, and construction materials.

b) Erosion Control and Stabilization Practices

i) Erosion Control Descriptions and Timing

1) Construction Exit

- a. Description: The purpose of a temporary construction exit is to provide a stable entrance/exit condition from the construction site and keep mud and sediment off public roads. A stabilized construction exit is a stabilized pad of crushed stone located at any point traffic will be entering or leaving the construction site from a public right-of-way, street, alley, sidewalk, or parking area. The purpose is to reduce or eliminate the tracking or flowing of sediment onto public rights-of-ways. The location of the construction exit can be seen on the attached construction plans.
- **b. Schedule:** Construction entrance will be the first thing constructed and is typically removed once the base of the road is laid.

2) Silt Fence

- a. Description: A silt fence is a barrier consisting of geotextile fabric supported by metal posts to prevent soils and sediment loss from a site. When properly used, silt fences can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond, allowing heavier solids to settle out. It not properly installed, silt fences are not likely to be effected. The purpose of a silt fence is to intercept and detain water borne sediment form unprotected areas of a limited extent. Silt fence is used during the period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. The fence should remain in place until the disturbed area is permanently stabilized. Silt fence should not be used where there is a concentration of water in a channel or drainage way. If concentrated flow occurs after installation, corrective action must be taken such as placing a rock berm in the areas of concentrated flow. The location of the silt fence can be seen on the attached construction plans.
- **b. Schedule:** The silt fence shall be installed before any grading or clearing is started. The silt fence will be removed after construction is complete and the disturbed areas have been complete revegetated.

3) Rock Berm

- a. Description: The purpose of a rock berm is to serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detain the sediment and release the water in sheet flow. The rock berm should be used when the contributing drainage area is less than 5 acres. Rock berms are used in areas where the volume of runoff is too great for a silt fence to contain. They are less effective for sediment removal than silt fences, particularly for fine particles, but are able to withstand higher flow than a silt fence. As such, rock berms are often used in areas of channel flows (ditches, gullies, etc.). Rock berms are most effective at reducing bed load in channels and should not be substituted for other erosion and sediment control measure farther up the watershed. The location of the rock berms can be seen on the attached construction plans.
- b. Schedule: The rock berms shall be installed before any grading or clearing is started. The rock berms will be removed after construction is complete and the disturbed areas have been complete revegetated.

4) Inlet Protection

a. Description: Storm sewers that are made operational prior to stabilization of the associated drainage areas can convey large amounts of sediment to natural drainage ways. In case of extreme sediment loading, the storm sewer itself may clog and lose a major portion of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets.

In developments for which drainage is to be convey by underground storm sewer (i.e., streets with curbs and gutters), all inlets that may receive storm runoff from disturbed areas should be protected. Temporary inlet protection is a series of different measures that provide protection against silt transport or accumulation in storm sewer systems. This clogging can greatly reduce or completely stop the flow in the pipes. The different measures are used for different site conditions and inlet types.

Care should be taken when choosing a specific type of inlet protection. Field experience has shown that inlet protection that causes excessive ponding in an area of high construction activity may become so inconvenient that it is removed or bypassed, thus transmitting sediment-laden flows unchecked. In such situations, a structure with an adequate overflow mechanism should be utilized.

It should also be noted that inlet protection devices are designed to be installed on construction sites and not on streets and roads open to the public. When used on public streets these devices will cause ponding of runoff, which can cause minor flooding and can present a traffic hazard. An example of appropriate siting would be a new subdivision where the storm drain system is installed before the area is stabilized and the streets open to the general public. When construction occurs adjacent to active streets, the sediment should be controlled on site and not on public thoroughfares. Occasionally, roadwork or

utility installation will occur on public roads. In these cases, inlet protection is an appropriate temporary BMP.

The following inlet protection devices are for drainage areas of one acre or less. Runoff from larger disturbed areas should be routed to a temporary sediment trap or basin.

Filter barrier protection using silt fence is appropriate when the drainage area is less than one acre and the basin slope is less than five percent. This type of protection is not applicable in paved areas.

Block and gravel protection is used when flows exceed 0.5 cubic feet per second and it is necessary to allow for overtopping to prevent flooding. This form of protection is also useful for curb type inlets as it works well in paved areas.

Wire mesh and gravel protection is used when flow exceed 0.5 cubic feet per second and construction traffic may occur over the inlet. This form of protection may be used with both curb and drop inlets.

Excavated impoundment protection around a drop inlet may be sued for protection against sediment entering a storm drain inlet. With this method, it is necessary to install weep holes to allow the impoundment to drain completely. If this measure is impediment, the impoundment should be sized such that the volume of excavation is 3,600 cubic feet per acre (equivalent to 1 inch of runoff) of disturbed area entering the inlet.

The locations of the inlet protection can be seen on the attached construction plans.

b. Schedule: The inlet protection should be during street constructions, after the inlets are in place. They will be removed after revegetation of the right-of-way prior to the street being open to traffic.

5) Vegetation

a. Description: Vegetation is used as a temporary or permanent stabilization technique for areas disturbed by construction, but not covered by pavement, buildings, or other structures. As a temporary control, vegetation can be used to stabilize stockpiles and barren areas that are inactive for long periods of time.

Vegetative techniques can and should apply to every construction project with few exceptions. Vegetation effectively reduces erosion in swales, stockpiles, berms, mild to medium slopes, and along roadways.

b. Schedule: Any disturbed area shall be revegetated after major construction activities are complete.

ii) The following records must be maintained

- 1) The dates when major grading activities occur
- 2) The dates when construction activities temporarily or permanently cease on a portion of the site
- 3) The dates when stabilization measure are initiated

All of these activities and events should be logged in the Major Activities Log Form, a copy of which can be found in Exhibit F.

- iii) Erosion control and stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days. Stabilization measures that provide a protective cover must be initiated immediately in portions of the site where construction activities have permanently ceased. The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this requirement, "immediate" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Except as provided in (a) through (d) below, these measures must be completed as soon as practicable, but no more than 14 calendar days after the initiation of soil stabilization measures:
 - a. Where the immediate initiation of stabilization measures after construction activity temporarily or permanently ceased is precluded by snow cover or frozen found conditions, stabilization measures must be initiated as soon as practicable.
 - b. In arid areas, semi-arid areas, or drought-stricken areas where the immediate initiation of stabilization measures after construction activity has temporarily or permanently ceased or is precluded by arid conditions, erosion control and stabilization measures must be initiated as soon as practical. Where vegetative controls are not feasible due to arid conditions, the operator shall immediately install and within 14 calendar days of a temporary or permanent cessation of work in any portion of the site complete, non-vegetative erosion controls. If non-vegetative controls are not feasible, the operator shall install temporary sediment controls as required in Paragraph (c) below.
 - c. In areas where temporary stabilization measures are infeasible, the operator may alternatively utilize temporary perimeter controls. The operator must document in the SWP3 the reason why stabilization measures are not feasible and must demonstrate that the perimeter controls will retain sediment on site to the extent practicable. The operator must continue to inspect the BMPs at the frequency established in Section III.F.7.(a) of the TCEQ's General Permit to Discharge under the Texas Pollutant Discharge Elimination System for unstabilized sites.
 - d. If the initiation or completion of vegetative stabilization is affected by circumstances beyond the control of the permittee, vegetative stabilization must be initiated or completed as soon as conditions or circumstances allow it on the site. The requirement to initiate stabilization is triggered as soon as it is known with reasonable certainty that work will be stopped for 14 or more additional calendar days.
- iv) Final Stabilization must be achieved prior to termination of permit coverage.

 TCEQ does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left un-vegetated or unstabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

c) Sediment Control Practice

i) Sites with Drainage Areas of Ten or More Acres

a. Sedimentation Basin(s)

Sedimentation basins will not be used for this project. No single point of discharge will have more than 10 acres of disturbed area contributing runoff.

b. Perimeter Controls

Silt fences, rock berms, and a construction exit will be used as perimeter controls for this project to keep sediment from being tracked off site. The location of the erosion and sedimentation controls can be found on the attached set of plans.

ii) Sites with Drainage Areas Less than Ten Acres

For the parts of the site with a drainage area of less than ten acres, the erosion and sedimentation controls will be the same as those for areas with drainage areas more than ten acres.

Silt fences and a construction exit will be used as perimeter controls for this project to keep sediment from being tracked off site. The location of the erosion and sedimentation controls can be found on the attached set of plans.

3. Description of Permanent Stormwater Controls

Permittees are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site or prior to submission of an NOT.

a) Sand Filter Systems

Sand filters consist of basins that capture stormwater runoff and then filter the runoff through a bed of sand in the floor of the facility. These BMPs can be configures as either a single basin or separate sedimentation and filtration basins. These facilities should be installed at grade to facilitate drying out of the sand between storm events.

The objective of sand filters is to remove sediment and the pollutants from the first flush of pavement and impervious area runoff. The filtration of nutrients, organics, and coliform bacteria is enhanced by a mat of bacterial slime that develops during normal

operations. One of the main advantages of sand filters is their adaptability; they can be used on areas with thin soils, high evaporation rates, low-soil infiltration rates, in limited space areas, and where groundwater is to be protected (Young et al., 1996).

b) Extended Detention Basins

Extended detention basins are normally used to remove particulate pollutants and to reduce maximum runoff rates associated with development to their pre-development levels. The water quality benefits are the removal of sediment and buoyant materials. Furthermore, nutrients, heavy metals, toxic materials, and oxygen-demanding materials associated with the particles also are removed. The control of the maximum runoff rates serves to protect drainage channels below the device from erosion and to reduce downstream flooding. Although detention facilities designed for flood control have different design requirements than those used for water quality enhancement, it is possible to achieve these two objectives in a single facility.

These devices require sufficient area and hydraulic head to function properly. Detention facilities may be berm-encased areas excavated basins, or buried tanks although the latter are not preferred in most situations (Young et. al., 1996).

c) Grassy Swales

Grassy swales are vegetated channels that convey stormwater and remove pollutants by sedimentation and infiltration through soil. They require shallow slopes and soils that drain well. Pollutant removal capability is related to channel dimensions, longitudinal slope, and amount of vegetation. Optimum design of these components will increase contact time and runoff through the swale and improve pollutant removal rates.

4. Other Required Controls and BMPs

a) Permittees shall minimize, to the extent practicable, the off-site vehicle tracking of sediments and the generation of dust.

Off-site vehicle tracking will be prevented through the use of a construction exit. Dust will be controlled using water trucks when necessary.

b) Waste Materials

All wastewater material will be collected and stored in a secure metal dumpster, which will be regularly emptied. No construction materials will be buried on site. Petroleum products will be properly disposed of off-site. Sanitary waste will be collected and disposed of properly in accordance with local regulations.

c) Pollution Sources Other Than Construction

There are no anticipated stormwater discharges from any activity other than construction.

d) Velocity Dissipation

Velocity dissipation devices will be placed at discharge locations and anywhere else where erosive velocities are expected.

e) Appropriate controls will be used to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water from the site.

f) Spill Response Plan

1. ALL SPILLS MEETING THE FOLLOWING CRITERIA MUST BE IMMEDIATELY REPORTED TO THE TEXAS SPILL HOTLINE (1-800-832-8224), WHICH IS OPERATED 24 HRS A DAY.

