

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: IDM Builders					2. Regulated Entity No.:				
3. Customer Name: David Morgan					4. Customer No.:				
5. Project Type: (Please circle/check one)	New		Modification		Extension		Exception		
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		Non-residential			8. Site (acres):		5.09	
9. Application Fee:	\$5,000		10. Permanent BMP(s):			Batch Detention			
11. SCS (Linear Ft.):	NA		12. AST/UST (No. Tanks):			None			
13. County:	Williamson		14. Watershed:			South Fork San Gabriel River			

Application Distribution

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

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

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

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	<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.

Jack Garner, PE

Print Name of Customer/Authorized Agent

11-30-23

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: Jack Garner, PE

Date: 11/30/23

Signature of Customer/Agent:

A handwritten signature in blue ink, appearing to read 'Jack Garner', is written over a horizontal line.

Regulated Entity Name: IDM Builders

Project Information

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

Contact Person: David Morgan

Entity: IDM Builders

Mailing Address: 350 County Road 258

City, State: Liberty Hill, Texas

Telephone: 512.778.5573

Email Address: idmbuilders@gmail.com

Zip: 78642

Fax: 512.778.6866

5. Agent/Representative (If any):

Contact Person: Jack Garner, PE

Entity: Langan Engineering

Mailing Address: 9606 N. Mopac Expressway, Suite 110

City, State: Austin, Texas

Zip: 78759

Telephone: 737.289.7800

Fax: 737.289.7801

Email Address: jgarner@langan.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.

The site is located on the south side of County Road 258 between US 183 and County Road 260 and is about 0.34 miles east of the intersection of CR 258 and US 183.

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): 5.09 Acres

Total disturbed area: 5.33 Acres

14. Estimated projected population: _____

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	10,804	÷ 43,560 =	0.25
Parking	12,964	÷ 43,560 =	0.30
Other paved surfaces	56,329	÷ 43,560 =	1.29
Total Impervious Cover	80,080	÷ 43,560 =	1.84

Total Impervious Cover 80,080 ÷ **Total Acreage** 221,836 X 100 = 36.1% **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" = 30'.
35. 100-year floodplain boundaries:
- ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
- ☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA FIRM 48491C0275E, last revised 9/26/2008.
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.

Contributing Zone Plan Application TCEQ Form 10257

Attachment J: BMPs for Upgradient Stormwater

Upgradient stormwater will be captured along the east property line and diverted to an unnamed tributary of the South Fork of the San Gabriel River on the west side of the site. Therefore, no upgradient stormwater will cross the surface of the proposed site.

Contributing Zone Plan Application TCEQ Form 10257

Attachment K: BMPs for onsite stormwater

Construction Phase

Please refer to Plan Sheets for more information and details about the information presented below.

Stabilization practices for this site include:

1. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed
2. Frequent watering of excavation and fill areas to minimize wind erosion during construction.
3. Permanent seeding and planting of all unpaved areas.
4. Use of stabilization fabric for all slopes having a slope of 1V:3H or greater
5. For all disturbed areas where construction activities have temporarily or permanently ceased for more than 14 days, stabilization activities shall commence no later than the 14th day after cessation of construction activities.

Structural practices for this site include:

1. Perimeter protection using silt fencing and/or erosion control logs
2. Stabilized construction access point
3. Contractor shall provide sufficient velocity dissipation devices in the form of rock rip rap for velocity dissipation at areas with existing or potential channelized flow.

Permanent phase: water quality/detention pond

An on-site water quality/detention pond utilizing batch detention, which has been designed in accordance with the TCEQ Edwards Aquifer Compliance Technical Guidance Manual on Best Management Practices, will be constructed by the Owner for use as a permanent water quality and water quantity control system. All storm water runoff from the site will be route to swales and then flow to the on-site water quality/detention pond.

Contributing Zone Plan Application TCEQ Form 10257

Attachment L: BMPs for surface streams

The stormwater runoff from this site will flow into an on-site water quality/ detention pond with utilizing batch detention, built and maintained by the Owner, before passing into a seasonal tributary of the South Fork of the San Gabriel River. The pond will provide effective protection to the water quality of this surface stream.

Contributing Zone Plan Application TCEQ Form 10257

Attachment M: Construction Plans

Please refer to construction plans prepared for this construction site which are a separate part of the permit application package.

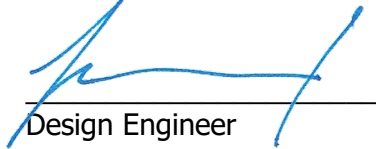
Contributing Plan Application TCEQ Form 10257

Attachment N: Inspection, maintenance, repair, and retrofit plan for batch detention

The Owner shall implement the following inspection, maintenance, repair, and record keeping procedures for the batch detention pond designed to serve the site.

1. **Inspection:** Owner's representative shall visually inspect the batch detention pond at least every 3 months, and after each large storm for the first year of operation. For the second and following years, inspections may be limited to every 6 months and at least one time per year after a large storm. Because construction activities can contribute heavy sediment and debris loads, construction activities should be completed, and all areas should be stabilized, prior to exposing the batch detention pond to stormwater runoff. During each inspection, erosion areas inside and downstream of the pond shall be identified and repaired or revegetated immediately. Any damage to structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) shall be identified and repaired immediately. Cracks, voids, and undermining effects shall be patched/ filled to prevent additional structural damage. Trees and root systems shall be removed to prevent growth in cracks and joints that can lead to structural damage.
2. **Sediment Removal:** Sediment shall be removed from the inlet structure and sedimentation chamber when sediment buildup reaches a depth of 6" or when the proper functioning of inlet and outlet structure is impaired. Sediment shall be cleared from the inlet structure at least once per year and from the sedimentation basin at least once every 5 years.
3. **Debris and Litter Removal:** Debris and litter that has accumulated near the sedimentation basin outlet device should be removed during regular mowing operations and during all inspections. Particular attention shall be directed towards floating debris that could eventually clog the control device or riser.
4. **Riser and Drain:** Clean riser and drain piping network to remove any sediment buildup, on an as needed basis, to maintain design drawdown time.
5. **Mowing:** Grassy areas in and around the pond shall be mowed at least two times per year, with more frequent mowing as necessary to maintain aesthetic appeal. Vegetation height should be limited to 18". Vegetation on the pond embankments shall be mowed as often as is necessary to prevent the establishment of woody vegetation.
6. **Record Keeping:** The Owner's representative shall prepare a signed, written record of each inspection performed and actions performed as a result of the inspection observations, shall maintain those records in the Owner's office for a period of 5 years, and shall, upon request, make those records available to TCEQ personnel and other agencies with jurisdiction over the site.

Certifications:



Design Engineer

Jack Garner, PE

Printed Name

11-30-2023

Date



PE Seal

IDM Builders

Owner

David Morgan

Printed Name

11-30-2023

Date

Contributing Zone Plan Application TCEQ Form 10257

Attachment P: Measures for minimizing surface stream contamination

An Owner's representative shall visually inspect all roof drains and drive/ parking area inlets in the collection system at a minimum interval of every 3 months, and at least once during or immediately following wet weather. Specific items to be observed are: the amount of sediment and/or trash buildup at trash rack/riser (removal required if > 10% of the trash rack is blocked), the presence of standing water or soggy conditions, indicative of poor drainage, and damage to structural components (pipes, curb inlets, grate inlets, etc...)

The stormwater runoff from this site will flow into an on-site water quality/ detention pond utilizing batch detention, built and maintained by the Owner, before passing into a seasonal tributary of the South Fork of the San Gabriel River. An Owner's representative shall visually inspect all downstream flow path at a minimum interval of every 3 months. These combined onsite and offsite practices will provide effective measures to minimize surface stream contamination.

Contributing Zone Application - TCEQ Form 10257

Attachment A: Road Map

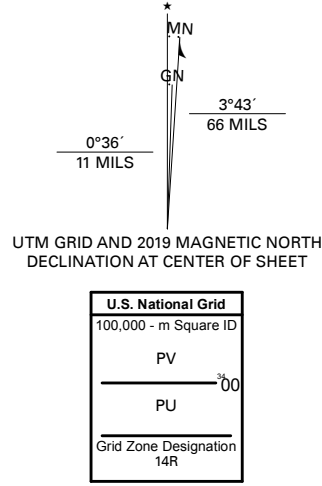




Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 14R.
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, August 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2002 - 2011
Contours.....National Elevation Dataset, 2002 - 2004
Boundaries.....Multiple sources; see metadata file 2016 - 2017
Wetlands.....FWS National Wetlands Inventory 1982



CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18



1	2	3
4	5	6
7	8	9

- 1 Mahomet
- 2 Florence
- 3 Cobbs Cavern
- 4 Liberty Hill
- 5 Georgetown
- 6 Nameless
- 7 Leander
- 8 Round Rock

ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

Contributing Zone Plan Application - TCEQ Form 10257

Attachment C: Project Narrative

The IDM Builders (aka IDM Suppliers) site is located in the Liberty Hill Extraterritorial Jurisdiction (ETJ) of the city of Liberty Hill, Texas. The site is also in the Edwards Aquifer Contributing Zone. Previously the tract, owned by IDM Builders, was about 64.7 acres and primarily undeveloped with open pastures and trees. IDM Builders operated on a small portion of the land located adjacent to County Road 258. Within this area there are several small buildings for the business, a green house, and gravel parking lot with roads to access the rest of the property.

In 2021 about 59.6 acres of the tract were sold to the Liberty Hill Independent School District for the development of Middle School #3. IDM Builders retained a 5.09 acre portion of land which has the buildings and gravel parking lot. The total existing impervious cover from the buildings and gravel is about 1.84 acres or 36.1% of the 5.09 acre lot. By selling the 59.6 acres to the school district, the remaining 5.09 acre lot is now out of TCEQ compliance and therefore permanent BMPs are required.

To bring the site into compliance a new batch detention pond will be constructed. No other improvements or demolition of buildings are planned for the site but the pond will be oversized for potential future site improvements. The pond will be sized for 2.45 acres of impervious cover or 48.1% of the 5.09 acres. Detention for the site will be stacked on top of the water quality pond.

On-site runoff will be routed to the pond via an existing swale adjacent to the west property line of the site. The swale will be improved to have capacity for the future improvements. Runoff from the east will be diverted around the site by use of a berm to an new channel that was constructed for the MS #3 site to allow upstream runoff to bypass the MS #3 site. The WQ/detention pond will discharge into this same channel.

To accommodate additional future improvements the east side of the pond will be a grassed line slope while the other three sides will be concrete walls. This will allow the pond to continue growing to the east if need be however as noted above the pond is sized for 2.45 acres of impervious cover but will only be receiving 1.84 acres of impervious cover when constructed.

Contributing Zone Plan Application - TCEQ Form 10257

Attachment D: Factors Affecting Surface Water Quality

The potential factors affecting **construction period surface water quality** from this site are: sediment runoff from disturbed areas, petroleum products runoff from drips from construction equipment, pesticides and fertilizers from landscaping activities, and high pH washwater from concrete and masonry cleanup/ washout facilities. Sediment runoff will be significantly reduced during construction by the use of an onsite temporary sedimentation ponds. The high pH washwater potential will be controlled by requiring the use of appropriately sized, plastic-lined containment areas for concrete and masonry cement washout and cleanup activities. The petroleum and pesticide/ fertilizer sources will be minimized by the use of good housekeeping procedures and inspections by trained personnel to ensure that all construction activities follow the procedures given on SWPPP Plan included as part of the construction drawings prepared for the site.

The potential factors affecting **post-construction surface water quality** from this site are: pesticide and fertilizer runoff from vegetated areas, petroleum products runoff from parking areas and drives. Sediment runoff from the site will be significantly reduced by the action of the water quality/ detention pond with batch detention as the permanent BMP. Pesticide/ fertilizer runoff will be minimized by education of the school employees or outside landscaping firm relative to acceptable landscaping practices after construction activities are completed.

Contributing Zone Plan Application TCEQ Form 10257

Attachment E: Volume and Character of Stormwater

Please refer to Drainage Area Maps in the construction plans for more details on the information presented below.

Pre-construction conditions: The total studied drainage area is 5.09 acres, the upstream run-on is approximately 6.0 acres and onsite hydrology is as shown on existing drainage area map (calculations are based on the Rational Method $Q = C \cdot I \cdot A$, as presented in the 2020 Round Rock Drainage Criteria Manual).

Post-construction conditions: The peak discharge rates for post-construction are equal to or less than pre-developed discharge rates. Pre and post construction discharge rates are shown in the design point summary below:

PEAK DISCHARGE AT DESIGN POINT										
Design Point	Existing Conditions					Proposed Conditions				
	2-Year	10-Year	25-Year	100-Year	Comments	2-Year	10-Year	25-Year	100-Year	Comments
	(cfs)	(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)	
1	7.63	13.32	17.58	26.83		6.97	12.68	16.90	26.14	POND RESULTS + OS-1

Temporary Stormwater Management Practices TCEQ Form 0602

Attachment A Spill Response Actions

SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN

1 MATERIALS COVERED

The following materials or substances with known hazardous properties are expected to be present onsite during construction:

Concrete	Cleaning solvents
Detergents	Petroleum based products
Paints	Pesticides
Paint solvents	Acids
Fertilizers	Concrete additives
Soil stabilization additives	

2 MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

2.1 Good Housekeeping

The following good housekeeping practices will be followed onsite during the construction project.

- A. An effort will be made to store only enough product required to do the job.
- B. All materials stored onsite will be stored in a neat, orderly manner and, if possible, under a roof or other enclosure.
- C. Products will be kept in their original containers with the original manufacturer's label in legible condition.
- D. Substances will not be mixed with one another unless recommended by the manufacturer.
- E. Whenever possible, all of a product will be used up before disposing of the container.
- F. Manufacturer's recommendations for proper use and disposal will be followed.
- G. The job site superintendent will be responsible for daily inspections to ensure proper use and disposal of materials.

2.2 Hazardous Products

These practices will be used to reduce the risks associated with hazardous materials.

- A. Products will be kept in original containers with the original labels in legible condition.
- B. Original labels and material safety data sheets (MSDS's) will be procured and used for each material.
- C. If surplus product must be disposed of, manufacturers or local/state/federal recommended methods for proper disposal will be followed.
- D. A spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site.
- E. All of the product in a container will be used before the container is disposed of. All such containers will be triple rinsed with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with stormwater discharges.

2.3 Product Specific Practices

The following product specific practices will be followed on the job site.

A. Petroleum Products

All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any petroleum storage tanks used onsite will have a dike or berm containment structure constructed around it to contain any spills which may occur. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

B. Fertilizers

Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked in the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

C. Paints, Paint Solvents, and Cleaning Solvents

All containers will be tightly sealed and stored when not in use. Excess paint and solvents will not be discharged to the storm sewer system but will be properly disposed of according to manufacturer's instructions or state and federal regulations.

