

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
6. If the geologic assessment was completed before October 1, 2004 and the site contains “possibly sensitive” features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.
4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

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

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

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

1. Regulated Entity Name: <i>Texas Murugan Temple</i>					2. Regulated Entity No.:				
3. Customer Name: Murugan Temple of Central Texas					4. Customer No.:				
5. Project Type: (Please circle/check one)	<input checked="" type="checkbox"/> New	Modification			Extension		Exception		
6. Plan Type: (Please circle/check one)	WPAP	<input checked="" type="checkbox"/> CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		<input checked="" type="checkbox"/> Non-residential			8. Site (acres):		5.337	
9. Application Fee:			10. Permanent BMP(s):				Batch detention		
11. SCS (Linear Ft.):			12. AST/UST (No. Tanks):				0		
13. County:	Williamson		14. Watershed:				South Fork San Gabriel		

Application Distribution

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

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

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

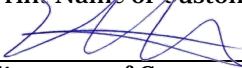
Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	<u>X</u>
Region (1 req.)	—	—	<u>X</u>
County(ies)	—	—	<u>X</u>
Groundwater Conservation District(s)	<u>—</u> Edwards Aquifer Authority <u>—</u> Barton Springs/ Edwards Aquifer <u>—</u> Hays Trinity <u>—</u> Plum Creek	<u>—</u> Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	<u>—</u> Austin <u>—</u> Buda <u>—</u> Dripping Springs <u>—</u> Kyle <u>—</u> Mountain City <u>—</u> San Marcos <u>—</u> Wimberley <u>—</u> Woodcreek	<u>—</u> Austin <u>—</u> Bee Cave <u>—</u> Pflugerville <u>—</u> Rollingwood <u>—</u> Round Rock <u>—</u> Sunset Valley <u>—</u> West Lake Hills	<u>—</u> Austin <u>—</u> Cedar Park <u>—</u> Florence <u>—</u> Georgetown <u>—</u> Jerrell <u>—</u> Leander <u>X</u> Liberty Hill <u>—</u> Pflugerville <u>—</u> Round Rock

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

Marco Castaneda, PE

Print Name of Customer/Authorized Agent



6/16/23

Signature of Customer/Authorized Agent

Date

****FOR TCEQ INTERNAL USE ONLY****

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

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: Marco Castaneda, PE

Date: 6/15/23

Signature of Customer/Agent:



Regulated Entity Name: Texas Murugan Temple

Project Information

1. County: Williamson
2. Stream Basin: South Fork San Gabriel
3. Groundwater Conservation District (if applicable): _____
4. Customer (Applicant):

Contact Person: Venkatesan Palanivelan

Entity: Murugan Temple of Central Texas

Mailing Address: 10805 Ballard Path

City, State: Austin, Tx

Telephone: 720-480-5134

Email Address: vkn101@gmail.com

Zip: 78717

Fax: _____

5. Agent/Representative (If any):

Contact Person: Marco Castaneda, PE

Entity: Ranger Engineering, PLLC

Mailing Address: 5524 Bee Cave Rd, J-3

City, State: Austin, Tx

Zip: 78746

Telephone: 512-785-8446

Fax: _____

Email Address: marco@sectexas.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 Liberty Hill.
- ☐ 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.

775 Stubblefield Lane, Liberty Hill, Tx 78642

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 and contains, at a minimum, the following details:

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

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): 5.337 Acres

Total disturbed area: 2.214 Acres

14. Estimated projected population: 200

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

Table 1 - Impervious Cover

<i>Impervious Cover of Proposed Project</i>	<i>Sq. Ft.</i>	<i>Sq. Ft./Acre</i>	<i>Acres</i>
Structures/Rooftops	8194	÷ 43,560 =	0.188
Parking	72,321	÷ 43,560 =	1.660
Other paved surfaces	3199	÷ 43,560 =	0.073
Total Impervious Cover	83,714	÷ 43,560 =	1.922

Total Impervious Cover $1.922 \div \text{Total Acreage } 5.337 \times 100 = 36\%$ 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.

☐ N/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.

$L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$

21. Pavement Area:

Length of pavement area: _____ feet.

Width of pavement area: _____ feet.

$L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$

Pavement area _____ acres \div R.O.W. area _____ acres $\times 100 = \text{_____ \%}$ 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

26. Wastewater will be disposed of by:

☒ On-Site Sewage Facility (OSSF/Septic Tank):

☒ **Attachment F - Suitability Letter from Authorized Agent.** An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

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

☐ Sewage Collection System (Sewer Lines):

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

☐ Existing.

☐ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons.

☐ N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

<i>AST Number</i>	<i>Size (Gallons)</i>	<i>Substance to be Stored</i>	<i>Tank Material</i>
1			
2			
3			
4			
5			

Total x 1.5 = _____ Gallons

28. ☐ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than

5 of 11

one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

- ☐ **Attachment G - Alternative Secondary Containment Methods.** Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are attached.

29. Inside dimensions and capacity of containment structure(s):

Table 3 - Secondary Containment

<i>Length (L)(Ft.)</i>	<i>Width(W)(Ft.)</i>	<i>Height (H)(Ft.)</i>	<i>L x W x H = (Ft3)</i>	<i>Gallons</i>

Total: _____ Gallons

30. Piping:

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

31. ☐ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of: _____.

32. ☐ **Attachment H - AST Containment Structure Drawings.** A scaled drawing of the containment structure is attached that shows the following:

- ☐ Interior dimensions (length, width, depth and wall and floor thickness).
- ☐ Internal drainage to a point convenient for the collection of any spillage.
- ☐ Tanks clearly labeled
- ☐ Piping clearly labeled
- ☐ Dispenser clearly labeled

33. ☐ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

- ☐ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

- ☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

Site Plan Requirements

Items 34 - 46 must be included on the Site Plan.

34. ☒ The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 20'.
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): FIRM Panel No. 48491C-0245F Dated 12/20/19.
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. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
41. ☒ 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. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

- ☐ **Attachment 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 water 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.

☒ 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

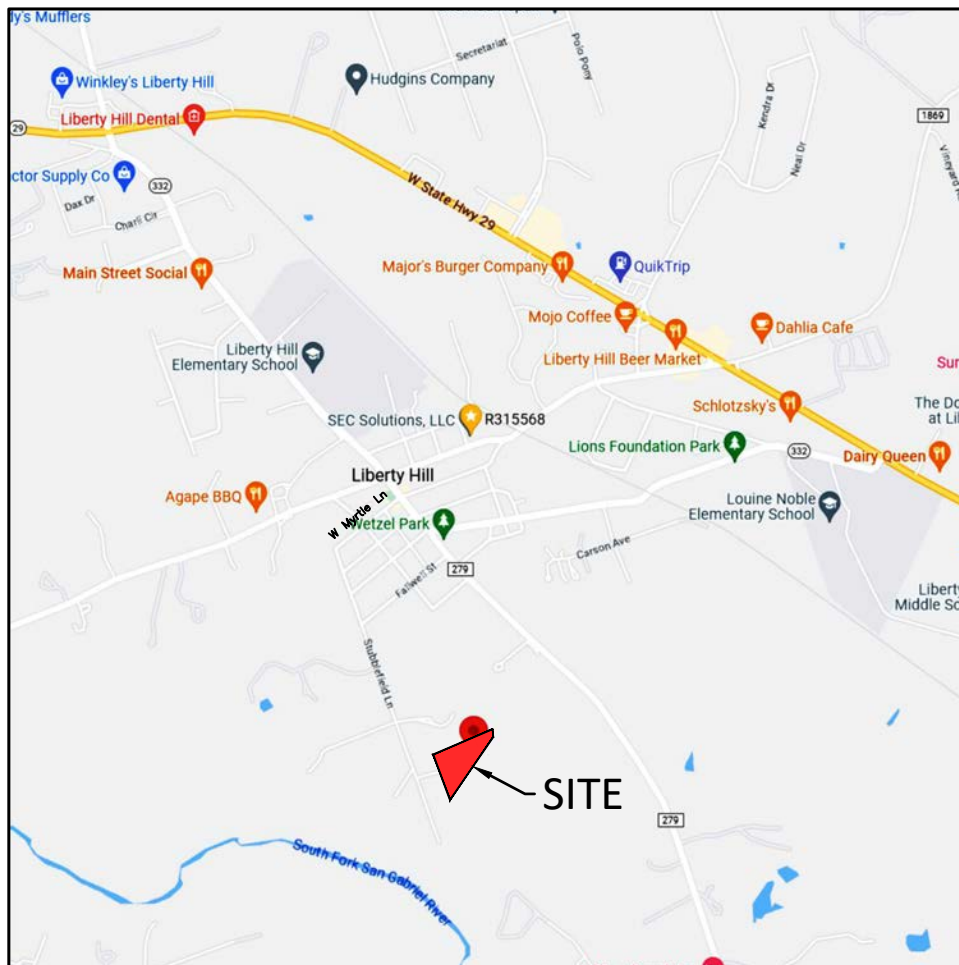
Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

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.

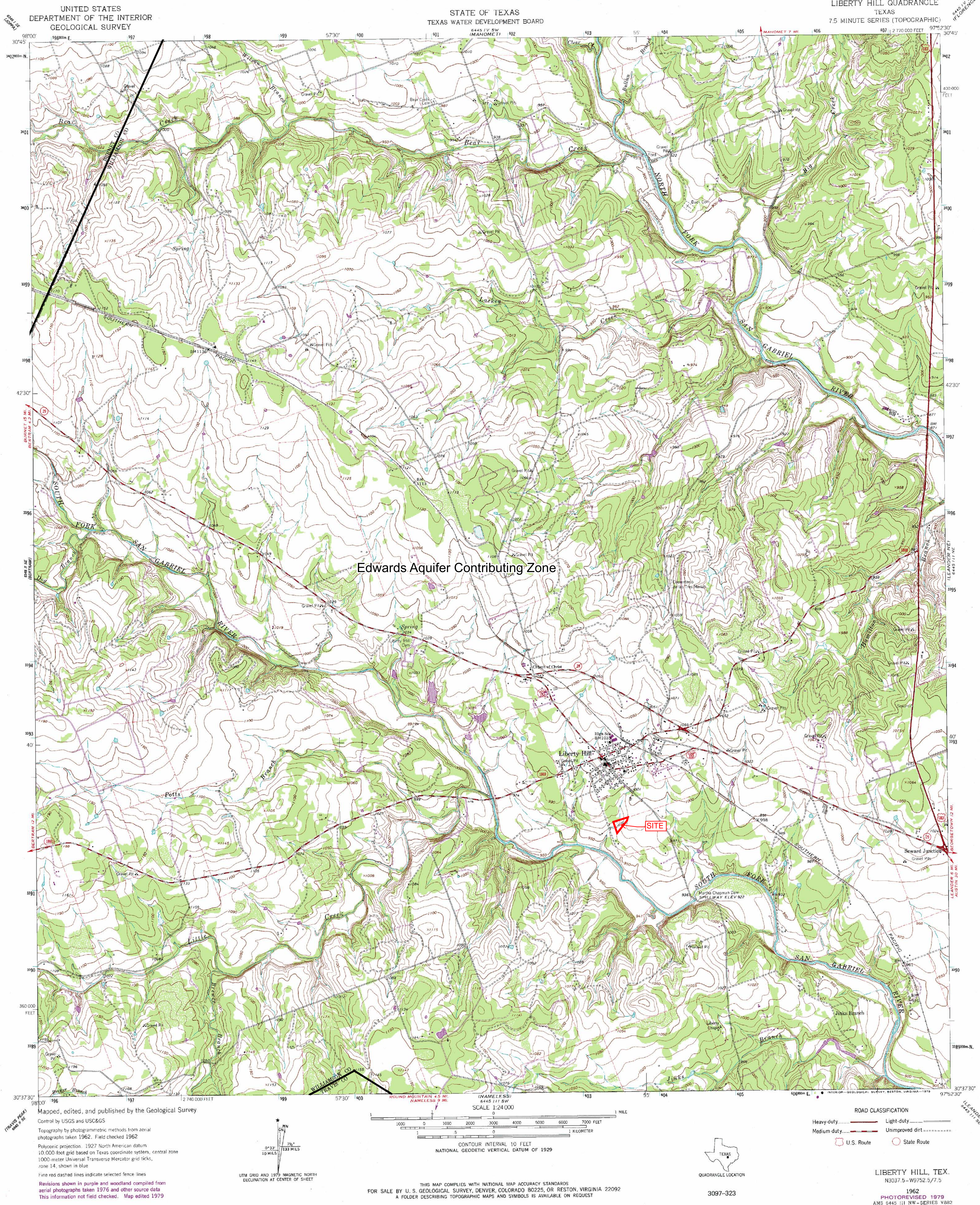
Administrative Information


- 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.



LOCATION MAP

SCALE: 1" = 2000'





Texas Commission on Environmental Quality
Edwards Aquifer Protection Program

Regulatory Zones

30 TAC Chapter 213- Edwards Aquifer
Effective March 1974

This map was produced by the Groundwater Planning and Assessment Team of the Texas Commission on Environmental Quality to detail the boundaries of the regulatory zones of the Edwards Aquifer Protection Program, as described in Texas Administrative Code Title 30, Part 1, §213.3. No other claims are made to the accuracy or completeness of the data or to its suitability for a particular use. For more information about the Edwards Aquifer Protection Program, please contact the TCEQ Regional Offices in San Antonio or Austin. Printed June 2006.

Civil Engineering
512-785-8446
marco@sectexas.com

5524 Bee Cave Road, Suite J-3
Austin, Texas 78746

Project Narrative

June 16, 2023

Texas Commission on Environmental Quality
TCEQ Region 11
P.O. Box 13087
Austin, Texas 78711-3087

Re: Texas Murugan Temple
775 Stubblefield Lane
Liberty Hill, Tx 78642

To Whom It May Concern,

The purpose of this letter is to provide a narrative description of the proposed improvements for the above referenced development. The site is currently developed with a single-family structure which will remain to be converted to accessory office space. The proposed development will consist of a religious assembly building with accessory bathroom structures, along with associated parking, utility and drainage improvements. The BMP is designed as a batch detention system for 35% impervious cover over the entire 5.337 acre site. This 35% impervious cover includes existing and proposed development.

A seasonal un-named creek runs through the site draining approximately 374 acres. This creek drains directly into the South Fork San Gabriel river approximately 1000' southwest of the site.

Should you have any questions or comments, feel free to contact the undersigned at (512) 785-8446.

Sincerely,
Marco Castaneda, P.E.

6/16/23



ATTACHMENT D

FACTORS AFFECTING SURFACE WATER QUALITY

This development consists of a religious assembly building with associated parking. Vehicle traffic and vehicle fluids associated with every day vehicle traffic will be the main source of surface pollutants. There are no proposed industrial activities on the site that would cause additional surface pollutants.

A water quality pond consisting of a batch detention pond is proposed to treat the site run-off from all proposed impervious cover on the site. The pond is sized to per TCEQ guidelines to treat the required water quality volume before discharging into the existing creek running through the site.

ATTACHMENT E

VOLUME AND CHARACTER OF STORMWATER

This 5.337 acre site under existing conditions is developed with a single family structure. The developed site will consist of approximately 36% of impervious cover. An existing seasonal creek runs through the site. No portion of the site is within the 100 year flood plain according to FIRM panel 48491C-0245F, dated 12/20/2019 for Williamson County, Texas.

The existing conditions on-site drainage was analyzed with two drainage areas, one for on-suite flow draining to the pond system and another small area for flows bypassing the pond system containing a portion of the entry driveway. Under existing conditions, the on-site flow for the 100-year storm event is 54.1 CFS with a CN of 80.68. The existing conditions flow consist of approximately 100 feet of sheet flow and 288 feet of shallow concentrated flow before entering the existing creek running through the site. Approximately 374 acres of upstream off-site area contributes to the creek running through the site. All run-off originates as surface flow.

Under developed conditions, the site was divided into multiple drainage areas. The combined drainage areas, encompassing the same areas as under existing conditions, encompassing the vast majority of the proposed impervious cover on the site. A portion of the site will be allowed to drain off the site uncontrolled. The developed flows will enter the proposed water quality/detention system.

Developed site flows will drain into a system of area inlets in the parking area and conveyed into the batch detention pond through underground pipes. The initial discharge will fill the water quality pond until the required volume is reached and then detention outflow structure will then control the outflow from the detention volume above the water quality volume. The filtered outflow from the filtration basin will discharge directly into the nearby creek channel.

The water quality pond consists of a batch detention basin. The water quality pond is sized to treat the required 26,888 CF water quality volume which includes a 20% increase for sediment/silt accumulation in the water quality pond. The water quality pond discharges into the nearby creek. The detention pond was sized to mitigate the increase in flows for the 2, 10, 25, and 100-year storm events back to pre-developed conditions. An outlet structure from the detention pond will control the discharge into the existing nearby creek.

ATTACHMENT J

UPGRADIENT FLOWS

An un-named seasonal creek flows through the site draining approximately 374 acres and there are no proposed improvements within the creek channel, which will be allowed to continue to flow under natural conditions through the site within a proposed drainage easement. The proposed development will treat the stormwater run-off from proposed site improvements before any flows enter this creek and therefore will not impact the water quality of this creek. No permanent BMP's are proposed to treat upstream flows entering the site within the creek.

ATTACHMENT K

DESCRIPTION OF BMP's

This 5.337 acre site under existing conditions is developed with a single family structure and narrow gravel drive. The proposed developed site will consist of approximately 36% impervious cover.

All site run-off originates as surface flow.

Developed site flows will drain into a system of area inlets in the parking area and conveyed into the batch detention pond through underground pipes. The initial discharge will fill the water quality pond until the required volume is reached and then detention outflow structure will then control the outflow from the detention volume above the water quality volume. The filtered outflow from the filtration basin will discharge directly into the nearby creek channel.

The water quality pond consists of a batch detention basin. The water quality pond is sized to treat the required 26,888 CF water quality volume which includes a 20% increase for sediment/silt accumulation in the water quality pond. The water quality pond discharges into the nearby creek. The detention pond was sized to mitigate the increase in flows for the 2, 10, 25, and 100-year storm events back to pre-developed conditions. An outlet structure from the detention pond will control the discharge into the existing nearby creek.

There are no proposed sources of contaminated stormwater run-off other than the vehicle parking area serving the development. There are no proposed vehicle repair, vehicle storage, industrial uses, any other sources of contamination of the run-off.

ATTACHMENT P

MEASURES FOR MINIMIZING SURFACE STEAM CONTAMINATION

Developed site flows will drain into a system of area inlets in the parking area and conveyed into the batch detention pond through underground pipes. The initial discharge will fill the water quality pond until the required volume is reached and then detention outflow structure will then control the outflow from the detention volume above the water quality volume. The filtered outflow from the filtration basin will discharge directly into the nearby creek channel.

The water quality pond consists of a batch detention basin. The water quality pond is sized to treat the required 26,888 CF water quality volume which includes a 20% increase for sediment/silt accumulation in the water quality pond. The water quality pond discharges into the nearby creek. The detention pond was sized to mitigate the increase in flows for the 2, 10, 25, and 100-year storm events back to pre-developed conditions. An outlet structure from the detention pond will control the discharge into the existing nearby creek.

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

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

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

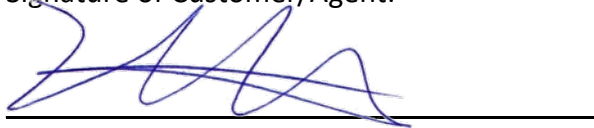
Signature

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

Print Name of Customer/Agent: Marco Castaneda, PE

Date: 6/16/23

Signature of Customer/Agent:



Regulated Entity Name: Texas Murugan Temple

Project Information

Potential Sources of Contamination

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

1. Fuels for construction equipment and hazardous substances which will be used during construction:

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

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

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

- ☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
- ☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
- ☒ Fuels and hazardous substances will not be stored on the site.
- 2. ☒ **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
- 3. ☐ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- 4. ☒ **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

- 5. ☒ **Attachment C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
 - ☐ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.
 - ☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- 6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: South Fork San Gabriel

Temporary Best Management Practices (TBMPs)

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

- 7. ☒ **Attachment D – Temporary Best Management Practices and Measures.** TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

- ☐ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
 - ☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
 - ☐ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
 - ☐ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.
8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
- ☐ **Attachment E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
- ☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.
9. ☒ **Attachment F - Structural Practices.** A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.
10. ☒ **Attachment G - Drainage Area Map.** A drainage area map supporting the following requirements is attached:
- ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
 - ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
 - ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
 - ☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

- ☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.
11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
- ☒ N/A
12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

17. ☒ **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for the site is attached.

- 18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

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

ATTACHMENT A

SPILL RESPONSE ACTIONS

Fuels and hazardous substances will not be stored on the site, but in the event of a spill, personnel should only respond to a spill if they have adequate training to do so safely.

All spills and leaks of hazardous materials and petroleum products will be cleaned up. Upon discovery of a spill, the Contractor will immediately:

1. Assess the area for safety: identify the material spilled, the cause, and any potential hazards. If it is an emergency threatening human health, dial 911. If telephone service is not available or 911 does not work in the area, immediately contact the spread office so emergency responders can be notified. Implement appropriate safety procedures, based on the nature of the hazard.
2. Extinguish or remove ignition sources, if the spilled material is flammable.
3. Shut off leaking equipment, if safe to do so.
4. Stop leaks, if possible.
5. Contain the spill using spill response materials and by creating a berm or dike, if necessary. Block culverts, storm sewers, and other points, if necessary to limit spill travel.
6. Notify supervisor of the spill, including material, quantity, time, and location. Supervisors are responsible for notifying TCEQ of spills (see section below).

Personnel entry and travel on contaminated soils shall be minimized. The Contractor will commence spill clean-up immediately, if it is safe to do so. The Contractor is responsible for removing and disposing of contaminated material in accordance with applicable federal, state, and local laws. It is anticipated that most spills will be small and easily removed with a shovel, with contaminated soil deposited in plastic bags or similar containers for transport to the Contractor's yard. Larger spills may require the use of equipment or special services.

All efforts will be made to prevent a release to water resources; however, if the spilled material reaches water, sorbent booms, socks, and/or pads will be deployed to contain and remove the spilled material.

The Contractor shall notify TCEQ immediately of any spill of a potentially hazardous substance that meets government reporting criteria as well as any existing soil contamination discovered during construction. If pre-existing contamination is suspected, the Contractor shall stop work in the area and not resume work until authorized to do so by the TCEQ.

In the event of a spill that meets government reporting criteria, the Contractor shall notify the appropriate regulatory agencies. Any material released into water that creates a sheen must be reported immediately to TCEQ. The Contractor is required to notify TCEQ immediately if there is any spill of oil, oil products, or hazardous materials that reaches a wetland or waterbody. Incidents on public highways shall be reported to TCEQ and the appropriate agencies.

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

This development will consist of a religious assembly building with associated parking. Vehicle traffic and vehicle fluids associated with every day vehicle traffic will be the main source of surface pollutants. There are no proposed industrial activities on the site that would cause additional surface contamination.

ATTACHMENT C

SEQUENCE OF CONSTRUCTION

1. Temporary erosion and sedimentation controls are to be installed as indicated on the site plan or approved subdivision construction plan and in accordance with the Erosion Control Plan. Install tree protection and initiate tree mitigation measures. Total estimated area of disturbance within the Limits of Construction is 2.106 acres.
2. The Environmental Project Manager or Site Supervisor must contact the City of Liberty Hill and Williamson County Environmental Inspection, 72 hours prior to the scheduled date of the required on-site preconstruction meeting.
3. The Environmental Project Manager, and/or Site Supervisor, and/or Designated Responsible Party, and the General Contractor will follow the Storm Water Pollution Prevention Plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with City/County Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.
4. Rough grade the pond(s) at 50% proposed capacity while maintaining site access over a stabilized construction entrance through the southern half of the site. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of embankment or excavation that leads to ponding conditions. The outlet system must consist of a sump pit outlet and an emergency spillway meeting the requirements of TCEQ, Liberty Hill or Williamson County, as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until installation of the permanent water quality pond(s).
5. Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the Storm Water Pollution Prevention Plan (SWPPP) posted on the site.
6. Begin site clearing/construction (or demolition) activities.
7. n/a.
8. Permanent water quality ponds or controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.
9. Complete construction and start revegetation of the site and installation of landscaping.
10. Upon completion of the site construction and revegetation of a project site, the design engineer shall submit an engineer's letter of concurrence to the City of Liberty Hill indicating that construction, including revegetation, is complete and in substantial conformity with the approved plans.
11. After a final inspection has been conducted by the City/County Inspector and with approval from the City/County Inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.