KIND OF SPILL	WHERE DISCHARGED	AMOUNT	
PETROLEUM	LAND	25 GAL	
PETROLEGIVI	WATER	LEAVES A SHEEN ON	
PRODUCTS		WATER SURFACE	
CHEMICALS	WATER	100 LBS	

IF POSSIBLE, BE PREPARED TO ANSWER THE FOLLOWING QUESTIONS:

- DATE AND TIME OF SPILL.
- IDENTITY OF MATERIAL SPILLED.
- ESTIMATE OF THE QUANTITY OF MATERIAL SPILLED AND DURATION.
- THE EXACT LOCATION OF THE SPILL, INCLUDING THE NAME OF WATERS INVOLVED OR THREATENED (ONION CREEK/WALNUT SPRINGS)
- EXTENT OF ACTUAL AND POTENTIAL WATER POLLUTION.
- SOURCE OF THE SPILL.
- NAME, ADDRESS, AND PHONE NUMBER OF THE PARTY IN CHARGE OF, OR RESPONSIBLE FOR THE PROJECT OR ACTIVITY ASSOCIATED WITH THE SPILL.
- THE STEPS BEING TAKEN OR PROPOSED TO CONTAIN AND CLEAN UP THE SPILL AND ANY PRECAUTIONS TAKEN TO MINIMIZE IMPACTS, INCLUDING EVACUATION.
- THE EXTENT OF INJURIES, IF ANY.
- ANY KNOWN OR ANTICIPATED HEALTH RISKS.
- POSSIBLE HAZARDS TO THE ENVIRONMENT (AIR, SOIL, WATER, WIDLIFE, ETC.)
- THE IDENTITIES OF ANY RESPONDING AGENCIES.
- 2. IMMEDIATELY CONTAIN SPILLS OF ALL QUANTITIES AND MATERIALS. IF A LIQUID SPILL OCCURS ON PAVED SURFACES, ENCIRCLE THE SPILL WITH ABSORBENT MATERIALS. IF A LIQUID SPILL OCCURS IN DIRT AREAS, IMMEDIATELY CONTAIN THE SPILL BY CONSTRUCTING AN EARTHEN DIKE. PROMPTLY AND PROPERLY DISPOSE OF CONTAMINATED ABSORBENT MATERIAL AND DIRT. NEVER HOSE DOWN OR BURY DRY MATERIAL SPILLS.
- WHEN VEHICLE MAINTENANCE AND/OR FUELING OCCURS ONSITE, USE A DESIGNATED AREA LOCATED AWAY FROM DRAINAGE COURSES. REGULARLY INSPECT ONSITE VEHICLES AND EQUIPMENT FOR LEAKS. REPAIR IMMEDIATELY.

5. Documentation of Compliance with Approved State and Local Plans

- a) The SWPPP is consistent with requirement specified in applicable sediment and erosion site plans or sit permits, or stormwater management site plans or site permits approved by federal, state, or local officials.
- b) The SWPPP will be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or stormwater management site plans or site permits approved by state or local officials.

c) Contributing Zone Permit

A Contributing Zone Permit has been prepared and is included with this SWPPP.

6. Maintenance Requirements

The contractor must comply with all requirements set forth in Part III. F.6 (a)-(d) of the attached General Permit.

7. Inspections of Controls

The contractor must comply with all requirements set forth in Part III. F.7 (a)-(e) of the attached General Permit. Inspection and Maintenance Report Forms can be found in Exhibit G.

8. Non-Stormwater Components of Discharge

Non-stormwater discharges are not expected form this site. During construction, irrigation waters may be applied to planted grasses and landscape plants through a sprinkler system to establish and maintain them.

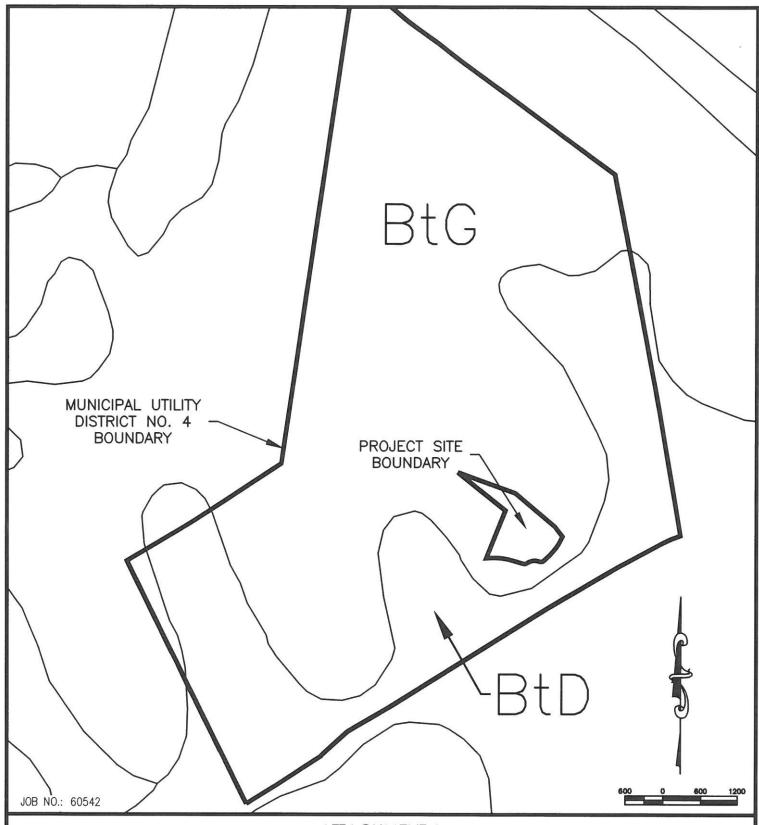
9. SWPPP Requirements

The permittee must comply with all requirements and conditions of the General Permit and this SWPPP. A responsible corporate official must certify the SWPPP. In signing the plan, the corporate officer attests that he has read and fully understands the general permit requirement and conditions.

Owner/Developer	Title	Date
Printed Name	Phone Number	
Contractor	Title	Date
Printed Name	Phone Number	
Other Operator (if applicable)	Title	Date
Printed Name	Phone Number	
Other Operator (if applicable)	Title	 Date
Printed Name	Phone Number	

10. The SWPPP includes pollution prevention procedures that comply with Part III.G.4 of the General Permit.

Exhibit A
Soils Map and Table



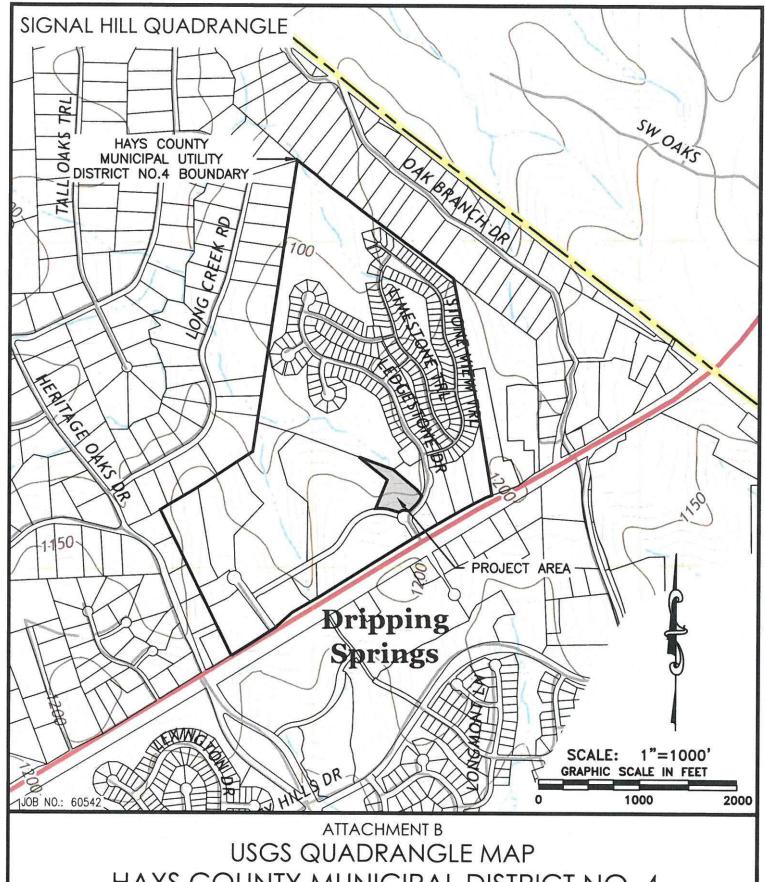
ATTACHMENT A

HAYS COUNTY MUNICIPAL UTILITY DISTRICT NO. 4
STORMWATER POLLUTION PREVENTION PLAN
SOILS CONSERVATION SERVICE SOIL TYPES

BURGESS & NIPLE, INC.

235 LEDGE STONE DRIVE AUSTIN, TEXAS 78737 (512) 432-1000 JANUARY 2023 **Exhibit B**

Location Map



USGS QUADRANGLE MAP
HAYS COUNTY MUNICIPAL DISTRICT NO. 4
CONTRIBUTING ZONE PERMIT

BURGESS & NIPLE, INC.

235 LEDGE STONE DRIVE AUSTIN, TEXAS 78737 (512) 432-1000

JANUARY 2023

Exhibit C

TPDES General Permit

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087



GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

This permit supersedes and replaces TPDES General Permit No. TXR150000, effective March 5, 2018

EPA-issued 2017 NPDES General Permit No. TXR10F000, modified June 27, 2019

Construction sites that discharge stormwater associated with construction activity located in the state of Texas may discharge to surface water in the state only according to monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the Commission of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, on March 5, 2023.

EFFECTIVE DATE: January 28, 2022

ISSUED DATE: January 28, 2022

For the Commission

Exhibit D

Notice of Intent



Notice of Intent (NOI) for an Authorization for Stormwater Discharges Associated with Construction Activity under TPDES General Permit TXR150000

IMPORTANT INFORMATION

Please read and use the General Information and Instructions prior to filling out each question in the NOI form.

Use the NOI Checklist to ensure all required information is completed correctly. **Incomplete applications delay approval or result in automatic denial.**

Once processed your permit authorization can be viewed by entering the following link into your internet browser: http://www2.tceq.texas.gov/wq_dpa/index.cfm or you can contact TCEQ Stormwater Processing Center at 512-239-3700.

ePERMITS

Effective September 1, 2018, this paper form must be submitted to TCEQ with a completed electronic reporting waiver form (TCEQ-20754).

To submit an NOI electronically, enter the following web address into your internet browser and follow the instructions: https://www3.tceq.texas.gov/steers/index.cfm

APPLICATION FEE AND PAYMENT

The application fee for submitting a paper NOI is \$325. The application fee for electronic submittal of a NOI through the TCEQ ePermits system (STEERS) is \$225.

Payment of the application fee can be submitted by mail or through the TCEQ ePay system. The payment and the NOI must be mailed to separate addresses. To access the TCEQ ePay system enter the following web address into your internet browser: http://www.tceq.texas.gov/epay.

Provide your payment information for verification of payment:

- If payment was mailed to TCEQ, provide the following:
 - o Check/Money Order Number:
 - Name printed on Check:
- If payment was made via ePay, provide the following:
 - Voucher Number:
 - A copy of the payment voucher is attached to this paper NOI form.