D. Concrete Trucks

The CGP authorizes the land disposal of wash out water from concrete trucks at construction sites that are regulated under the CGP, as long as the discharge is in compliance with the restrictions given in Section 3.02.4.B of this SWPPP. This authorization is limited to the land disposal of wash out water from concrete trucks only. Any other direct discharge of concrete production waste water is not authorized by the CGP and must be authorized under a separate TCEQ General Permit or individual permit.

2.4 Spill Prevention Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup.

- A. Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.
- B. Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite in spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.).
- C. All spills will be cleaned up immediately after discovery.
- D. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with the hazardous substances.
- E. Spills of toxic or hazardous materials will be reported to the appropriate federal, state, and/or local government agency, regardless of the size of the spill. Spills of amounts that exceed Reportable Quantities of certain substances specifically mentioned in federal regulations (40 CFR 302 list and oil) will be immediately reported to the TCEQ National Response Center, telephone **1-800-832-8224**. Reportable Quantities of some substances which may be used at the job site are as follows:
 - oil - appearance of a film or sheen on water
 - pesticides - usually 1 lb.
 - acids - 5000 lb.
 - solvents, flammable - 100 lb.
- F. The SPCC plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the

cleanup measures will also be included. If the spill exceeds a Reportable Quantity, all federal regulations regarding reports of the incident will be complied with.

- G. The job site superintendent will be the spill prevention and cleanup coordinator. He will designate the individuals who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of these personnel will be posted in the material storage area and in the office trailer onsite.

Spills: Reportable Quantities

The RQ depends on the substance released and where released. Use this table to determine whether you must report and under what rule.

In Texas, upon determining that a reportable discharge or spill has occurred, the responsible person must notify the state. The threshold quantity that triggers the requirement to report a spill is called the **reportable quantity (RQ)**. The reportable quantity depends on the type of substance released and where released (e.g. into water vs. on land); different kinds of spills are subject to different provisions of state and federal rules.

Kind of spill	Where discharged	Reportable quantity	Rule, statute, or responsible agency
Hazardous substance	onto land	"Final RQ" in Table 302.4 in 40 CFR 302.4 (PDF)	30 TAC 327 ↗
	into water	"Final RQ" or 100 lbs, whichever is less	
Any oil	coastal waters	as required by the Texas General Land Office	Texas General Land Office ↗
Crude oil, oil that is neither a petroleum product nor used oil	onto land	210 gallons (five barrels)	30 TAC 327 ↗
	directly into water	enough to create a sheen	
Petroleum product, used oil	onto land, from an exempt PST facility	210 gallons (five barrels)	30 TAC 327 ↗
	onto land, or onto land from a non-	25 gallons	

exempt PST facility

	directly into water	enough to create a sheen	
Associated with the exploration, development and production of oil, gas, or geothermal resources	under the jurisdiction of the Railroad Commission of Texas	as required by the Railroad Commission of Texas	Railroad Commission of Texas ↗
Industrial solid waste or other substances	into water	100 lbs	30 TAC 327 ↗
From petroleum storage tanks, underground or aboveground	into water	enough to create a sheen on water	30 TAC 334 ↗ .75-81
From petroleum storage tanks, underground or aboveground	onto land	25 gallons or equal to the RQ under 40 CFR 302 ↗	30 TAC 327 ↗
Other substances that may be useful or valuable and are not ordinarily considered to be waste, but will cause pollution if discharged into water in the state	into water	100 lbs	30 TAC 327 ↗

(PDF Help)**Emergency Response Home****Spills, Discharges, and Releases****Hurricanes****Drought****Tornados****Wildfires****Floods**

Winter Storms



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Temporary Stormwater Management Practices TCEQ Form 0602

Attachment B Potential Sources of Contamination

The following are the potential pollutants and their sources which may occur at this construction site: offsite vehicle tracking of mud from vehicle traffic through inadequate construction exit, petroleum based products from vehicle/ equipment leaks and drips (maintenance and petroleum storage areas will not be allowed on the construction site), pesticides and fertilizers from landscaping activities, and high pH washwater from concrete cleanup/washout facilities.

Temporary Stormwater Management Practices TCEQ Form 0602

Attachment C Sequence of Major Activities

The Contractor will be responsible for implementing the following erosion and sediment control and stormwater management control structures. The Contractor may designate these tasks to certain subcontractors as he sees fit, but the ultimate responsibility for implementing these controls and ensuring their proper functioning remains with the general contractor. The order of activities will be as follows (refer to Plan Sheet Erosion Control Plan in the Construction Plans for the project for details):

- A. Install erosion control barriers around perimeter of property and disturbed areas as shown on the SWPPP plan sheet. (Approx 5.09 acres)
- B. Construct temporary construction access road. (Approx 0.1 acres)
- C. Commence grubbing and removal of vegetation in area to receive cut or fill. (Approx 1.6 acres)
- D. Excavate and grade swales and batch detention pond area. (Approx 1.6 acres)
- E. Install pond maintenance access road. (Approx 0.1 acres)
- F. Construct concrete walls of batch detention pond. (Approx 0.3 acres)
- G. Install all proposed storm sewer pipes and install inlet protection erosion control log at ends of exposed pipes. (Approx 0.3 acres)
- H. Construct all drainage structures. Inlet protection erosion control logs may be removed temporarily for this construction. (Approx 0.3 acres)
- I. Repair pond maintenance access road as necessary. (Approx 0.1 acres)
- J. Complete planting and/or seeding of vegetated areas to accomplish stabilization, in accordance with the landscaping plan. (Approx 1.6 acres)
- K. Remove temporary construction exit, erosion control logs, inlet protection, and all other temporary sediment controls. (Approx 5.09 acres)

Temporary Stormwater Management Practices TCEQ Form 0602

Attachment D Temporary Best Management Practices

The following temporary best management practices will be used on the construction site

Stabilization Practices

1. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed
2. Frequent watering of excavation and fill areas to minimize wind erosion during construction.
3. Use of stabilization fabric for all slopes having a slope of 1V:3H or greater.
4. Permanent seeding and planting of all unpaved areas.
5. For all disturbed areas where construction activities have temporarily or permanently ceased for more than 14 days, stabilization activities shall commence no later than the 14th day after cessation of construction activities or after final grades have been achieved.

Temporary Stormwater Management Practices TCEQ Form 0602

Attachment F Structural Practices

The following structural best management practices will be used on the construction site

1. Perimeter protection using erosion control barriers.
2. Stabilized construction exit point
3. Temporary concrete washout area
4. Use of rock rip rap for velocity dissipation at areas with existing or potential channelized flow.

Temporary Stormwater Management Practices TCEQ Form 0602

Attachment G Drainage Area Map

Please refer to Plan Sheets Existing Drainage Area Map and Proposed Drainage Area Map of the Construction Plans for this project.

Temporary Stormwater Management Practices TCEQ Form 0602

Attachment I Inspection/ Maintenance for BMPs

I. Erosion and Sediment Control Maintenance and Inspection Practices

A. The following is a list of erosion and sediment controls to be used on this site during construction practice.

1. Stabilization practices for this site include:

- A. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed
- B. Frequent watering of excavation and fill areas to minimize wind erosion during construction.
- C. Use of stabilization fabric for all slopes having a slope of 1V:3H or greater.
- D. Permanent seeding and planting of all unpaved areas.
- E. For all disturbed areas where construction activities have temporarily or permanently ceased for more than 14 days, soil stabilization activities shall commence as soon as practicable but no later than the 14th day after cessation of construction activities.

2. Structural practices for this site include:

- A. Perimeter protection using silt fencing and/or straw roll wattles
- B. Stabilized construction access point
- C. Temporary concrete washout area

Velocity Dissipation: Contractor shall provide sufficient velocity dissipation devices to prevent soil erosion at discharge points where concentrated flow occurs or is expected to occur.

B. The following inspection and maintenance practices will be used to maintain erosion and sediment controls.

- 1. All control measures will be inspected weekly and after each rainfall event.
- 2. All measures will be maintained in good working order; if repairs are found to be necessary, they will be initiated within 24 hours of report

and completed prior to the next anticipated rainfall event. If completion of required repairs cannot be accomplished prior to the next anticipated rainfall event, the reason shall be documented in the SWPPP for the site and completion shall be accomplished as soon as practicable.

3. Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.
4. Silt fences will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are securely in the ground.
5. The sediment basin, if present, will be inspected for depth of sediment, and built up sediment will be removed when it reaches 50 percent of the design capacity. **Contractor shall install a depth gauge in the sediment basin to use in evaluating the depth of accumulated sediment to determine when sediment removal is required.**
6. Temporary and permanent seeding will be inspected for bare spots, washouts, and healthy growth.
7. A maintenance inspection report will be made after each inspection. Copies of the report forms to be completed by the inspector are included in the SWPPP for the site.
8. The job site superintendent will be responsible for selecting and training the individuals who will be responsible for these inspections, maintenance and repair activities, and filling out inspection and maintenance reports.
9. Personnel selected for the inspection and maintenance responsibilities will receive training from the job site superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls that are used onsite in good working order. They will also be trained in the completion of, initiation of actions required by, and the filing of the inspection forms. Documentation of the qualifications of inspection personnel must be kept in the SWPPP for the site.

II. Inspection and Maintenance Report Forms

Once installation of any required or optional erosion control device or measure has been implemented, weekly inspections of each measure shall be performed by the Contractor's inspection personnel. The Inspection and Maintenance Reports found in the SWPPP for the site (or other forms which the Contractor desires to use that have been approved by the Engineer) shall be used by the inspectors to inventory and report the condition of each measure to assist in maintaining the erosion and sediment control measures in good working order.

Based on the results of the periodic inspections, necessary control modifications shall be initiated within 24 hours and completed prior to the next anticipated rain event. These inspection reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three years from the date of completion and submission of the Notice of Termination.

These report forms shall become an integral part of the SWPPP for the site and shall be made readily accessible to TCEQ inspection officials, the Civil Engineering Consultant, and the Owner for review upon request during visits to the project site. In addition, copies of the reports shall be provided to any of these persons, upon request, via mail or facsimile transmission.

The following forms shall be utilized by inspectors to report on the incremental status and condition of the control measures used on the site:

III. Summary of Erosion and Sediment Control Maintenance/Inspection Procedures

- ☐ All control measures will be at least weekly and after each rainfall event.
- ☐ All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report and completed prior to the next anticipated rain event.
- ☐ Built-up sediment will be removed from silt fences when it has reached one-third the height of the fence.
- ☐ Silt fences will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- ☐ Sediment basins, if present, will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50% of the design capacity or at the end of the job. **Contractor shall install a depth gauge in the sediment basin to use in evaluating the depth of accumulated sediment to determine when sediment removal is required.**
- ☐ Diversion dikes, if present, will be inspected and any breaches promptly repaired.
- ☐ If sediment escapes the site, accumulations will be removed at a frequency to minimize further negative effects, and whenever feasible, prior to the next forecasted rain event.
- ☐ Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.

- ☐ A maintenance inspection report will be made after each inspection. Copies of the report forms to be used are included in the SWPPP for the site.
- ☐ The site job superintendent will select the individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance reports.
- ☐ Personnel selected for inspection and maintenance responsibilities will receive training from the site job superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order. Records documenting the training and experience qualifications of each and every inspector shall be kept with the Inspection Record Forms in the SWPPP for the site.

IV. Construction/Implementation Checklist

1. Maintain Records of Construction Activities, including:

- ☐ Dates when major grading activities occur
- ☐ Dates when construction activities temporarily cease on a portion of the site
- ☐ Dates when construction activities permanently cease on a portion of the site
- ☐ Dates when stabilization measures are initiated on the site
- ☐ Dates of rainfall events and post-rainfall inspections

2. Prepare Inspection Reports summarizing:

- ☐ Name of inspector
- ☐ Qualifications of Inspector
- ☐ Control measures/areas inspected
- ☐ Observed conditions and areas of non-compliance
- ☐ Location of any discharges of sediments or other pollutants from the site
- ☐ Recommended remedial actions and action on previously recommended remedial actions
- ☐ Statement that the site is or is not in compliance with the Permit/SWPPP
- ☐ Changes necessary to the SWPPP for the site

3. Report Releases of Reportable Quantities of Oil or Hazardous Materials (if they occur):

- ☐ Notify TCEQ Spill Response Center **(1-800-832-8224)** immediately
- ☐ Notify permitting authority in writing within 14 days
- ☐ Modify the pollution prevention plan to include:
 - the date of release
 - circumstances leading to the release
 - steps taken to prevent recurrence of the release

4. Modify Pollution Prevention Plan as necessary to:

- ☐ Comply with the minimum permit requirements when notified by TCEQ that the plan does not comply
- ☐ Address a change in design, construction operation, or maintenance which has an effect on the potential for discharge of pollutants
- ☐ Prevent recurrence of reportable quantity releases of a hazardous material or oil

Temporary Stormwater Management Practices TCEQ Form 0602

Attachment J Interim/ permanent soil stabilization practices

Final Stabilization/Termination Checklist

- ☐ All soil disturbing activities are complete
- ☐ Temporary erosion and sediment control measures have been removed or will be removed at an appropriate time
- ☐ All areas of the construction site not otherwise covered by a permanent pavement or structure have been stabilized with a uniform perennial vegetative cover with a density of 70% or equivalent measures have been employed
- ☐ Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

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.

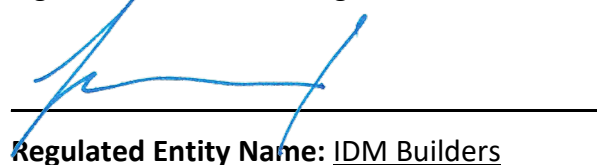
Signature

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: Jack Garner

Date: 11/30/23

Signature of Customer/Agent:



Regulated Entity Name: IDM Builders

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 River

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.

Copy of Notice of Intent (NOI)

The successful General Contractor will be required to prepare a SWPPP and file the NOI, in accordance with the Contributing Zone Permit, the Temporary Stormwater Section, Erosion Control Plan contained in the construction plans and Texas NPDES Program.