ATTACHMENT D

DESCRIPTION OF BMP's

This 5.337 acre developed site will consist of approximately 36% of impervious cover.

All site run-off originates as surface flow.

Temporary BMP's shall include siltfence along all downstream boundaries of the site including the east and south boundaries. Additional temporary rock berms shall be installed at the pond discharge near the southwestern boundary of the site.

Developed site flows will drain into the batch detention water quality pond. The initial discharge will fill the water quality pond until the required volume is reached and the detention overflow weir structure will allow the overflow to exit the pond. The filtered outflow from the batch detention basin will drain to the nearby creek.

The water quality pond consists of a batch detention basin. The pond is sized per the TCEQ Technical Guidance Manual to treat a required water quality volume which includes a 20% increase for sediment/silt accumulation in the water quality pond.

There are no proposed sources of contaminated stormwater run-off other than the vehicle parking area serving the building. There is no proposed vehicle repair, vehicle storage, industrial uses, or any other sources of contamination of the run-off.

ATTACHMENT F

STRUCTURAL PRACTICES

Silt fence and temporary rock gabions are proposed along all areas downstream of construction activities to prevent erosion and limit run-off discharge of pollutants from exposed areas of the site. Placement of structural practices are shown on the Erosion Control Plan.

ATTACHMENT I

INSPECTION AND MAINTENANCE FOR TEMPORARY BMP's

Siltfence: Siltfence shall be inspected for rips, tears, structural support failure, and excess silt and debris accumulation. The contractor is required to inspect the controls and fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.

Rock Berm: The area upstream of the rock berm should be maintained in a condition that will allow accumulated silt to be removed following the runoff of a rainfall event. Weekly, or after each rainfall event, inspections should be made by the responsible party. When silt reaches a depth equal to 1/3 the height of the berm or 1 foot, whichever is less, and the accumulated silt should be removed and disposed of at an approved site in a manner that will not contribute to additional siltation. The berm and its anchors should be repaired as needed to restore it to its original condition after each inspection. This may require additions or complete replacement as conditions warrant. The berm should be left in place until all upstream areas are stabilized and accumulated silt is removed.

Concrete Washout Area:

INSPECTION/MAINTENANCE/REMOVAL:

- Temporary concrete washout facilities are to be inspected by the resident inspector during his/her weekly erosion and sediment control inspection, after a storm event of ½" or greater and at the end of any day when concrete has been poured on the construction site. The inspector is to ensure that there are no leaks, no spills and that the facilities capacity has not yet been compromised.
- Any overflowing of the washout facilities onto the ground must be cleaned up and removed within 24 hours of discovery.
- If a rain or snow event is forecasted, a non-collapsing, non-water collecting cover shall be placed over the washout facility and secured to prevent accumulation and overflow of precipitation.
- Contents of each concrete washout facility are not to exceed 75% of its designed capacity. If the contents reach 75% capacity, discontinue pouring concrete into the facility until it has been cleaned out.
- Allow slurry to evaporate or remove from the site in a safe manner (ie. vacuum truck). All hardened material can then be removed and disposed of properly.
- If a lined basin is used, immediately replace the liner if it becomes damaged.
- Remove temporary concrete washout facilities when they are no longer needed and restore the disturbed areas to their original condition.

Using the Inspection Report

This inspection report is designed to be customized according to the BMPs and conditions at your site. For ease of use, you should take a copy of your site plan and number all of the stormwater BMPs and areas of your site that will be inspected. A brief description of the BMP or area should then be listed in the site-specific section of the inspection report. For example, specific structural BMPs such as construction site entrances, sediment ponds, or specific areas with silt fence (e.g., silt fence along Main Street; silt fence along slope in NW corner, etc.) should be numbered and listed. You should also number specific non-structural BMPs or areas that will be inspected (such as trash areas, material storage areas, temporary sanitary waste areas, etc).

You can complete the items in the “General Information” section that will remain constant, such as the project name, and inspector (if you only use one inspector). Print out multiple copies of this customized inspection report to use during your inspections.

When conducting the inspection, walk the site by following your site map and numbered BMPs/areas for inspection. Also note whether the overall site issues have been addressed (customize this list according to the conditions at your site). Note any required corrective actions and the date and responsible person for the correction in the Corrective Action Log.

Construction Site BMP Inspection Report

General Information			
Project Name	Goddard School		
		Location	Kauffman Loop Liberty Hill, Tx 78642
Date of Inspection		Start/End Time	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications	<div style="color: blue; text-align: center;">Insert qualification</div>		
Describe present phase of construction			
Type of Inspection: <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide: <div style="display: flex; justify-content: space-between;"> Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in): </div>			
Weather at time of this inspection? <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Other: Temperature: </div>			
Have any discharges occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:			

Are there any discharges at the time of inspection? ☐Yes ☐No

If yes, describe:

Site-specific BMPs

- Number the structural and non-structural BMPs on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Are discharge points and receiving waters free of any sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Is the construction exit preventing sediment from being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

"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."

Print name and title: _____

Signature: _____ Date: _____

ATTACHMENT J

Schedule of Interim and Permanent Soil Stabilization Practices

All disturbed areas to be revegetated are required to place a minimum of six (6) inches of topsoil. Do not add topsoil within the critical root zone of existing trees. The topsoil shall be composed of 4 parts of soil mixed with 1 part compost, by volume. The compost shall meet the definition of compost as defined by TXDOT specification item 161. The soil shall be locally available native soil that meets the following specifications:

The vegetative stabilization of areas disturbed by construction shall be as follows:

- § Shall be free of trash, weeds, deleterious materials, rocks, and debris.
- § 100% shall pass through a 1.5-inch (68-mm) screen
- § Soil to be a loamy material that meets the requirements of the table below in accordance with the USDA textural triangle. Soil known locally as “red death” is not an allowable soil. Textural composition shall meet the following criteria.

Textural class	minimum	maximum
Clay	5%	50%
Silt	10%	50%
Sand	15%	67%

- § An owner/engineer may propose use of onsite salvaged topsoil which does not meet the soil texture class required above by providing a soil analysis and a written statement from a qualified professional in soils, landscape architecture, or agronomy indicating the onsite topsoil will provide an equivalent growth media and specifying what, if any, soil amendments are required.
- § Soil amendments shall be worked into the existing onsite topsoil with a disc or tiller to create a well-blended material.

Topsoil salvaged from the existing site may often be used, but it should meet the same standards as set forth in these standards

Temporary vegetative stabilization:

1. From September 15 to March 1, seeding shall be with cool season cover crops (wheat at 0.5 pounds per 1000 sf, oats at 0.5 pounds per 1000 sf, cereal rye grain at 0.5 pounds per 1000 sf) with a total rate of 1.5 pounds per 1000 sf. Cool season cover crops are not permanent erosion control.
2. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pounds per 1000 sf.
 - A. Fertilizer shall be water soluble with an analysis of 15-15-15 to be applied once at planting and once during the period of establishment at a rate of 1/2 pound per 1000 sf.
 - B. Hydromulch shall comply with table 1, below.
 - C. Temporary erosion control shall be acceptable when the grass has grown at least 1 1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.
 - D. When required, native grass seeding shall comply with requirements of the city of Austin environmental criteria manual.

Table 1: Hydromulching for temporary vegetative stabilization

Material	description	longevity	typical application	applications rates
100% or any blend of Wood, cellulose, straw, And/or cotton plant Material (except no Mulch shall exceed 30% paper)	70% or greater wood/straw 30% or less paper or natural fibers	0-3 months	moderate slopes; from flat to 3:1	1500 to 2000 lbs per acre

Permanent vegetative stabilization:

1. From September 15 to March 1, seeding is considered to be temporary stabilization only. If cool season cover crops exist where permanent vegetative stabilization is desired, the grasses shall be mowed to a height of less than one-half (1/2) inch and the area shall be re-seeded in accordance with 2. Below.
2. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 sf with a purity of 95% with 85% germination. Bermuda grass is a warm season grass and is considered permanent erosion control.
 - A. Fertilizer shall be a water soluble with an analysis of 15-15-15 to be applied once at planting and once during the period of establishment at a rate of 1/2 pound per 1000 sf.
 - B. Hydromulch shall comply with table 2, below.
 - C. The planted area shall be irrigated or sprinkled in a manner that will not erode the topsoil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at daily intervals (minimum) during the first two months. Rainfall occurrences of 1/2 inch or more shall postpone the watering schedule for one week.
 - D. Permanent erosion control shall be acceptable when the grass has grown at least 1 1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.
 - E. When required, native grass seeding shall comply with requirements of the city of Austin environmental criteria manual.

Table 2: hydromulching for permanent vegetative stabilization

Material	description	longevity	typical applications	application rates
Bonded fiber matrix (BFM)	80% thermally refined wood 10% tackifier	6 months	on slopes up to 2:1 and erosive soil conditions	2500 to 4000 lbs per acre (see manufacturers recommendations)
Fiber reinforced matrix (FRM)	75% thermally refined wood 5% reinforcing fibers 10% tackifier	12 months	on slopes up to 1:1 and erosive soil conditions	3000 to 4000 lbs per acre (see manufacturers recommendations)



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

IMPORTANT:

- Use the [INSTRUCTIONS](#) to fill out each question in this form.
- Use the [CHECKLIST](#) to make certain all you filled out all required information. Incomplete applications **WILL** delay approval or result in automatic denial.
- Once processed your permit can be viewed at:
http://www2.tceq.texas.gov/wq_dpa/index.cfm

ePERMITS: Sign up now for online NOI: <https://www3.tceq.texas.gov/steers/index.cfm>
Pay a \$225 reduced application fee by using ePermits.

APPLICATION FEE:

- You must pay the **\$325** Application Fee to TCEQ for the paper application to be complete.
- Payment and NOI must be mailed to separate addresses.
- Did you know you can pay on line?
 - Go to <https://www3.tceq.texas.gov/epay/index.cfm>
 - Select Fee Type: GENERAL PERMIT CONSTRUCTION STORM WATER DISCHARGE NOI APPLICATION
- **Provide your payment information below, for verification of payment:**

Mailed	Check/Money Order No.: _____
	Name Printed on Check: _____
EPAY	Voucher No.: _____
	Is the Payment Voucher copy attached? Yes

RENEWAL: Is this NOI a Renewal of an existing General Permit Authorization?
(Note: A permit cannot be renewed after June 3, 2013.)

Yes The Permit number is: TXR15_____

(If a permit number is not provided, a new number will be assigned.)

No

1) OPERATOR (Applicant)

- a)** If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? You may search for your CN at:
<http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch>

CN _____

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.)

c) What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in TAC 305.44(a).

Prefix (Mr. Ms. Miss): _____

First/Last Name: _____ Suffix: _____

Title: _____ Credential: _____

d) What is the Operator Contact's (Responsible Authority) contact information and mailing address as recognized by the US Postal Service (USPS)? You may verify the address at:

<http://zip4.usps.com/zip4/welcome.jsp>

Phone #: _____ ext: _____ Fax #: _____

E-mail: _____

Mailing Address: _____

Internal Routing (Mail Code, Etc.): _____

City: _____ State: _____ ZIP Code: _____

If outside USA: Territory: _____ Country Code: _____ Postal Code: _____

e) Indicate the type of Customer (The instructions will help determine your customer type):

Individual	Limited Partnership	Sole Proprietorship-DBA
Joint Venture	General Partnership	Corporation
Trust	Estate	Federal Government
State Government	County Government	City Government
Other Government		

f) Independent Operator? Yes No
(If governmental entity, subsidiary, or part of a larger corporation, check "No".)

g) Number of Employees: 0-20; 21-100; 101-250; 251-500; or 501 or higher

h) Customer Business Tax and Filing Numbers:

(REQUIRED for Corporations and Limited Partnerships. Not Required for Individuals, Government, or Sole Proprietors)

State Franchise Tax ID Number: _____

Federal Tax ID: _____

Texas Secretary of State Charter (filing) Number: _____

DUNS Number (if known): _____

2) APPLICATION CONTACT

If TCEQ needs additional information regarding this application, who should be contacted?

Is the application contact the same as the applicant identified above?

Yes, go to Section 3). No, complete section below.

Prefix (Mr. Ms. Miss): _____

First/Last Name: _____ Suffix: _____

Title: _____ Credential: _____

Organization Name: _____
Phone No.: _____ ext: _____ Fax Number: _____
E-mail: _____
Mailing Address: _____
Internal Routing (Mail Code, Etc.): _____
City: _____ State: _____ ZIP Code: _____
Mailing Information if outside USA:
Territory: _____ Country Code: _____ Postal Code: _____

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

If the site of your business is part of a larger business site or if other businesses were located at this site before yours, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at:

<http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch>.

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

- a) TCEQ issued RE Reference Number (RN): RN _____
- b) Name of project or site (the name known by the community where located):

- c) In your own words, briefly describe the primary business of the Regulated Entity: (Do not repeat the SIC and NAICS code):

- d) County (or counties if > 1) _____
- e) Latitude: _____ Longitude: _____
- f) Does the site have a physical address?
Yes, complete Section A for a physical address.
No, complete Section B for site location information.

Section A: Enter the physical address for the site.

Verify the address with USPS. If the address is not recognized as a delivery address, provide the address as identified for overnight mail delivery, 911 emergency or other online map tools to confirm an address.

Physical Address of Project or Site:

Street Number: _____ Street Name: _____
City: _____ State: _____ ZIP Code: _____

Section B: Enter the site location information.

If no physical address (Street Number & Street Name), provide a written location access description to the site. (Ex.: located 2 miles west from intersection of Hwy 290 & IH35 accessible on Hwy 290 South)

City where the site is located or, if not in a city, what is the nearest city:

State: _____ ZIP Code where the site is located: _____

4) GENERAL CHARACTERISTICS

a) Is the project/site located on Indian Country Lands?

Yes - If the answer is Yes, 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 - If the answer is Yes, you 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?

Primary SIC Code: _____

d) If applicable, what is the Secondary SIC Code(s): _____

e) What is the total number of acres disturbed? _____

f) Is the project site part of a larger common plan of development or sale?

Yes - If the answer is Yes, the total number of acres disturbed can be less than 5 acres.

No - If the answer is No, the total number of acres disturbed must be 5 or more. If the total number of acres disturbed is less than 5 then the project site does not qualify for coverage through this Notice of Intent. Coverage will be denied. See the requirements in the general permit for small construction sites.

g) What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site?

h) What is the segment number(s) of the classified water body(s) that the discharge will eventually reach?

i) Is the discharge into an MS4?

Yes - If the answer is Yes, provide the name of the MS4 operator below.

No

If Yes, provide the name of the MS4 operator:

Note: The general permit requires you to send a copy of the NOI to the MS4 operator.

j) Are any of the surface water bodies receiving discharges from the construction site on the latest EPA-approved CWA 303(d) List of impaired waters?

Yes - If the answer is Yes, provide the name(s) of the impaired water body(s) below.

No

If Yes, provide the name(s) of the impaired water body(s):

k) Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer as defined in 30 TAC Chapter 213?

Yes - If the answer is Yes, complete certification below by checking "Yes."

No

I certify that a copy of the TCEQ approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) is either included or referenced in the Stormwater Pollution Prevention Plan.

Yes

5) CERTIFICATION

Check Yes to the certifications below. Failure to indicate Yes to **ALL** items may result in denial of coverage under the general permit.

- 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. Yes
- c) I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed. 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 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. Yes

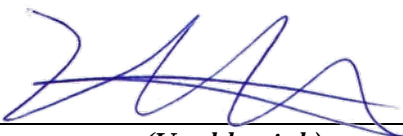
Operator Certification:

I, _____
Typed or printed name Title

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 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: 6/19/2023

NOTICE OF INTENT CHECKLIST (TXR150000)

- Did you complete everything? Use this checklist to be sure!
- Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

This checklist is for use by the operator to ensure a complete application. Missing information may result in denial of coverage under the general permit. (See NOI process description in the Instructions)

Application Fee:

If paying by Check:

Check was mailed **separately** to the TCEQs Cashier's Office. (See Instructions for Cashier's address and Application address.)

Check number and name on check is provided in this application.

If using ePay:

The voucher number is provided in this application or a copy of the voucher is attached.

PERMIT NUMBER:

Permit number provided – if this application is for renewal of an existing authorization.

OPERATOR INFORMATION - Confirm each item is complete:

Customer Number (CN) issued by TCEQ Central Registry

Legal name as filed to do business in Texas (Call TX SOS 512/463-5555)

Name and title of responsible authority signing the application

Mailing address is complete & verifiable with USPS. www.usps.com

Phone numbers/e-mail address

Type of operator (entity type)

Independent operator

Number of employees

For corporations or limited partnerships – Tax ID and SOS filing numbers

Application contact and address is complete & verifiable with USPS. <http://www.usps.com>

REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE - Confirm each item is complete:

Regulated Entity Reference Number (RN) (if site is already regulated by TCEQ)

Site/project name/regulated entity

Latitude and longitude <http://www.tceq.texas.gov/gis/sqmaview.html>

County

Site/project physical address. Do not use a rural route or post office box.

Business description

GENERAL CHARACTERISTICS - Confirm each item is complete:

Indian Country Lands –the facility is not on Indian Country Lands

Construction activity related to facility associated to oil, gas, or geothermal resources

Standard Industrial Classification (SIC) Code www.osha.gov/oshstats/sicser.html

Acres disturbed is provided and qualifies for coverage through a NOI

Common plan of development or sale

Receiving water body(s)

Segment number(s)

Impaired water body(s)

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.

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

General Information and Instructions

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

BY REGULAR U.S. MAIL
Texas Commission on
Environmental Quality
Stormwater Processing Center
(MC228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on
Environmental Quality
Stormwater Processing Center
(MC228)
12100 Park 35 Circle
Austin, TX 78753

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:

- 1) **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(s) on the form must be verified with the US Postal service as receiving regular mail delivery. Never give an overnight/express mailing address.
- 2) **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.
- 3) **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 key word TXR150000.

General Permit Forms

The Notice of Intent (NOI), Notice of Termination (NOT), and Notice of Change (NOC) (including instructions) are available in Adobe Acrobat PDF format on the TCEQ web site <http://www.tceq.texas.gov>.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated entity 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.

You can find the information on the Central Registry web site at <http://www12.tceq.texas.gov/crpub/index.cfm>. You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled "Additional ID". Capitalize all letters in the permit number.

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 General Permits, a Notice of Change form must be submitted to the program area.

Fees associated with a 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).

Application Fee: This fee 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.

Mailed Payments:

Payment must be mailed under separate cover at one of the addresses below using the attached Application Fee submittal form. (DO NOT SEND A COPY OF THE NOI WITH THE APPLICATION FEE SUBMITTAL FORM)

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/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

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.

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.

1. Operator (Applicant)

a) Enter assigned 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 this customer has not been assigned a CN, leave the space for the CN blank.

If this customer has already been assigned this number, enter the permittee’s CN.

b) Legal Name

Provide the current legal name of the permittee, as authorized to do business in Texas. 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. If filed in the county where doing business, provide a copy of the legal documents showing the legal name.

c) Person Signing Application

Provide information about person signing section 5) Certification.

d) Operator Contact’s (Responsible Authority) Contact Information and Mailing Address

Provide a complete mailing address for receiving mail from the TCEQ. The address must be verifiable with the US Postal Service at <http://www.usps.com> for regular mail delivery (not overnight express mail). If you find that the address is not verifiable using the USPS web search, please indicate the address is used by the USPS for regular mail delivery.

The area code and phone number should provide contact to the operator. Leave Extension blank if not applicable.

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

e) 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 a permit, registration or authorization.

Sole Proprietorship – DBA

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

- be under the person's name
- have its own name (doing business as or d.b.a.)
- 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).

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). A Limited Partnership or Limited Liability Partnership (Partnership) is required to file with the Texas Secretary of State. A General Partnership or Joint Venture is not required to register with the state.
- **Partnership (Limited Partnership or Limited Liability Partnership):** A limited partnership is defined in the Act as a partnership formed by two or more persons under the provisions of Section 3 of the Uniform Limited Partnership Act (Art. 6132a, Revised Civil Statutes of Texas) and having as members one or more general partners and one or more limited partners. The limited partners as such are not bound by the obligations of the partnership. Limited partners may not take part in the day-to-day operations of the business. A Limited Partnership must file with the Texas Secretary of State. A registered limited liability partnership is a general or limited partnership that is registered with the Texas Secretary of State. The partnership's name must contain the words "Registered Limited Liability Partnership" or the abbreviation "L.L.P." as the last words or letters of its name.
- **General Partnership:** A general partner may or may not invest, participates in running the partnership and is liable for all acts and debts of the partnership and any member of it. A General Partnership does not have limited partners. For a General Partnership, there is no registration with the state or even written agreement necessary for a general partnership to be formed. The legal definition of a partnership is generally stated as "an association of two or more persons to carry on as co-owners a business for profit" (Revised Uniform Partnership Act § 101 [1994]).
- **Joint Venture:** A joint venture is but another name for a special partnership. It might be distinguished from a general partnership in that the latter is formed for the transaction of a general business, while a joint venture is usually limited to a single transaction. That is, a joint venture is a special combination of persons in the nature of a partnership engaged in the joint prosecution of a particular transaction for mutual benefit or profit.

Corporation

A customer meets all of these conditions:

- is a legally incorporated entity under the laws of any state or country
- is recognized as a corporation by the Texas Secretary of State

- 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 should not be included as a part of the 'legal name' as applicant.

Trust or Estate

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

Other Government

A utility district, water district, tribal government, college district, council of governments, or river authority. Write in the specific type of government.

f) Independent Entity

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

g) 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.

h) 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 this number here.

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.

2. APPLICATION CONTACT

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

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

a) Regulated Entity Reference Number (RN)

A number issued by TCEQ's Central Registry to sites (a location where a regulated activity occurs) regulated by TCEQ. This is not a permit number, registration number, or license number. 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, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: <http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch>

If the site is found, provide the assigned Regulated Entity Reference Number (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) Site/Project Name/Regulated Entity

Provide the name of the site 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

Identify the county or counties in which the regulated entity is located.

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/sqmapview.html> or <http://nationalmap.gov/ustopo>

f) Site/Project (RE) Physical Address/Location Information

Enter the complete address for the site in Section A if the address can be validated through the US Postal Service. 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 (or house) number and street name, enter NO ADDRESS for the street name in Section A. In Section B provide a complete written location description. For example: "The site is located 2 miles west from intersection of Hwy 290 & IH35, located on the southwest corner of the Hwy 290 South bound lane."

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

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 and may need to obtain authorization from EPA Region 6. For more information, see:

http://info.sos.state.tx.us/pls/pub/readtacSext.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

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 Railroad Commission's jurisdiction must be authorized by the EPA and the Railroad Commission of Texas, as applicable. Activities under Railroad Commission of Texas 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 Railroad Commission of Texas; 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 Railroad Commission of Texas 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 Railroad Commission of Texas. 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 Railroad

Commission of Texas 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.

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 Bldgs. Other than Single Family Homes
- 1541 - Construction of Industrial Bldgs. and Warehouses
- 1542 - Construction of Non-residential Bldgs, other than Industrial Bldgs. 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, go to:

<http://www.osha.gov/pls/imis/sicsearch.html>

d) Secondary SIC Code

Secondary SIC Code(s) may be provided. Leave blank if not applicable. For help with SIC Codes, go to:

<http://www.osha.gov/pls/imis/sicsearch.html>

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 is a common plan of development?" go to:

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

For further information, go to the TCEQ stormwater construction webpage at:

www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If

you have any further questions about this item, please call the stormwater technical staff at (512)239-4671.

g) 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.

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

Identify the classified segment number(s) receiving a discharge directly or indirectly. Go to the following link 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

You may also find the segment number in TCEQ publication GI-316:
www.tceq.texas.gov/publications/gi/gi-316

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.

i) 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.

j) Surface Water bodies on list of impaired waters – Identify the impaired water body(s)

Indicate Yes or No if any surface water bodies receiving discharges from the construction site are on the latest EPA-approved CWA 303(d) List of impaired waters. Provide the name(s) of surface water bodies receiving discharges or potential discharges from the construction site that are on the latest EPA-approved CWA 303(d) List of impaired waters. The EPA-approved CWA 303(d) List of impaired waters in Texas can be found at:
www.tceq.texas.gov/waterquality/assessment/305_303.html

NOTE: Do not use any "draft" documents.

k) Discharges to the Edwards Aquifer Recharge Zone and Certification

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 at: www.tceq.texas.gov/field/eapp/viewer.html

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. The certification must be answered "Yes" for coverage under the Construction General Permit. The TCEQ approved plan must be readily available for TCEQ staff to review at the time that the NOI is submitted.