RE	NEWAL (This portion of the NOI is not applied	cable af	ter June 3, 20	18)			
Is t	his NOI for a renewal of an existing authoriz	ation?	□ Yes	□ No			
If Y	Yes, provide the authorization number here:	TXR15					
NC	TE: If an authorization number is not provid	ed, a ne	w number wi	ll be assigned.			
SE	CTION 1. OPERATOR (APPLICANT)						
a)	If the applicant is currently a customer with (CN) issued to this entity? CN	TCEQ,	what is the Cu	ustomer Number			
	(Refer to Section 1.a) of the Instructions)						
b)	What is the Legal Name of the entity (applicant) applying for this permit? (The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)						
	Lewis RR Dripping Springs, LLC						
c)	What is the contact information for the Ope	erator (I	Responsible A	Authority)?			
	Prefix (Mr. Ms. Miss): <u>Mr.</u>						
	First and Last Name: <u>R. Kip Lewis</u> Suffix:						
	Title: Credentials:						
	Phone Number: Fax Number:						
	E-mail:						
	Mailing Address:						
	City, State, and Zip Code:						
	Mailing Information if outside USA:						
	Territory:						
	Country Code: Postal Code:						
d)	Indicate the type of customer:						
	□ Individual	□F	ederal Govern	nment			
	☐ Limited Partnership		County Govern	nment			
	☐ General Partnership	\square S	tate Governm	ient			
	□ Trust		city Governme	ent			
	☐ Sole Proprietorship (D.B.A.)		ther Governr	nent			
	□ Corporation		ther:				
	□ Estate						
e)	Is the applicant an independent operator?	⊠ Yes	□ No	0			

	(If a governmental entity, a subsidiary, or part	of a larger corporation, check No.)		
f)	Number of Employees. Select the range applica	ble to your company.		
	⊠ 0-20	□ 251-500		
	□ 21-100	□ 501 or higher		
	□ 101-250			
g)	Customer Business Tax and Filing Numbers: (R Partnerships. Not Required for Individuals, Go			
	State Franchise Tax ID Number: 32080684296			
	Federal Tax ID: <u>87-2585804</u>			
	Texas Secretary of State Charter (filing) Number	r: <u>804449241</u>		
	DUNS Number (if known):			
SE	CTION 2. APPLICATION CONTACT			
Is t	the application contact the same as the applicar	at identified above?		
	☐ Yes, go to Section 3			
	⋈ No, complete this section			
Pre	efix (Mr. Ms. Miss): <u>Mr.</u>			
First and Last Name: Felix Manka Suffix:				
Title: Project Engineer Credential: P.E.				
Organization Name: <u>Burgess & Niple, Inc.</u>				
Phone Number: <u>512-432-1000</u> Fax Number: <u>512-432-1015</u>				
E-mail: <u>felix.manka@burgessniple.com</u>				
Mailing Address: 235 Ledge Stone Drive				
Internal Routing (Mail Code, Etc.):				
City, State, and Zip Code: Austin, TX 78737				
Mailing information if outside USA:				
Territory:				
Co	ountry Code: Postal Code			
SE	CTION 3. REGULATED ENTITY (RE) INFORMATI	ON ON PROJECT OR SITE		
a)	If this is an existing permitted site, what is the issued to this site? RN 104798640	Regulated Entity Number (RN)		
	(Refer to Section 3.a) of the Instructions)			

- b) Name of project or site (the name known by the community where it's located): Ledge Stone Subdivision Phase 1 c) In your own words, briefly describe the type of construction occurring at the regulated site (residential, industrial, commercial, or other): Commercial development d) County or Counties (if located in more than one): Hays e) Latitude: Longitude: f) Site Address/Location If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete Section A. If the site does not have a physical address, provide a location description in Section B. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1. Section A: Street Number and Name: City, State, and Zip Code: Section B: Location Description: The site is located on the north side of the Ledge Stone Drive roundabout, east of Anthem Apartments. City (or city nearest to) where the site is located: <u>Dripping Springs</u> Zip Code where the site is located: 78737 SECTION 4. GENERAL CHARACTERISTICS a) Is the project or site located on Indian Country Lands? ☐ Yes, do not submit this form. You must obtain authorization through EPA Region 6. ⊠ No b) Is your construction activity associated with a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources? ☐ Yes. Note: The construction stormwater runoff may be under jurisdiction of the
- Railroad Commission of Texas and may need to obtain authorization through EPA Region 6.

⊠ No

- c) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site? 1542
- d) What is the Secondary SIC Code(s), if applicable?
- e) What is the total number of acres to be disturbed? 8.74

f)	Is the project part of a larger common plan of development or sale?
	□ Yes
	☑ No. The total number of acres disturbed, provided in e) above, must be 5 or more. If the total number of acres disturbed is less than 5, do not submit this form. See the requirements in the general permit for small construction sites.
g)	What is the estimated start date of the project?
h)	What is the estimated end date of the project?
i)	Will concrete truck washout be performed at the site? \square Yes \square No
j)	What is the name of the first water body(ies) to receive the stormwater runoff or potential runoff from the site? <u>Unnamed Tributary to Long Branch</u>
k)	What is the segment number(s) of the classified water body(ies) that the discharge will eventually reach? $\underline{1430}$
l)	Is the discharge into a Municipal Separate Storm Sewer System (MS4)?
	□ Yes □ No
	If Yes, provide the name of the MS4 operator:
	Note: The general permit requires you to send a copy of this NOI form to the MS4 operator.
m)	Is the discharge or potential discharge from the site within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?
	□ No, go to Section 5
	I certify that the copy of the TCEQ-approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) that is included or referenced in the Stormwater Pollution Prevention Plan will be implemented. \Box Yes
SE	CTION 5. NOI CERTIFICATION
a)	I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000). ☑ Yes
b)	I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas. \boxtimes Yes
c)	I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed. $\hfill \boxtimes$ Yes
d)	I certify that a Stormwater Pollution Prevention Plan has been developed, will be implemented prior to construction and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the Construction General Permit (TXR150000).

Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3, provided all obligations are confirmed by at least one operator.

Operator Signatory Name:
Operator Signatory Title:
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 there are significant penalties for
submitting false information, including the possibility of fine and imprisonment for

SECTION 6. APPLICANT CERTIFICATION SIGNATURE

knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink):	Date:
Signature (disc side limi).	

NOTICE OF INTENT CHECKLIST (TXR150000)

Did you complete everything? Use this checklist to be sure!

APPLICATION FEE

Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

Confirm each item (or applicable item) in this form is complete. This checklist is for use by the applicant to ensure a complete application is being submitted. **Missing information may result in denial of coverage under the general permit.** (See NOI process description in the General Information and Instructions.)

If paying by check:
☐ Check was mailed separately to the TCEQs Cashier's Office. (See Instructions for Cashier's address and Application address.)
\square Check number and name on check is provided in this application.
If using ePay:
\square The voucher number is provided in this application and a copy of the voucher is attached.
RENEWAL
$\hfill\square$ If this application is for renewal of an existing authorization, the authorization number is provided.
OPERATOR INFORMATION
□ Customer Number (CN) issued by TCEQ Central Registry
\square Legal name as filed to do business in Texas. (Call TX SOS 512-463-5555 to verify.)
\square Name and title of responsible authority signing the application.
□ Phone number and e-mail address
☐ Mailing address is complete & verifiable with USPS. www.usps.com
\square Type of operator (entity type). Is applicant an independent operator?
□ Number of employees.
\square For corporations or limited partnerships – Tax ID and SOS filing numbers.
\square Application contact and address is complete & verifiable with USPS. http://www.usps.com
REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE
□ Regulated Entity Number (RN) (if site is already regulated by TCEQ)
☐ Site/project name and construction activity description
□ County
$\label{eq:lambda} \square \ Latitude \ and \ longitude \ \underline{http://www.tceq.texas.gov/gis/sqmaview.html}$

\square Site Address/Location. Do not use a rural route or post office box.
GENERAL CHARACTERISTICS
□ Indian Country Lands -the facility is not on Indian Country Lands.
□ Construction activity related to facility associated to oil, gas, or geothermal resources
\square Primary SIC Code that best describes the construction activity being conducted at the site $\underline{www.osha.gov/oshstats/sicser.html}$
□ Estimated starting and ending dates of the project.
□ Confirmation of concrete truck washout.
☐ Acres disturbed is provided and qualifies for coverage through a NOI.
□ Common plan of development or sale.
□ Receiving water body or water bodies.
□ Segment number or numbers.
□ MS4 operator.
□ Edwards Aquifer rule.
CERTIFICATION
□ Certification statements have been checked indicating Yes.
☐ Signature meets 30 Texas Administrative Code (TAC) §305.44 and is original.

Instructions for Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

By Regular Mail: By Overnight or Express Mail:

TCEQ TCEQ

Stormwater Processing Center (MC228) Stormwater Processing Center (MC228)

P.O. Box 13087 12100 Park 35 Circle

Austin, Texas 78711-3087 Austin, TX

Application Fee:

The application fee of \$325 is required to be paid at the time the NOI is submitted. Failure to submit payment at the time the application is filed will cause delays in acknowledgment or denial of coverage under the general permit. Payment of the fee may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

Mailed Payments:

Use the attached General Permit Payment Submittal Form. The application fee is submitted to a different address than the NOI. Read the General Permit Payment Submittal Form for further instructions, including the address to send the payment.

ePAY Electronic Payment: http://www.tceq.texas.gov/epay

When making the payment you must select Water Quality, and then select the fee category "General Permit Construction Storm Water Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

TCEQ Contact List:

Application – status and form questions: 512-239-3700, swpermit@tceq.texas.gov

Technical questions: 512-239-4671, swgp@tceq.texas.gov

Environmental Law Division: 512-239-0600 Records Management - obtain copies of forms: 512-239-0900

Reports from databases (as available): 512-239-DATA (3282)

Cashier's office: 512-239-0357 or 512-239-0187

Notice of Intent Process:

When your NOI is received by the program, the form will be processed as follows:

Administrative Review: Each item on the form will be reviewed for a
complete response. In addition, the operator's legal name must be
verified with Texas Secretary of State as valid and active (if applicable).
The address(es) on the form must be verified with the US Postal service
as receiving regular mail delivery. Do not give an overnight/express
mailing address.

- **Notice of Deficiency:** If an item is incomplete or not verifiable as indicated above, a notice of deficiency (NOD) will be mailed to the operator. The operator will have 30 days to respond to the NOD. The response will be reviewed for completeness.
- Acknowledgment of Coverage: An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.

or

Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

For NOIs submitted **electronically** through ePermits, provisional coverage under the general permit begins immediately following confirmation of receipt of the NOI form by the TCEQ.

For **paper** NOIs, provisional coverage under the general permit begins 7 days after a completed NOI is postmarked for delivery to the TCEQ.

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site http://www.tceq.texas.gov. Search using keyword TXR150000.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated project or site changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted no later than 10 days prior to the change in Operator status.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. After final acknowledgment of coverage under the general permit, the program will assign a Customer Number and Regulated Entity Number, if one has not already been assigned to this customer or site.

For existing customers and sites, you can find the Customer Number and Regulated Entity Number by entering the following web address into your internet browser: http://www15.tceq.texas.gov/crpub/ or you can contact the TCEQ Stormwater Processing Center at 512-239-3700 for assistance. On the website, you can search by your permit number, the Regulated Entity (RN) number, or the Customer Number (CN). If you do not know these numbers, you can select "Advanced Search" to search by permittee name, site address, etc.

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all authorizations as changes occur. For this permit, a Notice of Change form must be submitted to the program area.

INSTRUCTIONS FOR FILLING OUT THE NOI FORM

Renewal of General Permit. Dischargers holding active authorizations under the expired General Permit are required to submit a NOI to continue coverage. The existing permit number is required. If the permit number is not provided or has been terminated, expired, or denied, a new permit number will be issued.

Section 1. OPERATOR (APPLICANT)

a) Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. **This is not a permit number, registration number, or license number**.

If the applicant is an existing TCEQ customer, the Customer Number is available at the following website: http://www15.tceq.texas.gov/crpub/. If the applicant is not an existing TCEQ customer, leave the space for CN blank.

b) Legal Name of Applicant

Provide the current legal name of the applicant. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, as filed in the county. You may contact the SOS at 512-463-5555, for more information related to filing in Texas. If filed in the county, provide a copy of the legal documents showing the legal name.

c) Contact Information for the Applicant (Responsible Authority)

Provide information for the person signing the application in the Certification section. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. The mailing address must be recognized by the US Postal Service. You may verify the address on the following website: https://tools.usps.com/go/ZipLookupAction!input.action.

The phone number should provide contact to the applicant.

The fax number and e-mail address are optional and should correspond to the applicant.

d) Type of Customer (Entity Type)

Check only one box that identifies the type of entity. Use the descriptions below to identify the appropriate entity type. Note that the selected entity type also indicates the name that must be provided as an applicant for an authorization.

Individual

An individual is a customer who has not established a business, but conducts an activity that needs to be regulated by the TCEQ.