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

I David Morgan
Print Name

Owner
Title - Owner/President/Other

of IDM Builders
Corporation/Partnership/Entity Name

have authorized Jack Garner, PE
Print Name of Agent/Engineer

of Langan Engineering
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:

David Morgan
Applicant's Signature

11-9-23
Date

THE STATE OF Texas §
County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared David S. Morgan 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 9th day of November, 2023



Kate Marie Morgan
NOTARY PUBLIC
Kate Marie Morgan
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 9/7/2024

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: IDM Builders

Regulated Entity Location: 350 County Road 258, Liberty Hill, Texas 78642

Name of Customer: IDM Builders

Contact Person: David Morgan

Phone: 512-515-5573

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	5.09 Acres	\$ 5,000
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: 11-30-2023

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 Core Data Form

For detailed instructions on completing 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)		3. Regulated Entity Reference Number (if issued)
CN		RN

[Follow this link to search for CN or RN numbers in Central Registry**](#)

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
<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)			
<i>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).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		If new Customer, enter previous Customer below:	
David Morgan			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:	<input type="checkbox"/> Corporation	<input checked="" type="checkbox"/> Individual	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"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
12. Number of Employees		13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input 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"/> Other:			
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant			
15. Mailing Address:	350 County Road 258		
	City	Liberty Hill	State TX ZIP 78642 ZIP + 4
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		idmbuilders@gmail.com	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(512) 778-5573		(512) 778-6866	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
IDM Builders	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	350 County Road 258							
	City	Liberty Hill	State	TX	ZIP	78642	ZIP + 4	
24. County	Williamson							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	The site is located on the south side of County Road 258 between US 183 and County Road 260 and is about 0.34 miles east of the intersection of CR 258 and US 183							
26. Nearest City	Liberty Hill				State	TX	Nearest ZIP Code	78642
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>								
27. Latitude (N) In Decimal:				28. Longitude (W) In Decimal:				
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
30	39	52.8546	-97	52	23.556			
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)			
1521			236115					
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>								
General Contractor								
34. Mailing Address:	350 County Road 258							
	City	Liberty Hill	State	TX	ZIP	78642	ZIP + 4	
35. E-Mail Address:	idmbuilders@gmail.com							
36. Telephone Number	37. Extension or Code		38. Fax Number <i>(if applicable)</i>					
(512) 778-5573			(512) 778-6866					

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.

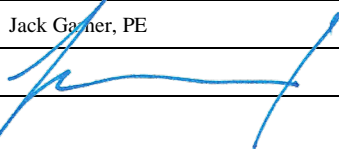
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source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

SECTION IV: Preparer Information

40. Name:	Jack Garner, PE		41. Title:	Consulting Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(737) 289-7800		(737) 289-7801	jgarner@langan.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.

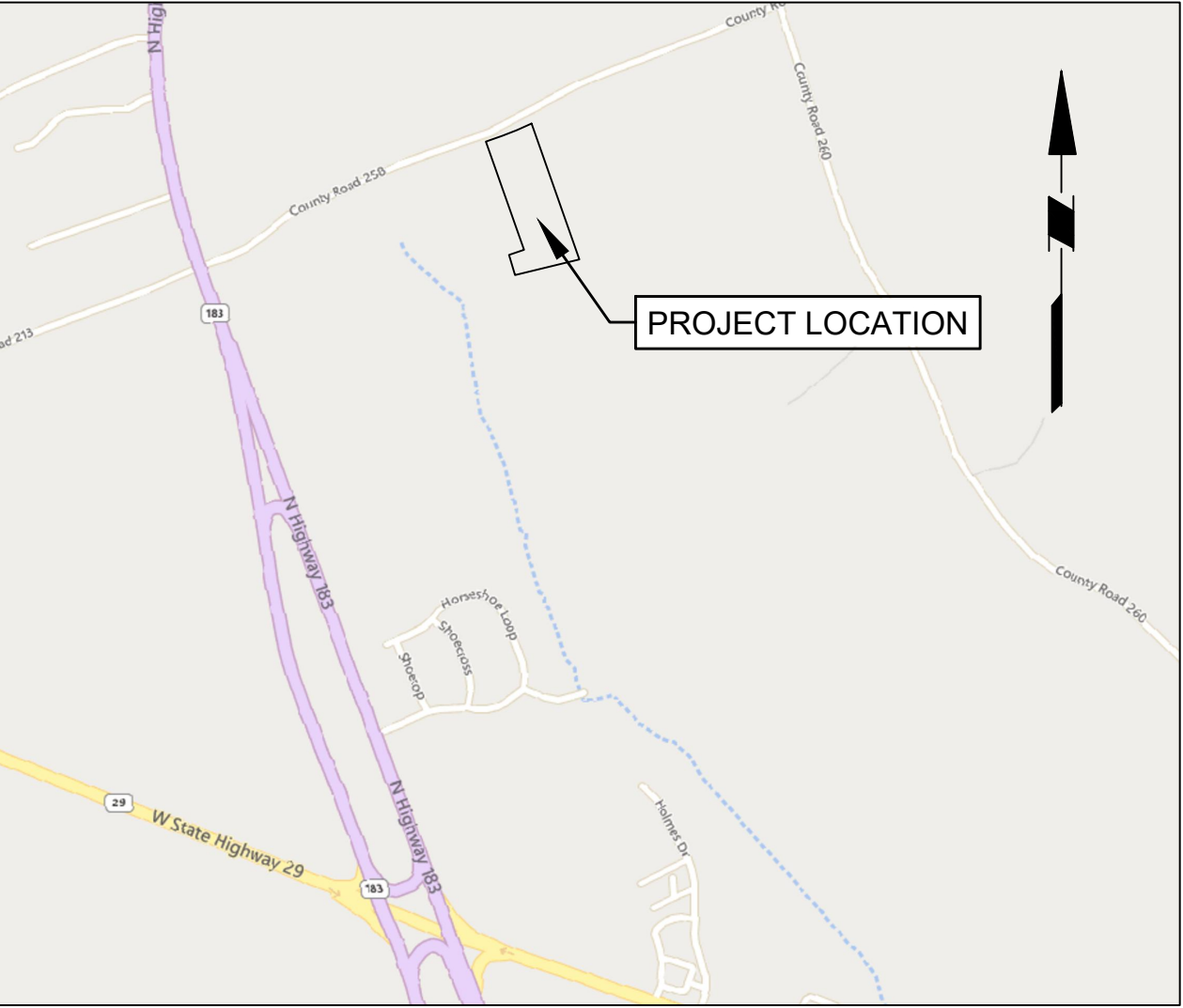
Company:	Langan Engineering	Job Title:	Associate Principal
Name (In Print):	Jack Garner, PE	Phone:	(737) 289- 7810
Signature:			Date:
			11-30-2023

THE CONTRACTOR SHALL OBTAIN A "NOTICE OF PROPOSED INSTALLATION OF UTILITY LINE" PERMIT FROM WILLIAMSON COUNTY FOR ANY WORK PERFORMED IN THE EXISTING COUNTY RIGHT-OF-WAY (DRIVEWAY APRON, WATER MAIN TIE-IN, ETC.) THIS PERMIT APPLICATION WILL REQUIRE A LIABILITY AGREEMENT, A CONSTRUCTION COST ESTIMATE FOR WORK WITHIN THE RIGHT-OF-WAY INCLUDING PAVEMENT REPAIR (IF NEEDED), A PERFORMANCE BOND, CONSTRUCTION PLANS AND, IF NECESSARY, A TRAFFIC CONTROL PLAN, AN INSPECTION FEE, AND A PRE-CONSTRUCTION MEETING MAY ALSO BE REQUIRED, DEPENDING ON THE SCOPE OF WORK. THE PERMIT WILL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER, AND MUST ALSO BE APPROVED BY THE WILLIAMSON COUNTY COMMISSIONERS COURT IF ANY ROAD CLOSURE IS INVOLVED.

Plans for the Construction of
**GRADING
& DRAINAGE IMPROVEMENTS**
To Serve
350 COUNTY ROAD 258 - IDM BUILDERS
IN THE CITY OF LIBERTY HILL ETJ, TEXAS

CIVIL ENGINEER
LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
9606 N. MOPAC EXPRESSWAY, SUITE 110
AUSTIN, TX 78759
CONTACT: JACK GARNER, JR., PE
PHONE: (737) 289-7800
EMAIL: JGARNER@LANGAN.COM

SURVEYOR
JPH LAND SURVEYING, INC.
1516 E. PALM VALLEY BLVD., STE. A4, ROUND ROCK, TEXAS 78664
CONTACT: CHRIS HENDERSON , REGISTERED PROFESSIONAL LAND SURVEYOR
PHONE: (512) 778-5688
EMAIL: CHRIS@JPHLS.COM



SITE MAP

1000 0 500 1000
SCALE: 1 INCH = 1000 FEET

LANGAN

Langan Engineering and
Environmental Services, Inc.
9606 N. Mopac Expressway, Suite 110
Austin, TX 78759
T: 737.289.7800 F: 737.289.7801 www.langan.com
TBPE FIRM REG. #F-13709

LANGAN PROJECT NO. 531021601

NOVEMBER 2023

SHEET LIST TABLE

SHEET #	SHEET TITLE
C1.00	COVER SHEET
C1.01	GENERAL NOTES
C1.02	TOPOGRAPHIC SURVEY
C2.00	EROSION & SEDIMENT CONTROL PLAN
C3.00	SITE REMOVAL PLAN
C4.00	GRADING & DRAINAGE PLAN
C5.00	EXISTING DRAINAGE AREA MAP
C5.01	PROPOSED DRAINAGE AREA MAP
C5.02	BATCH DETENTION POND PLAN
C5.03	DRAINAGE CALCULATIONS
C6.00	EROSION & SEDIMENT CONTROL DETAILS
C6.01	DRAINAGE DETAILS

CERTIFICATE OF COMPLIANCE (C OF C) PERMIT NUMBER _____
TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR) APPLICATION NUMBER _____

PAUL BRANDENBURG, DIRECTOR OF PLANNING
CITY OF LIBERTY HILL, TEXAS
DATE _____
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.

CURTIS STEGER, P.E., CITY ENGINEER
CITY OF LIBERTY HILL, TEXAS
DATE _____
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.

REVIEWED FOR COMPLIANCE WITH WILLIAMSON COUNTY REQUIREMENTS:
SIGNATURE _____ DATE _____

Date	Description	No.
Revisions		
		
Signature 		Date 11-30-2023
TBPE Registration #: 13079		
LANGAN Langan Engineering and Environmental Services, Inc. 9606 N. Mopac Expressway, Suite 110 Austin, TX 78759 T: 737.289.7800 F: 737.289.7801 www.langan.com TBPE FIRM REG. #F-13709		
Project 350 COUNTY ROAD 258 IDM BUILDERS LIBERTY HILL-ETJ WILLIAMSON TEXAS		
Drawing Title COVER SHEET		
Project No. 531021601		Drawing No. C1.00
Date 11/30/23		
Drawn By VM		
Checked By AR		
Sheet 1 of 12		

GENERAL NOTES

1.

EXISTING TOPOGRAPHIC, BOUNDARY AND UTILITY INFORMATION AS SHOWN ON THESE DESIGN DOCUMENT(S) ARE BASED ON PLAN(S) TOPOGRAPHIC SURVEY 5.093 ACRES BEING LOT 1, BLOCK A SEWARD INDUSTRIAL PARK, PREPARED BY JPH LAND SURVEYING, INC. DATED 09/21/2022.

ACTUAL SITE CONDITIONS MAY VARY FROM THOSE ENCOUNTERED AT THE TIME THE SURVEY DATA SHOWN HEREON WAS OBTAINED.

PRIOR TO ANY USE OF THIS DATA, INCLUDING BUT NOT LIMITED TO DESIGN OR CONSTRUCTION, THE APPROPRIATE DATA CONFIRMATIONS SHALL BE MADE.

BASED ON THE REFERENCED INFORMATION, ALL ELEVATIONS AND ESTABLISHED GRADES SHOWN HEREON REFER TO NAVD 88 DATUM.

2.

THE CONTRACTOR SHALL BEGIN WORK AS DIRECTED BY THE OWNER/CITY OR THE NOTICE TO PROCEED.

3.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, AND INSPECTIONS PRIOR TO AND THROUGHOUT CONSTRUCTION.

4.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN NEAT AND ACCURATE CONSTRUCTION RECORDS FOR THE OWNER/CITY'S USE. THE CONTRACTOR SHALL PROVIDE THE CITY CLEAN AND ACCURATE FULL SIZE REPRODUCIBLE RECORD DRAWINGS WHICH CLEARLY DESCRIBE ALL CONSTRUCTION AND ANY DEVIATIONS FROM THE PLANS.

5.

ALL SHOP DRAWINGS AND SUBMITTALS SHALL BE PROOFREAD AND REVIEWED BY THE GENERAL CONTRACTOR FOR APPROVAL PRIOR TO SUBMITTAL TO THE ENGINEER. SUBCONTRACTOR / GENERAL CONTRACTOR SHALL CLEARLY INDICATE, MARK, HIGHLIGHT, AND PROPERLY CLARIFY PRODUCTS TO BE CONSIDERED FOR APPROVAL. SUBMITTALS NOT PROOFREAD OR REVIEWED OR CLARIFIED PROPERLY SHALL BE RETURNED UNREVIEWED. CONTRACTOR SHALL RESUBMIT SHOP DRAWINGS AND ALLOW FOR SUITABLE REVIEW TIME. SUITABLE REVIEW TIME SHALL BE SEVEN (7) WORKING DAYS FOR TYPICAL SUBMITTALS AND LONGER DEPENDING ON THE SIZE AND NATURE OF THE SUBMITTAL.

6.

CONTRACTOR SHALL BE RESPONSIBLE FOR QUALITY CONTROL IN THE REQUIRED CONSTRUCTION SURVEYING AND MATERIALS TESTING. DIMENSIONS SHOWN AND DIGITAL FILES PROVIDED SHALL BE USED TO LAYOUT THE SITE.

7.

ALL ADJACENT PROPERTY DAMAGED BY THE PROPOSED CONSTRUCTION SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN WHICH IT WAS FOUND BEFORE SUCH WORK WAS UNDERTAKEN (NON-PAY ITEM).

8.

ALL EFFORTS SHALL BE MADE TO AVOID DAMAGE TO EXISTING TREES THAT ARE TO REMAIN. TREES SHALL BE TRIMMED AND PAINTED ONLY IF NECESSARY FOR THE SAFE MANEUVERING OF CONSTRUCTION EQUIPMENT. CONTRACTOR SHALL RECEIVE PRIOR APPROVAL FROM THE OWNER'S FIELD REPRESENTATIVE FOR REMOVAL OF ANY TREES. WHEN EXCAVATING AROUND A TREE, THE ROOTS SHALL BE CLEAN CUT PRIOR TO ANY EXCAVATION WORK. DO NOT SNAG AND TEAR TREE ROOTS

9.

ALL EXISTING FENCES ARE TO REMAIN UNLESS SPECIFIED OTHERWISE BY THE OWNERS REPRESENTATIVE. ANY DAMAGE TO FENCES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE WITH NEW AND LIKE MATERIALS. TEMPORARY CONSTRUCTION SITE SECURITY FENCES ARE REQUIRED.