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.

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.

5. CERTIFICATIONS

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: www.tceq.texas.gov/goto/construction

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 this 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.

Operator Certification:

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 Texas Commission on Environmental Quality'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.

- 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:

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/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 / 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/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 ENTRIES.

See Attached List of Sites (If more space is needed, you may attach a list.)

Project/Site (RE) Name: _____

Project/Site (RE) Physical Address:

Staple Check in This Space

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

I VENKATESAN PALANIVELAN,
Print Name

President,
Title - Owner/President/Other

of TEXAS MURUGAN TEMPLE,
Corporation/Partnership/Entity Name

have authorized Marco Castaneda
Print Name of Agent/Engineer

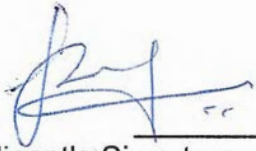
of Ranger Engineering, PLLC
Print Name of Firm

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

I also understand that:

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

SIGNATURE PAGE:



Applicant's Signature

05/31/2023

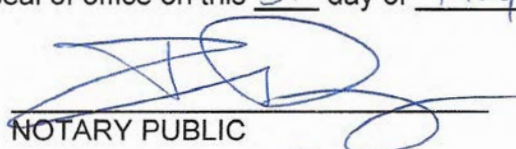
Date

THE STATE OF TEXAS §

County of WILLIAMSON §

BEFORE ME, the undersigned authority, on this day personally appeared Venkatesan Palanivelu 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.

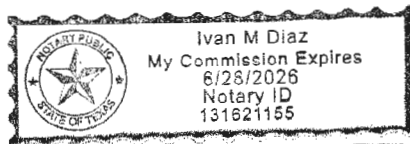
GIVEN under my hand and seal of office on this 31st day of May, 2023



NOTARY PUBLIC

Ivan Diaz
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 06/26/2026



Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Texas Murugan Temple

Regulated Entity Location: 775 Stubblefield Lane

Name of Customer: Murugan Temple of Central Texas

Contact Person: Marco Castaneda, PE

Phone: 512-785-8446

Customer Reference Number (if issued):CN _____

Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays

☐ Travis

☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar

☐ Medina

☐ Uvalde

☐ Comal

☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment.** This payment is being submitted to:

☒ Austin Regional Office

☐ San Antonio Regional Office

☐ Mailed to: TCEQ - Cashier

☒ Overnight Delivery to: TCEQ - Cashier

Revenues Section

Mail Code 214

P.O. Box 13088

Austin, TX 78711-3088

12100 Park 35 Circle

Building A, 3rd Floor

Austin, TX 78753

(512)239-0357

Site Location (Check All That Apply):

☐ Recharge Zone

☒ Contributing Zone

☐ Transition Zone

<i>Type of Plan</i>	<i>Size</i>	<i>Fee Due</i>
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	5.337 Acres	\$ 5000
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: _____

Date: 6/19/23

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

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

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

Extension of Time Requests

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



TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		2/16/2022	
<input checked="" type="checkbox"/> New Customer		<input type="checkbox"/> Update to Customer Information		<input type="checkbox"/> Change in Regulated Entity Ownership	
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				If new Customer, enter previous Customer below:	
Murugan Temple of Central Texas					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	
		32072390449		84-3552816	
10. DUNS Number (if applicable)					
11. Type of Customer:		<input checked="" type="checkbox"/> Corporation		<input type="checkbox"/> Individual	
		<input type="checkbox"/> Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited			
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other:	
12. Number of Employees		<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		13. Independently Owned and Operated?	
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
<input type="checkbox"/> Owner		<input type="checkbox"/> Operator		<input checked="" type="checkbox"/> Owner & Operator	
<input type="checkbox"/> Occupational Licensee		<input type="checkbox"/> Responsible Party		<input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:	
15. Mailing Address:		10805 Ballard Path			
City		Austin		State TX ZIP 78717 ZIP + 4	
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)			
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	
(720) 480-5134				() -	

SECTION III: Regulated Entity Information

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

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	775 Stubblefield Lane							
	City	Liberty Hill	State	TX	ZIP	78642	ZIP + 4	
24. County	Williamson							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:								
26. Nearest City						State	Nearest ZIP Code	
27. Latitude (N) In Decimal:				28. Longitude (W) In Decimal:				
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
30	39	23.1	97	55	13.1			
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)			
8661			813110					
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>								
Religious Assembly								
34. Mailing Address:	10805 Ballard Path							
	City	Austin	State	TX	ZIP	78717	ZIP + 4	
35. E-Mail Address:								
36. Telephone Number			37. Extension or Code			38. Fax Number <i>(if applicable)</i>		
(720) 480-5134						() -		

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.


<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input checked="" type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
	110038825			
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Marco Castaneda		41. Title:	Applicant
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(512) 785-8446		() -	marco@sectexas.com	

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

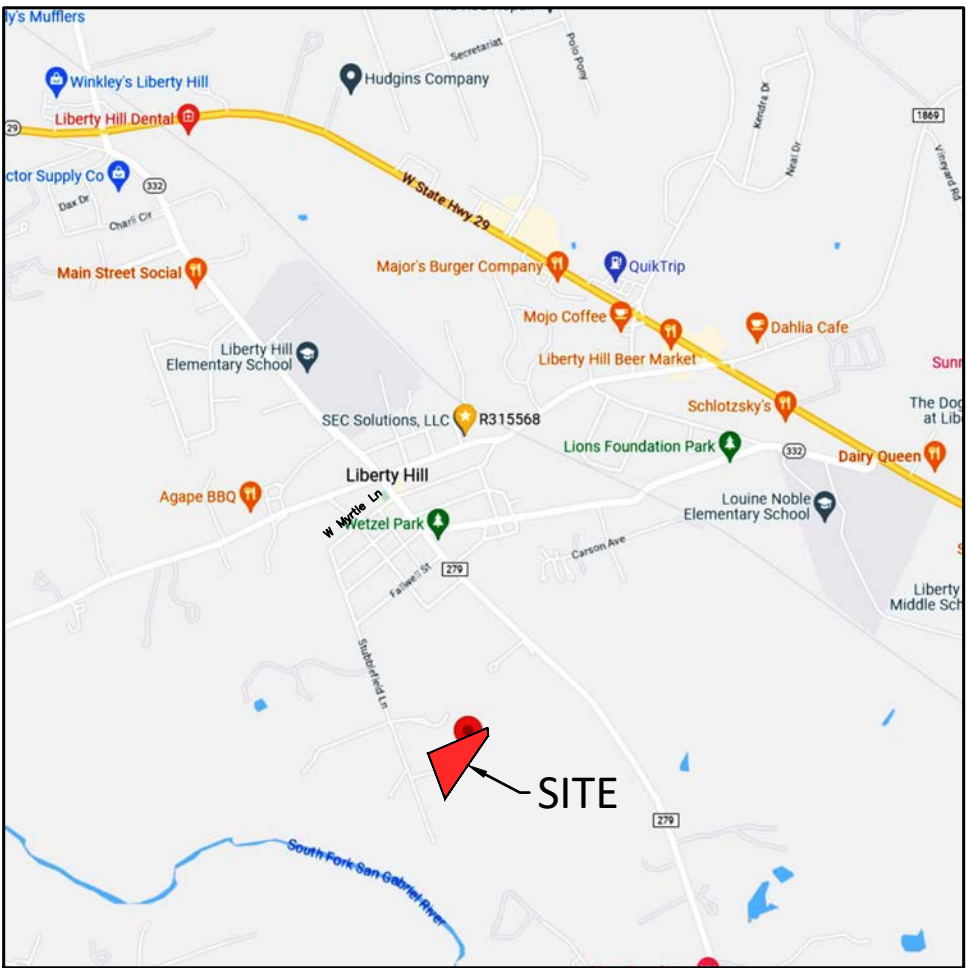
Company:	Ranger Engineering PLLC	Job Title:	Engineer
Name <i>(In Print)</i> :	Marco Castaneda PE	Phone:	(512) 785- 8446
Signature:		Date:	6/19/2023

Site Development Plans for
TEXAS MURUGAN TEMPLE

775 Stubblefield Lane
Liberty Hill, Texas 78642

PROJECT DATA

PROJECT NAME: TEXAS MURUGAN TEMPLE
PROJECT ADDRESS: 775 STUBBLEFIELD LANE
LIBERTY HILL, TEXAS 78642
OWNER/DEVELOPER: MURUGAN TEMPLE OF CENTRAL TEXAS
775 STUBBLEFIELD LANE
LIBERTY HILL, TEXAS 78642
CIVIL ENGINEER: RANGER ENGINEERING, PLLC
5524 BEE CAVE ROAD, SUITE J-3
PH. (512) 785-8446
CONTACT: MARCO CASTANEDA, P.E.
marco@sectexas.com
SURVEYOR: RRP SURVEYING, LLC
206 CRESTON STREET
HUTTO TEXAS 78634
CONTACT: STEVEN WARNER WOMACK
PH: 512-638-0220



LOCATION MAP

SCALE: 1" = 2000'

SHEET INDEX

1. COVER SHEET
2. GENERAL NOTES
3. SUBDIVISION PLAT
4. TREE SURVEY LIST
5. DEMOLITION PLAN
6. EROSION CONTROL PLAN
7. DIMENSIONED SITE PLAN
8. UTILITY IMPROVEMENTS PLAN
9. OFF-SITE DRAINAGE PLAN
10. ON-SITE DRAINAGE PLAN – EXISTING CONDITIONS
11. ON-SITE DRAINAGE PLAN – PROPOSED CONDITIONS
12. GRADING PLAN
13. STORM PLAN
14. DETENTION POND PLAN
15. WATER QUALITY CONTROL CALCULATIONS & DETAILS
16. EROSION CONTROL DETAILS
17. CONSTRUCTION DETAILS
18. CONSTRUCTION DETAILS

SUBMITTAL DATE: _____

SUBMITTED FOR APPROVAL BY: _____

MARCO E. CASTANEDA P.E. #126967 6/15/23
DATE

CERTIFICATION:

BASED ON THE DESIGN ENGINEER'S CERTIFICATION OF COMPLIANCE WITH ALL APPLICABLE CITY, STATE AND FEDERAL REGULATIONS, THE PLANS AND SPECIFICATIONS CONTAINED HEREIN HAVE BEEN REVIEWED AND ARE FOUND TO BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE CITY OF LIBERTY HILL.

JERRY L. MILLARD, JR., DIRECTOR OF PLANNING DATE

CURTIS STEGER, P.E., CITY ENGINEER DATE

LIZ BRANIGAN, MAYOR DATE

ELAINE SIMPSON, CITY SECRETARY DATE



RANGER ENGINEERING, PLLC
CIVIL ENGINEERING
TEXAS REG. NO. F-22406
5524 BEE CAVE ROAD, STE J-3
AUSTIN, TEXAS 78746
PHONE: (512) 785-8446
email: marco@sectexas.com

TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642

COVER SHEET

JUNE 15, 2023
MEC
MEC

GENERAL NOTES:

1.

All construction shall be in accordance with the City of Round Rock Standard Specifications Manual.
2.

Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not planned for destruction or removal that are damaged or removed shall be repaired or replaced at his expense.
3.

The Contractor shall verify all depths and locations of existing utilities prior to any construction. Any discrepancies with the construction plans found in the field shall be brought immediately to the attention of the Engineer who shall be responsible for revising the plans are appropriate.
4.

Manhole frames, covers, valves, cleanouts, etc. shall be raised to finished grade prior to final paving construction.
5.

The Contractor shall give the City of Round Rock 48 hours notice before beginning each phase of construction. Telephone 218-5555 (Engineering and Development Services Department).
6.

All areas disturbed or exposed during construction shall be revegetated in accordance with the plans and specifications. Revegetation of all disturbed or exposed areas shall consist of sodding or seeding, at the Contractor's option. However, the type of revegetation must equal or exceed the type of vegetation present before construction.
7.

Prior to any construction, the Engineer shall convene a preconstruction conference between the City of Round Rock, himself, the Contractor, other utility companies, any affected parties and any other entity the City or Engineer may require.
8.

The Contractor and the Engineer shall keep accurate records of all construction that deviates from the plans. The Engineer shall furnish the City of Round Rock accurate "As-Built" drawings following completion of all construction. These "As-Built" drawings shall meet with the satisfaction of the Engineering and Development Services Department prior to final acceptance.
9.

The Round Rock City Council shall not be petitioned for acceptance until all necessary easement documents have been signed and recorded.
10.

When construction is being carried out within easements, the Contractor shall confine his work to within the permanent and any temporary easements. Prior to final acceptance, the Contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the City Engineer.
11.

Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.
12.

Available benchmarks (City of Round Rock Datum) that may be utilized for the construction of this project are described as follows:

TRENCH SAFETY NOTES:

1.

In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems to be utilized for this project (will be provided by the contractor; are on sheet _____, etc.).
2.

In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.
3.

If trench safety system details were not provided in the plans because trenches were anticipated to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted to the City of Round Rock.

STREET AND DRAINAGE NOTES:

1.

All testing shall be done by an independent laboratory at the Owner's expense. Any retesting shall be paid for by the Contractor. A City inspector shall be present during all tests. Testing shall be coordinated with the City inspector and he shall be given a minimum of 24 hours notice prior to any testing. Telephone 218-5555 (Inspections).
2.

Backfill behind the curb shall be compacted to obtain a minimum of 95% maximum density to within 3" of top of curb. Material used shall be primarily granular with no rocks larger than 6" in the greatest dimension. The remaining 3" shall be clean topsoil free from all clods and suitable for sustaining plant life.
3.

Depth of cover for all crossings under pavement including gas, electric, telephone, cable tv, water services, etc., shall be a minimum of 30" below subgrade.
4.

Street rights-of-way shall be graded at a slope of 1/4" per foot toward the curb unless otherwise indicated. However, in no case shall the width of right-of-way at 1/4" per foot slope be less than 10 feet unless a specific request for an alternate grading scheme is made to and accepted by the City of Round Rock Engineering and Development Services Department.
5.

Barricades built to City of Round Rock standards shall be constructed on all dead-end streets and as necessary during construction to maintain job and public safety.
6.

All R.C.P. shall be minimum class III.

7.

The subgrade material for the streets shown herein was tested by _____ and the paving sections designed in accordance with the current City of Round Rock design criteria. The paving sections are to be constructed as follows:

Street	Station	Flex. Base Thickness	HMAC Thickness	Lime Stab. Thickness
--------	---------	----------------------	----------------	----------------------

The Geotechnical Engineer shall inspect the subgrade for compliance with the design assumptions made during preparation of the Soils Report. Any adjustments that are required shall be made through revision of the construction plans.

8.

Where PI's are over 20, subgrades must be stabilized utilizing a method acceptable to the City Engineer. The Geotechnical Engineer shall recommend an appropriate subgrade stabilization if sulfates are determined to be present.

WATER AND WASTEWATER NOTES:

1.

Pipe material for water mains shall be PVC (AWWA C-900, min. class 200), or Ductile Iron (AWWA C-100, min. class 200). Water services (2" or less) shall be polyethylene tubing (black, 200 psi, DR 9).
2.

Pipe material for pressure wastewater mains shall be PVC (AWWA C-900, min. class 150), or Ductile Iron (AWWA C-100, min. class 200). Pipe material for gravity wastewater mains shall be PVC (ASTM D2241 or D3034, max. DR-26), Ductile Iron (AWWA C-100, min. class 200).
3.

Unless otherwise accepted by the City Engineer, depth of cover for all lines out of the pavement shall be 42" min., and depth of cover for all lines under pavement shall be a min. of 30" below subgrade.
4.

All fire hydrant leads shall be ductile iron pipe (AWWA C-100, min. class 200).
5.

All iron pipe and fittings shall be wrapped with minimum 8-mil polyethylene and sealed with duct tape or equal accepted by the City Engineer.
6.

The Contractor shall contact the City Inspector at 218-5555 to coordinate utility tie-ins and notify him at least 48 hours prior to connecting to existing lines.
7.

All manholes shall be concrete with cast iron ring and cover. All manholes located outside of the pavement shall have bolted covers. Tapping of fiberglass manholes shall not be allowed.
8.

The Contractor must obtain a bulk water permit or purchase and install a water meter for all water used during construction. A copy of this permit must be carried at all times by all who use water.
9.

Line flushing or any activity using a large quantity of water must be scheduled with the water & wastewater superintendent, telephone 218-5555.
10.

The Contractor, at his expense, shall perform sterilization of all potable water lines constructed and shall provide all equipment (including test gauges), supplies (including concentrated chlorine disinfecting material), and necessary labor required for the sterilization procedure. The sterilization procedure shall be monitored by City of Round Rock personnel. Water samples will be collected by the City of Round Rock to verify each treated line has attained an initial chlorine concentration of 50 ppm. Where means of flushing is necessary, the Contractor, at his expense, shall provide flushing devices and remove said devices prior to final acceptance by the City of Round Rock.
11.

Sampling taps shall be brought up to 3 feet above grade and shall be easily accessible for City personnel. At the Contractor's request, and in his presence, samples for bacteriological testing will be collected by the City of Round Rock not less than 24 hours after the treated line has been flushed of the concentrated chlorine solution and charged with water approved by the City. The Contractor shall supply a check or money order, payable to the City of Round Rock, to cover the fee charged for testing each water sample. City of Round Rock fee amounts may be obtained by calling the Engineering and Development Services Department at 218-5555.
12.

The Contractor, at his expense, shall perform quality testing for all wastewater pipe installed and pressure pipe hydrostatic testing of all water lines constructed and shall provide all equipment (including pumps and gauges), supplies and labor necessary to perform the tests. Quality and pressure testing shall be monitored by City of Round Rock personnel.
13.

The Contractor shall coordinate testing with the City of Inspector and provide no less than 24 hours notice prior to performing sterilization, quality testing or pressure testing.
14.

The Contractor shall not open or close any valves unless authorized by the City of Round Rock.
15.

All valve boxes and covers shall be cast iron.
16.

All water service, wastewater service and valve locations shall be appropriately marked as follows:

	water service	"W" on top of curb
	wastewater service	"S" on top of curb
	valve	"V" on face of curb

Tools for marking the curb shall be provided by the Contractor. Other appropriate means of marking service and valve locations shall be provided in areas without curbs. Such means of marking shall be as specified by the Engineer and accepted by the City of Round Rock.

17.

Contact City of Round Rock Engineering and Development Services Department at 218-5555 for assistance in obtaining existing water and wastewater locations.
18.

The City of Round Rock Fire Department shall be notified 48 hours prior to testing of any building sprinkler piping in order that the Fire Department may monitor such testing.

19.

Sand, as described in Specification Item 510 pipe, shall not be used as bedding for water and wastewater lines. Acceptable bedding materials are pipe bedding stone, pea gravel and in lieu of sand, a naturally occurring or manufactured stone material conforming to ASTM C33 for stone quality and meeting the following gradation specification:

Sieve Size	Percent Retained By Weight
1/2"	0
3/8"	0-2
#4	40-85
#10	95-100

20.

The Contractor is hereby notified that connecting to, shutting down, or terminating existing utility lines may have to occur at off-peak hours. Such hours are usually outside normal working hours and possibly between 12 a.m. and 6 a.m.

21.

All wastewater construction shall be in accordance with the Texas Commission on Environmental Quality (TCEQ) Regulations, 30 TAC Chapter 213 and 317, as applicable. Whenever TCEQ and City of Round Rock Specifications conflict, the more stringent shall apply.

TRAFFIC MARKING NOTES:

1.

Any methods, street markings and signage necessary for warning motorists, warning pedestrians or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.
2.

All pavement markings, markers, paint, traffic buttons, traffic controls and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest editions.

EROSION AND SEDIMENTATION CONTROL NOTES:

1.

Erosion control measures, site work and restoration work shall be in accordance with the City of Round Rock Erosion and Sedimentation Control Ordinance.
2.

All slopes shall be sodded or seeded with approved grass, grass mixtures or ground cover suitable to the area and season in which they are applied.
3.

Silt fences, rock berms, sedimentation basins and similarly recognized techniques and materials shall be employed during construction to prevent point source sedimentation loading of downstream facilities. Such installation shall be regularly inspected by the City of Round Rock for effectiveness. Additional measures may be required if, in the opinion of the City Engineer, they are warranted.
4.

All temporary erosion control measures shall not be removed until final inspection and approval of the project by the Engineer. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the Engineer.
5.

All mud, dirt, rocks, debris, etc., spilled, tracked or otherwise deposited on existing paved streets, drives and areas used by the public shall be cleaned up immediately.

TCEQ WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES

1.

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."
2.

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)].
3.

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)].
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)].
5.

All water line crossings of wastewater mains shall be perpendicular [§290.44(e)(4)(B)].
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)].
7.

The maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures is 0.25 percent [§290.44(b)].
8.

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)].
9.

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)].
10.

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)].

11.

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.

- o

The hydrostatic leakage rate for polyvinyl chloride (PVC) pipe and appurtenances shall not 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 calculation is correct and most current formula is in use;

$$Q = \frac{LD\sqrt{P}}{148,000}$$

Where:

- Q = the quantity of makeup water in gallons per hour,
- L = the length of the pipe section being tested, in feet,
- 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).

- o

The hydrostatic leakage rate for ductile iron (DI) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-600 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

$$L = \frac{SD\sqrt{P}}{148,000}$$

Where:

- L = the quantity of makeup water in gallons per hour,
- S = the length of the pipe section being tested, in feet,
- 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).

12.

The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet §290.44(e)(1)-(4).

13.

The separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant [§290.44(e)(5)].

14.

Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater line, wastewater lateral, or wastewater service line regardless of construction [§290.44(e)(6)].

15.

Suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line [§290.44(e)(7)].

16.

Waterlines shall not be installed closer than ten feet to septic tank drainfields [§290.44(e)(8)].

17.

The contractor shall disinfect the new waterlines in accordance with AWWA Standard C-651-14 or most recent, then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer [§290.44(f)(3)].

18.

Dechlorination of disinfecting water shall be in strict accordance with current AWWA Standard C655-09 or most recent.