Partnership

A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). If the customer is a 'General Partnership' or 'Joint Venture' filed in the county (not filed with TX SOS), the legal name of each partner forming the 'General Partnership' or 'Joint Venture' must be provided. Each 'legal entity' must apply as a co-applicant.

Trust or Estate

A trust and an estate are fiduciary relationships governing the trustee/executor with respect to the trust/estate property.

Sole Proprietorship (DBA)

A sole proprietorship is a customer that is owned by only one person and has not been incorporated. This business may:

- 1. be under the person's name
- 2. have its own name (doing business as or DBA)
- 3. have any number of employees.

If the customer is a Sole Proprietorship or DBA, the 'legal name' of the individual business 'owner' must be provided. The DBA name is not recognized as the 'legal name' of the entity. The DBA name may be used for the site name (regulated entity).

Corporation

A customer that meets all of these conditions:

- 1. is a legally incorporated entity under the laws of any state or country
- 2. is recognized as a corporation by the Texas Secretary of State
- 3. has proper operating authority to operate in Texas

The corporation's 'legal name' as filed with the Texas Secretary of State must be provided as applicant. An 'assumed' name of a corporation is not recognized as the 'legal name' of the entity.

Government

Federal, state, county, or city government (as appropriate)

The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the applicant. A department name or other description of the organization is not recognized as the 'legal name'.

Other

This may include a utility district, water district, tribal government, college district, council of governments, or river authority. Provide the specific type of government.

e) Independent Entity

Check No if this customer is a subsidiary, part of a larger company, or is a governmental entity. Otherwise, check Yes.

f) Number of Employees

Check one box to show the number of employees for this customer's entire company, at all locations. This is not necessarily the number of employees at the site named in the application.

g) Customer Business Tax and Filing Numbers

These are required for Corporations and Limited Partnerships. These are not required for Individuals, Government, and Sole Proprietors.

State Franchise Tax ID Number

Corporations and limited liability companies that operate in Texas are issued a franchise tax identification number. If this customer is a corporation or limited liability company, enter the Tax ID number.

Federal Tax ID

All businesses, except for some small sole proprietors, individuals, or general partnerships should have a federal taxpayer identification number (TIN). Enter this number here. Use no prefixes, dashes, or hyphens. Sole proprietors, individuals, or general partnerships do not need to provide a federal tax ID.

TX SOS Charter (filing) Number

Corporations and Limited Partnerships required to register with the Texas Secretary of State are issued a charter or filing number. You may obtain further information by calling SOS at 512-463-5555.

DUNS Number

Most businesses have a DUNS (Data Universal Numbering System) number issued by Dun and Bradstreet Corp. If this customer has one, enter it here.

Section 2. APPLICATION CONTACT

Provide the name and contact information for the person that TCEQ can contact for additional information regarding this application.

Section 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) Regulated Entity Number (RN)

The RN is issued by TCEQ's Central Registry to sites where an activity is regulated by TCEQ. This is not a permit number, registration number, or license number. Search TCEQ's Central Registry to see if the site has an assigned RN at http://www15.tceq.texas.gov/crpub/. If this regulated entity has not been assigned an RN, leave this space blank.

If the site of your business is part of a larger business site, an RN may already be assigned for the larger site. Use the RN assigned for the larger site.

If the site is found, provide the assigned RN and provide the information for the site to be authorized through this application. The site information for this authorization may vary from the larger site information.

An example is a chemical plant where a unit is owned or operated by a separate corporation that is accessible by the same physical address of your unit or facility. Other examples include industrial parks identified by one common address but different corporations have control of defined areas within the site. In both cases, an RN would be assigned for the physical address location and the permitted sites would be identified separately under the same RN.

b) Name of the Project or Site

Provide the name of the site or project as known by the public in the area where the site is located. The name you provide on this application will be used in the TCEQ Central Registry as the Regulated Entity name.

c) Description of Activity Regulated

In your own words, briefly describe the primary business that you are doing that requires this authorization. Do not repeat the SIC Code description.

d) County

Provide the name of the county where the site or project is located. If the site or project is located in more than one county, provide the county names as secondary.

e) Latitude and Longitude

Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to: http://www.tceq.texas.gov/gis/sqmaview.html.

f) Site Address/Location

If a site has an address that includes a street number and street name, enter the complete address for the site in *Section A*. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

If a site does not have an address that includes a street number and street name, provide a complete written location description in *Section B.* For example: "The site is located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1."

Provide the city (or nearest city) and zip code of the site location.

Section 4. GENERAL CHARACTERISTICS

a) Indian Country Lands

If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA Region 6, Dallas. Do not submit this form to TCEQ.

b) Construction activity associated with facility associated with exploration, development, or production of oil, gas, or geothermal resources

If your activity is associated with oil and gas exploration, development, or production, you may be under jurisdiction of the Railroad Commission of Texas (RRC) and may need to obtain authorization from EPA Region 6.

Construction activities associated with a facility related to oil, gas or geothermal resources may include the construction of a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a

carbon dioxide geologic storage facility; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel.

Where required by federal law, discharges of stormwater associated with construction activities under the RRC's jurisdiction must be authorized by the EPA and the RRC, as applicable. Activities under RRC jurisdiction include construction of a facility that. when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources, such as a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility under the jurisdiction of the RRC; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel. The RRC also has jurisdiction over stormwater from land disturbance associated with a site survey that is conducted prior to construction of a facility that would be regulated by the RRC. Under 33 U.S.C. §1342(l)(2) and §1362(24), EPA cannot require a permit for discharges of stormwater from field activities or operations associated with {oil and gas} exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities unless the discharge is contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the facility. Under §3.8 of this title (relating to Water Protection), the RRC prohibits operators from causing or allowing pollution of surface or subsurface water. Operators are encouraged to implement and maintain best management practices (BMPs) to minimize discharges of pollutants, including sediment, in stormwater during construction activities to help ensure protection of surface water quality during storm events.

For more information about the jurisdictions of the RRC and the TCEQ, read the Memorandum of Understanding (MOU) between the RRC and TCEQ at 16 Texas Administrative Code, Part 1, Chapter 3, Rule 3.30, by entering the following link into an internet browser:

http://texreg.sos.state.tx.us/public/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=30 or contact the TCEQ Stormwater Team at 512-239-4671 for additional information.

c) Primary Standard Industrial Classification (SIC) Code

Provide the SIC Code that best describes the construction activity being conducted at this site.

Common SIC Codes related to construction activities include:

- 1521 Construction of Single Family Homes
- 1522 Construction of Residential Buildings Other than Single Family Homes
- 1541 Construction of Industrial Buildings and Warehouses

- 1542 Construction of Non-residential Buildings, other than Industrial Buildings and Warehouses
- 1611 Highway and Street Construction, except Highway Construction
- 1622 Bridge, Tunnel, and Elevated Highway Construction
- 1623 Water, Sewer, Pipeline and Communications, and Power Line Construction

For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Local Government Assistance Section at 800-447-2827 for assistance.

d) Secondary SIC Code

Secondary SIC Code(s) may be provided. Leave this blank if not applicable. For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Environmental Assistance Section at 800-447-2827 for assistance.

e) Total Number of Acres Disturbed

Provide the approximate number of acres that the construction site will disturb. Construction activities that disturb less than one acre, unless they are part of a larger common plan that disturbs more than one acre, do not require permit coverage. Construction activities that disturb between one and five acres, unless they are part of a common plan that disturbs more than five acres, do not require submission of an NOI. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

If you have any questions about this item, please contact the stormwater technical staff by phone at 512-239-4671 or by email at swgp@tceq.texas.gov.

f) Common Plan of Development

Construction activities that disturb less than five acres do not require submission of an NOI unless they are part of a common plan of development or for sale where the area disturbed is five or more acres. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

For more information on what a common plan of development is, refer to the definition of "Common Plan of Development" in the Definitions section of the general permit or enter the following link into your internet browser:

www.tceq.texas.gov/permitting/stormwater/common_plan_of_development_steps.html

For further information, go to the TCEQ stormwater construction webpage enter the following link into your internet browser: www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If you have any further questions about the Common Plan of Development you can contact the TCEQ Stormwater Team at 512-239-4671 or the TCEQ Small Business and Environmental Assistance at 800-447-2827.

g) Estimated Start Date of the Project

This is the date that any construction activity or construction support activity is initiated at the site. If renewing the permit provide the original start date of when construction activity for this project began.

h) Estimated End Date of the Project

This is the date that any construction activity or construction support activity will end and final stabilization will be achieved at the site.

i) Will concrete truck washout be performed at the site?

Indicate if you expect that operators of concrete trucks will washout concrete trucks at the construction site.

j) Identify the water body(s) receiving stormwater runoff

The stormwater may be discharged directly to a receiving stream or through a MS4 from your site. It eventually reaches a receiving water body such as a local stream or lake, possibly via a drainage ditch. You must provide the name of the water body that receives the discharge from the site (a local stream or lake).

If your site has more than one outfall you need to include the name of the first water body for each outfall, if they are different.

k) Identify the segment number(s) of the classified water body(s)

Identify the classified segment number(s) receiving a discharge directly or indirectly. Enter the following link into your internet browser to find the segment number of the classified water body where stormwater will flow from the site: www.tceq.texas.gov/waterquality/monitoring/viewer.html or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

You may also find the segment number in TCEQ publication GI-316 by entering the following link into your internet browser: $\underline{\text{www.tceq.texas.gov/publications/gi/gi-316}}$ or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:

- 0100 (Canadian River Basin)
- 0200 (Red River Basin)
- 0300 (Sulfur River Basin)
- 0400 (Cypress Creek Basin)
- 0500 (Sabine River Basin)

Call the Water Quality Assessments section at 512-239-4671 for further assistance.

l) Discharge into MS4 - Identify the MS4 Operator

The discharge may initially be into a municipal separate storm sewer system (MS4). If the stormwater discharge is into an MS4, provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, county, or utility district, but possibly can be another form of government. Please note that the Construction General Permit requires the Operator to supply the MS4 with a

copy of the NOI submitted to TCEQ. For assistance, you may call the technical staff at 512-239-4671.

m) Discharges to the Edwards Aquifer Recharge Zone and Certification

The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

See maps on the TCEQ website to determine if the site is located within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer by entering the following link into an internet browser: www.tceq.texas.gov/field/eapp/viewer.html or by contacting the TCEQ Water Quality Division at 512-239-4671 for assistance.

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site-specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required before construction can begin.

For questions regarding the Edwards Aquifer Protection Program, contact the appropriate TCEQ Regional Office. For projects in Hays, Travis and Williamson Counties: Austin Regional Office, 12100 Park 35 Circle, Austin, TX 78753, 512-339-2929. For Projects in Bexar, Comal, Kinney, Medina and Uvalde Counties: TCEQ San Antonio Regional Office, 14250 Judson Rd., San Antonio, TX 78233-4480, 210-490-3096.

Section 5. NOI CERTIFICATION

Note: Failure to indicate Yes to all of the certification items may result in denial of coverage under the general permit.

a) Certification of Understanding the Terms and Conditions of Construction General Permit (TXR150000)

Provisional coverage under the Construction General Permit (TXR150000) begins 7 days after the completed paper NOI is postmarked for delivery to the TCEQ. Electronic applications submitted through ePermits have immediate provisional coverage. You must obtain a copy and read the Construction General Permit before submitting your application. You may view and print the Construction General Permit for which you are seeking coverage at the TCEQ web site by entering the following link into an internet browser: www.tceq.texas.gov/goto/construction or you may contact the TCEQ Stormwater processing Center at 512-239-3700 for assistance.

b) Certification of Legal Name

The full legal name of the applicant as authorized to do business in Texas is required. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at 512-463 5555, for more information related to filing in Texas.

c) Understanding of Notice of Termination

A permittee shall terminate coverage under the Construction General Permit through the submittal of a NOT when the operator of the facility changes, final stabilization has been reached, the discharge becomes authorized under an individual permit, or the construction activity never began at this site.

d) Certification of Stormwater Pollution Prevention Plan

The SWP3 identifies the areas and activities that could produce contaminated runoff at your site and then tells how you will ensure that this contamination is mitigated. For example, in describing your mitigation measures, your site's plan might identify the devices that collect and filter stormwater, tell how those devices are to be maintained, and tell how frequently that maintenance is to be carried out. You must develop this plan in accordance with the TCEQ general permit requirements. This plan must be developed and implemented before you complete this NOI. The SWP3 must be available for a TCEQ investigator to review on request.