10.

THE CONTRACTOR IS RESPONSIBLE FOR KEEPING EXISTING DRIVEWAYS AND SIDEWALKS FREE OF MUD AND DEBRIS FROM THE CONSTRUCTION AT ALL TIMES.

11.

ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED TO INCLUDE BUT NOT BE LIMITED TO ROCK, RUBBLE, DEBRIS, TRASH, ETC. UNUSABLE EXCAVATED MATERIAL AND ALL WASTE RESULTING FROM SITE CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE SPECIFIED OR AGREED TO BY OWNER.

12.

THE CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING WATER, OR BY OTHER MEANS, APPROVED BY THE CITY AND ENGINEER.

13.

THE CONTRACTOR SHALL NOTIFY THE OWNER/CITY REPRESENTATIVE OF OFF-SITE EXCESS SPOILS SITES THAT ARE TO BE UTILIZED

14.

CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES FOR THE ESTABLISHMENT OF GRASS OR OTHER GROWTH TO PREVENT EROSION.

15.

DISTURBED AREAS THAT ARE SEEDED SHALL BE CHECKED PERIODICALLY FOR FULL COVERAGE OF GRASS. ALL DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND SEEDED OR SODDED AS NECESSARY AND BY DEFINITION 'MAINTAINED' UNTIL AN ESTABLISHED STAND OF GRASS CAN BE RELEASED TO THE OWNER. REFERENCE LANDSCAPE/IRRIGATION PLAN (IF PROVIDED) TO COORDINATE PLANTING ENHANCEMENTS AND LIMITS OF IRRIGATION COVERAGE.

16.

CONTRACTOR SHALL NOT STORE MATERIALS, EQUIPMENT OR OTHER CONSTRUCTION ITEMS ON ADJACENT PROPERTIES OR ADJACENT RIGHT-OF-WAYS WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROPERTY OWNER AND THE CITY. ALL CONSTRUCTION WASTE MATERIALS TO BE REMOVED SHALL BE DISPOSED OF AT A PERMITTED LOCATION OFF SITE, UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE CITY.

17.

THE CONTRACTOR SHALL SET TWO (2) PERMANENT BENCHMARKS IN THE CITY COORDINATE SYSTEM. CONTRACTOR SHALL COORDINATE WITH CITY STAFF FOR RECORDED / APPROVED LOCATIONS.

UTILITY NOTES

1.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PRIVATE OR PUBLIC, PRIOR TO MOBILIZATION. CONTRACTOR SHALL VISIT THE SITE AND MAKE ALL NECESSARY OBSERVATIONS AND INSPECTIONS TO FAMILIARIZE THEMSELV WITH THE SITE AND THE SITE FACILITIES. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNERS OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA; AND, THE CONTRACTOR, SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES, FOR COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE.

2.

CONTRACTOR SHALL, IN BASE BID PROVIDE ALL NECESSARY FITTINGS AND APPURTENANCES REQUIRED TO COMPLETE ALL CONNECTIONS, RESOLVE UTILITY CONFLICTS AND OTHER INCIDENTAL UTILITY WORK SHOWN ON THE PLANS OR CONTAINED IN THE SPECIFICATIONS OR REQUIRED BY GOVERNING AGENCIES TO INCLUDE, BUT NOT LIMITED TO TEMPORARY SERVICES, VALVES, BOXES, METERS, BACKFLOW PREVENTION CONNECTIONS, ETC. INCLUDING THE REPAIR OR REPLACEMENT OF ANY EXISTING IRRIGATION SYSTEM. CONTRACTOR SHALL RAISE/LOWER OR ADJUST ALL EXISTING UTILITY MAINS IN CONFLICT WITH PROPOSED UTILITIES AS PART OF THE BASE BID FOR ALL KNOWN OR UNKNOWN LINES.

3.

THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 1 WEEK PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND MAKE ARRANGEMENTS FOR ANY AND ALL TEMPORARY UTILITIES, PERMITS, AND AGREEMENTS.

4.

THE CONTRACTOR SHALL PROTECT ALL UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL GIVE THE CITY, RESIDENTS AND BUSINESSES AFFECTED BY ANY ANTICIPATED WATER OR SEWER SERVICE DISRUPTIONS AT LEAST FORTY- EIGHT (48) HOURS PRIOR NOTICE.

5.

CONTRACTOR SHALL EXERCISE CAUTION AND MAINTAIN ADEQUATE CLEAR ZONE BETWEEN THE CONTRACTOR'S EQUIPMENT AND ANY POWER LINES.

6.

THE CONTRACTOR SHALL PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONES RISERS, WATER VALVES, UTILITIES, ETC. DURING ALL CONSTRUCTION PHASES. CONTRACTOR WILL BE RESPONSIBLE TO REPLACE ANY DAMAGED ITEMS AND RESTORE ANY SERVICES THAT HAVE BEEN DISTURBED. ALL MANHOLES, CLEAN-OUTS, WATER VALVES, FIRE HYDRANTS AND OTHER APPURTENANCES MUST BE ADJUSTED TO FINAL GRADE BEFORE THE OWNER WILL ACCEPT THE WORK.

7.

THE CONTRACTOR SHALL SALVAGE ALL EXISTING CITY UTILITIES (INCLUDING SIGNS, VALVES, FIRE HYDRANTS, ETC.) IN ACCORDANCE WITH CITY REQUIREMENTS AND PROVIDE TO THE CITY.

8.

ALL UTILITIES WITHIN 5' OF PROPOSED BUILDING(S) SHALL ADHERE TO THE MEP'S RECOMMENDATIONS AND OR REQUIREMENTS. CONTRACTOR SHALL PROVIDE STORM DRAIN CONNECTIONS FOR ALL ROOF DRAIN LINES. REFER TO MEP'S PLANS AND RELATED TECHNICAL SPECIFICATIONS. CIVIL UTILITIES (WATER, SANITARY SEWER & STORM SEWER) LIMITS BEGIN 5' OUTSIDE THE BUILDING. IN THE EVENT OF A CONFLICT WITH THE MEP'S WITHIN THIS AREA, THE MEP'S REQUIREMENTS SHALL GOVERN.

9.

TESTING OF UTILITY TRENCH BACKFILL COMPACTION SHALL BE AT 75' INTERVALS AND EACH LIFT'S BACKFILL. BACKFILL SHALL BE PROCESSED SUCH THAT NO DIRT CLODS ARE IN EXCESS OF 4" DIAMETER. ALL SANITARY SEWER LINES AND STORM SEWER LINES SHALL BE 10' TESTED AT THE COMPLETION OF THE PROJECT. (IN ADDITION TO MINIMUM CODE OR OTHER REQUIREMENTS) TO CHECK FOR DAMAGE CAUSED BY OTHER TRADES, UTILITY CONFLICTS, TRENCH SETTLEMENT, ETC. THE COST OF SUCH SHALL BE INCLUDED IN THE CONTRACTORS BASE PRICE.

GENERAL SITE NOTES:

1.

THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.

2.

THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS; AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.

3.

THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORKING DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.

4.

INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.

5.

THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.

6.

CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.

DEMOLITION NOTES

1.

NO EARTH-DISTURBING ACTIVITIES SHALL COMMENCE UNTIL ALL PERMITS ARE OBTAINED AND PERIMETER EROSION CONTROL MEASURES ARE IN PLACE.

2.

ALL DEMOLITION SHALL BE CLOSELY COORDINATED WITH THE OWNER'S REPRESENTATIVE REGARDING ITEMS TO BE SALVAGED, THOSE TO BE REMOVED, ETC. INCLUDING ANY AND ALL TREE PRESERVATION AND TRANSPLANTING ACTIVITIES, AS OUTLINED IN THE PRE-CONSTRUCTION MEETING. REMOVAL, RELOCATION AND/OR DISPOSAL OF ANY PRE-EXISTING ON-SITE TRASH, DEBRIS, OR STOCKPILES SHALL BE INCLUDED IN THE TOTAL COST OF DEMOLITION AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AT ALL TIMES.

3.

CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH ALL REGULATIONS GOVERNING AGENCIES REGARDING THE DEMOLITION, REMOVAL, TRANSPORTATION AND DISPOSAL OF ALL DEMOLITION DEBRIS.

4.

INGRESS AND EGRESS POINTS, PROPOSED DISPOSAL SITES, AND HAUL ROUTES MUST BE APPROVED BY CITY OFFICIALS PRIOR TO REMOVAL OF DEMOLITION DEBRIS OFF-SITE.

5.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DISCONNECTION OF ALL UTILITIES SERVING THE EXISTING SITE WITH THE APPROPRIATE UTILITY COMPANY, AND SHALL OBTAIN APPROVAL FROM SAME TO COMMENCE DEMOLITION ACTIVITIES.

6.

CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS FOR EXCAVATION AND TRENCHING PROCEDURES. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, ETC. AS NECESSARY FOR THESE OPERATIONS, AND SHALL COMPLY WITH ALL OSHA PERFORMANCE CRITERIA.

7.

THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL PROPERTY CORNER MONUMENTS, BENCHMARKS, CONTROL POINTS, ETC. AND SHALL HAVE, AT HIS EXPENSE, ALL CORNER MONUMENTS REPLACED WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES.

8.

THE CONTRACTOR SHALL INCUR ALL COSTS FOR MAINTENANCE AND REPAIR OF THE EXISTING FENCES TO REMAIN, IRRIGATION SYSTEMS TO REMAIN, UTILITY LINES, ETC., AS OUTLINED IN THE SPECIFICATIONS.

9.

THE CONTRACTOR SHALL LOCATE AND REMOVE ALL UNDERGROUND UTILITY CABLES (ELECTRIC, TELEPHONE, ETC.) UP TO A DEPTH OF 24 INCHES BELOW GRADE AS PART OF THE BASE BID.

10.

THE CONTRACTOR SHALL LOCATE AND REMOVE ALL UNDERGROUND UTILITY PIPING, CONDUIT, AND CABLES, REGARDLESS OF DEPTH, IN THE AREA OF THE PROPOSED BUILDING(S) FOUNDATIONS.

11.

NOTES SHOWN HEREON REGARDING SPECIFIC ITEMS OF DEMOLITION ARE GENERAL IN NATURE, AND ARE NOT INTENDED TO BE WHOLLY INCLUSIVE. THE CONTRACTOR SHALL DEMOLISH AND REMOVE ALL EXISTING IMPROVEMENTS TO THE SATISFACTION OF THE OWNER, AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS, AND TO THE EXTENT AS NOTED IN THE SPECIFICATIONS.

12.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLUGGING, CAPPING, OR OTHERWISE TERMINATING UTILITY SERVICE LINES AT EXISTING METER LOCATIONS, CLEANOUTS, ETC. A MIN. DISTANCE OF 1 FOOT OUTSIDE THE LIMITS OF THE TRACT SHOWN.

13.

THE CONTRACTOR SHALL CREATE AMPLE STAGING AND STOCKPILING AREAS FOR THE DELIVERIES OF CONSTRUCTION MATERIALS, CONCRETE DELIVERIES, TOPSOIL, ETC. IN ACCORDANCE WITH THE OWNER'S REPRESENTATIVE AND THE PROJECT SPECIFICATIONS.

Earthwork Notes

1.

PLACEMENT OF TOPSOIL TO WITHIN 0.10' OF FINISH GRADE. SEE TOPSOIL SPECIFICATION SHOULD IMPORTED MATERIAL BE NECESSARY.

2.

AS A RESULT OF THE SITE GEOLOGY AND PROPOSED SITE PLAN, THE CONTRACTOR SHALL ESTABLISH A SOIL MANAGEMENT PLAN/OPERATION THROUGHOUT THE CONSTRUCTION PROCESS. ALL TOPSOIL SHALL BE SALVAGED AND STOCKPILED ON-SITE. STOCKPILED TOPSOIL MAY BECOME STERILE AND NON-FERTILE OVER TIME. THE CONTRACTOR SHALL AMEND AND SUPPLEMENT THE STOCKPILED TOPSOIL AS NECESSARY TO YIELD A FERTILE TOPSOIL SUPPLY. THE CONTRACTOR'S BID SHALL INCLUDE ALL NECESSARY TOPSOIL (IMPORT MAY BE REQUIRED) AS REQUIRED TO BACKFILL AND CROWN ALL LANDSCAPE ISLANDS AND LANDSCAPE AREAS. THE LACK OF AVAILABLE ON-SITE TOPSOIL WILL NOT BE GROUNDS FOR A CHANGE ORDER OR ADDITIONAL PAY.

TCEQ CZP NOTES:

THIS CONSTRUCTION PROJECT IS SUBJECT TO THE CONDITIONS GIVEN IN THE EDWARDS AQUIFER PROTECTION PLAN (EAPP) APPROVED AND ISSUED FOR THIS SITE BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). NO CONSTRUCTION ACTIVITIES MAY COMMENCE UNTIL THAT PLAN HAS BEEN ISSUED BY THE TCEQ. CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PUBLIC NOTICE POSTINGS RELATED TO THIS TCEQ PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

CONTRACTOR AND OWNER SHALL ALSO OBTAIN COVERAGE FOR STORMWATER DISCHARGES RELATED TO CONSTRUCTION ACTIVITIES UNDER THE TEXAS GENERAL PERMIT TXR150000. CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PUBLIC NOTICE POSTINGS RELATED TO THIS TCEQ PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY CONTRIBUTING ZONE PLAN GENERAL CONSTRUCTION NOTES:

1.

A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY GROUND DISTURBANCE OR CONSTRUCTION ACTIVITIES. THIS NOTICE MUST INCLUDE:

- THE NAME OF THE APPROVED PROJECT;
- THE LOCATION OF THE PROJECT;
- THE ACTIVITY START DATE; AND
- THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

2.

ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT SHOULD BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED CONTRIBUTING ZONE PLAN (CZP) AND THE LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTOR(S) SHOULD KEEP COPIES OF THE APPROVED PLAN AND APPROVAL LETTER ON-SITE.

3.

NO HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

4.

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

5.

ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.

6.

SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.

7.

LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.

8.

ALL EXCAVATED MATERIAL THAT WILL BE STORED ON-SITE MUST HAVE PROPER E&S CONTROLS.

9.

IF PORTIONS OF THE SITE WILL HAVE A CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

10.

THE FOLLOWING RECORDS SHOULD BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:

- THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
- THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
- THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

11.

THE HOLDER OF ANY APPROVED CZP MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

- a. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY BEST MANAGEMENT PRACTICES (BMPs) OR STRUCTURE(S), INCLUDING BUT NOT LIMITED TO TEMPORARY OR PERMANENT PONDS, DAMS, BERMS, SILT FENCES, AND DIVERSIONARY STRUCTURES;
- b. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED;
- c. ANY CHANGE THAT WOULD SIGNIFICANTLY IMPACT THE ABILITY TO PREVENT POLLUTION OF THE EDWARDS AQUIFER; OR
- d. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE APPROVED CONTRIBUTING ZONE PLAN.