RANGER ENGINEERING, PLLC
CIVIL ENGINEERING
TYPE REG. NO. F-22406
5524 BEE CAVES ROAD, STE J-3
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PHONE: (512) 785-8446
email: marco@ranger-engineering.com

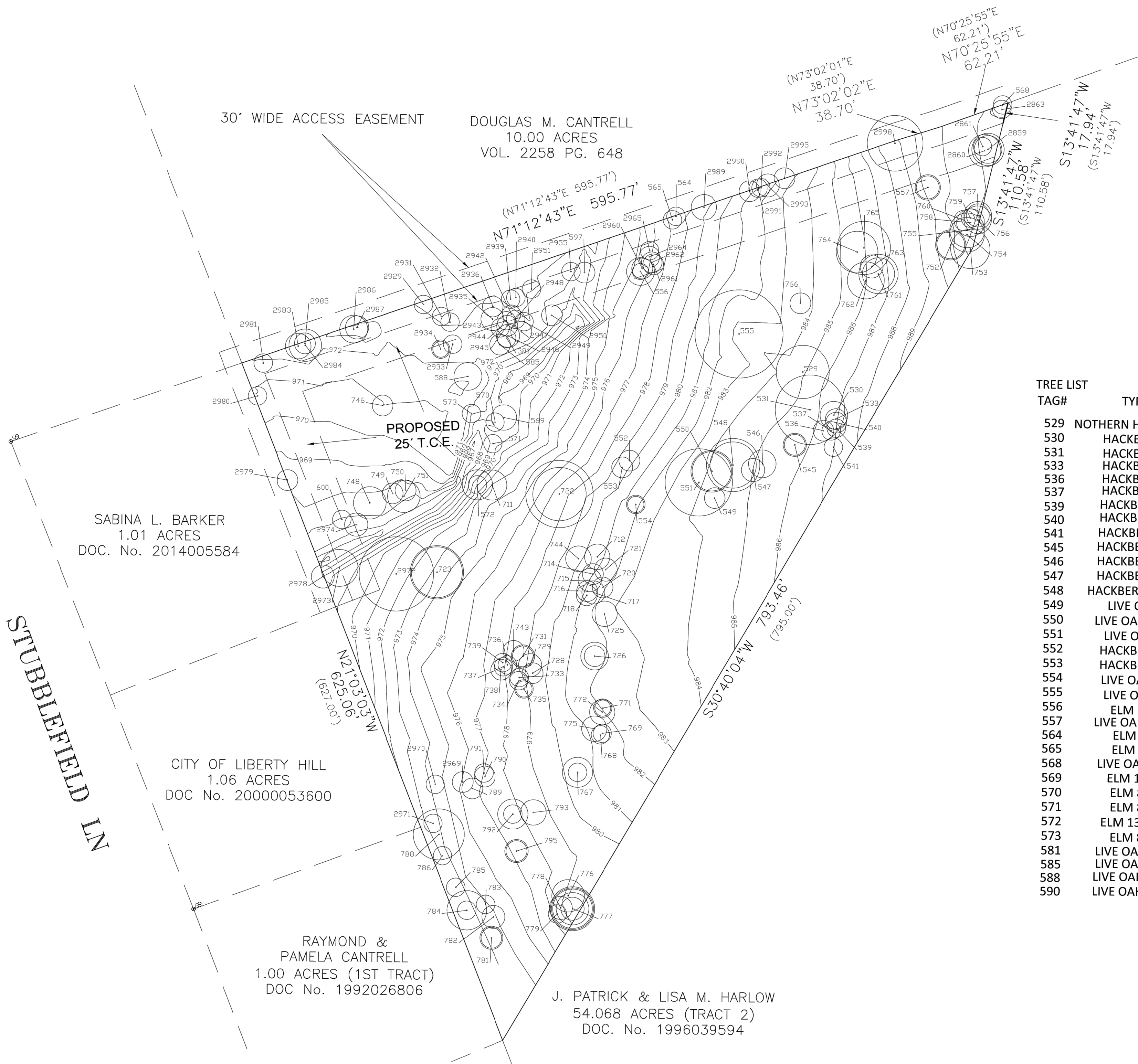
TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642

GENERAL NOTES

JUNE 15, 2023

MEC

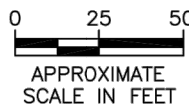
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TREE LIST		
TAG#	TYPE	SIZE
529	NOTHERN HACKBERRY	23
530	HACKBERRY	12
531	HACKBERRY	30
533	HACKBERRY	9
536	HACKBERRY	9
537	HACKBERRY	8
539	HACKBERRY	8
540	HACKBERRY	9
541	HACKBERRY	8
545	HACKBERRY	10/9
546	HACKBERRY	12
547	HACKBERRY	10
548	HACKBERRY	23/20
549	LIVE OAK	9
550	LIVE OAK	18/17
551	LIVE OAK	29
552	HACKBERRY	9
553	HACKBERRY	9
554	LIVE OAK	8/7
555	LIVE OAK	38
556	ELM	12/7
557	LIVE OAK	11/10
564	ELM	8
565	ELM	8
568	LIVE OAK	8
569	ELM	11
570	ELM	8
571	ELM	8
572	ELM	13/8
573	ELM	8
581	LIVE OAK	8
585	LIVE OAK	9
588	LIVE OAK	12
590	LIVE OAK	12

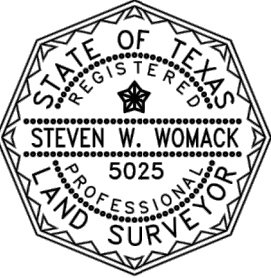
597	ELM	9	784	HACKBERRY	17/8
600	ELM	8	785	HACKBERRY	8
711	ELM	13	786	LIVE OAK	8
712	HACKBERRY	11	788	OAK	2
714	LIVE OAK	9	789	MESQUITE	9
715	LIVE OAK	10	790	LIVE OAK	9
716	LIVE OAK	9	791	LIVE OAK	8
717	LIVE OAK	10	792	MESQUITE	13/8
718	LIVE OAK	9	793	MESQUITE	11
720	LIVE OAK	9	795	MESQUITE	10/9
721	LIVE OAK	10	2859	LIVE OAK	14/12
722	LIVE OAK	MT 19/23	2860	LIVE OAK	14
723	LIVE OAK	MT 13/22	2861	LIVE OAK	8
725	LIVE OAK	11	2863	LIVE OAK	8
726	LIVE OAK	MT 12/9	2929	ELM	8
728	LIVE OAK	9	2931	LIVE OAK	8
729	LIVE OAK	10	2932	LIVE OAK	8
731	LIVE OAK	10/9	2933	LIVE OAK	8/8
733	LIVE OAK	8	2934	LIVE OAK	8/7
734	LIVE OAK	8	2935	LIVE OAK	10
735	LIVE OAK	MT 8/7	2936	LIVE OAK	9
736	LIVE OAK	8	2939	LIVE OAK	8
737	LIVE OAK	8	2940	LIVE OAK	8
738	LIVE OAK	9/9	2942	LIVE OAK	8
739	LIVE OAK	8	2943	LIVE OAK	8
743	LIVE OAK	9	2944	LIVE OAK	8
744	ELM	11	2945	LIVE OAK	9
746	HACKBERRY	9	2946	LIVE OAK	10
748	HACKBERRY	14	2947	LIVE OAK	9
749	ELM	9	2948	LIVE OAK	8
750	ELM	9	2949	LIVE OAK	8
751	ELM	14	2950	LIVE OAK	9
752	LIVE OAK	13/12	2951	LIVE OAK	8
753	LIVE OAK	17	2955	LIVE OAK	8
754	LIVE OAK	15	2960	ELM	9
755	LIVE OAK	15	2961	ELM	9
756	LIVE OAK	12	2962	ELM	9
757	LIVE OAK	12/10	2964	ELM	9
758	LIVE OAK	12	2965	ELM	8
759	LIVE OAK	8	2969	MESQUITE	9
760	LIVE OAK	9	2970	HACKBERRY	8
761	MESQUITE	17/14	2971	ELM	8
762	MESQUITE	16	2972	LIVE OAK	32
763	MESQUITE	10	2973	LIVE OAK	16
764	MESQUITE	18	2974	ELM	10
765	MESQUITE	23	2978	ELM	10
766	HACKBERRY	9	2979	HACKBERRY	9
767	MESQUITE	13/8	2980	LIVE OAK	8
768	LIVE OAK	8	2981	LIVE OAK	8
769	LIVE OAK	8	2983	LIVE OAK	11
771	LIVE OAK	8/7	2984	LIVE OAK	14
772	LIVE OAK	11	2985	LIVE OAK	9
775	HACKBERRY	11	2986	LIVE OAK	12
776	LIVE OAK	14	2987	LIVE OAK	10
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778	LIVE OAK	10	2990	ELM	9
779	LIVE OAK	8	2991	HACKBERRY	8
781	MESQUITE	10/9	2992	HACKBERRY	8
782	MESQUITE	10	2993	HACKBERRY	10
783	MESQUITE	8	2995	HACKBERRY	9
			2998	LIVE OAK	24

THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE COMMITMENT, THERE MAY BE ADDITIONAL EASEMENTS, SETBACKS, ETC. THAT AFFECT THIS TRACT BUT ARE NOT SHOWN HEREON.



THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS ASSOCIATION STANDARDS AND SPECIFICATIONS FOR A CATEGORY 6, CONDITION II, TOPOGRAPHIC SURVEY AS DESCRIBED IN THE MANUAL OF PRACTICE FOR LAND SURVEYING IN THE STATE OF TEXAS.

Steven Warner Womack, RPLS, PLS, NCEES Date: 24 Jan. 2022
National Council of Examiners for Engineering and Surveying #1928
Texas Registered Professional Land Surveyor #5025
North Carolina Professional Land Surveyor #1-5043
E-Mail: SWRPLS@gmail.com Phone/Fax: (512) 638-0220



206 CRESTON ST. HUTTO, TX
512-820-2525
opinedo@rrpsurveying.com
www.rrpsurveying.com
DATE: 01.24.22
Project name: 168 STUBBLEFIELD LN

5.3365 ACRES OF LAND (CALLED 6.50 ACRES) SITUATED IN THE HENRY FIELD SURVEY, ABSTRACT NO. 233 IN WILLIAMSON COUNTY, TEXAS, BEING THE SAME TRACT CONVEYED TO JAMES MATHER BY INSTRUMENT OF RECORD IN DOCUMENT NO. 2006068763 ALONG WITH A 30 FOOT WIDE ACCESS EASEMENT AND RECORDED IN THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.

REV. NO.	REVISION DESCRIPTION	APPROVED BY:	DATE



RANGER ENGINEERING, PLLC
CIVIL ENGINEERING
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AUSTIN, TEXAS 78746
PHONE: (512) 785-8446
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TEXAS MURUGAN TEMPLE

775 Stubblefield Lane

Liberty Hill, Texas 78642

SUBDIVISION PLAT

JUNE 15, 2023
MEC
MEC

LIST OF TREES SURVEY			
No	Name	Size (inch)	Status
529	Northern Hackberry	23	Remain
530	Hackberry	12	Remain
531	Hackberry	30	Remain
533	Hackberry	9	Remain
536	Hackberry	9	Remain
537	Hackberry	8	Remain
539	Hackberry	8	Remain
540	Hackberry	9	Remain
541	Hackberry	8	Remain
545	Hackberry	10,9	Remain
546	Hackberry	12	Removed
547	Hackberry	10	Removed
548	Hackberry	23,20	Remain
549	Live Oak	9	Removed
550	Live Oak	18,17	Remain
551	Live Oak	29	Remain
552	Hackberry	9	Remain
553	Hackberry	9	Remain
554	Live Oak	8,7	Removed
555	Live Oak	38	Remain
556	Elm	12,7	Remain
557	Live Oak	11,10	Remain
564	Elm	8	Remain
565	Elm	8	Remain
568	Live Oak	8	Remain
569	Elm	11	Remain
570	Elm	8	Remain
571	Elm	8	Remain
573	Elm	13,8	Remain
581	Live Oak	8	Remain
585	Live Oak	9	Remain
588	Live Oak	12	Remain
590	Live Oak	12	Remain
597	Elm	9	Remain
600	Elm	8	Remain
711	Elm	13	Remain
712	Hackberry	11	Remain
714	Live Oak	9	Removed
715	Live Oak	10	Removed
716	LJE	9	Removed
718	Live Oak	10	Removed
720	Live Oak	9	Removed
721	Live Oak	10	Removed
722	Live Oak	19,23	Remain
723	Live Oak	13,22	Remain
725	Live Oak	11	Removed
726	Live Oak	12,9	Removed
728	Live Oak	9	Removed
729	Live Oak	10	Removed
731	Live Oak	10,9	Removed
733	Live Oak	8	Removed

LIST OF TREES SURVEY			
No	Name	Size (inch)	Status
735	Live Oak MT	8,7	Removed
736	Live Oak	8	Removed
737	Live Oak	8	Removed
738	Live Oak	9,9	Removed
739	Live Oak	8	Removed
743	Live Oak	9	Removed
744	Live Oak	11	Remain
746	Live Oak	9	Remain
748	Live Oak	14	Remain
749	Live Oak	9	Remain
750	Live Oak	9	Remain
751	Live Oak	14	Remain
752	Live Oak	13,12	Remain
753	Live Oak	17	Remain
754	Live Oak	15	Remain
755	Live Oak	15	Remain
756	Live Oak	12	Remain
757	Live Oak	12,10	Remain
758	Live Oak	12	Remain
759	Live Oak	8	Remain
760	Live Oak	9	Remain
761	Mesquite	17,14	Remain
762	Mesquite	16	Remain
763	Mesquite	10	Remain
764	Mesquite	18	Remain
765	Mesquite	23	Remain
766	Hackberry	9	Remain
767	Mesquite	13,8	Removed
768	Live Oak	8	Removed
769	Live Oak	8	Removed
771	Live Oak	8,7	Removed
772	Live Oak	11	Removed
775	Hackberry	11	Removed
776	Live Oak	14	Remain
777	Live Oak	19,18,17,14,10	Remain
778	Live Oak	10	Removed
779	Live Oak	8	Removed
781	Mesquite	10,9	Removed
782	Mesquite	10	Removed
783	Mesquite	8	Removed
784	Hackberry	17,8	Removed
785	Hackberry	8	Removed
786	Live Oak	8	Removed
788	Oak	2	Removed
789	Mesquite	9	Removed
790	Live Oak	9	Removed
791	Live Oak	8	Removed
792	Mesquite	13,8	Remain
793	Mesquite	11	Remain
795	Mesquite	10,9	Removed

LIST OF TREES SURVEY			
No	Name	Size (inch)	Status
2859	Live Oak	14,12	Remain
5860	Live Oak	14	Remain
2861	Live Oak	8	Remain
2863	Elm	8	Remain
2829	Live Oak	8	Remain
2931	Live Oak	8	Remain
2932	Live Oak	8	Remain
2933	Live Oak	8,8	Remain
2934	Live Oak	8,7	Remain
2935	Live Oak	10	Remain
2936	Live Oak	9	Remain
2939	Live Oak	8	Remain
2940	Live Oak	8	Remain
2942	Live Oak	8	Remain
2943	Live Oak	8	Remain
2944	Live Oak	8	Remain
2945	Live Oak	9	Remain
2946	Live Oak	10	Remain
2947	Live Oak	9	Remain
2948	Live Oak	8	Remain
2949	Live Oak	8	Remain
2950	Live Oak	9	Remain
2951	Live Oak	8	Remain
2955	Live Oak	8	Remain
2960	Elm	9	Remain
2961	Elm	9	Remain
2962	Elm	9	Remain
2964	Elm	9	Remain
2965	Elm	8	Remain
2969	Mesquite	9	Remain
2970	Hackberry	8	Removed
2971	Elm	8	Removed
2972	Live Oak	32	Remain
2973	Live Oak	16	Remain
2974	Elm	10	Remain
2978	Elm	10	Remain
2979	Hackberry	9	Remain
2980	Live Oak	8	Remain
2981	Live Oak	8	Remain
2983	Live Oak	11	Remain
2984	Live Oak	14	Remain
2985	Live Oak	9	Remain
2986	Live Oak	12	Remain
2987	Live Oak	10	Remain
2989	Elm	11	Remain
2990	Elm	9	Remain
2991	Hackberry	8	Remain
2992	Hackberry	8	Remain
2993	Hackberry	10	Remain
2995	Hackberry	9	Remain
2998	Live Oak	24	Remain

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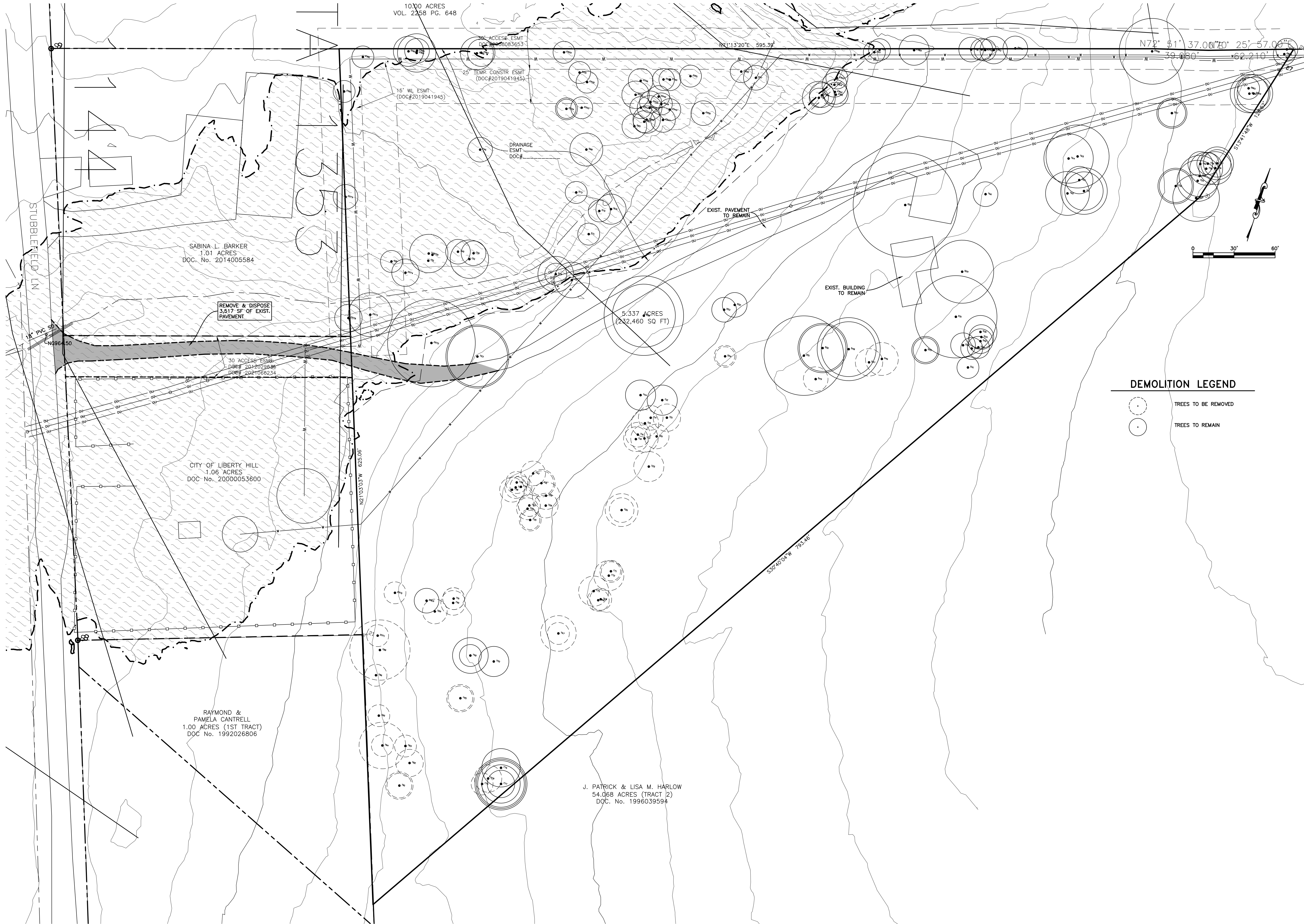
TREE SURVEY LIST

JUNE 15, 2023

MEC

MEC

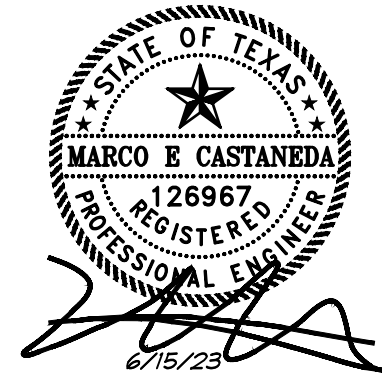
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DEMOLITION LEGEND

- TREES TO BE REMOVED
- TREES TO REMAIN

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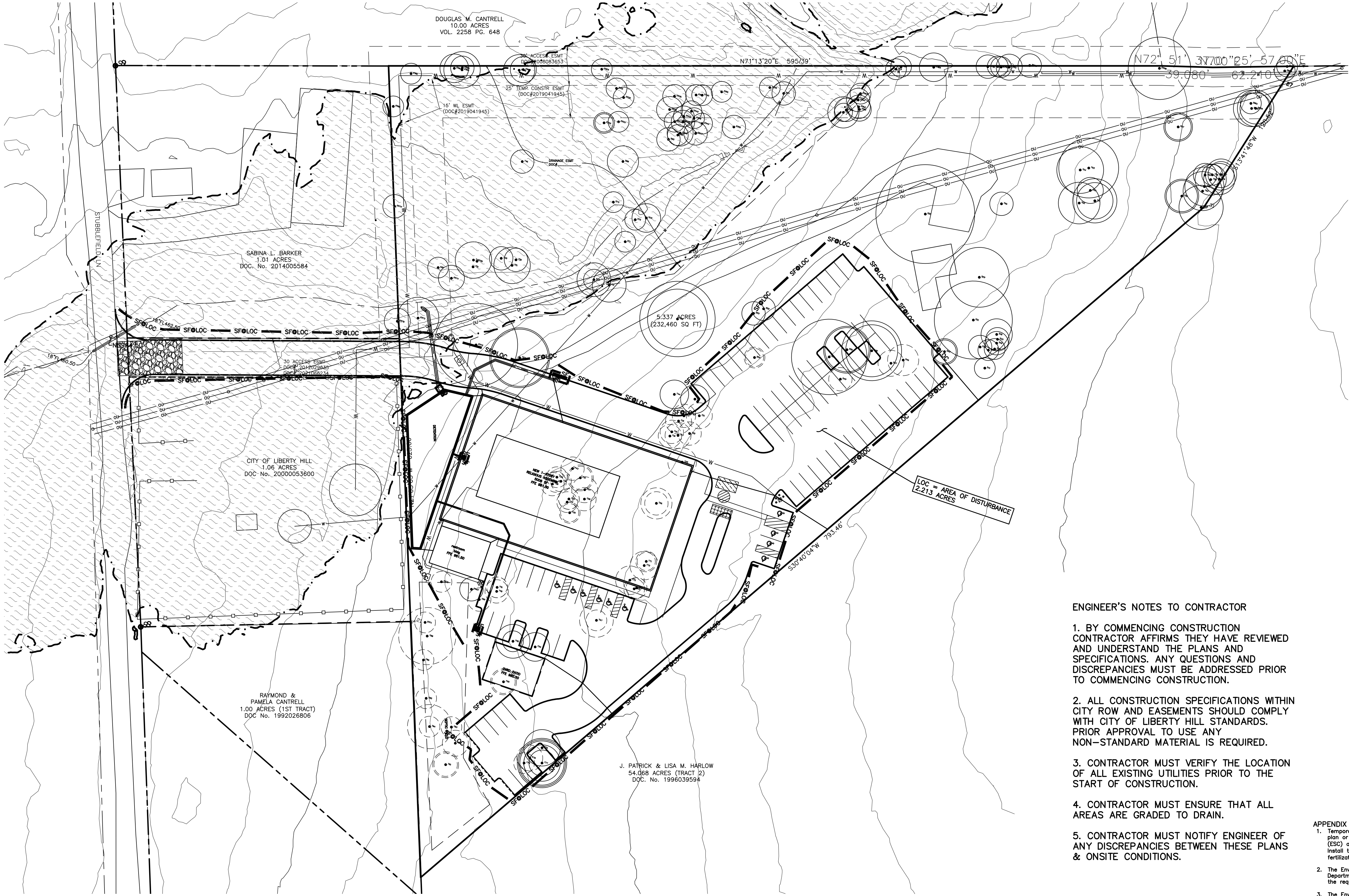


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TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642

EXISTING IMPROVEMENTS SURVEY & DEMOLITION PLAN

JUNE 15, 2023
MEC
MEC



- LEGEND**
- LOC LIMITS OF CONSTRUCTION (L.O.C.)
 - SF SILT FENCE
 - SF LOC SILT FENCE AT L.O.C. (SEE DETAIL "A")
 - INLET FILTER DIKE
 - MS MULCH SOCK
 - SF JS AREA INLET PROTECTION
 - TPF TREE PROTECTION FENCE
 - RB STONE OUTLET SEDIMENT TRAP
 - STABILIZED CONSTRUCTION ENTRANCE
 - CONSTRUCTION STAGING SITE
 - TEMP. SPOILS AREA
 - CONCRETE WASHOUT AREA
 - #105 TREE TO REMAIN (W/ 1/2 CRZ)
 - TREE TO BE REMOVED
 - 647 EXISTING CONTOUR
 - 647 PROPOSED CONTOUR
- DEMOLITION LEGEND**
- TREES TO BE REMOVED
 - TREES TO REMAIN

ENGINEER'S NOTES TO CONTRACTOR

1. BY COMMENCING CONSTRUCTION CONTRACTOR AFFIRMS THEY HAVE REVIEWED AND UNDERSTAND THE PLANS AND SPECIFICATIONS. ANY QUESTIONS AND DISCREPANCIES MUST BE ADDRESSED PRIOR TO COMMENCING CONSTRUCTION.
2. ALL CONSTRUCTION SPECIFICATIONS WITHIN CITY ROW AND EASEMENTS SHOULD COMPLY WITH CITY OF LIBERTY HILL STANDARDS. PRIOR APPROVAL TO USE ANY NON-STANDARD MATERIAL IS REQUIRED.
3. CONTRACTOR MUST VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
4. CONTRACTOR MUST ENSURE THAT ALL AREAS ARE GRADED TO DRAIN.
5. CONTRACTOR MUST NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS & ONSITE CONDITIONS.