Section 6. APPLICANT CERTIFICATION SIGNATURE

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

If you are a corporation:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

If you are a municipality or other government entity:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the TCEQ's Environmental Law Division at 512-239-0600.

30 Texas Administrative Code

§305.44. Signatories to Applications

- (a) All applications shall be signed as follows.
- (1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the

corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

- (2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.
- (3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

Texas Commission on Environmental Quality General Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

Instructions:

- Complete items 1 through 5 below:
- Staple your check in the space provided at the bottom of this document.
- Do not mail this form with your NOI form.
- Do not mail this form to the same address as your NOI.

Mail this form and your check to either of the following:

By Regular U.S. Mail

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 P.O. Box 13088 Austin, TX 78711-3088 By Overnight or Express Mail
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

Fee Code: GPA General Permit: TXR150000

- 1. Check or Money Order No:
- 2. Amount of Check/Money Order:
- 3. Date of Check or Money Order:
- 4. Name on Check or Money Order:
- 5. NOI Information:

If the check is for more than one NOI, list each Project or Site (RE) Name and Physical Address exactly as provided on the NOI. **Do not submit a copy of the NOI with this form, as it could cause duplicate permit application entries!**

If there is not enough space on the form to list all of the projects or sites the authorization will cover, then attach a list of the additional sites.

Project/Site (RE) Name:

Project/Site (RE) Physical Address:

Staple the check or money order to this form in this space.

Exhibit E

Major Activities Log Form

GRADING AND STABILIZATION ACTIVITIES LOG

Project Name: SWPPP Contact:

	 	 	 	<u> </u>	 	
Description of Stabilization Measure and Location						
Date When Stabilization Measures are Initiated						(S
Date Grading Activity Ceased (Indicate Temporary or Permanent)						
Description of Grading Activity						
Date Grading Activity Initiated						

Exhibit F

Inspection and Maintenance Report Form

INSPECTION AND MAINTENANCE REPORT FORM TO BE COMPLETED EVERY WEEK (7 CALENDAR DAYS) /OR EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF RAINFALL EVENT OF 0.5 INCHES OR MORE

Instructions: Each inspector or group of inspectors must complete this page (FORM A) of the INSPECTION AND MAINTENANCE REPORT. Complete a copy of FORM B for each individual site area as defined by the Storm Water Pollution Prevention Plan (SWPPP). If changes are required to the SWPPP, check the "YES" box at the bottom of the appropriate FORM B and then fill out the CHANGES REQUIRED and REASONS FOR CHANGES section below (FORM A). Use and attach additional sheets of paper if

necessary	tion below (FORM A). Use and attach additional sheets of paper if		
Inspector:	Date:		
Inspector's Qualifications:			
CHANGES REQUIRED TO THE SWPPP DOCUMENTED ON SUBSEQUENT PAGES O	RESULTING FROM THIS INSPECTION, AS OF THIS FORM (IF ANY):		
a .			
REASONS FOR CHANGES:			
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 gathered and evaluated 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.			
Signature:	Date:		

INSPECTION AND MAINTENANCE REPORT FORM

INSPECTION FORM B

Describe Maintenance or Corrective Action Required [Include Date(s) and Responsible Person(s)] IF YES, SPECIFY CHANGES on FORM A of this set of forms and SIGN BELOW. Inspector: Date: Describe Any Problems Signature: Gauge Location: Is There Evidence of Any Problems? % ×es Changes Required to the Storm Water Pollution Prevention Plan? Check One. Is Control Functioning Properly? Storm Water Pollution Control Revegetation Condition (After Temporary or Permanent Seeding) Stabilized Construction Entrance Specific Site Area Location: Silt Fences/Hay Bale Dikes Last Rainfall Amt. (inches): Days Since Last Rainfall: Offsite Vehicle Tracking Waste Disposal Other Controls: Rock Berms

Agent Authorization Form

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

	R. Kip Lewis	
	Print Name	
	Title - Owner/President/Other	, , , , , , , , , , , , , , , , , , , ,
of	Lewis RR Dripping Springs, LLC Corporation/Partnership/Entity Name	
have authorized	Felix J. Manka, P.E. Print Name of Agent/Engineer	
of	Burgess & Niple, Inc. Print Name of Firm	

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- 5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:
Applicant's Signature Date
THE STATE OF TO YOUR S County of Williamson S ERIKA RODRIGUEZ Notary Public, State of Texas Comm. Expires 03-24-2025 Notary ID 126817033
BEFORE ME, the undersigned authority, on this day personally appeared R. Kip Lewis 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 28th day of October , 2022.
NOTARY PUBLIC DISTURDANCE OF THE PUBLIC DIST
Typed or Printed Name of Notary
MY COMMISSION EXPIRES: 3/24/25

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: AEA Daycare Dripping Springs

Regulated Entity Location: The site is located on the north side of the Ledge Stone Drive

roundabout, east of Anthem Apartments. Name of Customer: Lewis RR Dripping Springs, LLC Contact Person: Felix Manka Phone: 512-432-1000 Customer Reference Number (if issued):CN Regulated Entity Reference Number (if issued):RN <u>104798640</u> Austin Regional Office (3373) X 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
City I a setion (Charle All That Annal A	

Site Location (Check All That Apply):

Recharge Zone	Contributing Zone	Transit	Transition Zone			
Туре	of Plan	Size	Fee Due			
Water Pollution Abatemer	nt Plan, Contributing Zone					
Plan: One Single Family Re	sidential Dwelling	Acres	\$			
Water Pollution Abatemer	nt Plan, Contributing Zone					
Plan: Multiple Single Famil	y Residential and Parks	Acres	\$			
Water Pollution Abatemer	nt Plan, Contributing Zone					
Plan: Non-residential		3.06 Acres	\$ 4,000			
Sewage Collection System		L.F.	\$			
Lift Stations without sewe	r lines	Acres	\$			
Underground or Abovegro	und Storage Tank Facility	Tanks	\$			
Piping System(s)(only)		Each	\$			
Exception		Each	\$			
Extension of Time		Each	\$			

Signature: Date: 01-19-23

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

	Project Area in			
Project	Acres	Fee		
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,	< 1	\$3,000		
nstitutional, multi-family residential, schools, and	1 < 5	\$4,000		
ther sites where regulated activities will occur)	5 < 10	\$5,000		
	10 < 40	\$6,500		
	40 < 100	\$8,000		
	≥ 100	\$10,000		

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee			
Exception Request	\$500			

Extension of Time Requests

Project	Fee				
Extension of Time Request	\$150				



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.

SECT	FION.	I: General	l Information

The second secon		ssion (<i>If other is c</i> stration or Authori	52				0.860	l with	the pro	gram appi	lication	1.)	
Renewa	al (Core Da	ata Form should b	e submitted v	vith the i	renewal	form)	\Box	☐ Other					
2. Custome	r Referenc	e Number <i>(if i</i> ss	ued)	Follow	this link	to search	3. 1	3. Regulated Entity Reference Number (if issued)					if issued)
CN	100			for CN		umbers in							
SECTION	II: Cu	stomer Info	ormation										
4. General C	ustomer l	nformation	5. Effective	Date fo	or Custo	omer Info	ormati	on U	pdates	(mm/dd/y	ууу)		
New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)									Entity Ownership				
											The state of the s	rent and	active with the
Average and a state		f State (SOS)											
6. Customer	Legal Na	me (If an individual	l, print last nam	e first: eg	g: Doe, Jo	ohn)		If nev	w Custo	mer, enter	previo	us Custom	er below:
Lewis R	R Dripp	ing Springs, l	LLC					290	BUSH	I INC			
7. TX SOS/C	PA Filing	Number	8. TX State	Tax ID	(11 digits)			9. Fe	ederal	Tax ID (9 di	gits)	10. DUN	S Number (if applicable)
08046284	17		3208524	3072				456	65530)64			
11. Type of 0	Customer:		on		☐ Inc	dividual		Partnership: ☐ General ☐ Limited					
	70 TO THE RESERVE TO	County 🔲 Federal 🗀	State 🔲 Other			ole Propri	ietorsh	ip	⊠o	ther: Disr	egard	ed LLC	
12. Number ○ 0-20 □	of Employ 21-100	rees 101-250	251-500		501 and	higher		13. lr			wned :	and Opera	ited?
14. Custome	r Role (Pr	oposed or Actual) -	as it relates to	the Regu	ulated En	tity listed	on this	form.	Please	check one	of the fo	ollowing	
	nal Licens	Operat	or nsible Party			er & Ope		Applic	cant	Othe	r:		
	1102 N	Martin Avenu	ie		iking.					1 1887	100	SP.	
15. Mailing										- 15		10000000	
Address:	City	Round Rock	ζ	Sta	ate 7	ГΧ	ZIP	7	78681		T	ZIP + 4	
16. Country	Mailing In	formation (if outside	de USA)			17.	E-Ma	il Add	dress (if applicable)			
	· · · · · · · · · · · · · · · · · · ·								inv.co				
18. Telephon	e Number	•		19. Ext	tension	or Code)		1	0. Fax Nu	mber	(if applicat	ole)
(512)79	6-0168)	-		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
ECTION	III: Re	egulated En	tity Infor	mati	on								
						is selecte	ed belo	ow this	s form	should be	accom	panied by	a permit application)
☐ New Regu			to Regulated I							ntity Inform			
The Regula	ated Ent	ity Name subi	mitted may	be up	dated	in orde	er to	meet	t TCE	Q Agend	y Da	ta Stand	lards (removal
	000 11 1000	ndings such a			reflect					370	20		
22. Regulate	d Entity N	ame (Enter name o	of the site where	e the reg	ulated ac	tion is tak	ing pla	ce.)					

TCEQ-10400 (02/21) Page 1 of 2

23. Street Address of the Regulated Entity:					- 8.00kg Hz	10 /		900		
(No PO Boxes)	City			State		ZIP			ZIP + 4	
24. County		-				I Section 1				
		Enter P	hysical L	ocation Descript	ion if no str	eet addres	s is provide	d.		
25. Description to Physical Location:										
26. Nearest City			***				State		Nea	rest ZIP Code
				-0						
27. Latitude (N) In De			207545				W) In Decim		97.97897	
Degrees	Minute			Seconds	Degree		Minut			Seconds
30		12	,	27		97		58		44
29. Primary SIC Code	(4 digits)	30. Secon	ndary SIC	Code (4 digits)	31. Primar (5 or 6 digits	y NAICS C		32. Seco (5 or 6 digit	ondary NAI	CS Code
00 14/1-41-41-10										
33. What is the Prima	ry Busin	ess of this	entity?	Do not repeat the SIC	or NAICS desc	cription.)		-300		
				***************************************	12-		- W	All se		
34. Mailing				-						200
Address:			_				T			
		ity	2089	State		ZIP			ZIP + 4	
35. E-Mail Addre										
36. Telej	hone Nu	Imper		37. Extension	on or Code		38. Fa	x Numb	er (if appli	cable)
. TCEQ Programs and) - I ID Numl	bers Check a	all Programs	and write in the pe	rmits/registrat	ion numbers	that will be af	ected by	the updates	submitted on this
m. See the Core Data For Dam Safety		Districts	onal guidan	ce. Edwards Aqu	iifer	☐ Emissi	ons Inventory	Air [7 Industrial	Hazardous Waste
				05112102			one miremery.		modound	Tiazardous Trasic
Municipal Solid Waste		New Source F	Review Air	OSSF		☐ Petrole	um Storage Ta	Storage Tank PWS		
Sludge		Storm Water		☐ Title V Air		☐ Tires		☐ Used Oil		
Voluntary Cleanup	□ v	Waste Water		☐ Wastewater A	Agriculture	☐ Water I	Water Rights Other:			
ECTION IV: P	rengre	r Infor	nation							
0. Felix Manl		1111011	11441011		41. Title:	Proje	ct Engine	er		
2. Telephone Number	43. Ext	./Code	44. Fax	Number	45. E-Ma	il Address				70000
512) 432-1000			() -	9094 (A/O)	15.95	urgessnip	le.com	1	
ECTION V: A	uthori	zed Sign	ature	=	4					
By my signature belonature authority to submittified in field 39.	w, I certif	fy, to the bes	st of my kr	nowledge, that the tity specified in S	information ection II, Fie	provided in eld 6 and/or	n this form is as required f	true and or the up	complete, odates to the	and that I have e ID numbers
	gess & Ni	ple. Inc		100	Job Title:	Engin	eer	233		#
	x Manka			2		Lingin	Phone:	(.5	512) 432- 1	000
ignature:	Toles	John	1 ul	w			Date:		1-19-	

TCEQ-10400 (02/21)

OWNER: LEWIS RR DRIPPING SPRINGS LLC

1102 MARTIN AVE

ROUND ROCK, TEXAS 78681

512.246.2858

ENGINEER: BURGESS & NIPLE, INC.