AUSTIN REGIONAL OFFICE

12100 PARK 35 CIRCLE, BUILDING A

AUSTIN, TEXAS 78753-1808

PHONE (512) 339-2929

FAX (512) 339-3795

SAN ANTONIO REGIONAL OFFICE

14250 JUDSON ROAD

SAN ANTONIO, TEXAS 78233-448

PHONE (210) 490 3096

FAX (210) 545-4329

WILLIAMSON COUNTY NOTES

WILLIAMSON COUNTY EMERGENCY SERVICE DISTRICT NO. 4 NOTES

1.

PRIOR TO CONSTRUCTION ABOVE THE SLAB, PROVIDE AN ALL-WEATHER DRIVE SURFACE THAT IS ENGINEERED TO WITHSTAND 75,000 LBS. AN ACCEPTANCE INSPECTION BY FIRE INSPECTIONS IS REQUIRED. 2015 IFC 503 AND D102.1

2.

PRIOR TO CONSTRUCTION ABOVE THE SLAB, THE FIRE HYDRANTS ON THE SITE PLAN ARE REQUIRED TO BE INSPECTED AND APPROVED FOR SERVICE BY THE FIRE CODE OFFICIAL.

AUSTIN REGIONAL OFFICE

12100 PARK 35 CIRCLE, BUILDING A

AUSTIN, TEXAS 78753-1808

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CITY OF LIBERTY HILL NOTES

CITY OF LIBERTY HILL 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 CONTRACTOR'S 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 AS 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 LIBERTY HILL 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. TELEPHONE 512-778-5449 (PLANNING & DEVELOPMENT 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 LIBERTY HILL, 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 LIBERTY HILL ACCURATE "AS-BUILT" DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS-BUILT" DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE PLANNING & DEVELOPMENT DEPARTMENT PRIOR TO FINAL ACCEPTANCE.

9.

THE LIBERTY HILL 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 CONTRACTOR'S 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 AND/OR CITY INSPECTOR.

11.

PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.

12.

BENCHMARKS UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT ARE DESCRIBED IN TOPOGRAPHIC SURVEY BY JPH LAND SURVEYING, INC. TITLED TOPOGRAPHIC SURVEY 5.093 ACRES BEING LOT 1, BLOCK A SEWARD INDUSTRIAL PARK, DATED 09/21/2022.

CITY OF LIBERTY HILL 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 OR 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.

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 DEVICES 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 LIBERTY HILL.

CITY OF LIBERTY HILL WASTEWATER NOTES:

1.

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).

2.

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.

THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR AT 512-778-5449 TO COORDINATE UTILITY TIE-INS AND NOTIFY HIM AT LEAST 48 HOURS PRIOR TO CONNECTING TO EXISTING LINES.

5.

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.

6.

THE CONTRACTOR, AT CONTRACTOR'S 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 LIBERTY HILL PERSONNEL.

7.

ALL WASTEWATER SERVICE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:

WASTEWATER SERVICE "S" ON TOP OF CURB

TOOLS FOR MARKING THE CURB 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 LIBERTY HILL.

8.

CONTACT THE CITY OF LIBERTY HILL WATER & WASTEWATER SUPERINTENDENT AT 512-778-5449 FOR ASSISTANCE IN OBTAINING EXISTING WATER AND WASTEWATER LOCATIONS.

9.

THE CITY OF LIBERTY HILL 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.

10.

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, #2A 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

3/4"

0-2

#4

40-85

#10

95-100

11.

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.

12.

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 LIBERTY HILL SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.

CITY OF LIBERTY HILL 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 SPECIFICATIONS.

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 LIBERTY HILL 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.

CITY OF LIBERTY HILL 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.

CITY OF LIBERTY HILL 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 512-778-5449 (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.

<

Field: AG 2022/09/13 CTX5863
Drafter: RDG 2022/09/20
Revision:
Revision:

LEGEND OF SYMBOLS

air conditioner
borehole
cable tv
electric meter
fence or handrail
fire dept. connection
fire hydrant
fire lane
guard rail
grout trap
bollard
grate inlet
gas meter
gas line
utility pole anchor
irrigation valve
landscape or tree line
landscape electric box
landscape light
light pole
mailbox
monitoring well
overhead utility lines
pool equipment
road sign
roof drain
silt fence
spot elevation
sanitary sewer manhole
sanitary sewer pipe
storm water manhole
storm water pipe
telephone manhole
telephone tank fill lid
telephone riser
traffic signal pole
unknown manhole
utility clean out
utility cabinet
utility vault
utility pole
utility pole with riser
utility sign
water shutoff
water valve
water manhole
water meter
well
water line
one-foot contour lines
tree trunk (with canopy)
caliper inches at breast height
ornamental tree
multiple trunks
Google 360 Hyperlink

UTILITY WARNING

Unless otherwise stated, the client or client's representative did not provide JPH with plans and/or reports, and JPH did not coordinate a private utility locate request. If these Table A items are listed in the certification, the client, being aware of the factors listed above, has agreed for these Table A item(s) to be addressed from a combination of online GIS maps, markings from locate request(s) to municipalities and 811 and observed evidence of utilities. The client is aware locate requests to 811 and the like, may be ignored or result in an incomplete response, in which case utilities may not have been marked, or not completely marked, at the time the fieldwork was performed. Therefore, utilities may exist which are not shown on this survey. Lacking excavation and/or a private utility locate request, the exact location of underground features cannot be accurately, completely, and reliably depicted.

FLOOD ZONE CLASSIFICATION

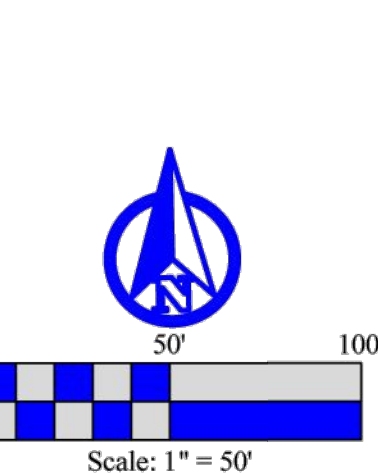
This property lies within ZONE(S) X (unshaded) of the Flood Insurance Rate Map for Williamson County, Texas and Incorporated Areas, map no. 48491C0275E, dated 2008/09/26, via scaled map location and graphic plotting and/or the National Flood Hazard Layer (NFHL) Web Map Service (WMS) at <http://hazards.fema.gov>.

MONUMENTS / DATUMS / BEARING BASIS

Monuments are found if not marked MNS or CRS.
CRS = 1/2" rebar stamped "JPH Land Surveying" set
MNS = Mag nail & washer stamped "JPH Land Surveying" set
TBM = Site benchmark (see vicinity map for general location)
Coordinate values, if shown, are US.SyFt./TxCs, 83.CZ
Elevations, if shown, are NAVD88 (Geoid 18)
Bearings are based on the TxCs, 83.CZ
Distances & areas shown are represented in surface values

LEGEND OF ABBREVIATIONS

US.SyFt. United States Survey Feet
TxCs, 83.CZ Texas Coordinate System of 1983, Central Zone
NAVD88 North American Vertical Datum of 1988
P.R.W.C.T. Plat Records of Williamson County, Texas
O.P.R.W.C.T. Official Public Records of Williamson County, Texas
D.R.W.C.T. Deed Records of Williamson County, Texas
VOL/P.G/INST# Volume/Page/Instrument Number
POB/POC Point of Beginning/Point of Commencing
ESMT/BL Easement/Building Line
PVC/RCP Polyvinyl Chloride Pipe/Reinforced Concrete Pipe
CMP Corrugated Metal Pipe



DIG-TESS MARKED UTILITY LEGEND

ELECTRIC	24"	24"
GAS/COL-STEAM	24"	24"
COMMUNICATION-CATV	24"	24"
WATER	24"	24"
SEWER	24"	24"

CITY OF GEORGETOWN UTILITY MAP

CLICK HERE FOR MAP IN PDF FORMAT



NOTE REGARDING UTILITIES:

Utility locations are per observed and sources listed below:
DIG-TESS - ticket number 2275096202.
Utility providers listed in Texas 811 ticket link below:
<https://portal.811.org/#ticket/2275096202>
GIS MAPS - City of Georgetown Utility Information Interactive Map
<https://opendata-georgetown.opendata.arcgis.com/pages/interactivemap>

Curve Data Table					
Curve #	Arc	Radius	Delta	Chord Bearing	Chord
C1	178.02'	1941.51'	005°15'13"	N67°08'34"E	177.96'

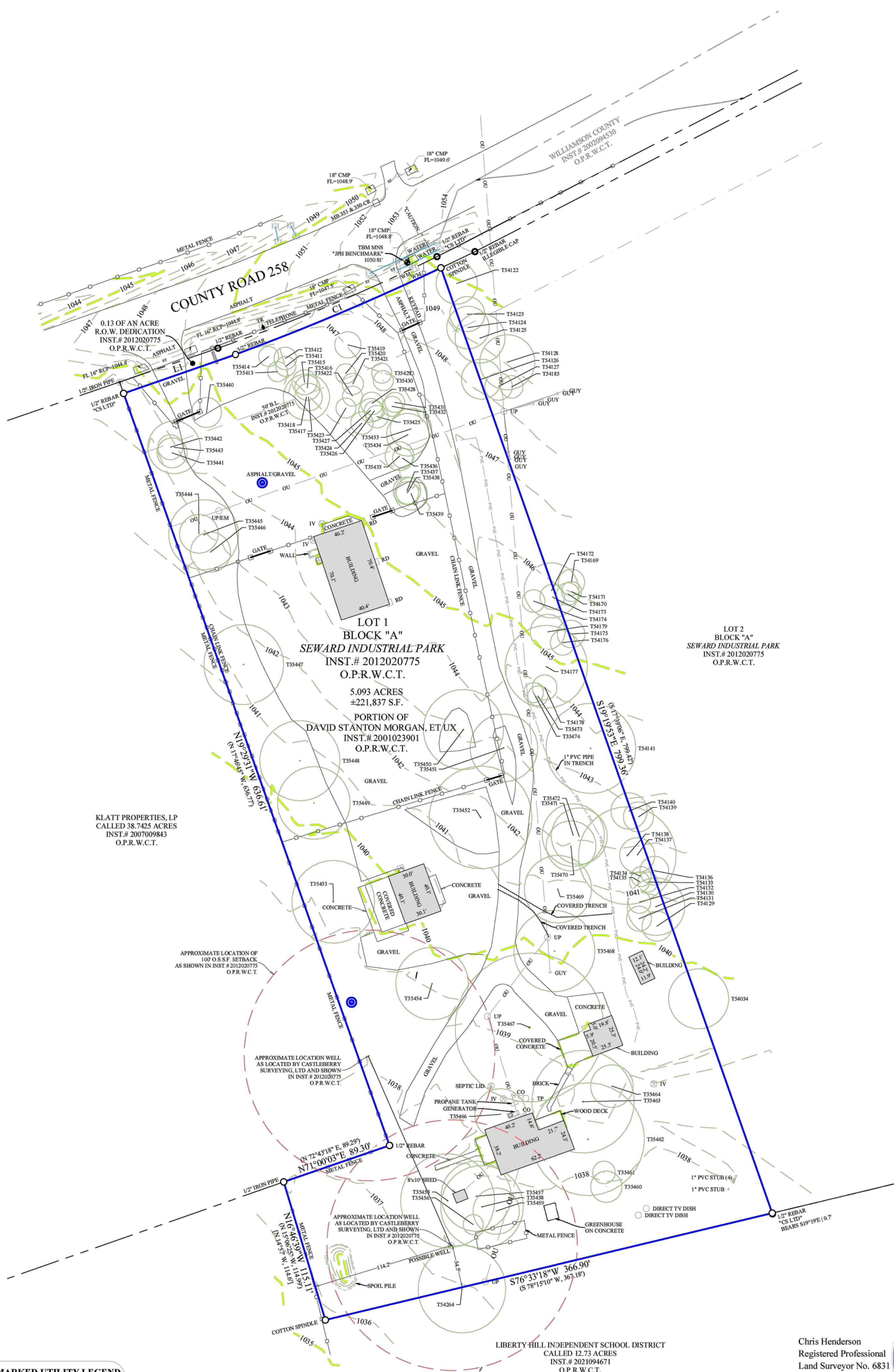
Record Curve Data Table					
Curve #	Arc	Radius	Delta	Chord Bearing	Chord
C1	(178.02)	(1941.51)	(005°15'13")	(N68°51'01"E)	(177.96)

Line Data Table		
Line #	Bearing	Distance
L1	N70°50'52"E	94.70'

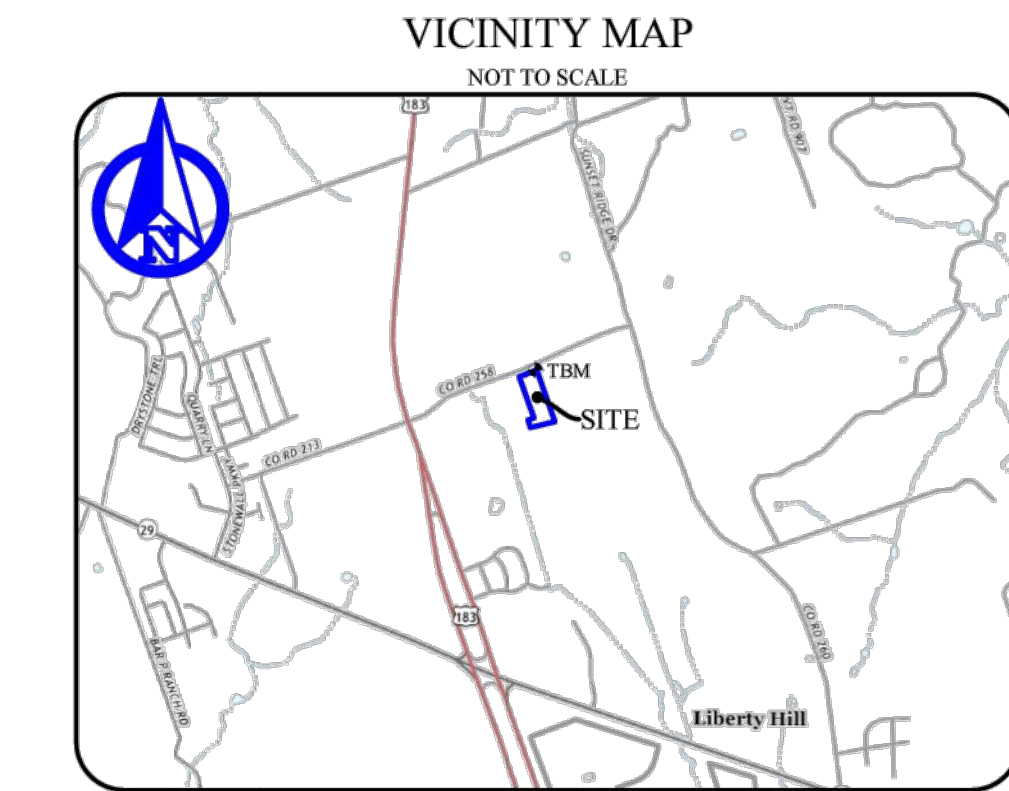
Record Line Data Table		
Line #	Bearing	Distance
L1	(N72°30'50"E)	(94.62)