- APPENDIX P-4: - STANDARD SEQUENCE OF CONSTRUCTION
1. Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan or subdivision construction plan and in accordance with the Erosion Sedimentation Control Plan (ESC) and Stormwater Pollution Prevention Plan (SWPPP) that is required to be posted on the site. Install tree protection, initiate tree mitigation measures and conduct "Pre - Construction" tree fertilization (if applicable).
 2. The Environmental Project Manager or Site Supervisor must contact the Development Services Department, Environmental Inspection, at 512-974-2278, 72 hours prior to the scheduled date of the required on-site preconstruction meeting.
 3. The Environmental Project Manager, and/or Site Supervisor, and/or Designated Responsible Party, and the General Contractor will follow the Erosion Sedimentation Control Plan (ESC) and Storm Water Pollution Prevention Plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with City Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.
 4. Rough grade the pond(s) at 100% proposed capacity. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of embankment or excavation that leads to ponding conditions. The outlet system must consist of a sump pit outlet and an emergency spillway meeting the requirements of the Drainage Criteria Manual and/or the Environmental Criteria Manual, as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until installation of the permanent water quality pond(s).
 5. Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the Erosion Sedimentation Control Plan (ESC) and Storm Water Pollution Prevention Plan (SWPPP) posted on the site.
 6. Begin site clearing/construction (or demolition) activities.
 7. In the Barton Springs Zone, the Environmental Project Manager or Site Supervisor will schedule a mid-construction conference to coordinate changes in the construction schedule and evaluate effectiveness of the erosion control plan after possible construction alterations to the site. Participants shall include the City Inspector, Project Engineer, General Contractor and Environmental Project Manager or Site Supervisor. The anticipated completion date and final construction sequence and inspection schedule will be coordinated with the appropriate City Inspector.
 8. Permanent water quality ponds or controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.
 9. Complete construction and start revegetation of the site and installation of landscaping.
 10. Upon completion of the site construction and revegetation of a project site, the design engineer shall submit an engineer's letter of concurrence bearing the engineer's seal, signature, and date to the Development Services Department indicating that construction, including revegetation, is complete and in substantial compliance with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate City Inspector.
 11. Upon completion of landscape installation of a project site, the Landscape Architect shall submit a letter of concurrence to the Development Services Department indicating that the required landscaping is complete and in substantial conformity with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate City Inspector.
 12. After a final inspection has been conducted by the City Inspector and with approval from the City Inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.

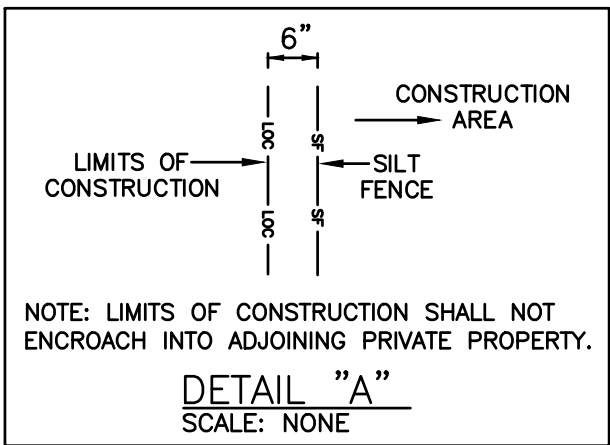
TREE PRESERVATION NOTES:

1. TREES WILL BE FERTILIZED PRIOR TO ANY CONSTRUCTION ACTIVITY. MATERIALS AND METHODS ARE TO BE APPROVED BY THE CITY ARBORIST (974-1876) PRIOR TO APPLICATION.
2. THE GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND INSURE COORDINATION WITH THE CITY ARBORIST. WITHIN 7 DAYS AFTER FERTILIZATION IS PERFORMED, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF THE WORK PERFORMED TO THE CITY ARBORIST, WATERSHED PROTECTION, P.O. BOX 1088, AUSTIN, TEXAS 78767.
3. ALL CLASS 1 TREES WITHIN (OR ADJACENT TO) THE LIMITS OF CONSTRUCTION WHICH ARE INDICATED TO BE PRESERVED (ON THE PLANS) WILL BE FERTILIZED PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES AND AGAIN AFTER THE COMPLETION OF ALL CONSTRUCTION. AREAS TO BE FERTILIZED INCLUDE THE ENTIRE CRITICAL ROOT ZONE OF A TREE AS DEPICTED ON THE CITY APPROVED PLANS. TREES ARE TO FERTILIZED VIA SOIL INJECTION METHOD (MINIMUM 100 PSI) USING DOGGETT X-L INJECTO 32-7-7 OR EQUIVALENT AT RECOMMENDED RATES. CONSTRUCTION THAT WILL BE COMPLETED IN LESS THAN 90 DAYS SHOULD USE MATERIAL AT 1/2 RECOMMENDED RATES. ALTERNATE ORGANIC FERTILIZER MATERIALS ARE ACCEPTABLE WHEN APPROVED BY THE CITY ARBORIST.
4. PRIOR TO EXCAVATING WITHIN THE TREE DRIPLENS, OR THE REMOVAL OF TREES ADJACENT TO OTHER TREES THAT ARE TO REMAIN, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE ROOT DAMAGE. IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DURING CONSTRUCTION WITH FENCING, AND WHERE HEAVY VEHICULAR TRAFFIC IS ANTICIPATED, COVER THOSE AREAS WITH FOUR (4) INCHES OF ORGANIC MULCH TO BE PRODUCED ON SITE, TO MINIMIZE SOIL COMPACTION. 4" MULCH SHALL BE ADDED TO ALL R.O.W. TREES OUTSIDE WORK AREA. PERFORM ALL GRADING WITHIN CRITICAL ROOT ZONE AREAS WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE. WATER ALL TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES DEEPLY AS NECESSARY DURING PERIODS HOT, DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
5. TREE PROTECTION FENCE REMOVED FOR UTILITY TRENCING MUST BE RE-ESTABLISHED AS SOON AS PLANNED CONSTRUCTION WORK IS COMPLETED OR AT THE END OF THE WORK DAY. ANY WORK BEING DONE WITHIN THE TREE PROTECTION FENCE AREA MUST NOT IMPACT TREE. NO ROOT DAMAGE AND NO BRANCH OR TRUNK DAMAGE. ADD A 1/2" LAYER OF MULCH WITHIN THE TREE PROTECTION FENCE AREA PRIOR TO CONDUCTING ANY WORK INSIDE FENCE AREA.
6. NO ROOTS GREATER THAN 1" MAY BE CUT FOR UTILITY TRENCH. ANY ROOT CUTS MUST BE DONE UNDER THE SUPERVISION OF A CERTIFIED ARBORIST.
7. TRENCH MUST BE BACKFILLED IMMEDIATELY UPON COMPLETION OF UTILITY WORK. IF DURATION OF UTILITY WORK EXCEEDS ONE DAY ROOTS MUST BE PROTECTED TO PREVENT DRYING OUT.

SPECIAL CONSTRUCTION TECHNIQUES:

- PRIOR TO EXCAVATING WITHIN THE TREE DRIPLENS, OR THE REMOVAL OF TREES ADJACENT TO OTHER TREES THAT ARE TO REMAIN, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE ROOT DAMAGE.
- IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DURING CONSTRUCTION WITH FENCING, AND WHERE HEAVY VEHICULAR TRAFFIC IS ANTICIPATED, COVER THOSE AREAS WITH FOUR (4) INCHES OF ORGANIC MULCH TO BE PRODUCED ON SITE, TO MINIMIZE SOIL COMPACTION.
- PERFORM ALL GRADING WITHIN CRITICAL ROOT ZONE AREAS WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE.
- WATER ALL TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES DEEPLY AS NECESSARY DURING PERIODS HOT, DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
- WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE PLASTIC VAPOR VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.
- ADEQUATE BARRIERS BETWEEN ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, SUCH AS A 6" CONCRETE CURB ARE REQUIRED. IF A STANDARD 6" CURB AND GUTTER ARE NOT PROVIDED FOR ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, COMPLY WITH ECM, SECTION 2.4.7, "PROTECTION OF LANDSCAPE AREAS".

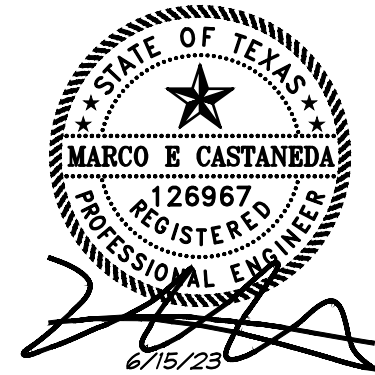
ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND / OR MODIFY EROSION / SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATION LDC 25-8-183.



LANDSCAPE BARRIERS NOTES:

1. ADEQUATE BARRIERS BETWEEN ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, SUCH AS A 6" CONCRETE CURB AND GUTTER ARE NOT PROVIDED FOR ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, COMPLY WITH ECM, SECTION 2.4.7, "PROTECTION OF LANDSCAPE AREAS".
 2. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE PLASTIC VAPOR VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.
 3. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
- EROSION CONTROL NOTES:
1. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP OR REVEGETATION MATING. [ECM 1.4.4.B.3, SECTION 5, 1.]
 2. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS. [LDC 25-8-183]
 3. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
 4. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY. [ECM 1.4.4.D.4]

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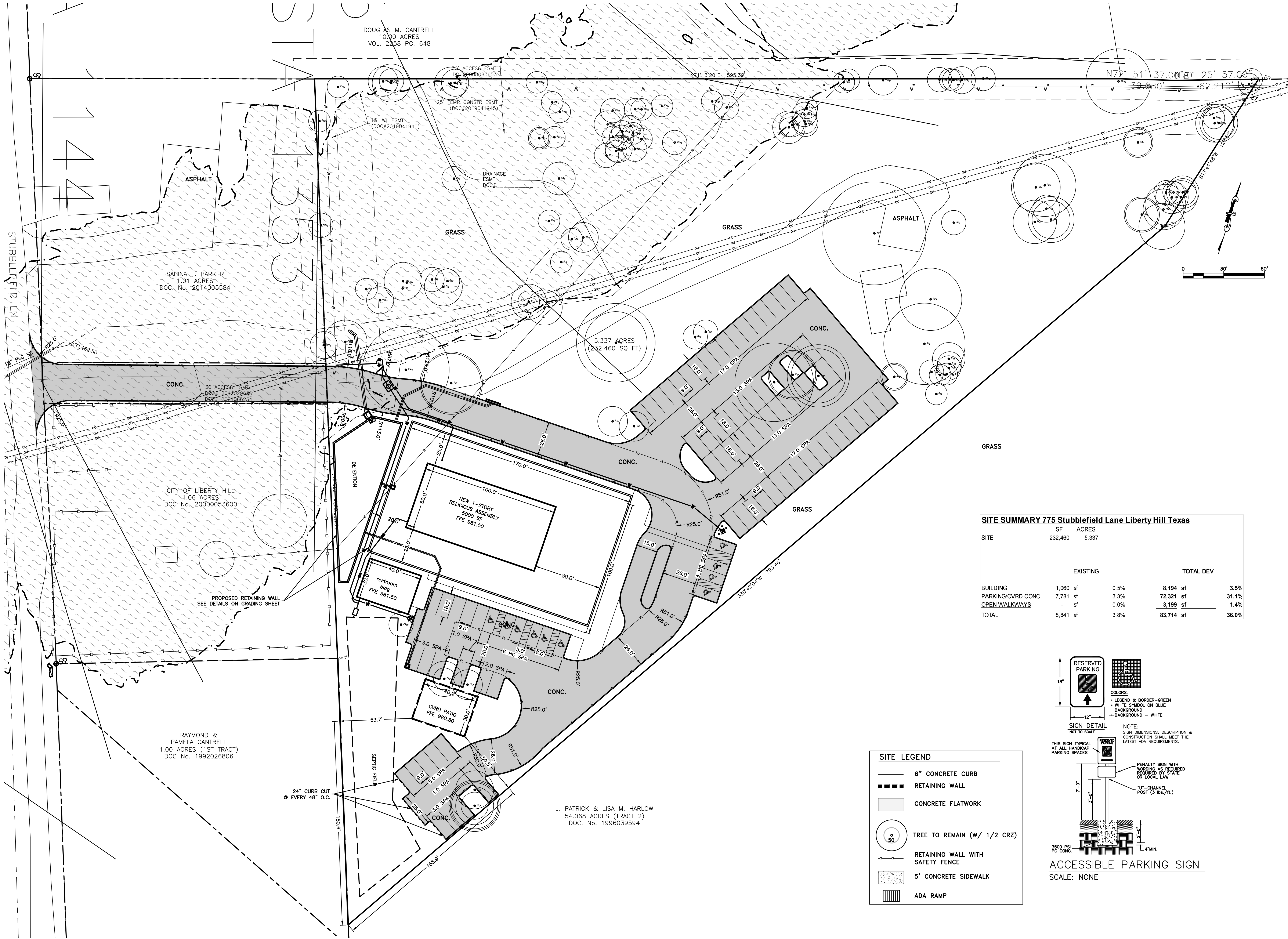


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TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642

EROSION CONTROL PLAN

JUNE 15, 2023
MEC
MEC



SITE SUMMARY 775 Stubblefield Lane Liberty Hill Texas				
SITE	SF		ACRES	
	232,460		5.337	
		EXISTING	TOTAL DEV	
BUILDING	1,060 sf	0.5%	8,194 sf	3.5%
PARKING/CVRD CONC	7,781 sf	3.3%	72,321 sf	31.1%
OPEN WALKWAYS	- sf	0.0%	3,199 sf	1.4%
TOTAL	8,841 sf	3.8%	83,714 sf	36.0%

- SITE LEGEND**
- 6" CONCRETE CURB

RETAINING WALL

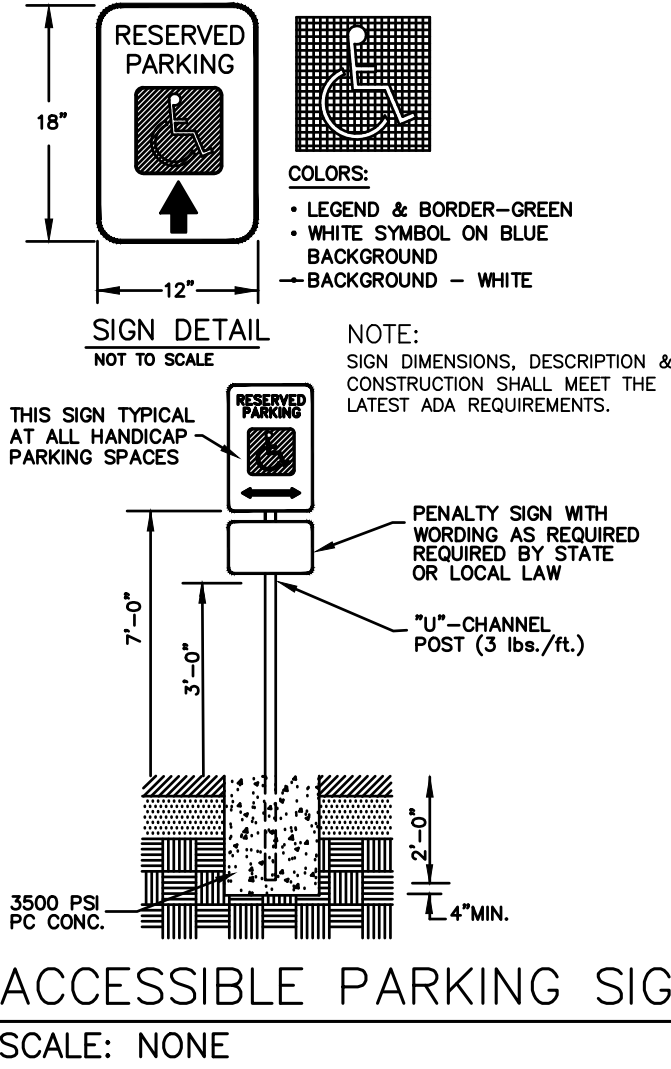
CONCRETE FLATWORK

TREE TO REMAIN (W/ 1/2 CRZ)

RETAINING WALL WITH SAFETY FENCE

5' CONCRETE SIDEWALK

ADA RAMP



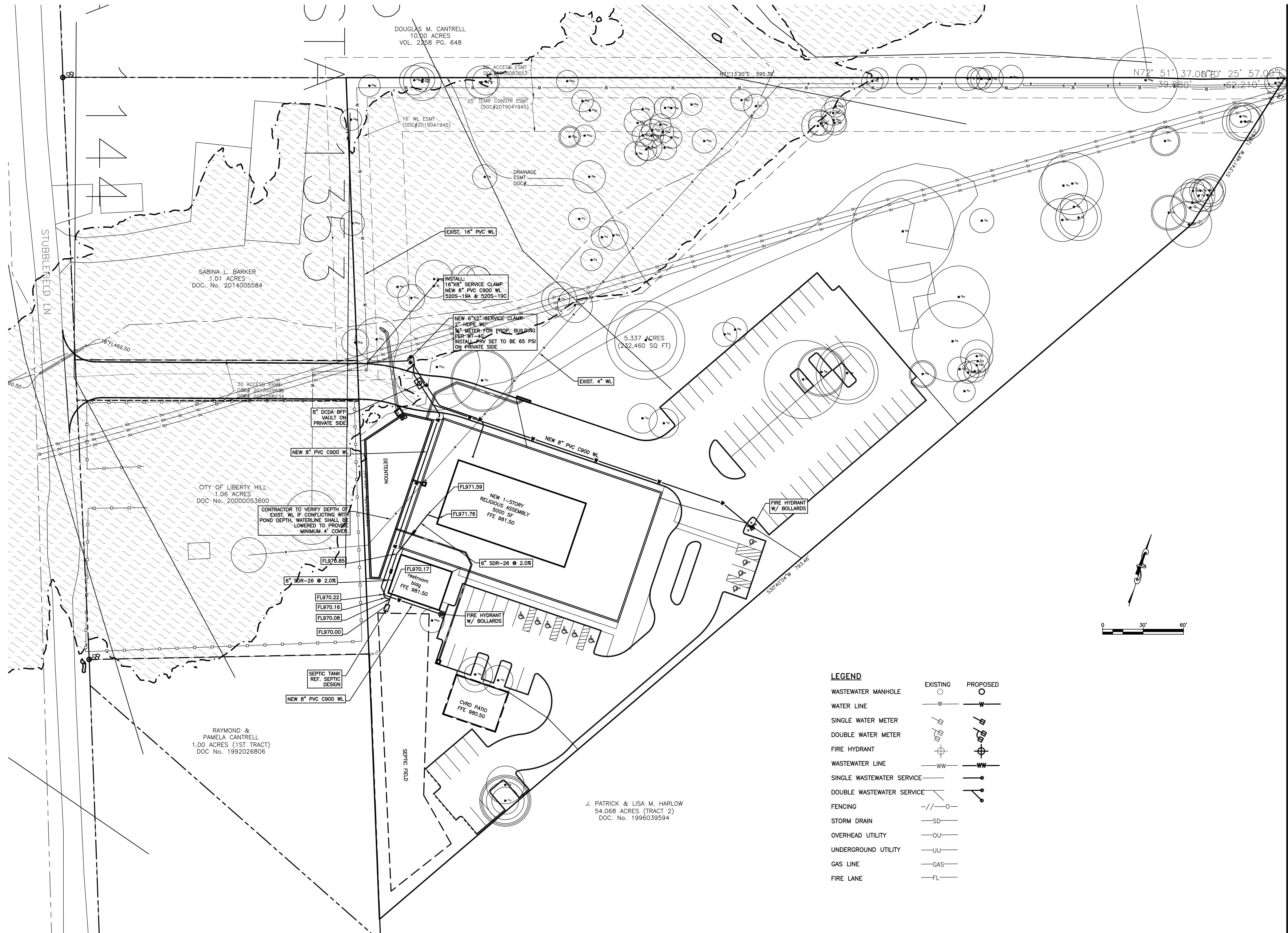
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TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642
DIMENSIONED SITE PLAN

JUNE 15, 2023
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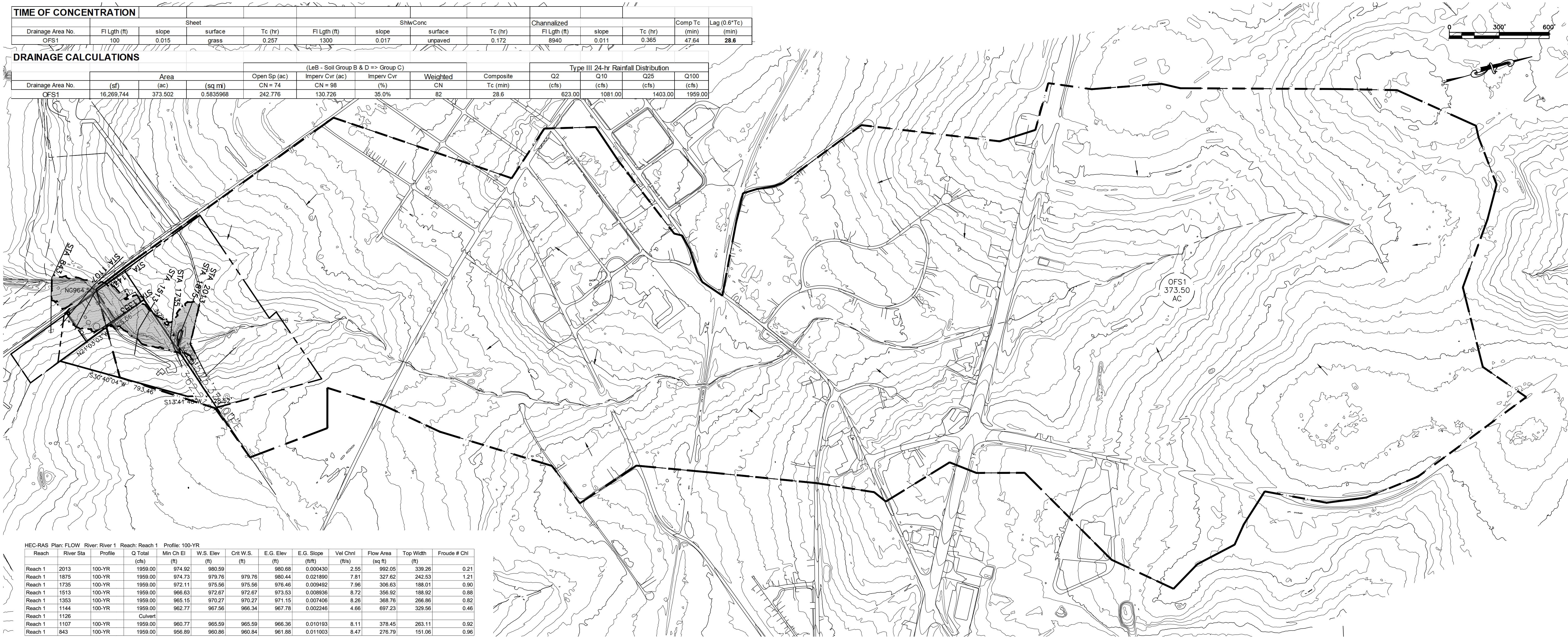
UTILITY IMPROVEMENTS PLAN