235 LEDGE STONE DR.

AUSTIN, TEXAS 78737

felix.manka@burgessniple.com

512.432.1000

ARCHITECT: ELEVEN18 ARCHITECTURE

1011 E. COLONIAL DR.

SUITE 307

ORLANDO, FLORIDA 32803

407.745.5300

WATER, WASTEN

WTCPUA NOTES:

. THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY IS THE RETAIL WATER PROVIDER. HCMUD 4 IS THE RETAIL WASTEWATER PROVIDER.

HHE 61.81 101

CH PHASE 2 SECTION 2

Prepared: January 16, 2013

DT' 106

LOT' 107

DT' 106

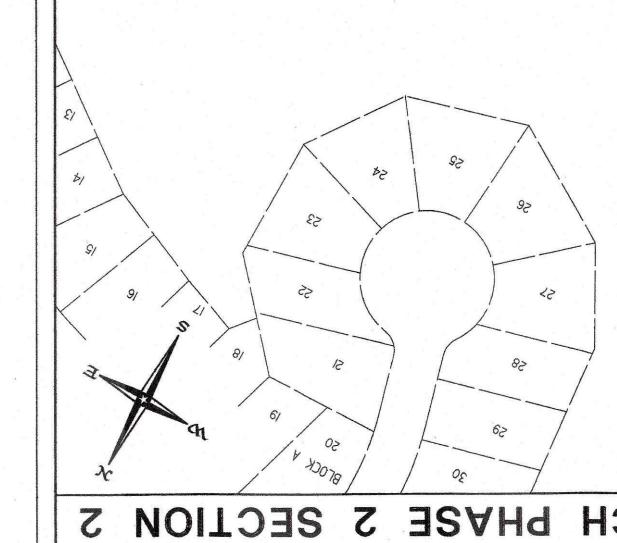
DT' 106

DT' 106

DT' 107

DT' 108

ASE1:81 101



94.8/19/

ICH PHASE 2 SECTION 2

SOMOTE SAFE USE OF ROADWAYS AND TO PRESERVE THE CONDITIONS WAYS, NO DRIVEWAY CONSTRUCTED ON ANY LOT WITHIN THIS SUBDIVISION DUNTY ROADWAY RIGHT-OF-WAY HAS BEEN ISSUED UNDER HAYS COUNTY OUNTY ROADWAY SIGHT-OF-WAY HAS BEEN ISSUED UNDER HAYS COUNTY SET TORIVEWAY SATISFIES THE MINIMUM SPACING REQUIREMENT FOR USE TO SHAPPER TORIVE ROADWAY SATISFIES THE MINIMUM SPACING REQUIREMENT FOR SET FORTH IN HAYS COUNTY CHAPTER TSI.

HIS PLAT BY THE COMMISSIONERS COURT OF HAYS COUNTY, DERSTOOD THAT THE BUILDING OF ALL STREETS, ROADS, AND HOROUGHFARES DELINEATED AND SHOWN ON THIS PLAT, AND CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED IN REWITH SHALL BE THE RESPONSIBILITY OF THE OWNER TH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THIS PLAT IN Y, TEXAS, ASSUME NO OBLIGATION TO BUILD THE STREETS, Y, TEXAS, ASSUME NO OBLIGATION TO BUILD THE STREETS, Y, TEXAS, ASSUME NO OBLIGATION TO BUILD THE STREETS, Y, TEXAS, ASSUME NO OBLIGATION TO BUILD THE STREETS, Y, TEXAS, ASSUME NO OBLIGATION TO BUILD THE STREETS, Y, TEXAS, ASSUME NO OBLIGATION TO BUILD THE STREETS, Y, TEXAS, ASSUME NO OBLIGATION THIS PLAT OR OF REPORTS OF THE STREETS, ASSUME NO OBLIGATION THIS PLAT OR OF THE STREETS, ASSUME NO OBLIGATION THIS PLAT OR OF THE STREETS, ASSUME NO OBLIGATION THIS PLAT OR OF THE STREETS, AND THE STREETS, AN

ALVINDIVIDUAL WATER SUPPLY CERTIFICATION, TO-WIT:

IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED AL WATER SUPPLY OR A STATE APPROVED COMMUNITY WATER ECTIVE PROPERTY OWNERS ARE CAUTIONED BY HAYS COUNTY HE SELLER CONCERNING GROUND WATER AVAILABILITY. RAIN TION IS ENCOURAGED AND IN SOME AREAS MAY OFFER THE TION IS ENCOURAGED AND IN SOME AREAS MAY OFFER THE

IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED SOVED AND PERMITTED BY HAYS COUNTY ENVIRONMENTAL HEALTH ON OR OTHER DEVELOPMENT WITHIN THIS SUBDIVISION MAY IN HAYS COUNTY ENVIRONMENTS HAVE

SIDEWALK NOTES:

- SIDEWALK ASSIGNMENTS MAY VARY IN RIGHT—OF—WAY AS DIRECTED BY OWNER. PAYMENT SHALL BE MADE PER LINEAR FOOTAGE INSTALLED AS ARRANGED BY OWNER. THE BID PRICE SHALL INCLUDE ANY CURVATURE OF SIDEWALKS AS VARIED FROM PLANS AS REQUESTED BY OWNER. BROOM FINISH SIDEWALK (SEE STREET DETAIL SHEET). LAYOUT OF WALK (STAKING OR PAINT) IN FIELD FOR APPROVAL BY OWNER MAY BE BY OTHER LAYOUT PREPARED BY LANDSCAPE ARCHITECT NOT INCLUDED IN THESE PLANS. CONTRACTOR TO COORDINATE WITH OWNER TO OBTAIN APPROVAL OF THE SIDEWALK LAYOUT PRIOR TO CONSTRUCTION.
- ALL SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS REQUIREMENTS. i,
- PASSING SPACES TO BE PROVIDED ON SIDEWALKS AT A DISTANCE NOT TO EXCEED 200'. THE PASSING SPACE SHOULD BE A MINIMUM 5' WIDTH BY 5' LENGTH WITH A 2% CROSS SLOPE. 3

HAYS COUNTY CONSTRUCTION NOTES:

- SEVENTY-TWO (72) HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION, THE DEVELOPER SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE WITH ALL PERTINENT
- ALL ROADWAY AND DRAINAGE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HAYS COUNTY SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS FROM HAYS COUNTY ROAD AND BRIDGE DEPARTMENT PRIOR TO BEGINNING ANY ON—SITE CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE NECESSARY INSPECTIONS FROM THE HAYS COUNTY ROAD AND BRIDGE DEPARTMENT. ALL REPAIRS TO IMPROVEMENTS CAUSED BY THE CONTRACTOR. HAYS COUNTY ROAD AND BRIDGE DEPARTMENT'S ACCEPTANCE OF THE CONTRACTOR'S FAILURE TO INSTALL IMPROVEMENTS IN ACCORDANCE WITH HAYS COUNTY SPECIFICATIONS AND THESE CONSTRUCTION PLANS SHALL BE THE RESPONSIBILITY OF IMPROVEMENTS ARE CONTINGENT ON REPAIRS BEING MADE TO HAYS COUNTY'S SATISFACTION. DELAYS CAUSED BY REPAIRS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ri
- CONTRACTOR SHALL ENSURE THE VEHICLES LEAVING THE CONSTRUCTION SITE ONTO PUBLICLY MAINTAINED ROADWAYS ARE CLEAR OF MUD AND DEBRIS. CONTINGENT ON REPAIRS BEING MADE TO HAYS COUNTY'S SATISFACTION. DELAYS CAUSED BY REPAIRS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

3

HAYS COUNTY ROAD AND BRIDGE DEPARTMENT'S ACCEPTANCE OF THE IMPROVEMENTS ARE

GENERAL ENGINEERIN

- . ALL CONSTRUCTION COUNTY MUNICIPAL TRAVIS COUNTY PUB STANDARD SPECIFICA REQUIREMENTS EXIST
- 2. PRIOR TO BEGINNING
 REPRESENTATIVE SHA
 CITY OF DRIPPING S
 HAYS COUNTY DEVEL
 INCLUDING BUT NOT
 HOURS PRIOR TO TH
 BEGINNING OF CONS
- 3. THE CONTRACTOR SH NOTICE BEFORE BEG
- ANY EXISTING PAVEN REPAIRED BY THE CI SUBDIVISION.
- 5. SEE WATER DETAILS
- 6. CONTACT SHALL BE WATER AGENCY AND TO EXISTING WATER
- '. ALL CONSTRUCTION PREPARED BY
- 8. WATER AND WASTEW/
 DEFLECTION WITHIN 1
 FITTINGS ARE CALLET
 SHOWN ON THE PLA
- 9. IT IS THE CONTRACT
 UTILITIES, INCLUDING
 FIRE HYDRANTS, STR
 RIGHT-OF-WAY OR E
 CONTRACTOR TO REF
 SIDEWALKS, FENCES,
 REGARDLESS OF WHE
 EXPENSE. THE LOCA
 IS APPROXIMATE. IN
 EXTRA CAUTION WHEI
 PLANS.
- 10. WHENEVER EXISTING OBSTRUCTIONS TO G

CONTACT INFORMATION

OWNER: LEWIS RR DRIPPING SPRINGS LLC/1102 MARTIN AVENUE, ROUND ROCK, TEXAS 78681

TEXAS 78738 WEST TRAVIS COUNTY PUA 13215 BEE CAVE PARKWAY BUILDING B, SUITE 110 BEE CAVE,

512/263-0100

JRIECHERS@WTCPUA.ORG

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: BURGESS & NIPLE, INC./(512)432-1000 MAINTENANCE: LEWIS RR DRIPPING SPRINGS LLC

PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL: LEWIS RR DRIPPING SPRINGS LLC CONTRACTOR: GI CUSTOM BUILDERS

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION: LEWIS RR DRIPPING SPRINGS LLC

SPOILS MANAGEMENT AND DISPOSAL NOTES

- I. TEMPORARY HOLDING SITES AS NECESSARY TO STOCKPILE EXCAVATED SOILS, EMBEDMENT MATERIAL, AND/OR PIPING AND APPURTENANCES MAY BE LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE
 - 2.NO PERMANENT SPOILS DISPOSAL SHALL BE ALLOWED ON-SITE, UNLESS APPROVED BY THE OWNER AND
- GOVERNING AUTHORITY.