LEGEND OF RECORD CALLS & REFERENCES

[X XX'XXX" X XX.XX'] - INST.# 2012020775, O.P.R.W.C.T.
(record bearing and distance)
[X XX'XXX" X XX.XX'] - VOL. 713, PG. 20, D.R.W.C.T.
(record bearing and distance)



Chris Henderson
Registered Professional
Land Surveyor No. 6831
Chris@jphls.com
September 21, 2022



BOUNDARY & TOPOGRAPHIC SURVEY
5.093 ACRES
BEING
LOT 1, BLOCK A
SEWARD INDUSTRIAL PARK
INSTRUMENT NUMBER 2012020775, O.P.R.W.C.T.
CITY OF LIBERTY HILL EXTRA TERRITORIAL JURISDICTION
WILLIAMSON COUNTY, TEXAS
ADDRESS: 350 COUNTY ROAD 258

Tree Table	
Point	Size & Species
35411	8" OAK
35412	9" OAK
35413	8" OAK
35414	8" OAK
35415	10" OAK
35416	10" OAK
35417	11" OAK
35418	18.5" OAK (M) 10.5", 8", 8"
35419	10.5" OAK (M) 7.5", 6"
35420	8" OAK
35421	8.5" OAK
35422	8" OAK
35423	8" OAK (M) 6", 4"
35424	9" OAK (M) 7", 4"
35425	9" OAK
35426	8" OAK
35427	9.5" OAK
35428	9" OAK
35429	8" OAK
35430	8" OAK
35431	8" OAK
35432	8" OAK
35433	16.5" CEDAR
35434	17" OAK (M) 8", 7", 7", 4"
35435	11.5" OAK (M) 8.5", 6"
35436	8" OAK
35437	11" OAK
35438	9" OAK
35439	13" OAK
35440	12" OAK
35441	12" OAK
35442	10" OAK
35443	21" OAK (M) 10", 9", 7", 6"
35444	15.5" OAK
35445	28" OAK
35446	16" OAK
35447	32" OAK (M) 15", 13", 12", 9"
35448	32" OAK
35449	29" OAK
35450	32" OAK
35451	27" OAK
35452	41" OAK
35453	33" OAK
35454	29" OAK
35455	37.5" OAK
35456	8" HACKBERRY
35457	28" OAK
35458	33" OAK
35459	18.5" CEDAR

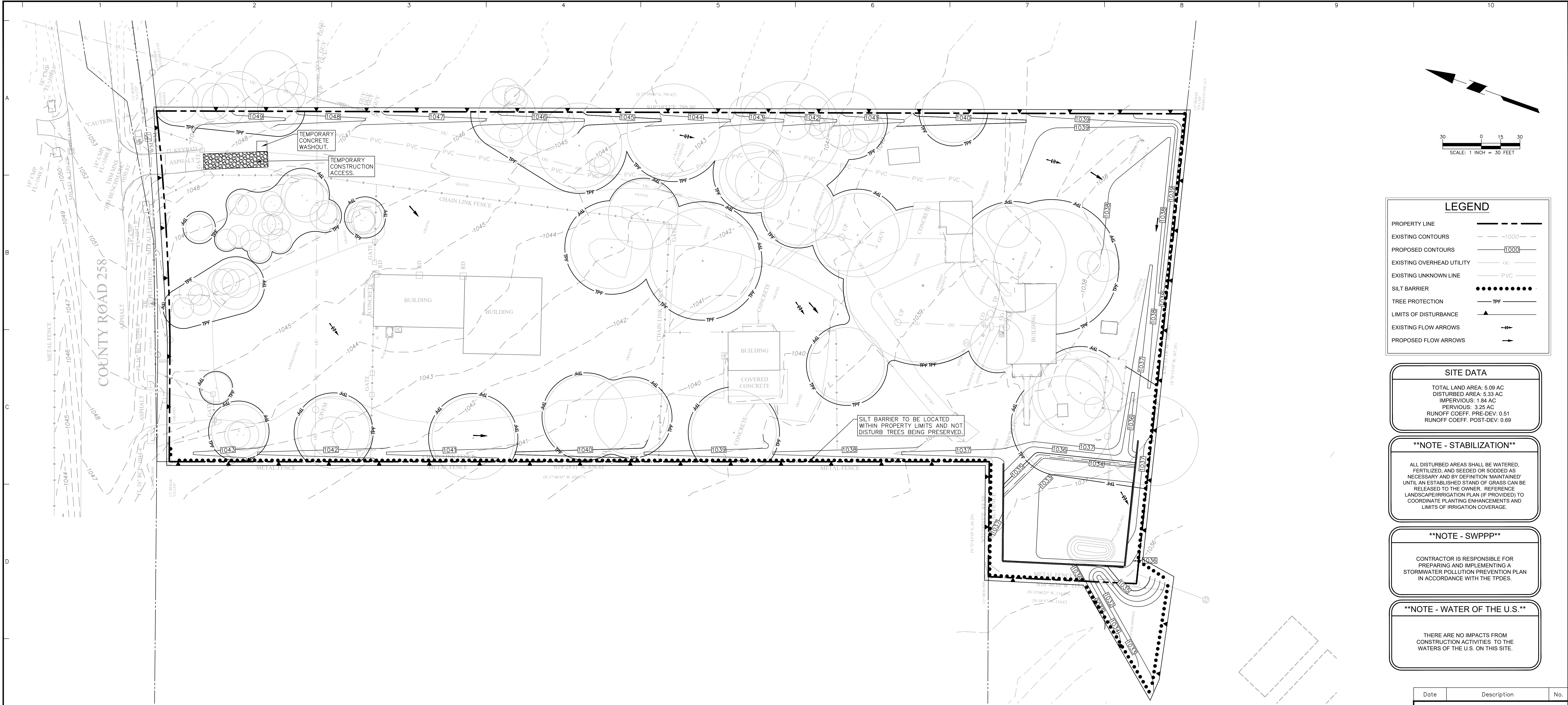
Tree Table	
Point	Size & Species
35460	12.5" HACKBERRY
35461	9" HACKBERRY (M) 6", 6"
35462	45" OAK
35463	41" OAK
35464	17" OAK
35466	20.5" OAK
35467	59.5" OAK
35468	32.5" OAK
35469	27" OAK
35470	20" OAK
35471	25" OAK
35472	22.5" OAK
35473	8" OAK
35474	8" OAK
35475	24" OAK
35476	16.5" OAK (M) 7", 7", 6", 6"
35477	14" OAK
35478	17" OAK
35479	20" OAK
35480	16" OAK
35481	11" OAK
35482	22" OAK
35483	12" OAK
35484	23" OAK
35485	10" OAK
35486	9" OAK
35487	8" OAK
35488	8" OAK
35489	8" OAK
35490	11.5" OAK (M) 7", 5", 4"
35491	14" OAK
35492	39" OAK (M) 28", 22"
35493	12" OAK
35494	14.5" OAK (M) 10", 9"
35495	36" OAK
35496	10.5" OAK (M) 8", 5"
35497	9" OAK
35498	8" OAK
35499	22" OAK
35500	10" CEDAR ELM
35501	9" OAK
35502	11" CEDAR ELM
35503	10" OAK
35504	33" OAK (M) 28", 10"
35505	10" OAK (M) 7", 6"
35506	14" CEDAR ELM
35507	9" OAK
35508	35" OAK

!!!CAUTION!!!
EXISTING OVERHEAD & UNDERGROUND UTILITIES IN THE VICINITY.
VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES
BY VACUUM EXCAVATION OR OTHER POTHOLING TECHNIQUES.



THESE PLANS ARE SUBJECT TO REVIEW & APPROVAL BY JURISDICTIONAL ENTITIES.

Date	Description	No.
Revisions		
Signature _____ Date _____		
LANGAN Langan Engineering and Environmental Services, Inc. 9606 N. Mopac Expressway, Suite 110 Austin, TX 78759 T: 737.289.7800 F: 737.289.7801 www.langan.com TPBC FIRM REG. #F-13709		
Project		
350 COUNTY ROAD 258 IDM BUILDERS LIBERTY HILL-ETJ		
Drawing Title		
TOPOGRAPHIC SURVEY		
Project No.	Drawing No.	
531021601	C1.02	
Date	11/30/23	
Drawn By		
Checked By		
Sheet 3 of 12		



EROSION CONTROL NOTES

- CONTRACTOR MUST COMPLETE A CONSTRUCTION SITE NOTICE, OBTAIN SIGNED COPIES OF NOI FORM FOR BOTH OWNER AND CONTRACTOR (IF APPLICABLE TO THIS SITE), AND POST THEM AT THE CONSTRUCTION SITE, IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES (TXR150000). THE GENERAL CONTRACTOR, (AND ALL SUBCONTRACTORS INVOLVED WITH ANY CONSTRUCTION ACTIVITY RELATED TO EARTHWORK, EROSION CONTROL, ETC., OR WHICH UTILIZE POSSIBLE POLLUTANTS AS DEFINED IN THE TPDES GENERAL PERMIT) MUST BE FAMILIAR WITH THE CONTENTS OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AS WELL AS ALL THE REQUIREMENTS SET FORTH IN THE TPDES GENERAL PERMIT AND ANY APPLICABLE LOCAL PERMIT REQUIREMENTS, AND SHALL COMPLY WITH ALL SUCH REQUIREMENTS DURING ALL CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL ADHERE TO THE SEQUENCE OF OPERATIONS FOR EROSION CONTROL IMPLEMENTATION SHOWN HEREON. ANY DEVIATION FROM THIS SEQUENCE DEEMED NECESSARY BY THE CONTRACTOR MAY REQUIRE THAT THE STORMWATER POLLUTION PREVENTION PLAN BE MODIFIED IN ACCORDANCE WITH THE NPDES GENERAL PERMIT GUIDELINES.
- THE CONTRACTOR SHALL MODIFY THIS PLAN TO SHOW LOCATIONS OF TEMPORARY WASHDOWN AREAS, PORTABLE TOILETS, EQUIPMENT MAINTENANCE/REPAIR AREAS, STOCKPILE AREAS, FUEL STORAGE AREAS, CONCRETE WASH-OUT PITS, AND POLLUTANT CONTROLS FOR EACH, AS SOON AS POSSIBLE. THE GENERAL PERMIT AUTHORIZES THE LAND DISPOSAL OF WASH OUT WATER FROM CONCRETE TRUCKS THAT ARE ASSOCIATED WITH OFF-SITE PRODUCTION FACILITIES, AS LONG AS THE DISCHARGE IS INTO SPECIFICALLY DESIGNATED DIKED AREAS WHICH HAVE BEEN PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH OUT WATER AND STORMWATER WHICH WILL BE DISCHARGED FROM THE SITE, TO PREVENT DIRECT DISCHARGE TO SURFACE WATERS (SEE CONCRETE WASHOUT DETAIL SHOWN IN PLANS). DIRECT DISCHARGE OF CONCRETE TRUCK WASH OUT WATER TO SURFACE WATERS IN THE STATE, INCLUDING DISCHARGE TO STORM SEWERS, IS PROHIBITED BY THE GENERAL PERMIT. IF A CONCRETE PLANT IS LOCATED AT CONSTRUCTION SITE, CONTRACTOR SHALL OBTAIN COVERAGE UNDER AND COMPLY WITH GENERAL PERMIT TXG110000 OR INDIVIDUAL PERMIT.
- THE GENERAL CONTRACTOR SHALL PERFORM ALL REQUIRED INSPECTIONS OF STORMWATER CONTROLS AND PRACTICES AT FREQUENCIES GIVEN IN THE NPDES GENERAL PERMIT, AND SHALL COMPLETE AND SIGN APPROPRIATE INSPECTION FORMS.
- OIL AND GREASE ABSORBING MATERIALS SHALL BE READILY AVAILABLE ON-SITE AND SHALL BE PROMPTLY USED TO CONTAIN AND/OR CLEAN UP ALL FUEL OR CHEMICAL SPILLS OR LEAKS.
- DUST CONTROL SHALL BE ACCOMPLISHED BY WATERING DRY, EXPOSED AREAS ON A REGULAR BASIS. SPRAYING OF PETROLEUM BASED OR TOXIC LIQUIDS FOR THIS PURPOSE IS PROHIBITED.
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR AT LEAST FOURTEEN DAYS SHALL BE TEMPORARILY STABILIZED WITH VEGETATION AND MULCH.
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE PERMANENTLY SEEDED WITHIN FOURTEEN DAYS PER SEEDING OR LANDSCAPING SPECIFICATIONS.
- ALL VEHICLES SHALL BE CLEANED AT THE CONSTRUCTION EXIT POINTS ACCORDING TO NOTES SHOWN ON THE DETAIL THEREOF. IF THE MAJORITY OF MUD OR DIRT IS NOT REMOVED FROM EXITING TRAFFIC, HOSE BIBS SHALL BE PROVIDED AT CONSTRUCTION TRAFFIC EXIT POINTS, AND VEHICLE TIRES SHALL BE WASHED BEFORE EXITING ONTO PUBLIC ROADS. SILT FROM THIS WASHING OPERATION SHALL BE INTERCEPTED AND TRAPPED BEFORE WASHWATER IS ALLOWED TO BE DISCHARGED OFF-SITE.
- ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED ONTO ADJACENT ROADWAYS BY VEHICLES EXITING THE SITE SHALL BE CLEANED OR REMOVED IMMEDIATELY.
- CONTRACTOR SHALL PREVENT ANY SILTATION FROM ENTERING THE STORM SEWER SYSTEM. ALL INLETS AND INLET OPENINGS SHALL BE FULLY ENCLOSED WITH APPROPRIATE INLET PROTECTION DEVICES.
- THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SILT IN ANY TEMPORARY OR PERMANENT DETENTION PONDS, STORM SEWER INLETS AND PIPES, AND ALONG SILT BARRIER, WITHIN 48 HOURS AFTER INSPECTION OF DEVICES REVEALS THE PRESENCE OF EXCESSIVE SILTATION.
- SILT BARRIER SHALL BE PLACED AROUND ANY STOCKPILES USED ON THIS SITE.
- THE CONTRACTOR IS ADVISED TO CONSTRUCT TEMPORARY OR PERMANENT FENCING AROUND DETENTION PONDS AND SEDIMENT BASINS AT THE EARLIEST POSSIBLE TIME TO PREVENT ACCIDENTAL ACCESS BY PERSONS OR ANIMALS.
- ANY ADDITIONAL EROSION CONTROL MEASURES REQUIRED TO ENSURE COMPLIANCE WITH THE TPDES GENERAL PERMIT OR LOCAL PERMIT REQUIREMENTS SHALL BE IMPLEMENTED BY THE CONTRACTOR, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE WITHIN THIRTY DAYS AFTER STABILIZATION OF ALL SURFACES.
- THE CONTRACTOR SHALL ASSUME LIABILITY FOR DAMAGE TO ADJACENT PROPERTIES AND/OR PUBLIC RIGHT-OF-WAY RESULTING FROM FAILURE TO FULLY IMPLEMENT AND EXECUTE ALL EROSION CONTROL PROCEDURES SHOWN AND NOTED IN THESE PLANS.
- WHENEVER DIRT, ROCK, OR OTHER MATERIALS ARE IMPORTED OR EXPORTED ON THE PRIMARY CONSTRUCTION SITE, CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR COMPLIANCE WITH ALL TCED STORMWATER REQUIREMENTS FOR THE REMOTE SITE. CONTRACTOR SHALL FURNISH THE ENGINEER AND THE OWNER'S CONSTRUCTION MANAGER WITH DOCUMENTATION OF COVERAGE FOR THE BORROW OR FILL SITE UNDER A NPDES PERMIT FOR STORMWATER DISCHARGES AND OF A WRITTEN AGREEMENT WITH THE LANDOWNER OF THE REMOTE SITE INDICATING EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED THEREON. AT A MINIMUM, EROSION CONTROL MEASURES MUST CONSIST OF PERIMETER CONTROLS (SILT BARRIER) ON ALL DOWN SLOPES AND SIDE SLOPE BOUNDARIES OF ANY DISTURBED AREA, PLUS PROVISIONS FOR RE-VEGETATION AFTER THE FILL MATERIALS ARE IN PLACE.
- ALL SLOPES ON SITE WHICH ARE 3:1 OR STEEPER SHALL BE STABILIZED BY TRACK WALKING (TRAVERSING UP AND DOWN THE SLOPE WITH A TRACKED VEHICLE) FOLLOWED BY INSTALLATION OF EROSION CONTROL BLANKET INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL.