F 18

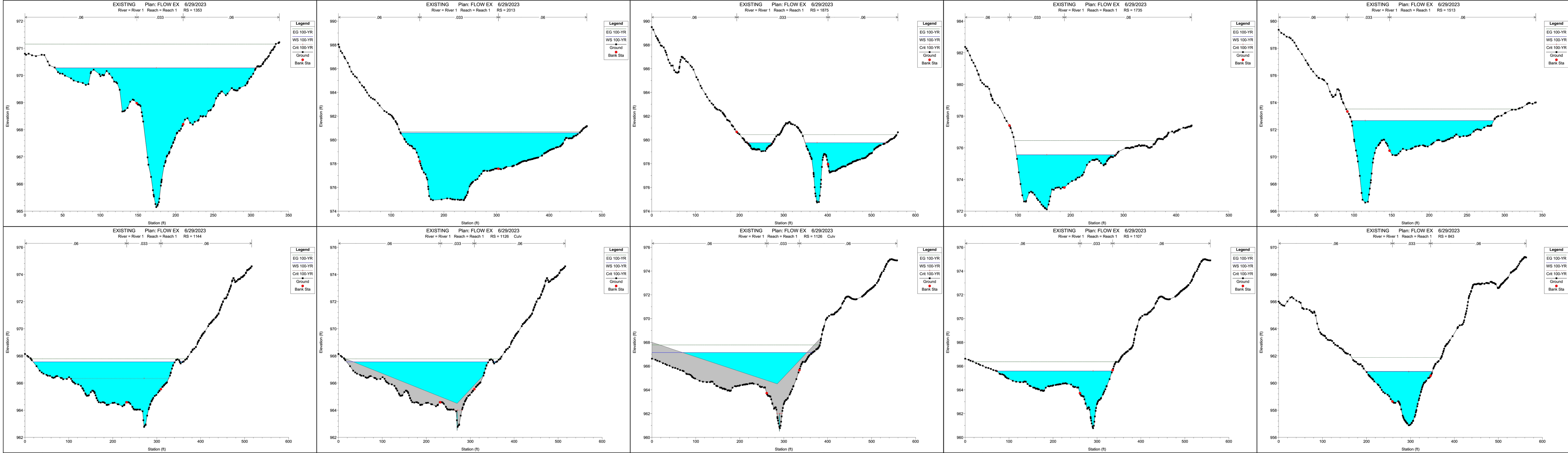
TIME OF CONCENTRATION													
Drainage Area No.	Fl Lgth (ft)	slope	Sheet	surface	Tc (hr)	Fl Lgth (ft)	slope	Shlw Conc	surface	Tc (hr)	Channelized	Fl Lgth (ft)	slope
OFS1	100	0.015	grass	0.257	1300	0.017	unpaved	0.172	8940	0.011	0.365	47.64	28.8

DRAINAGE CALCULATIONS

Type III 24-hr Rainfall Distribution													
Drainage Area No.	(sf)	Area (ac)	(sq ft)	Open Sp (ac)	Imperv Cvr (ac)	Imperv Cvr (%)	Weighted CN	Composite Tc (min)	Q2 (cfs)	Q10 (cfs)	Q25 (cfs)	Q100 (cfs)	
OFS1	16,269,744	373.502	0.5835968	242.776	130.726	35.0%	82	28.6	623.00	1081.00	1403.00	1959.00	



HEC-RAS Plan: FLOW		River: River 1	Reach: Reach 1	Profile: 100-YR								
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # CHI
Reach 1	2013	100-YR	1959.00	974.92	980.59		980.68	0.000430	2.55	992.05	339.26	0.21
Reach 1	1875	100-YR	1959.00	974.73	979.76	979.76	980.44	0.021890	7.81	327.62	242.53	1.21
Reach 1	1735	100-YR	1959.00	972.11	975.56	975.56	976.46	0.009952	7.96	306.63	188.01	0.90
Reach 1	1513	100-YR	1959.00	966.63	972.67	972.67	973.53	0.008936	8.72	356.92	188.92	0.88
Reach 1	1353	100-YR	1959.00	965.15	970.27	970.27	970.27	0.007406	8.26	368.76	266.86	0.82
Reach 1	1144	100-YR	1959.00	962.77	967.56	966.34	967.78	0.002246	4.66	697.23	329.56	0.46
Reach 1	1126	Culvert										
Reach 1	1107	100-YR	1959.00	960.77	965.59	965.59	966.36	0.010193	8.11	378.45	263.11	0.92
Reach 1	843	100-YR	1959.00	956.89	960.86	960.84	961.88	0.011903	8.47	276.79	151.06	0.96



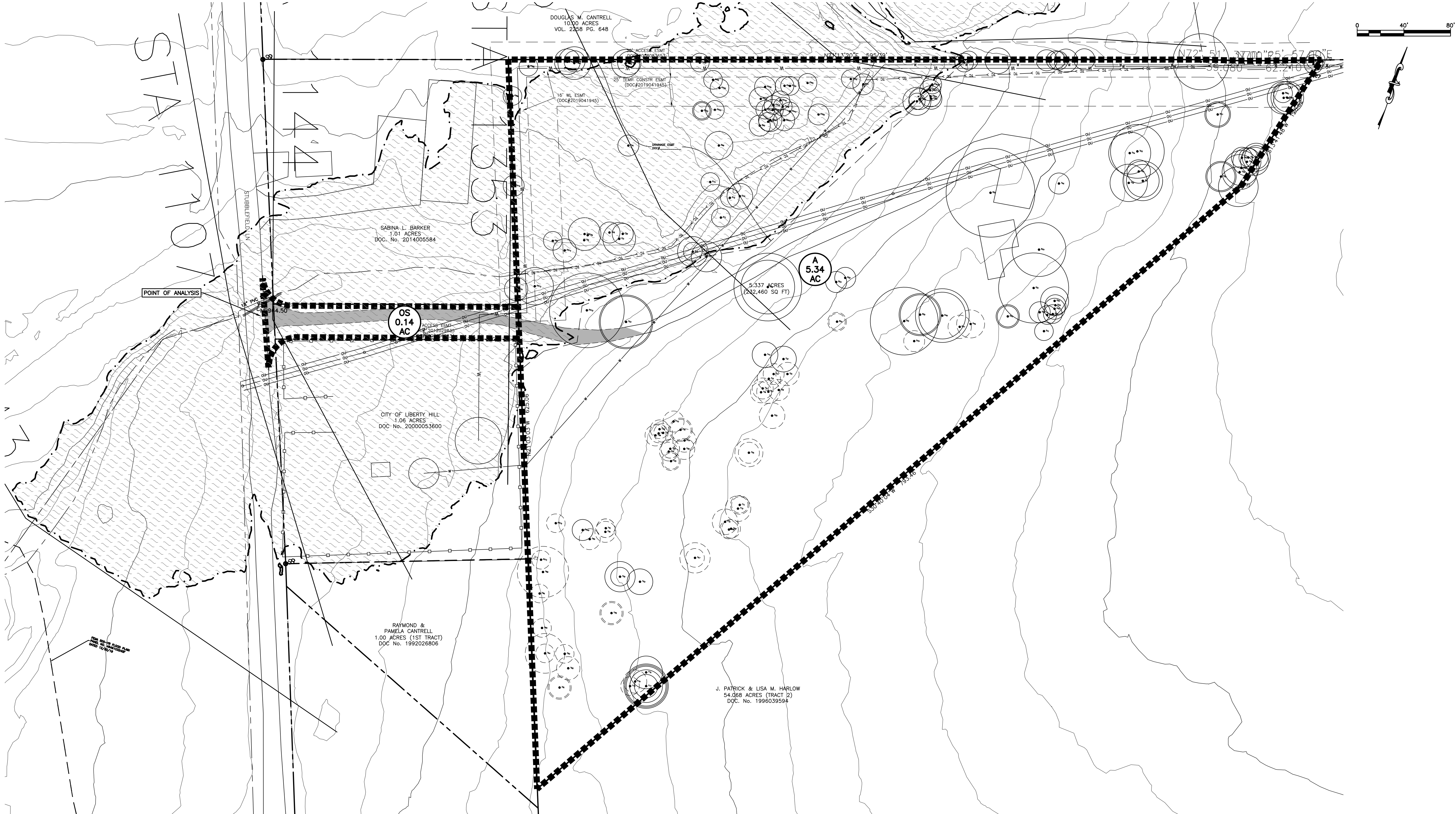
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TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642
OFF-SITE DRAINAGE PLAN

JUNE 15, 2023
MEC
MEC



EXISTING NRCS Runoff Curve Number Computations						
151 SAINT JOSEPH STREET LIBERTY HILL TEXAS						
Development Condition	Impervious Cover (ft ²)	Area (ft ²)	Percent Impervious (%)	Hydrologic Soil Group	Grass CN Condition	Weighted CN
A	8841.54	232460.35	3.80%	D	80	80.68
OS	2404.00	6127.03	39.24%	D	80	87.06

Refer to Table 2-5: NRCS Runoff Curve Numbers for Urban Areas and Agricultural Lands from City of Austin Drainage Criteria Manual

EXISTINGTIME OF CONCENTRATION CALCULATIONS													
775 STUBBLEFIELD DRIVE LIBERTY HILL TEXAS													
Drainage Area	Mannings	Sheet Flow				Shallow Concentrated Flow				Circular Pipe Flow			
		Length, L _s		Slope, S	Tc sf	Tc sc unpaved		Tc sc paved		Tc chan		Total Tc	Comments
		(ft)	(in)			(ft)	(ft/ft)	(ft)	(ft/ft)	(ft)	(ft/ft)		
A	0.240	100	4.06	3.50%	10.1	288	6.30%	4.05	1.2			11.31	6.79
OS	0.150	100	4.06	5.10%	6.0	331	5.10%	4.59	1.2			7.18	4.31

Refer to Table 2-4: Manning's "n" for overland flow from City of Austin Drainage Criteria Manual

EXISTING CONDITIONS RUNOFF CALCULATIONS									
775 Stubblefield Lane Liberty Hill Texas									
ID	TOTAL AREA (AC)	TOTAL AREA	IMPERVIOUS COVER IC (AC)	WEIGHTED CURVE NO CN	TIME OF CONCENTRATION Tc (min)	TOTAL FLOW Q _t (cfs)	TOTAL FLOW Q ₁₀ (cfs)	TOTAL FLOW Q ₂₅ (cfs)	TOTAL FLOW Q ₁₀₀ (cfs)
A	5.34	0.008338	0.20	80.68	11.31	15.46	29.23	38.48	54.1
OS	0.14	0.000220	0.06	87.06	7.18	0.57	0.98	1.24	1.7
EG COMBINED						15.96	30.08	39.57	55.56

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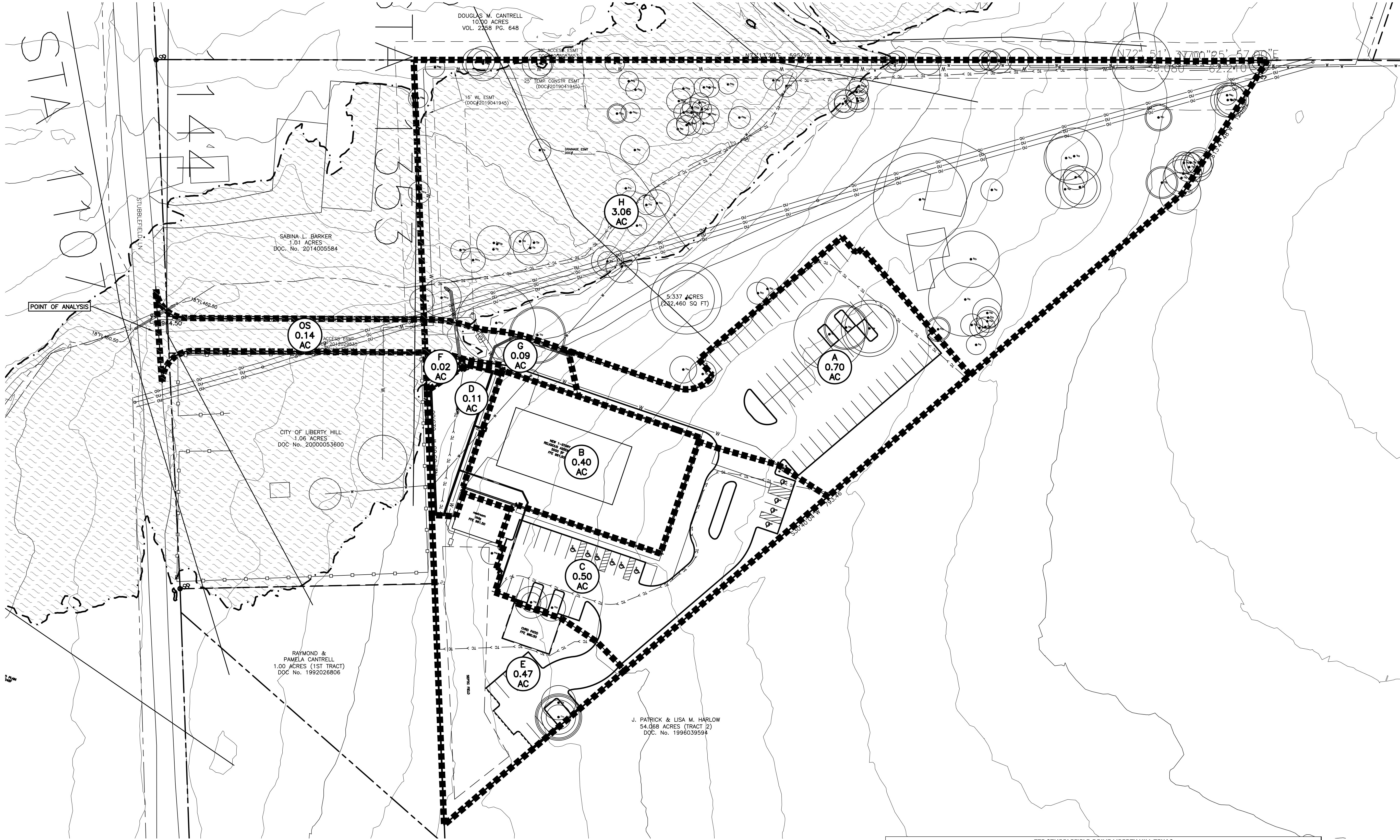
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TEXAS MURUGAN TEMPLE

775 Stubblefield Lane
Liberty Hill, Texas 78642

DRAINAGE PLAN - EXISTING CONDITIONS

JUNE 15, 2023
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PROPOSED TIME OF CONCENTRATION CALCULATIONS																		
775 STUBBLEFIELD DRIVE LIBERTY HILL TEXAS																		
Drainage Area	Mannings	Sheet Flow				Shallow Concentrated Flow						Circular Pipe Flow			Total Tc	Comments	Lag Time	
		Length, L _o	2-yr, 24-hr ran	Slope, S	Tc sf	Length	Tc sc unpaved			Tc sc paved			Length	Velocity				Tc chan
							Slope S	Velocity V	Tc unpaved	Length	Slope S	Velocity V						
	(n)	(ft)	(in)	ft/ft	(min)	(ft)	ft/ft	(fps)	(min)	(ft)	ft/ft	(fps)	(min)	(fps)	(fps)	(min)	(min)	(min)
A	0.240	27	4.06	4.10%	3.3					390	1.00%	2.03	3.2				6.53	3.92
B	0.015	100	4.06	0.50%	2.4					93.7	0.50%	1.44	1.1				3.5	Use Tc = 5 min 3.00
C	0.240	29	4.06	2.70%	4.2					221	1.00%	2.03	1.8				5.99	3.59
D	0.240	100	4.06	2.10%	12.4	32.5	2.10%	2.34	0.2								12.66	7.59
E	0.240	100	4.06	5.90%	8.2	33.8	8.40%	4.68	0.1								8.34	5.00
F	0.240	52.9	4.06	4.90%	5.3												5.32	3.19
G	0.015	100	4.06	5.10%	0.9					240	5.10%	4.59	0.9				1.82	Use Tc = 5 min 3.00
H	0.240	100	4.06	3.50%	10.1	288	6.30%	4.05	1.2								11.31	6.79
OS	0.015	100	4.06	5.10%	0.9					331	5.10%	4.59	1.2				2.15	Use Tc = 5 min 3.00
Refer to Table 2-4: Manning's "n" for overland flow from City of Austin Drainage Criteria Manual																		

775 STUBBLEFIELD DRIVE LIBERTY HILL TEXAS						
Development Condition	Impervious Cover (ft ²)	Area (ft ²)	Percent Impervious (%)	Hydrologic Soil Group	Grass CN Conditon	Weighted CN
A	24344.96	30517.03	79.77%	D	80	94.36
B	17218.98	17218.98	100.00%	D	80	98.00
C	17784.15	21862.68	81.34%	D	80	94.64
D	0.00	4634.22	0.00%	D	80	80.00
E	6420.96	20654.45	31.09%	D	80	85.60
F	0.00	769.34	0.00%	D	80	80.00
G	3289.65	3702.82	88.84%	D	80	95.99
H	7720.98	133185.56	5.80%	D	80	81.04
OS	6127.03	6127.03	100.00%	D	80	98.00
Refer to Table 2-5: NRCS Runoff Curve Numbers for Urban Areas and Agricultural Lands from City of Austin Drainage Criteria Manual						

PROPOSED CONDITIONS RUNOFF CALCULATIONS										
775 Stubblefield Lane Liberty Hill Texas										
ID	TOTAL AREA (AC)	TOTAL AREA (SQ MILE)	IMPERVIOUS COVER IC (AC)	WEIGHTED CURVE NO CN	TIME OF CONCENTRATION Tc (min)	TOTAL FLOW Q ₂ (cfs)	TOTAL FLOW Q ₁₀ (cfs)	TOTAL FLOW Q ₂₅ (cfs)	TOTAL FLOW Q ₁₀₀ (cfs)	Comment
A	0.70	0.0010946478	0.56	94.36	6.53	3.53	5.52	6.82	9.1	Drains to Inlet A
B	0.40	0.0006176458	0.40	98.00	5.00	2.28	3.45	4.20	5.5	Drains to Inlet B
C	0.50	0.0007842156	0.41	94.64	5.99	2.58	4.03	4.97	6.6	Dains to Inlet C
D	0.11	0.0001662296	0.00	80.00	12.66	0.29	0.55	0.73	1.0	Drains to Pond Outfall
E	0.47	0.0007408764	0.15	85.60	8.34	1.78	3.10	3.98	5.5	Drains to Southwest Property
F	0.02	0.0000275962	0.00	80.00	5.32	0.06	0.12	0.16	0.2	Drains to East Property
G	0.09	0.0001328205	0.08	95.99	5.00	0.47	0.73	0.89	1.2	Drains to Stubblefield Lane
H	3.06	0.0047773746	0.18	81.04	11.31	8.97	16.84	22.13	31.1	Drains to Stubblefield Lane
OS	0.14	0.0002197769	0.14	98.00	5.00	0.81	1.23	1.49	2.0	Drains to East Property
PR COMBINED						15.82	28.92	38.79	55.5	

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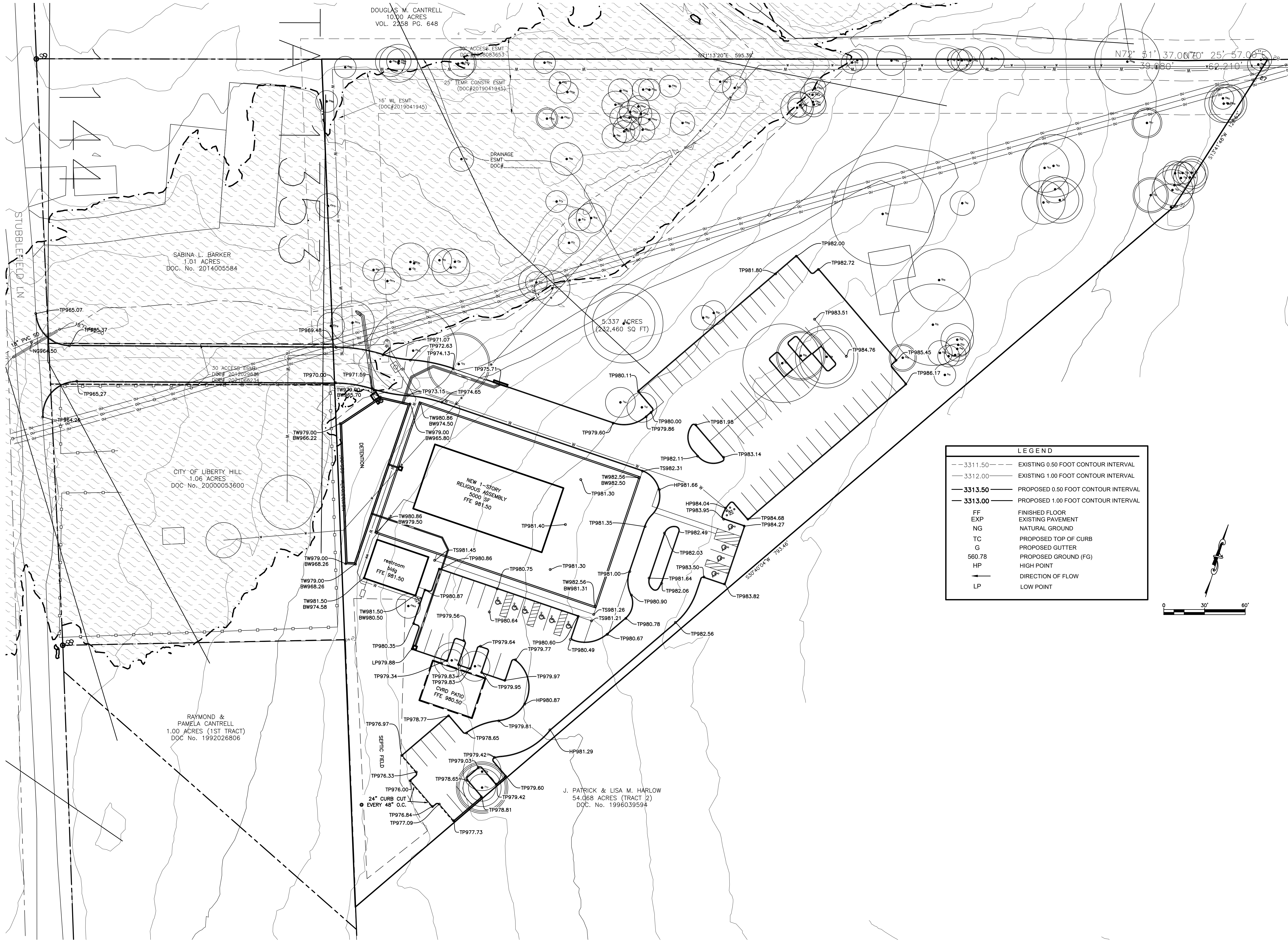


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DRAINAGE PLAN - PROPOSED CONDITIONS