 3.ALL SPOILS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL DISPOSAL SITE.

 THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE; AND SHALL NOTIFY THE OWNER AND/OR ENGINEER AT LEAST FORTY—EIGHT (48) HOURS PRIOR TO DISPOSAL OF ANY SPOILS MATERIAL.

EROSION/SEDIMENTATION CONTROL NOTES

USE LATEST CITY OF AUSTIN EROSION/SEDIMENTATION NOTES OR VARIATION APPROVED BY CITY OF AUSTIN. STANDARD TREE PROTECTION NOTES

USE LATEST CITY OF AUSTIN EROSION/SEDIMENTATION NOTES OR VARIATION APPROVED BY CITY OF AUSTIN.

WEST TRAVIS COUNTY PUBLIC UTILTY AGENCY (WTCPUA) NOTES:

HOURS OF CONSTRUCTION

NO WORK SHALL BE DONE BETWEEN THE HOURS OF 8:00 P.M. AND 6:00 A.M; NOR ON SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE WRITTEN PERMISSION OF THE WTCPUA IN EACH CASE, EXCEPT SUCH WORK AS MAY BE NECESSARY FOR THE PROPER CARE, MAINTENANCE AND PROTECTION OF THE WORK ALREADY DONE OR IN THE CASE OF AN EMERGENCY.

LIMITS OF CONSTRUCTION

MTCPUA WATER & WASTEWATER

- 1. ALL CONSTRUCTION OPERATI AND U.S. OCCUPATIONAL SA STANDARDS MAY BE PURCH/ REFERENCE MATERIALS MAY LA POSADA DR, SUITE 375,
- 2. THE ATTENTION OF THE CON THE STATE LAW, (VERNON'S PRECAUTIONARY MEASURES RESPONSIBLE FOR ALL SAFE ELECTRIC UTILITY COMPANY.
- 3.THE CONTRACTOR SHALL CO EXISTING UTILITY LOCATIONS UNDERGROUND FACILITIES SH INCLUSIVE. IT IS THE CONTR IN ADDITIONAL TO NORMAL FEET OF ANY UTILITIES SHOW CONTRACTOR SHALL VERIFY
- 4. THE CONTRACTOR SHALL BE CONTRACTORS AND UTILITIES ELECTRICAL, TELEPHONE, CA BECOMES AWARE OF A POS ENGINEER AND WTCPUA INSF
- 5.THE CONTRACTOR SHALL BE SITE. ALL SPOILS MATERIAL CONTRACTOR SHALL BE RES CONTRACTOR SHALL NOTIFY OF THE MATERIAL. NO SPOIL 6.NO BLASTING OR BURNING N
- 7.IT SHALL BE THE RESPC CURB, FENCES WHETHER THESE ITEMS ARE PAVEMENT,
- B.WHENEVER EXISTING UTILITIE ALIGNMENT OF PROPOSED P IF EXISTING IMPROVEMENTS IS TO BE CHANGED.
- 9.DUST PREVENTION SHALL BE INCLUDE SPRAYING OF WATE THE PROJECT OR OTHER ME
- 10. CLEANUP UPON COMPLI CONTRACTOR SHALL CLEAN OF OF ALL RUBBISH, EXCESS M EQUIPMENT. ALL PARTS OF TO THE WTCPUA AND OTHER PAYMENT.
- 11. THE CONTRACTOR SHALL IN CONTRACTOR SHALL COORDII AND OTHER ACTIVITIES. 12 DEWATEDING IF NEGEOVAD

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES (REVISED FEBRUARY 2019 OR LATEST VERSION)

- THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS." <u>.</u> ri
- ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [\$290.44(A)(1)].
 - PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [\$290.44(A)(2)].

'n

4.

- NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY [\$290.44(A)(3)].
 - ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [\$290.44(E)(4)(B)]. 6 6
- WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [\$290.44(A)(4)].
 - THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [\$290.44(B)]. 7 ø
 - THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16—MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [\$290.44(D)(1)].

 THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [\$290.44(F)(1)].
- 6
- WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [\$290.44(F)(2)]. 10.
- PURSUANT TO 30 TAC \$290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS. Ξ.
- EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC \$290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

WHERE:

- Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
- ${}_{\bullet}$ L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET, ${}_{\bullet}$ D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
- P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).
- 7 THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED

- TEXAS COMMISSION CONTRIBUTING ZON
- WRITTEN CONSTRUCT TCEQ REGIONAL OFF THE REGULATED ACT REGULATED ACTIVITY REGULATED ACTIVITY, TELEPHONE NUMBER
- ALL CONTRACTORS (SHOULD BE PROVIDE ZONE PLAN AND THE APPROVAL. DURING CONTRACTOR(S) SHO ETTER ON-SITE. d
- NO TEMPORARY ABO TANK SYSTEM MAY E IRRIGATION, OR PUBI 3
- PRIOR TO COMMENCE (E&S) CONTROL MEA MAINTAINED IN ACCO ENGINEERING PRACTI APPROVED EDWARDS CONSTRUCTION. IF IN INAPPROPRIATELY, OF DISTURBED AREAS AI CONTROL FOR SITE STABILIZED. 4
- IF SEDIMENT ESCAPE IMPACTS TO WATER SURFACE STREAMS (SEDIMENT MUST BE 5
- SEDIMENT MUST BE LATER THAN WHEN [STAKE MUST BE PRO OF THE BASIN VOLU 6
- LITTER, CONSTRUCTION STORMWATER SHALL

GENERAL NOTES:

"www.tnrcc.state.tx.us/waterperm/wwperm/construct.html". DISCLAIMER: INFORMATION CONTAINED IN THIS PARAGRAPH IS BASED UPON THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL NECESSARY FORMS AND DOCUMENTATION AND COMPLY WITH THE PROVISIONS OF THE 2 THE CONTRACTOR SHALL COMPLY WITH ALL OF THE REQUIREMENTS SET FORTH IN THE TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (TCEQ) "TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM" (TPDES). INFORMATION ON THE TPDES CONSTRUCTION GENERAL PERMITS MAY BE OBTAINED BY CONTACTING THE TCEQ AT 512-339-2929. INFORMATION ALSO AVAILABLE THROUGH TCEQ WEB SITE AT

THE CONTRACTOR WILL BE REQUIRED TO FOLLOW BEST MANAGEMENT PRACTICES AND TO USE AND MAINTAIN SEDIMENTATION AND WATER POLLUTION CONTROL DEVICES AS REQUIRED.

THE CONTRACTOR SHALL PROVIDE THE OWNER 48 HOURS NOTICE PRIOR TO DISTURBING ANY VEGETATION OR BEGINNING ANY SITE PREPARATION IN ADVANCE OF THE EARTHWORK OPERATION. THE 48 HOUR NOTICE PROVIDES THE OWNER THE REQUIRED TIME TO FILE AND POST THE "NOTICE OF INTENT" (NOI) WITH THE TCEQ.

THE CONTRACTOR SHALL NOT RECEIVE FINAL PAYMENT FOR THE PROJECT UNTIL THE UNPAYED AREAS HAVE ACHIEVED 70% VEGETATIVE COVER WITH PERMANENT GRASSES, AND THE OWNER HAS FILED THE "NOTICE OF TERMINATION" (NOT) WITH THE TCEQ.

IN AREAS THAT HAVE ACHIEVED 70% VEGETATIVE COVER (WHEN COMPARED TO THE SURROUNDING, UNDISTURBED, VEGETATIVE COVER), THE CONTRACTOR MAY REMOVE AND REUSE ANY TEMPORARY EROSION CONTROL DEVICES (THAT ARE IN REASONABLE CONDITION) ON OTHER LOCATIONS IN THE DEVELOPMENT. ADDITIONAL SEEDING MAY BE REQUIRED TO VEGETATE THE AREAS WHERE THE STRUCTURAL CONTROLS WERE REMOVED.

PRIOR TO ACCEPTANCE AND FINAL PAYMENT, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES. ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE PLACED PRIOR TO CONSTRUCTION IN ANY AREA, OR AS SOON AS PRACTICAL.

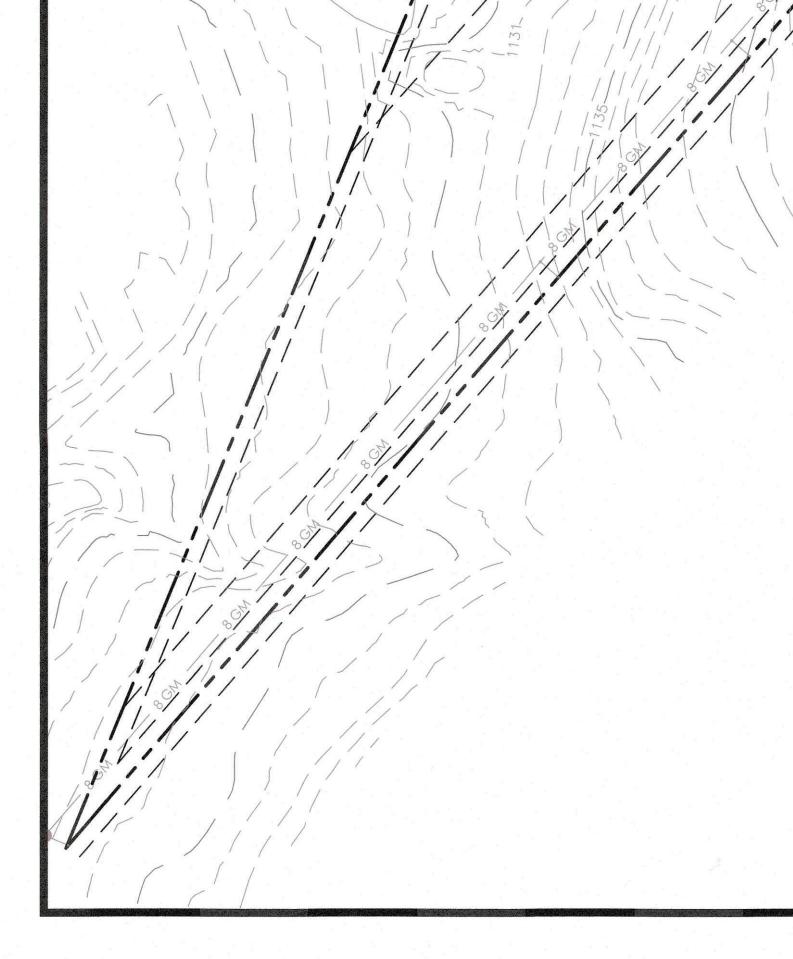
THE CONTRACTOR SHALL PROVIDE FOR ALL INTERIM DRAINAGE ON THE PROJECT. THE INTERIM DRAINAGE SHALL ENSURE THAT ALL RUNOFF IS CHANNELED TO THE TEMPORARY CONTROL DEVICES. THE CONTRACTOR SHALL TAKE THE STEPS NECESSARY TO ENSURE THAT ALL CONSTRUCTION TRAFFIC LEAVING THE PROJECT SHALL NOT TRACK MUD OR OTHER DEBRIS ONTO ANY ROADWAY, PUBLIC STREET OR ANY ROADWAY WITHIN THE DEVELOPMENT. SHOULD MUD OR OTHER DEBRIS BE TRACKED ONTO ANY ROADWAY, THE CONTRACTOR SHALL TAKE IMMEDIATE STEPS TO REMOVE IT TO THE SATISFACTION OF THE OWNER AND/OR ANY REGULATORY.