EROSION CONTROL SEQUENCE

- INSTALL SILT BARRIERS AROUND PERIMETER OF PROPERTY AND DISTURBED AREAS AS SHOWN.
- INSTALL ROCK CHECK DAMS AT THE ENDS OF ALL EXPOSED STORM SEWER PIPES, IF PRESENT.
- CONSTRUCT TEMPORARY CONSTRUCTION EXIT.
- COMMENCE GRUBBING AND REMOVAL OF VEGETATION IN AREA TO RECEIVE CUT OR FILL.
- COMMENCE GRADING OPERATION FOR BUILDING PAD PREPARATION.
- INSTALL ALL UNDERGROUND UTILITIES.
- FINALIZE PAVEMENT SUBGRADE PREPARATION.
- INSTALL ALL PROPOSED STORM SEWER PIPES AND SILT BARRIERS AT ENDS OF EXPOSED PIPES.
- CONSTRUCT ALL DRAINAGE STRUCTURES. SILT BARRIERS MAY BE REMOVED TEMPORARILY FOR THIS CONSTRUCTION.
- REMOVE SILT BARRIERS AROUND INLETS AND MANHOLES NO MORE THAN 48 HOURS PRIOR TO PLACING STABILIZED BASE COURSE.
- INSTALL BASE MATERIAL AS REQUIRED FOR PAVEMENT, CURB & GUTTER.
- INSTALL ALL PAVING, CURB & GUTTER.
- COMPLETE PLANTING AND/OR SEEDING OF VEGETATED AREAS TO ACCOMPLISH STABILIZATION, IN ACCORDANCE WITH THE LANDSCAPING PLAN.
- REMOVE TEMPORARY CONSTRUCTION EXIT, SILT BARRIERS & ROCK CHECK DAMS.

EROSION CONTROL MAINTENANCE NOTES

- ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON ON A SCHEDULE WHICH COMPLIES WITH THE GENERAL PERMIT REQUIREMENTS AND CLEANED AND REPAIRED WITHIN 48 HOURS OF THE INSPECTION IN ACCORDANCE WITH THE FOLLOWING:
 - INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
 - ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED.
 - SILT BARRIER SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT BARRIER WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT BARRIER.
 - THE TEMPORARY PARKING AND STORAGE AREA (IF PRESENT) SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
 - OUTLET STRUCTURES IN THE SEDIMENTATION BASINS OR SEDIMENT TRAPS (IF PRESENT) SHALL BE MAINTAINED IN OPERATIONAL CONDITION AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
 - MAINTENANCE PROCEDURES FOR THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SPECIFIED IN OF THE STORM WATER POLLUTION PREVENTION PLAN.

MATERIAL STORAGE - NOTICE TO CONTRACTOR ***

THE CONTRACTOR SHALL NOTE ON SITE PLAN THE LOCATION OF ALL MATERIAL STORAGE AREAS, EQUIPMENT STORAGE AREAS, PETROLEUM TANKS, SOLID WASTE RECEPTACLES, SANITARY FACILITIES, ANY ON-SITE OR OFF-SITE BORROW OR STOCKPILE AREA, ANY ON-SITE OR OFF-SITE SUPPORT ACTIVITIES (SUCH AS ASPHALT OR CONCRETE PLANTS). CONTRACTOR SHALL ALSO PREPARE, KEEP ON SITE, AND MAINTAIN CURRENT A LIST OF MATERIALS WITH APPROXIMATE QUANTITIES, WHICH ARE STORED ON SITE.

NOTES FOR CHANGES TO SWPPP

THE TXR15000 GENERAL PERMIT REQUIRES THAT THE PERMITTEE REVISE OR UPDATE THIS SWPPP WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, OR WHENEVER THE RESULT OF AN INSPECTION INDICATES THAT THIS SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS IN STORMWATER DISCHARGES. HOWEVER, THE REGULATIONS OF THE TEXAS BOARD OF PROFESSIONAL ENGINEERS REQUIRE THAT CHANGES MADE BY THE CONTRACTOR DURING CONSTRUCTION MUST BE AUTHORIZED BY A LICENSED TEXAS ENGINEER. THESE CHANGES MAY BE AUTHORIZED BY THE ENGINEER OF RECORD THROUGH UPDATED DRAWINGS, WORK ORDER CHANGES, OR OTHER METHODS ACCEPTABLE TO THE ENGINEER, OR BY ANOTHER ENGINEER PROVIDED THAT THEY NOTIFY THE ENGINEER OF RECORD.

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Know what's below.
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LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING OVERHEAD UTILITY
- EXISTING UNKNOWN LINE
- SILT BARRIER
- TREE PROTECTION
- LIMITS OF DISTURBANCE
- EXISTING FLOW ARROWS
- PROPOSED FLOW ARROWS

SITE DATA

TOTAL LAND AREA: 5.09 AC
DISTURBED AREA: 5.33 AC
IMPERVIOUS: 1.84 AC
PERVIOUS: 3.25 AC
RUNOFF COEFF. PRE-DEV: 0.51
RUNOFF COEFF. POST-DEV: 0.69

NOTE - STABILIZATION

ALL DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND SEEDED OR SODDED AS NECESSARY AND BY DEFINITION MAINTAINED UNTIL AN ESTABLISHED STAND OF GRASS CAN BE RELEASED TO THE OWNER. REFERENCE LANDSCAPE/IRRIGATION PLAN (IF PROVIDED) TO COORDINATE PLANTING ENHANCEMENTS AND LIMITS OF IRRIGATION COVERAGE.

NOTE - SWPPP

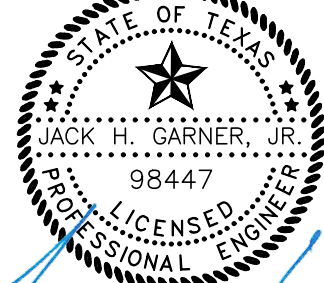
CONTRACTOR IS RESPONSIBLE FOR PREPARING AND IMPLEMENTING A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE TPDES.

NOTE - WATER OF THE U.S.

THERE ARE NO IMPACTS FROM CONSTRUCTION ACTIVITIES TO THE WATERS OF THE U.S. ON THIS SITE.

Date	Description	No.
------	-------------	-----

Revisions



Signature: Date: 11-30-2023
TBPE Registration #: 13079

LANGAN
Langan Engineering and Environmental Services, Inc.

9606 N. Mopac Expressway, Suite 110
Austin, TX 78759

T: 737.289.7800 F: 737.289.7801 www.langan.com
TBPE FIRM REG. #F-13709

Project

**350 COUNTY ROAD 258
IDM BUILDERS**

LIBERTY HILL-ETJ

WILLIAMSON TEXAS

Drawing Title

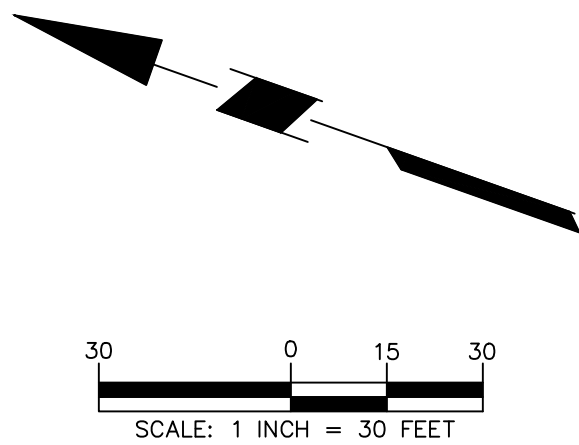
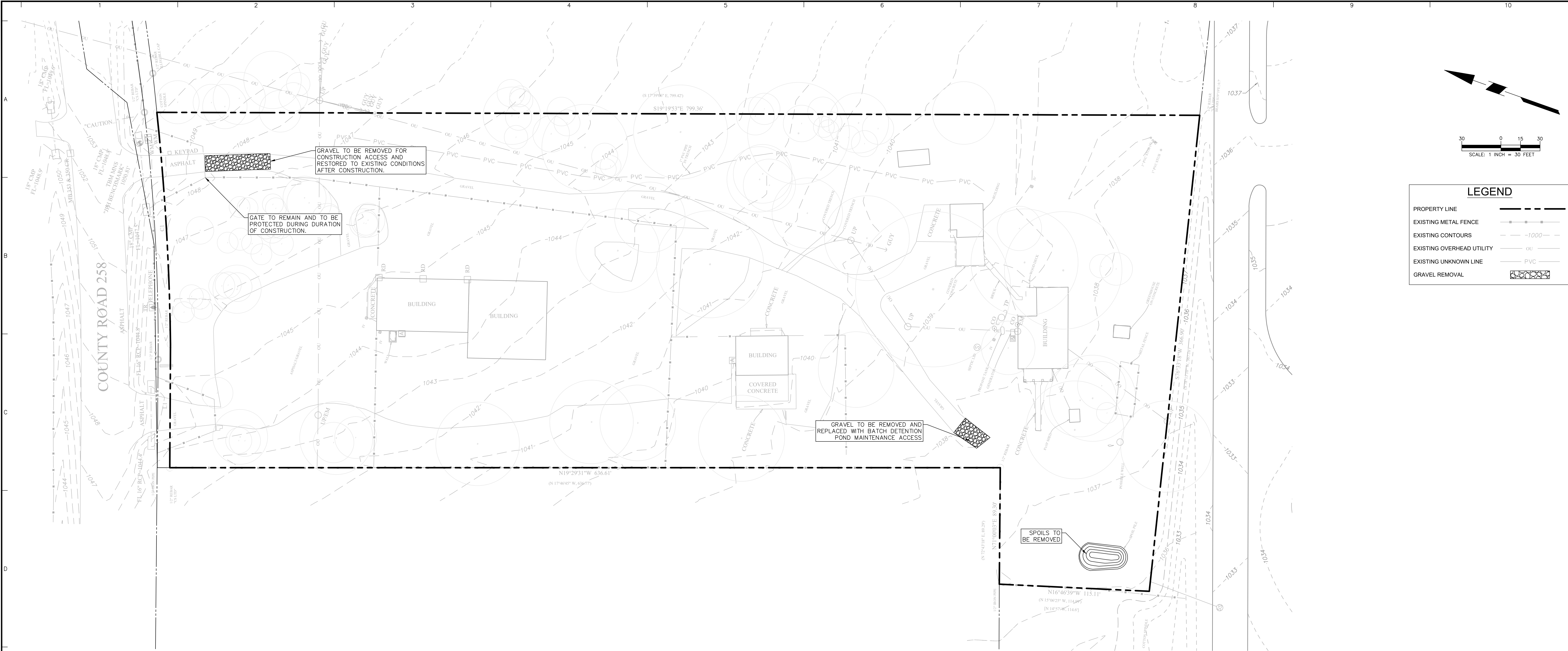
**EROSION &
SEDIMENT
CONTROL PLAN**

Project No. 531021601 Drawing No.