JUNE 15, 2023
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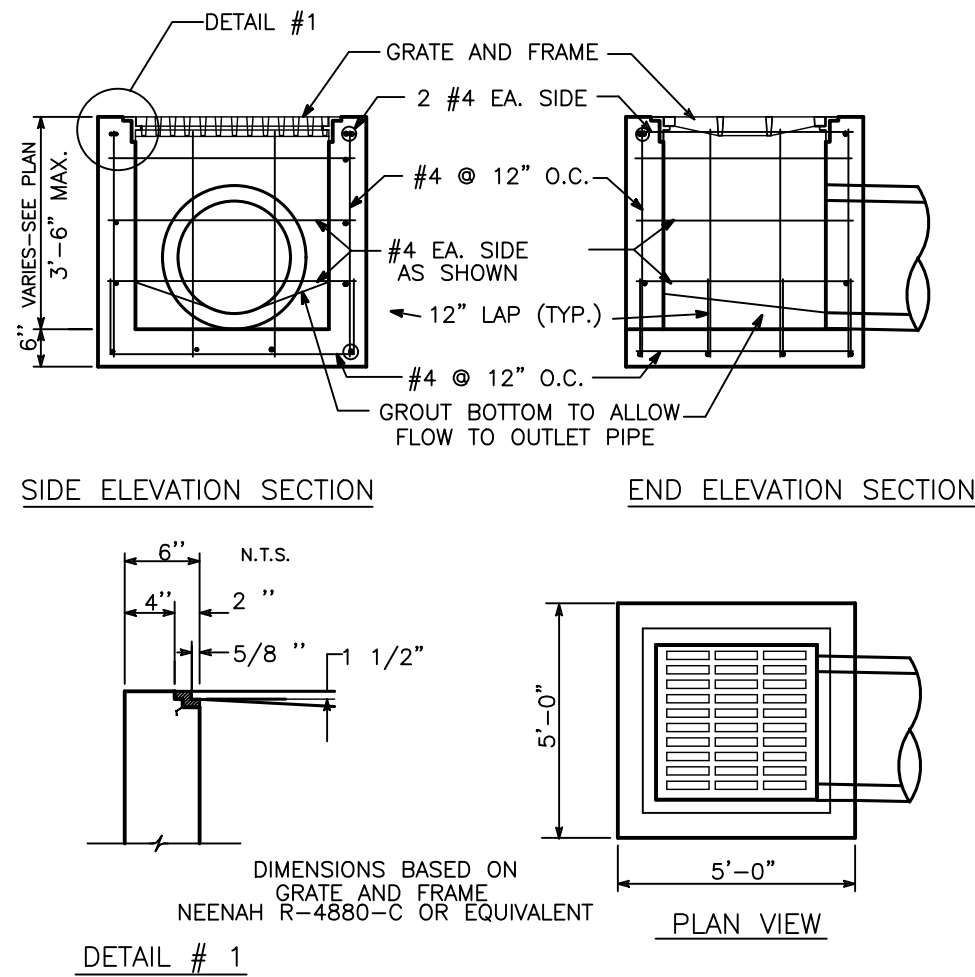
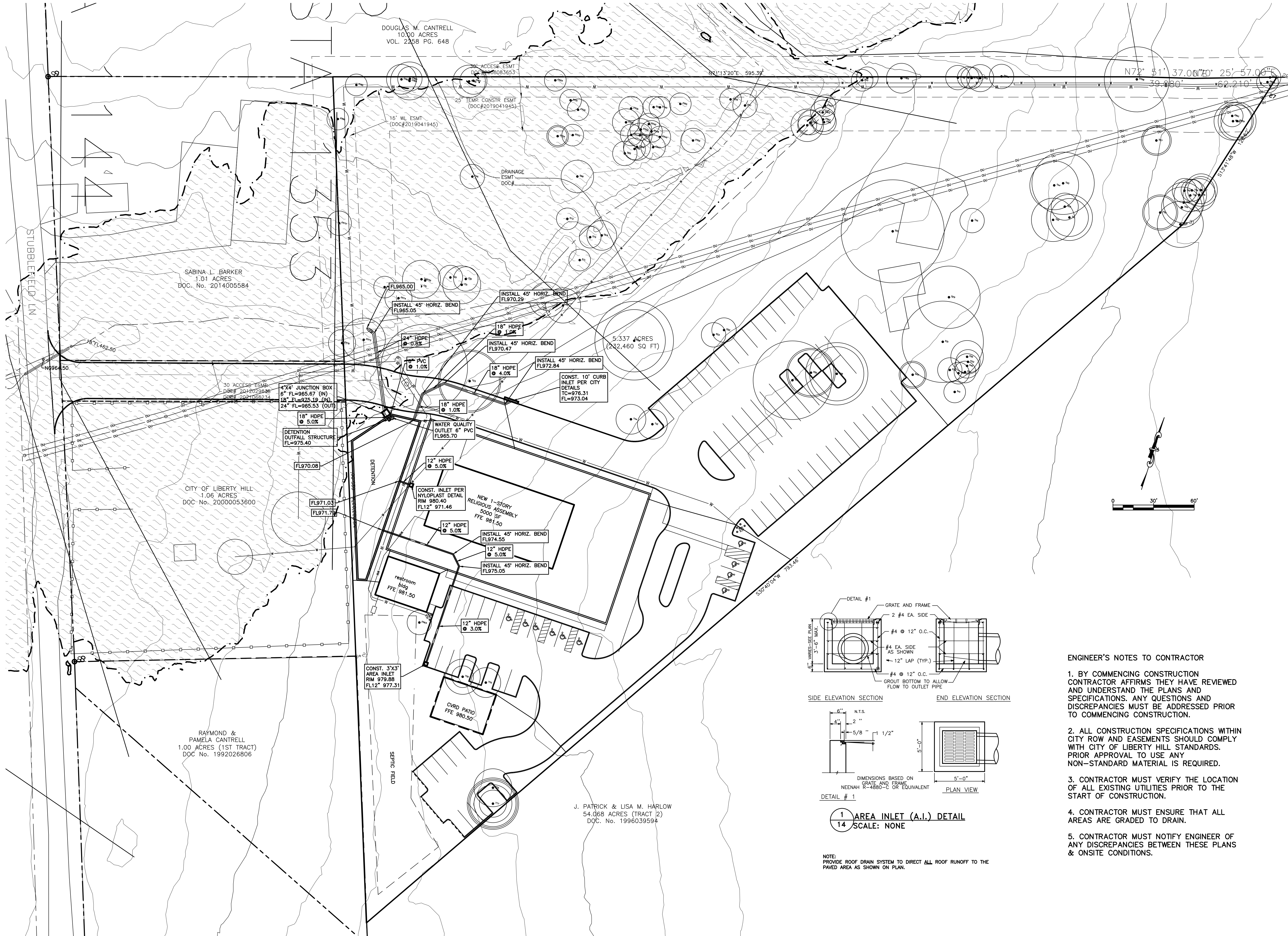
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TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
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JUNE 15, 2023
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1 AREA INLET (A.I.) DETAIL
14 SCALE: NONE

NOTE:
PROVIDE ROOF DRAIN SYSTEM TO DIRECT ALL ROOF RUNOFF TO THE
PAVED AREA AS SHOWN ON PLAN.

ENGINEER'S NOTES TO CONTRACTOR

1. BY COMMENCING CONSTRUCTION CONTRACTOR AFFIRMS THEY HAVE REVIEWED AND UNDERSTAND THE PLANS AND SPECIFICATIONS. ANY QUESTIONS AND DISCREPANCIES MUST BE ADDRESSED PRIOR TO COMMENCING CONSTRUCTION.
2. ALL CONSTRUCTION SPECIFICATIONS WITHIN CITY ROW AND EASEMENTS SHOULD COMPLY WITH CITY OF LIBERTY HILL STANDARDS. PRIOR APPROVAL TO USE ANY NON-STANDARD MATERIAL IS REQUIRED.
3. CONTRACTOR MUST VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
4. CONTRACTOR MUST ENSURE THAT ALL AREAS ARE GRADED TO DRAIN.
5. CONTRACTOR MUST NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS & ONSITE CONDITIONS.

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STORM PLAN

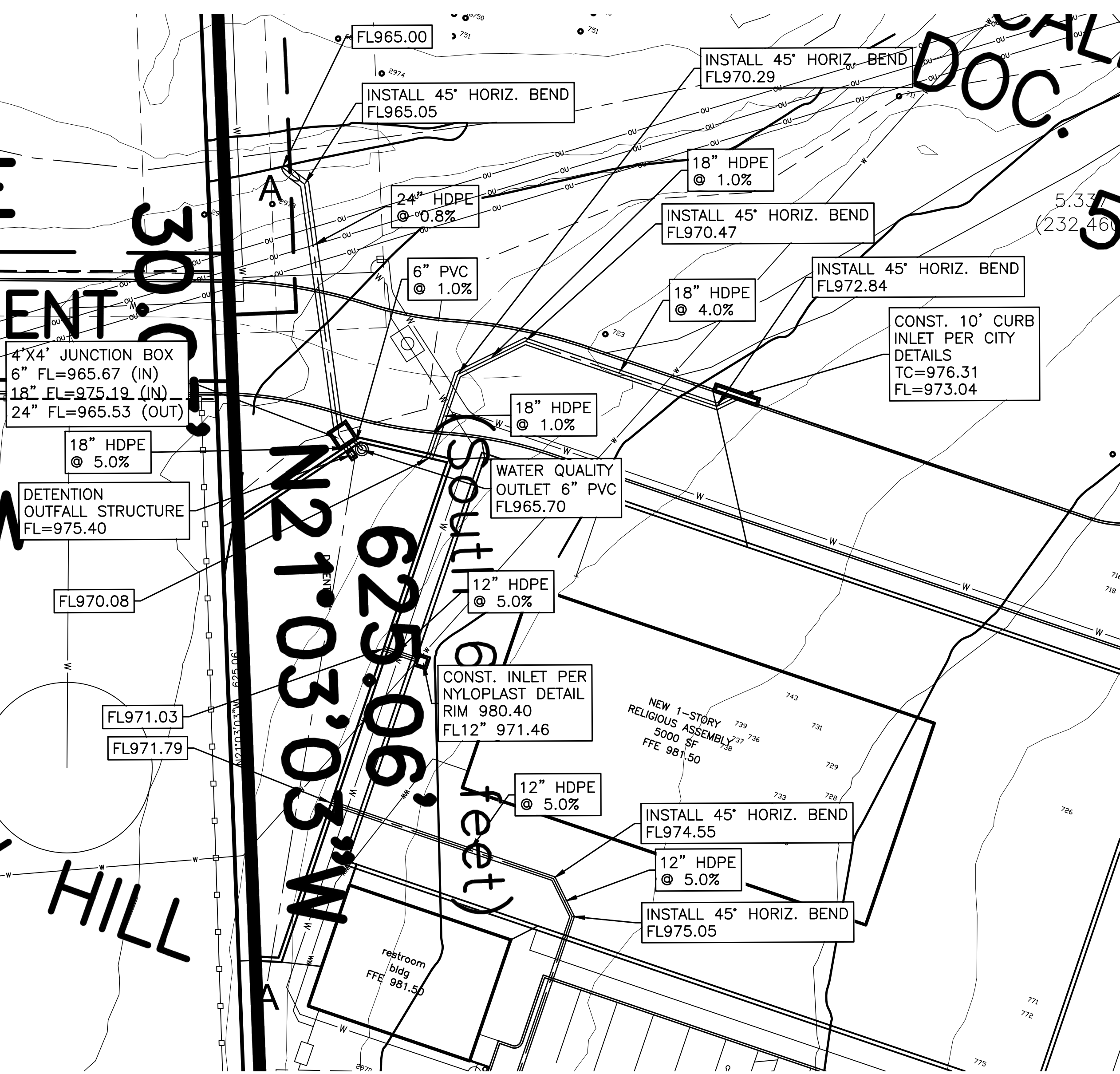
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9.08'
54'18"E

EASEMENT

8.92'
34'18"W

LIBERTY HILL
29635



For 48-Hour Discharge

Q = 0.16 cfs
C = 0.6
H = 9.7

$$A = 1.54 = 1.4" \phi \text{ ORIFICE (MIN)}$$

Detention Pond & Outflow Control Device Summary:								
	(in)	(ft)	Effective L (ft)	Multiplier	FL Elev	Center Elev	Area (sf)	Coefficient
Orifice 1	13.0	1.08		1	975.40	975.94	0.921	0.6
Weirs 1 & 2 (Slot Weir)	13.5	1.13	1.13	2	977.10			3.0
Weir 3 (18" standpipe)	56.5	4.71	2.46	1	978.45			3.0

DETENTION CHAMBER & OUTFLOW CONTROL DEVICE SUMMARY								
775 Stubblefield Lane Liberty Hill Texas								
Event	Elevation	Area (sf)	Volume (cf)	Cum Vol (cf)	Cum Vol (Ac-Ft)	HEC HMS (Atlasl 14)		
						POND OUTFLOW	PR COMBINED	ALLOWABLE
Orifice 1 FI (WQU WSE)	975.40	3,112.8	0.00	0	0.0000			
	975.50	3,112.8	311.28	311	0.0071			
	976.00	3,112.8	1,556.40	1,556	0.0357			
	976.50	3,112.8	1,556.40	1,868	0.0429			
2 YR WSE	976.97	3,112.8	1,463.02	3,331	0.0765	4.51	15.92	15.96
	977.00	3,112.8	93.38	3,424	0.0786			
WEIRS 1 & 2 (SLOT WEIR) FL	977.10	3,112.8	311.28	3,735	0.0858			
	977.50	3,112.8	1,245.12	4,980	0.1143			
10YR WSE	977.62	3,112.8	373.54	5,354	0.1229	8.33	29.08	30.08
25 YR WSE	977.95	3,112.8	1,027.22	6,381	0.1465	11.57	38.98	39.57
	978.00	3,112.8	155.64	6,537	0.1501			
100 YR WSE	978.41	3,112.8	1,276.25	7,813	0.1794	17.12	55.56	55.56
	978.45	3,112.8	124.51	7,938	0.1822			
Weir 3 (18" standpipe) FL	978.50	3,112.8	155.64	8,093	0.1858			
	TOP OF POND	979.00	3,112.8	1,556.40	9,650	0.2215		

985

980

975

970

965

960

985

980

975

970

965

960

SCALE: HORIZ. 1"=30' VERT. 1"=2'

TOP OF WALL=979.00

100YR WSE=978.41

25YR WSE=977.95

10YR WSE=977.62

2YR WSE=976.97

4'x4' JUNCTION BOX

18" FL975.19 (IN)

6" FL965.67 (IN)

24" FL965.53 (OUT)

DETENTION

OUTFALL STRUCTURE DETAILS ON THIS SHEET

18" HDPE

5.0% SLOPE

6" REMOVABLE PVC CAP

WATER QUALITY UNIT
REQUIRED VOL. = 26,888 CF
PROVIDED VOL. = 26,888 CF
WSE=975.40

EXISTING GROUND

6" PERF. STANDPIPE IN TRASH RACK FILLED WITH 2"-4" CLEAN GRAVEL

BATCH DETENTION

PROPOSED BOTTOM OF DETENTION POND

2.00% SLOPE

12" CLAY LINER PER 30 TAC CH.213 3.4.2

24" HDPE

0.80% SLOPE

45° HORIZ. BEND
FL965.00

Diagram illustrating a cross-section of a stormwater management structure, showing various components and elevations:

- RETAINING WALL OR TOP OF POND TW979.00**
- 100 YR. WATER ELEV. 978.41**
- 25 YR. WATER ELEV. 977.95**
- 10 YR. WATER ELEV. 977.62**
- 2 YR. WATER ELEV. 976.97**
- WEIR3 (18" STANDPIPE) FL978.45**
- WEIRS1&2 (13.5" SLOT WEIR) FL977.10**
- 18" HDPE @ 5.0%**
- 18" CMP FLOW**
- 18" HDPE FL975.19**
- 24" HDPE @ 0.8%**
- 24" HDPE FL965.53**
- 4"x4" STORM JUNCTION BOX**
- WATER TIGHT SEAL JOINT**
- END CAP W/ 13.00" DIAM. ORIFICE FL975.40**
- 18"x18" CMP TEE**
- FL965.40**
- WQ VOL. ELEV. 975.40**
- GALVANIZED METAL SUPPORT PLATFORM BY OTHERS**
- PROPOSED RETAINING WALL BY OTHERS**

RETAINING WALL
BY OTHERS

6" PERF. STANDPIPE IN
REMOVEABLE TRASH RACK MADE
OF GALVANIZED WELDED WIRE
FABRIC (1"x1" OPENING) FILLED
WITH 2"-4" CLEAN GRAVEL.
1½"x1½" GALVANIZED ANGLE
IRON TRASH RACK SUPPORTS
SET IN CONCRETE PAD
CORNERS,
TOP 965.67

6" REMOVEABLE
PVC CAP

4'x4' STORM JUNCTION BOX

24" HDPE
FL965.53

24" HDPE
@ 0.8%

3.5'x3.5'x4"
(MIN) CONC
PAD

6" REMOVEABLE PVC CAP
-W/ 1.40" ORIF. DRILLED

STATE OF TEXAS
★ ★ ★ ★ ★
MARCO E CASTANEDA
126967
REGISTERED
PROFESSIONAL ENGINEER
1/15/12

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DETENTION POND

DETENTION POND

JUNE 15, 2023

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

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

Page 3-29 Equation 3.3: $L_M = 27.2(A_{NI} \times P)$

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

Site Data: Determine Required Load Removal Based on the Entire Project
County = Williamson
Total project area included in plan = 5.48 acres
Predevelopment impervious area within the limits of the plan = 0.26 acres
Total post-development impervious area within the limits of the plan = 1.90 acres
Total post-development impervious cover fraction = 0.35
P = 32 inches

$L_{M\text{TOTAL PROJECT}}$ = 1432 lbs.

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

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

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

Drainage Basin/Outfall Area No. = DA-P1
Total drainage basin/outfall area = 5.48 acres
Predevelopment impervious area within drainage basin/outfall area = 0.26 acres
Post-development impervious area within drainage basin/outfall area = 1.90 acres
Post-development impervious fraction within drainage basin/outfall area = 0.35
 $L_{M\text{THIS BASIN}}$ = 1432 lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Extended Detention
Removal efficiency = 91 percent

Batch Detention

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

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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

where: A_C = Total On-Site drainage area in the BMP catchment area
 A_i = Impervious area proposed in the BMP catchment area
 A_p = Pervious area remaining in the BMP catchment area
 L_R = TSS Load removed from this catchment area by the proposed BMP

A_C = 5.48 acres
 A_i = 1.90 acres
 A_p = 3.58 acres
 L_R = 1974 lbs

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

Desired $L_{M\text{THIS BASIN}}$ = 1974 lbs. "= $L_{M\text{SITE}} - L_{M\text{RRP}}$ "

F = 1.00

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = 4.00 inches
Post Development Runoff Coefficient = 0.28
On-site Water Quality Volume = 22407 cubic feet

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

Off-site area draining to BMP = 0.00 acres
Off-site Impervious cover draining to BMP = 0.00 acres
Impervious fraction of off-site area = 0
Off-site Runoff Coefficient = 0.00
Off-site Water Quality Volume = 0 cubic feet

Storage for Sediment = 4481

Total Capture Volume (required water quality volume(s) x 1.20) = 26888 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.

8. Extended Detention Basin System

Designed as Required in RG-348

Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin = 26888 cubic feet

WATER QUALITY STAGE STORAGE				
ELEVATION	AREA	AVERAGE AREA	VOLUME	CUL. VOLUME
(ft)	(sq. ft)	(sq. ft)	(cu. Ft)	(cu. Ft)
965.70	0.00	0.00	0.00	0.00
966.00	321.90	160.95	48.28	48.28
966.50	1245.05	783.47	391.74	440.02
967.00	2058.50	1651.77	825.89	1265.91
967.50	2647.45	2352.98	1176.49	2442.40
968.00	3011.99	2829.72	1414.86	3857.26
968.26	3112.80	3062.40	796.22	4653.48
969.00	3112.80	3112.80	2303.47	6956.95
970.00	3112.80	3112.80	3112.80	10069.75
971.00	3112.80	3112.80	3112.80	13182.55
972.00	3112.80	3112.80	3112.80	16295.35
973.00	3112.80	3112.80	3112.80	19408.15
974.00	3112.80	3112.80	3112.80	22520.95
975.00	3112.80	3112.80	3112.80	25633.75
975.40	3112.80	3112.80	1245.12	26878.87

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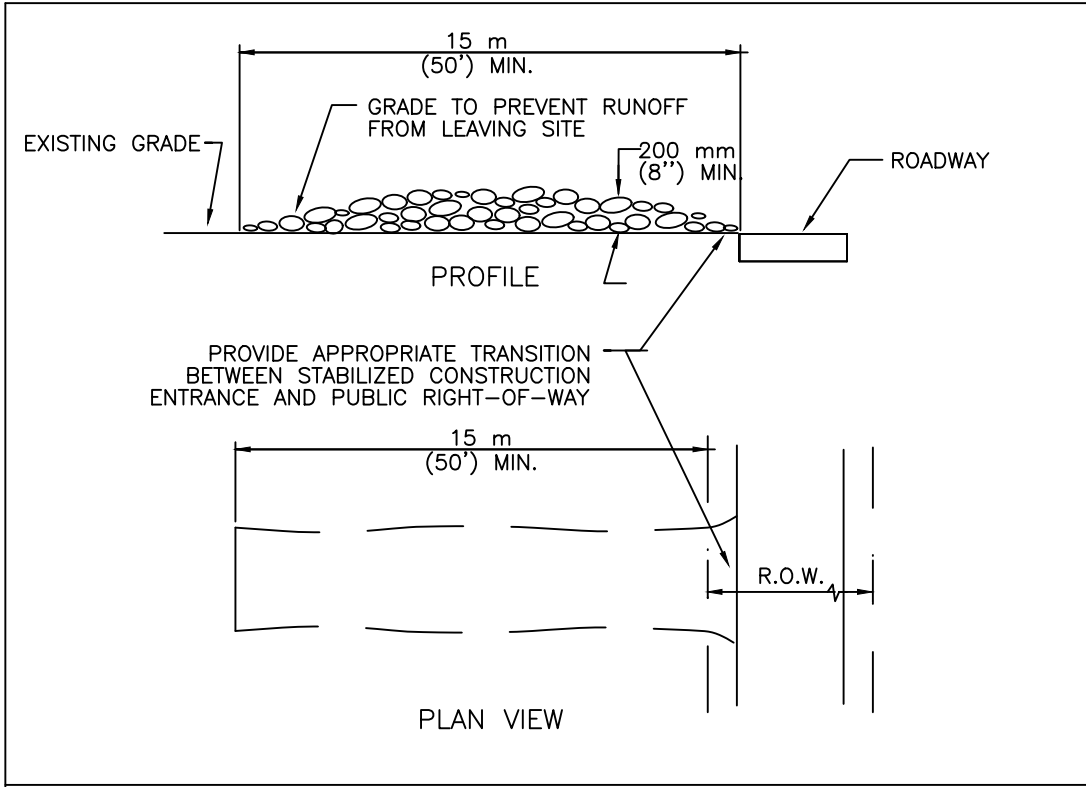
775 Stubblefield Lane
Liberty Hill, Texas 78642

WATER QUALITY CONTROL CALCULATIONS & DETAILS

JUNE 15, 2023

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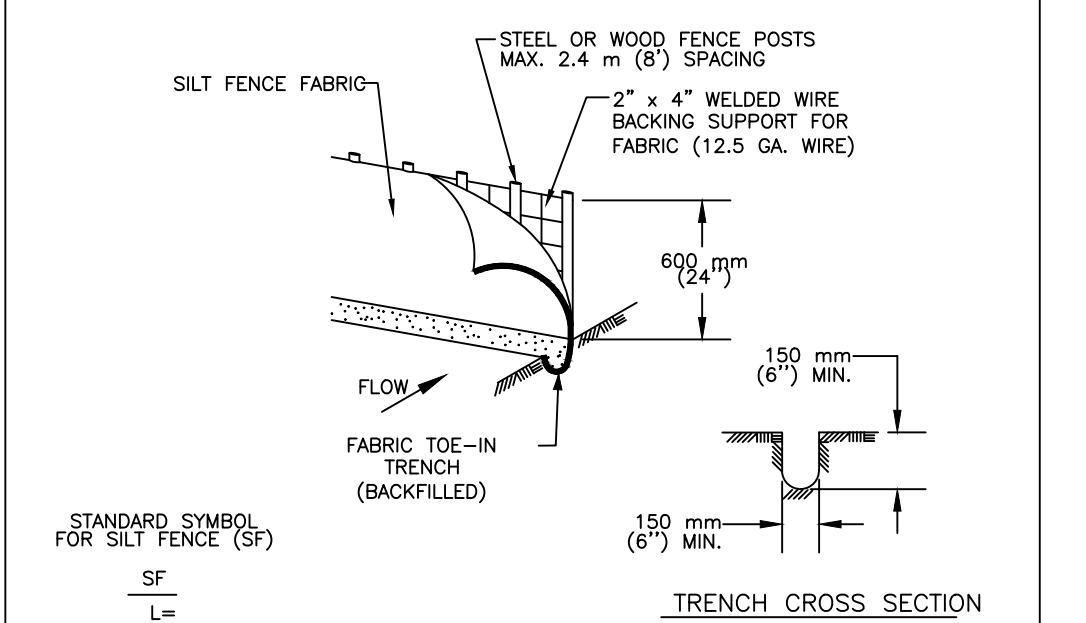
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NOTES:

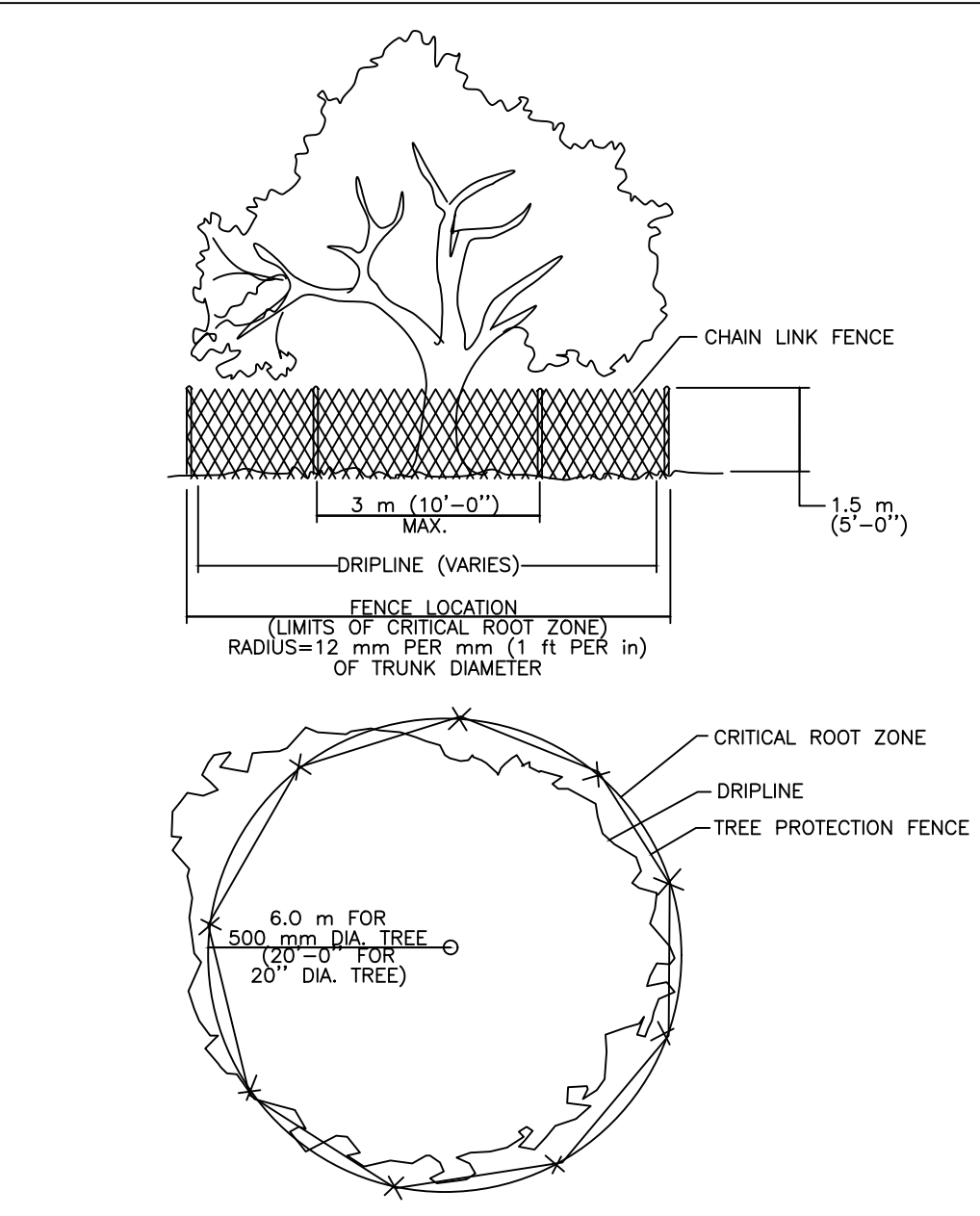
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE, BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN	STABILIZED CONSTRUCTION ENTRANCE
WATERSHED PROTECTION DEPARTMENT	
RECORD COPY SIGNED BY J. PATRICK MURPHY 5/23/00	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
ADOPTED	STANDARD NO. 641S-1

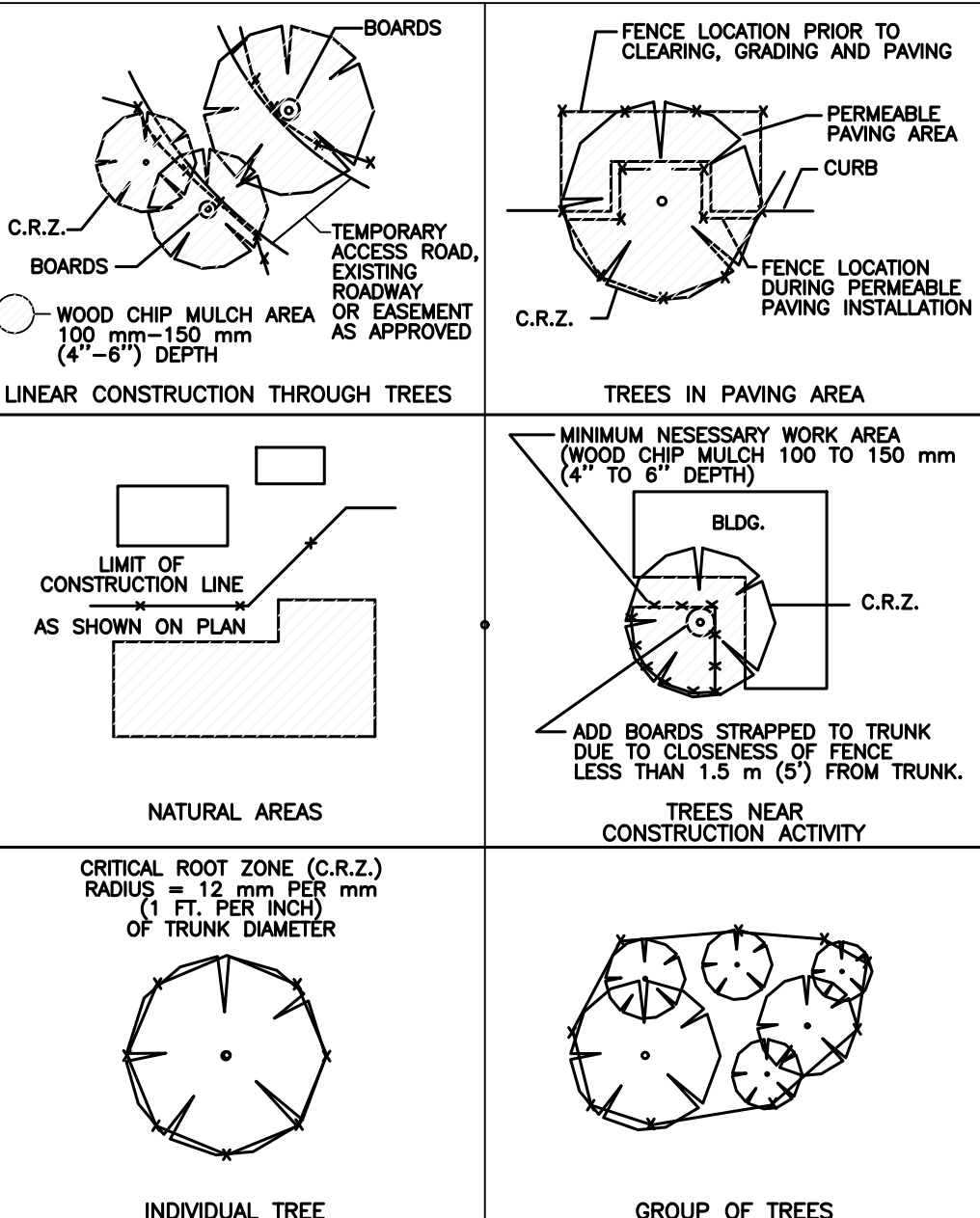


1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 INCHES) DEPTH, USE STEEL POSTS.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 INCHES) DEEP AND 150 mm (6 INCHES) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPIDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 INCHES). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

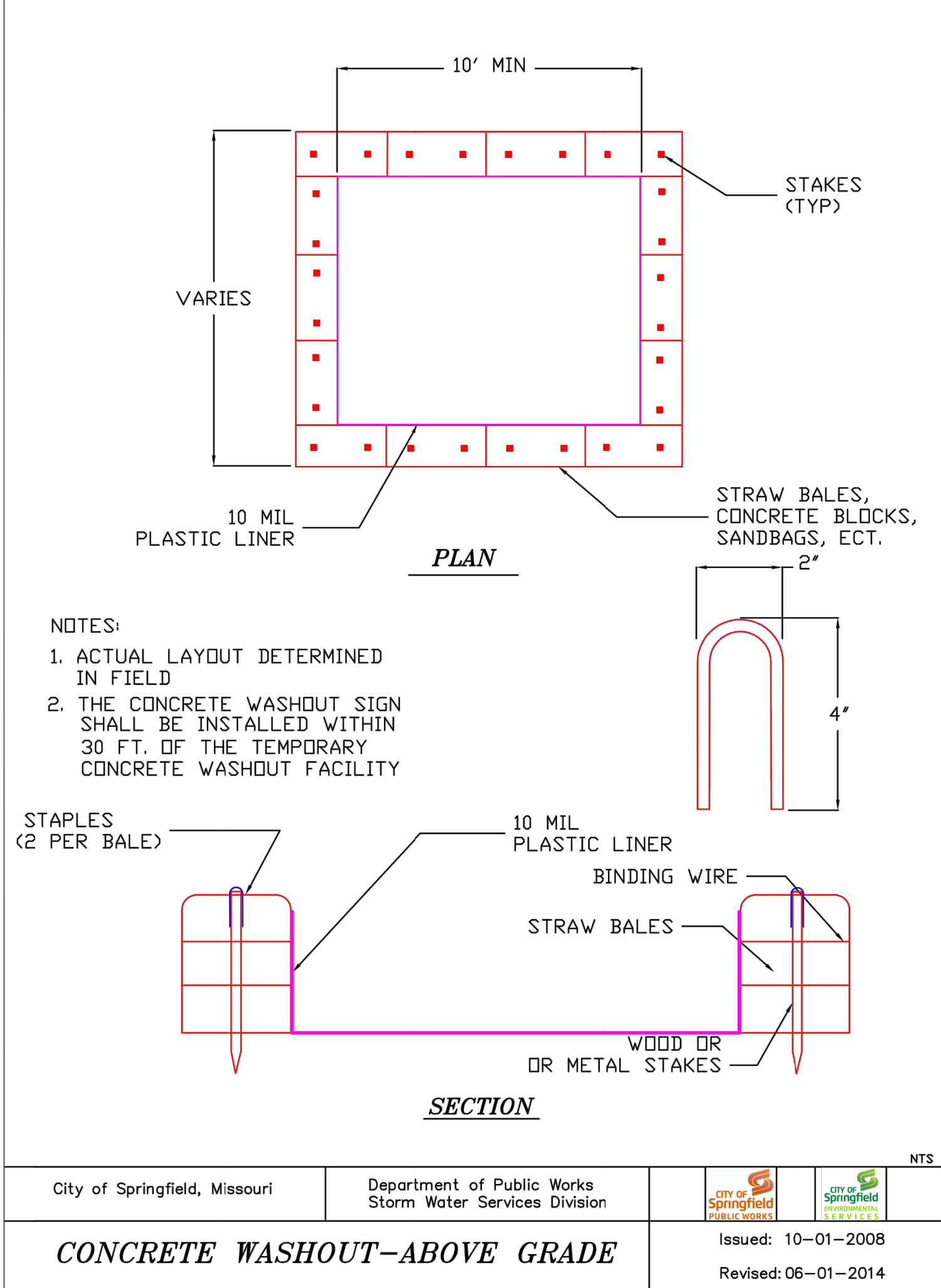
CITY OF AUSTIN	SILT FENCE
WATERSHED PROTECTION DEPARTMENT	
RECORD COPY SIGNED BY MORGAN BYARS 09/01/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
ADOPTED	STANDARD NO. 642S-1





CITY OF AUSTIN	TREE PROTECTION FENCE TYPE A - CHAIN LINK
WATERSHED PROTECTION DEPARTMENT	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
ADOPTED	STANDARD NO. 610S-2

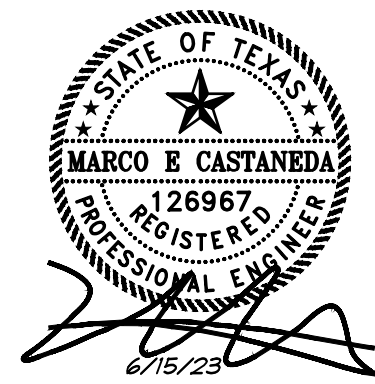


CITY OF AUSTIN	TREE PROTECTION FENCE LOCATIONS
WATERSHED PROTECTION DEPARTMENT	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
ADOPTED	STANDARD NO. 610S-1



City of Springfield, Missouri	Department of Public Works Storm Water Services Division			NTS
CONCRETE WASHOUT-ABOVE GRADE				Issued: 10-01-2008 Revised: 06-01-2014

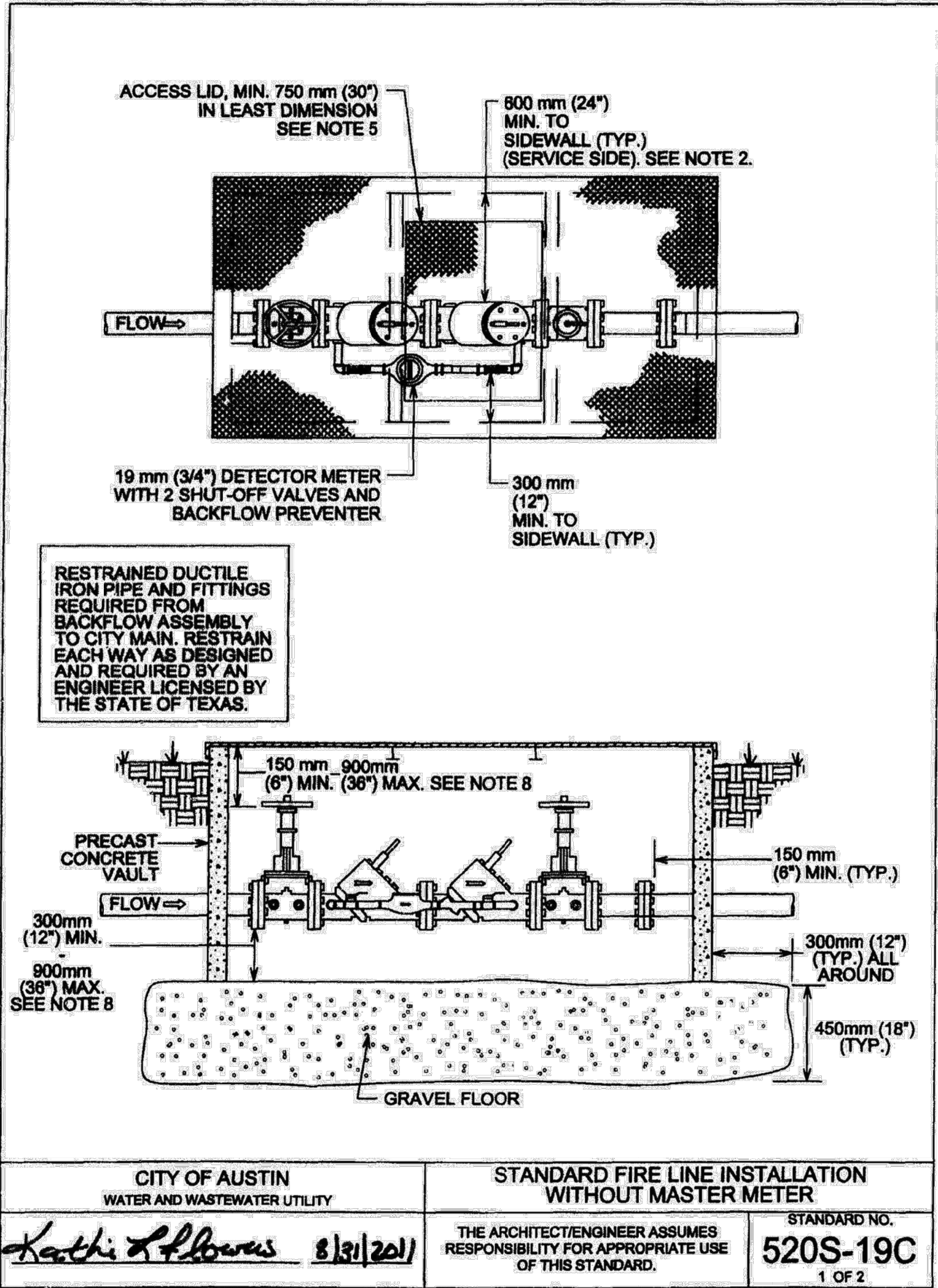
REV. NO.	REVISION DESCRIPTION	APPROVED BY:	DATE



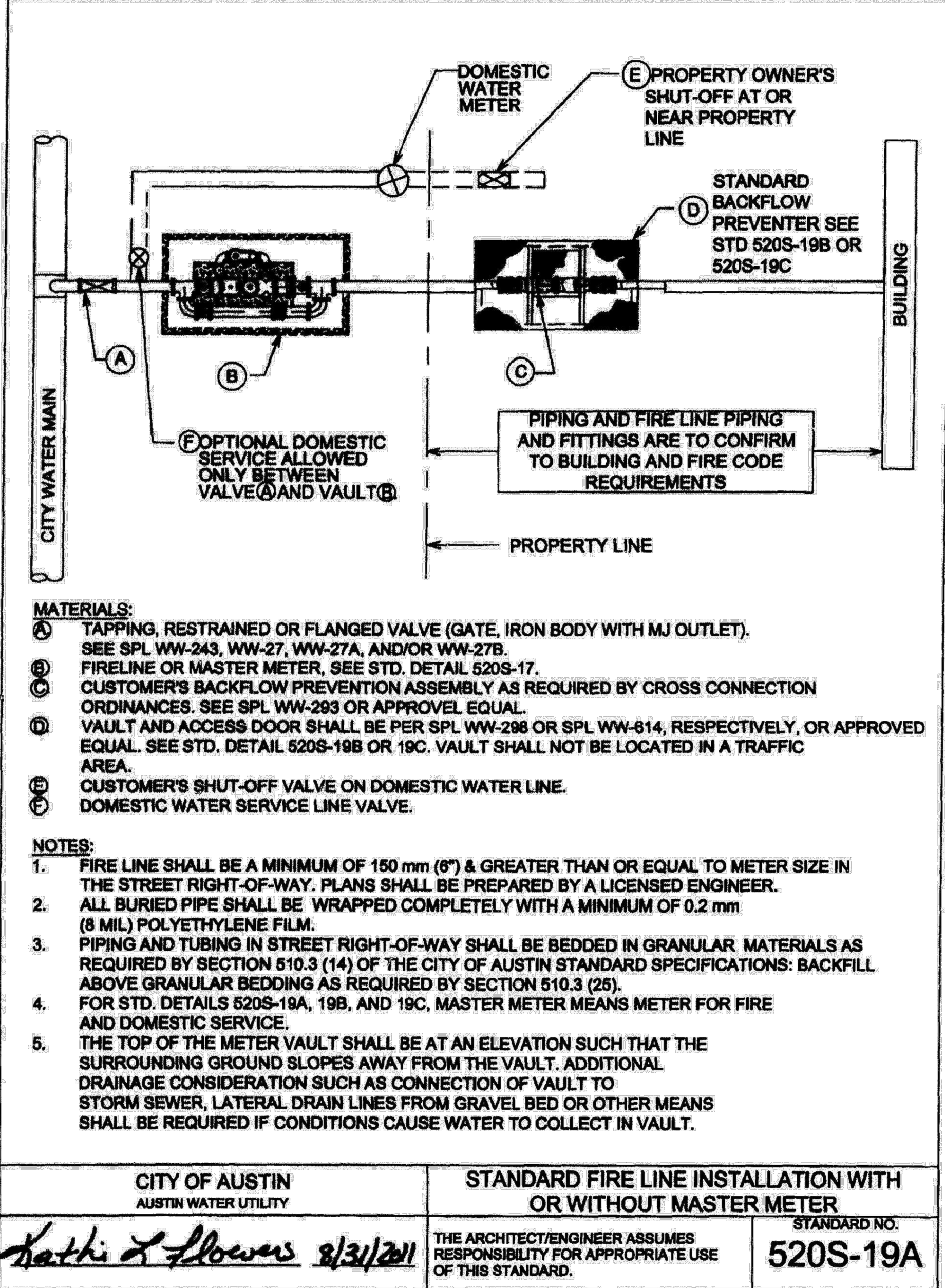
RANGER ENGINEERING, PLLC
CIVIL ENGINEERING
TYPE REG. NO. F-22406
5524 BEE CAVES ROAD, STE J-3
AUSTIN, TEXAS 78746
PHONE: (512) 785-8446
email: marco@ranger-engineering.com

TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642
EROSION CONTROL DETAILS

JUNE 15, 2023
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NOTES: 1. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL HAVE LAB AND FIELD APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH. 2. ALL TEST PORTS SHALL BE DIRECTED UPWARD AND PLUGGED. TEST PORTS ARE LOCATED ON SERVICE SIDE. PLUGS SHALL BE NON-FERROUS. 3. BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED IN THE UPRIGHT HORIZONTAL POSITION, UNLESS OTHERWISE APPROVED. BACKFLOW PREVENTION ASSEMBLIES SHALL NOT BE ROTATED ON THEIR AXIS. 4. CLEARANCE SHALL BE AS INDICATED, AND IN THE STANDARD CROSS CONNECTION ORDINANCES AND UCM. 5. ACCESS OPENING MUST BE LARGE ENOUGH TO REMOVE LARGEST PORTION OF BACKFLOW PREVENTER, BUT NOT LESS THAN 750 mm (30") IN LEAST DIMENSION. 6. TEST AND MAINTENANCE REPORT SHALL BE RECEIVED BY AUSTIN WATER UTILITY'S SPECIAL SERVICE DIVISION WITHIN 5 DAYS AFTER BEING INSTALLED. 7. VAULT SHALL NOT BE INSTALLED IN TRAFFIC AREA. 8. VAULT DEPTH MAY NOT EXCEED 1.8m (72"), BOTTOM OF LID TO TOP OF FLOOR. 9. HAND WHEELS SHALL BE HORIZONTALLY LOCATED WITHIN 300mm (12") OF ACCESS OPENING. 10. FOR ACCESS DOORS SEE SPL WW-614 OR APPROVED EQUAL (H2O LOADING REQUIRED). 11. FOR VAULT SEE SPL WW-298 OR APPROVED EQUAL (H2O LOADING REQUIRED). 12. VAULT PIPE WALL VOIDS SHALL BE SEALED WITH NON-SHRINK GROUT OR SEALANT PER SPL WW-146A OR APPROVED EQUAL. 13. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT. ADDITIONAL DRAINAGE CONSIDERATION SUCH AS CONNECTION OF VAULT TO STORM SEWER, LATERAL DRAIN LINES FROM GRAVEL BED OR OTHER MEANS SHALL BE REQUIRED IF CONDITIONS CAUSE WATER TO COLLECT IN VAULT.		
CITY OF AUSTIN WATER AND WASTEWATER UTILITY	STANDARD FIRE LINE INSTALLATION WITHOUT MASTER METER	STANDARD NO. 520S-19C 1 OF 2
Kathi L. Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	520S-19C 2 OF 2



REV. NO.

REVISION DESCRIPTION

APPROVED BY:

DATE

STATE OF TEXAS
MARCO E. CASTANEDA
128967
REGISTERED PROFESSIONAL ENGINEER
6/15/23

RANGER ENGINEERING, PLLC
CIVIL ENGINEERING
TYPE REG. NO. F-22406
5524 BEE CAVES ROAD, STE J-3
AUSTIN, TEXAS 78746
PHONE: (512) 785-8446
email: marco@rangereng.com

TEXAS MURUGAN TEMPLE
775 Stubblefield Lane
Liberty Hill, Texas 78642

CONSTRUCTION DETAILS

JUNE 15, 2023

MEC

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OF 18

November 6, 2023

RE: 775 Stubblefield Lane, Liberty Hill, TX 78642

AW0233 AW0233 - Field, H. Sur., ACRES 5.3351

The above referenced property is located within the Edwards Aquifer Contributing Zone.

Based on the surrounding subdivisions and the soil survey for Williamson County and planning material received, this office is able to determine that the soil and site conditions of this lot is suitable to allow the use of on-site sewage facilities (OSSF). It should be noted that this office has not actually studied the physical properties of this site. Site specific conditions such as OSSF setbacks, recharge features, drainage, soil conditions, etc..., will need taken into account in planning any OSSF.

These OSSF's will have to be designed by a professional engineer or a registered sanitarian. An Edwards Aquifer protection plan shall be approved by the appropriate TCEQ regional office before an authorization to construct an OSSF may be issued. The owner will be required to inform each prospective buyer, lessee or renter of the following in writing:

- That an authorization to construct shall be required before an OSSF can be constructed in the subdivision;
- That a notice of approval shall be required for the operation of an OSSF;
- Whether an application for a water pollution abatement plan as defined in Chapter 213 has been made, whether it has been approved and if any restrictions or conditions have been placed on the approval.

If this office can be of further assistance, please do not hesitate to call.

Sincerely,



Christopher Moreno, OS 35962
Williamson County - OSSF