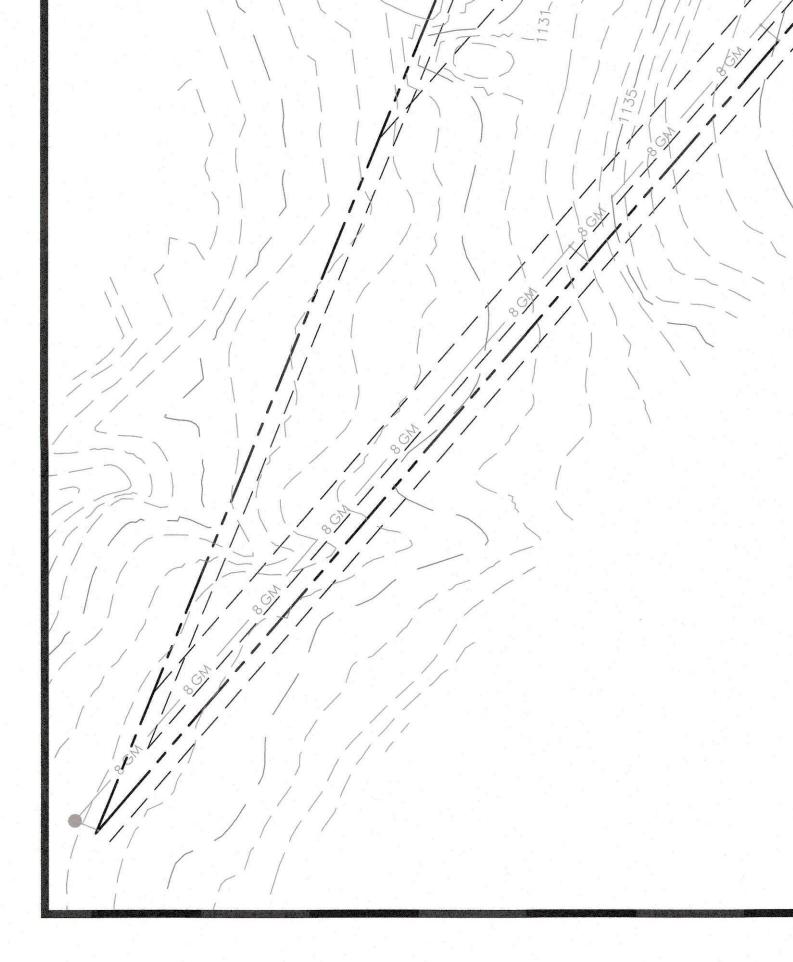
TEMPORARY AND PE CONTROL NOTES PE

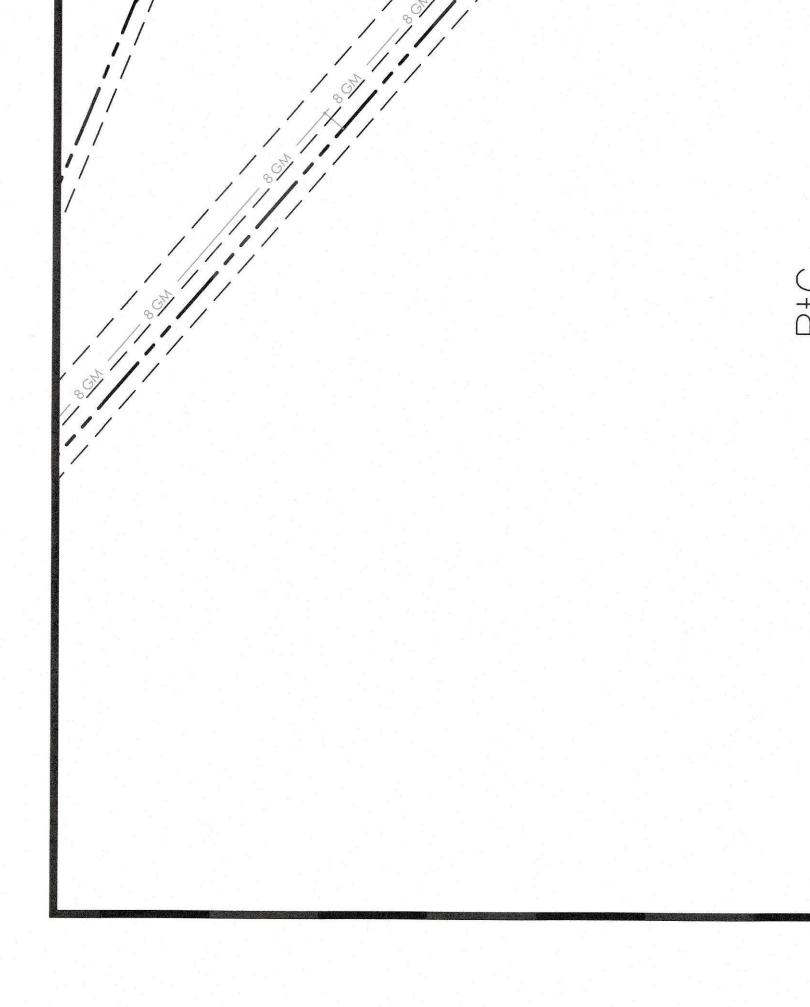
. ALL DISTURBED ARE REFERENCE CITY OF ENVIRONMENTAL ENH PLACED IN ALL DIST R.O.W. THE CONTRACTOR SI COMPLETION OF CONSTR SEEDING OR EROSION C DISTURBED BY CONSTRU APPROVED BY THE OWN FROM SEPTEM OF 1 POUND PER 1000 SQ FROM MARCH GRASS (CYNOI WITH A PURIT FERTILIZER SF A RATE OF 1 APPLIED AT A ACCEPTABLE V (95%) COVER/

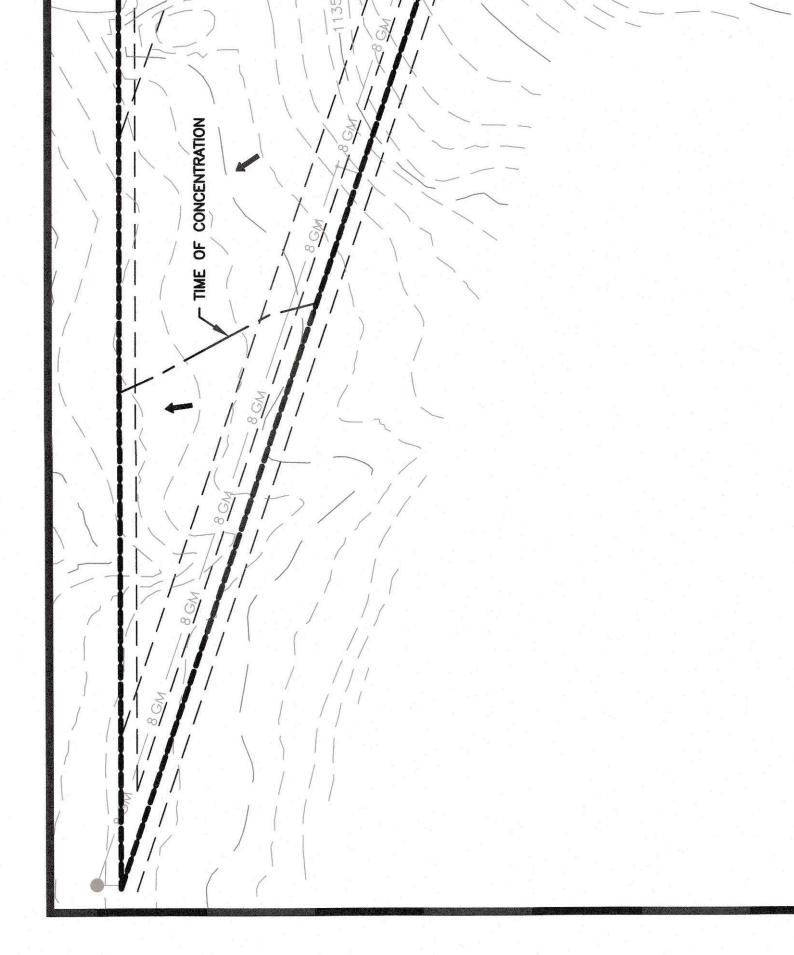
- THE SEEDED OR PL WHICH WILL NOT ER DEPTH OF SIX INCHI THE FIRST TWO MON POSTPONE THE WATE
- WHEN REQUIRED, NA GRASS SEEDING) OF ENVIRONMENTAL ENH

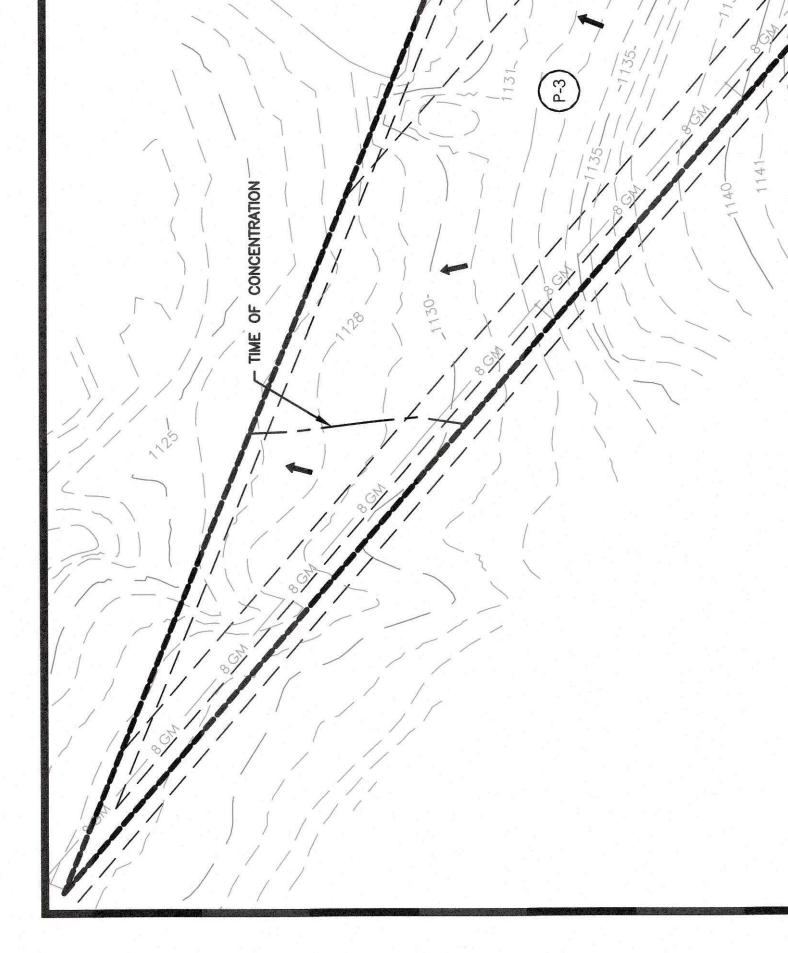
SITE DESCRIPTION A) THE PROJECT SHALL











C VALUES

Runoff Coefficients

COA DCM - Table 2-3

	2 Yr	10 Yr	25 Yr	100 Yr
Asphalt	0.73	0.81	0.86	0.95
Roof / Conc	0.75	0.83	0.88	0.97
Range (0 - 2%)	0.25	0.3	0.34	0.41
Range (2 - 7%)	0.33	0.38	0.42	0.49
Range > 7%	0.37	0.42	0.46	0.53
Grass (0 - 2%)	0.21	0.25	0.29	0.36
Grass (2 - 7%)	0.29	0.35	0.39	0.46
Grass > 7%	0.34	0.40	0.44	0.51

70.4% 58.7% 73.6% %0.0 %0.0 Area % Range >7% 14,964 14,329 35,631 Area (st) 0 0 ROOF/CONCRETE 80.1% 90.2% 21.3% 13.4% %0.0 Area % 26,484 10,796 4,352 3,272 Area (st) 0 %0.0 %0.0 %0.0 %0.0 %0.0 Area % ASPHALT Area (st) 0 0 0 0 0 0.560 0.759 0.111 0.467 Area 1.161 (ac) 24,405 20,326 33,053 50,578 4,825 Area (st) Basin P-1B P-2A P-2B P-1A P-3 Undeveloped Condition Developed Developed

Mixed

Mixed

AEA C Va