Date 11/30/23 C2.00

Drawn By VM

Checked By AR



LEGEND	
PROPERTY LINE	---
EXISTING METAL FENCE	---x---
EXISTING CONTOURS	-1000-
EXISTING OVERHEAD UTILITY	OU
EXISTING UNKNOWN LINE	PVC
GRAVEL REMOVAL	[Pattern]

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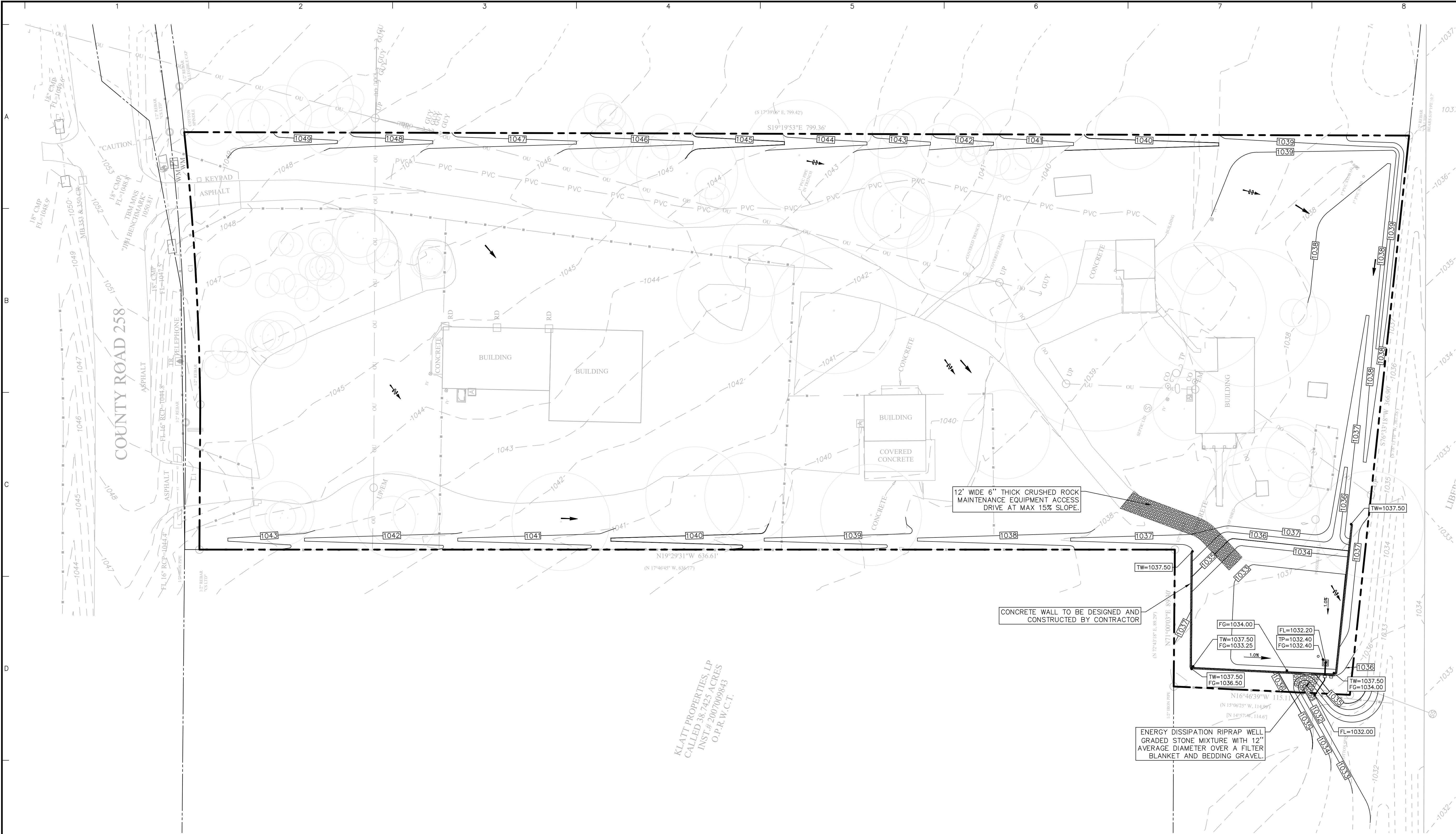
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Date	Description	No.
Revisions		
Signature	11-30-2023	Date
TBPE Registration #: 13079		

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TBPE FIRM REG. #F-13709

Project
**350 COUNTY ROAD 258
IDM BUILDERS**
LIBERTY HILL-ETJ
TEXAS
Drawing Title

SITE REMOVAL PLAN	
Project No. 531021601	Drawing No. C3.00
Date 11/30/23	Drawn By VM
Checked By AR	Sheet 5 of 12



LEGEND

PROPERTY LINE	---
EXISTING CONTOURS	--- 1000 ---
CONTOURS FROM LHSID MS#3	--- 1000 ---
PROPOSED CONTOURS	--- 1000 ---
TOP OF PAVEMENT	TP
TOP OF WALL	TW
FINISH GRADE	FG
FLOW LINE	FL
EXISTING FLOW ARROW	→
PROPOSED FLOW ARROW	→

GENERAL SITE GRADING NOTE

- AS PART OF THE BASE BID THE CONTRACTOR SHALL PROVIDE/IMPORT ALL SELECT FILL AND TOPSOIL MATERIAL NECESSARY TO ACHIEVE FINAL GRADE PER PLAN.
- ALL AREAS WITHIN CONSTRUCTION LIMITS NOT COVERED WITH AN IMPERVIOUS MATERIAL SHALL BE COVERED WITH TOPSOIL. THE TOPSOIL SHALL BE IN CONFORMANCE WITH THE TOPSOIL NOTES LISTED IN THE PLAN SET AND SPECIFICATIONS FOR THIS PROJECT.
- BASE BID SHALL ALSO INCLUDE HAUL OFF OF EXCESS MATERIAL AS NECESSARY.

KLATT PROPERTIES, LP
CALLED 38.425 ACRES
INST.# 2007099443
O.P.R.W.C.T.

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!!!CAUTION!!!

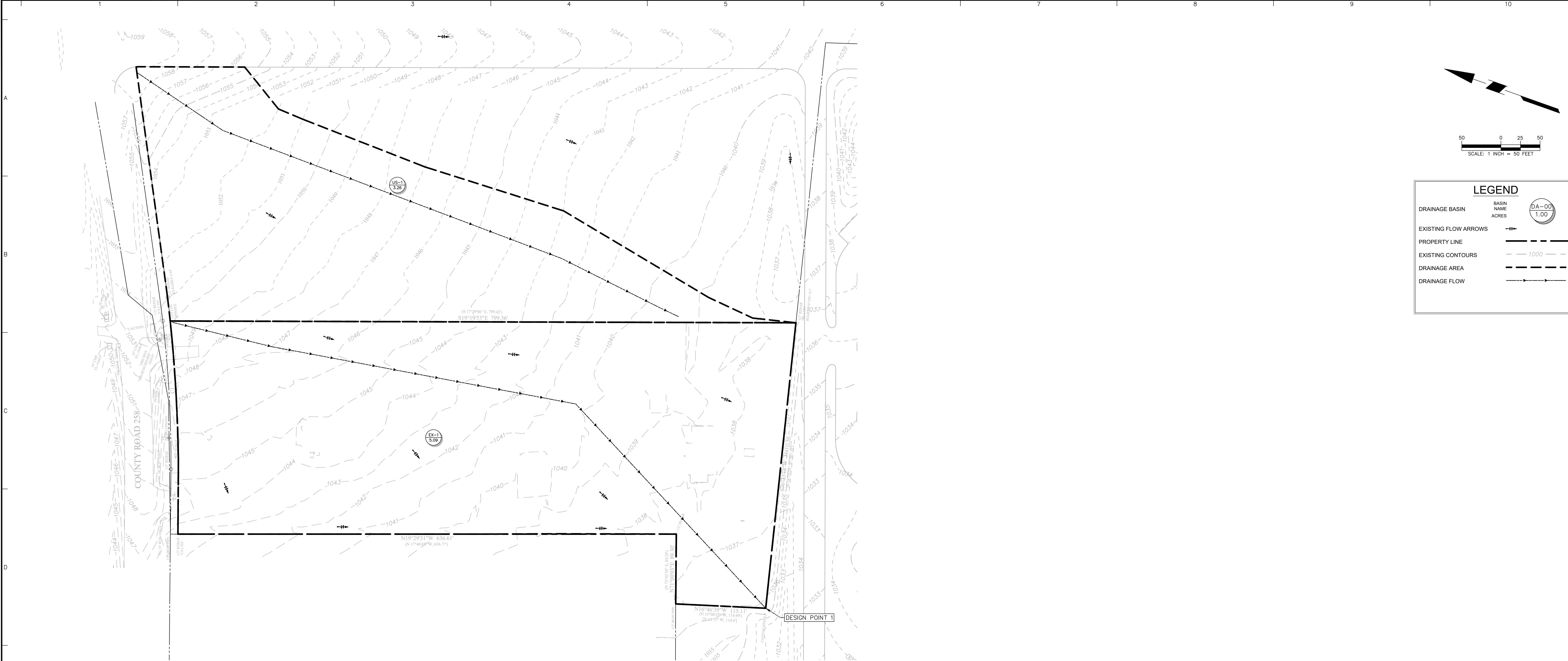
EXISTING OVERHEAD & UNDERGROUND UTILITIES IN THE VICINITY. VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES BY VACUUM EXCAVATION OR OTHER POTHOLING TECHNIQUES.

811

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Call before you dig.

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Date	Description	No.
Revisions		
Signature: Date: 11-30-2023		
TBPE Registration #: 13079		
LANGAN Langan Engineering and Environmental Services, Inc. 9606 N. Mopac Expressway, Suite 110 Austin, TX 78759 T: 737.289.7800 F: 737.289.7801 www.langan.com TBPE FIRM REG. #F-13709		
Project: 350 COUNTY ROAD 258 IDM BUILDERS LIBERTY HILL-ETJ TEXAS		
Drawing Title: GRADING		
Project No. 531021601	Drawing No. C4.00	
Date 11/30/23		
Drawn By VM		
Checked By AR	Sheet 6 of 12	



TIME OF CONCENTRATION CALCULATIONS													
Drainage Area Designation	Sheet Flow					Shallow Concentrated Flow					Channel Flow		
	Manning's (n)	Length (L)	Slope (s)	2-Yr, 24-hr rainfall	Time (T _f)	Length (L)	Slope (s)	Cover Type	Velocity	Time (T _f)	Length (L)	Velocity	Time (T _f)
		(ft)	(ft/ft)	(in)	(min)	(ft)	(ft/ft)	-	(ft/sec)	(min)	(ft)	(ft/sec)	(min)
EX-1	0.15	100	0.025	4.06	8.0	785	0.015	Unpaved	1.95	6.7	0	0.10	0.0

Note: The time of concentration for each watershed was calculated using equations given in Chapter 3 of TR-55 - Urban Hydrology for Small Watersheds. Values for each overland "n" are taken from Table 3-1 of the previously reference manual.

PRE-DEVELOPMENT DRAINAGE AREA CALCULATIONS											
Drainage Area Designation	Drainage Area	Runoff Coefficient "C"				Time of Concentration	2-Year Rainfall Intensity (I2)	2-Year Peak Discharge (Q2)	10-Year Rainfall Intensity (I10)	10-Year Peak Discharge (Q10)	100-Year Peak Discharge (Q100)
	(ac)	2-Yr	10-Yr	25-Yr	100-Yr	(min)	(in/hr)	(cfs)	(in/hr)	(cfs)	(cfs)
EX-1	5.09	0.35	0.41	0.44	0.51	15	4.28	7.63	6.38	13.32	26.83
Total	5.09							7.63		13.32	26.83

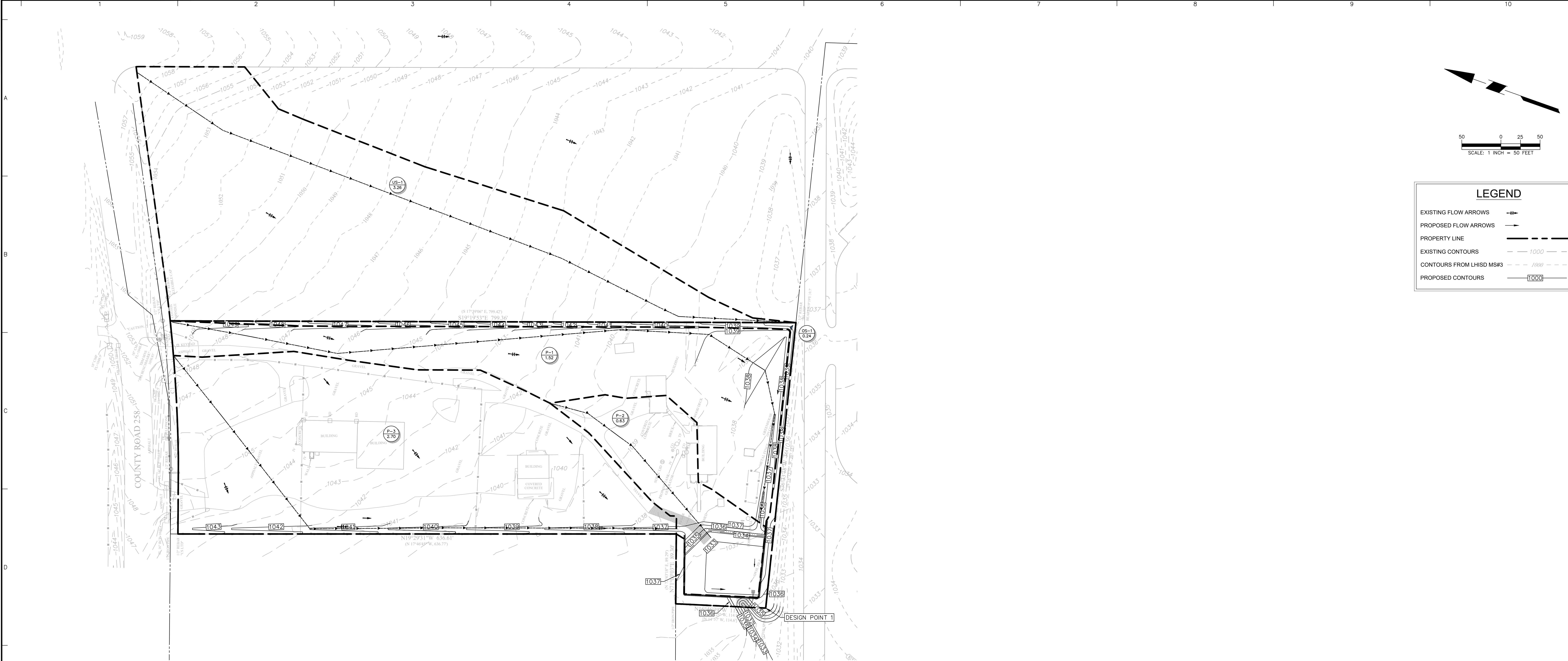
Note: Calculations based on the Rational Method: Q = CTA per the 2020 Round Rock Drainage Criteria Manual

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TIME OF CONCENTRATION CALCULATIONS														
Drainage Area Designation	Sheet Flow					Shallow Concentrated Flow					Channel Flow			Total
	Manning's (n)	Length (L)	Slope (s)	2-Yr, 24-hr rainfall	Time (T _f)	Length (L)	Slope (s)	Cover Type	Velocity	Time (T _f)	Length (L)	Velocity	Time (T _f)	Time (T _t)
	(ft)	(ft/ft)	(in)	(min)	(ft)	(ft/ft)	-	(ft/sec)	(min)	(ft)	(ft/sec)	(min)	(min)	
P-1	0.15	100	0.025	4.06	8.0	671	0.016	Unpaved	2.02	5.5	176	1.96	1.5	15
P-2	0.15	100	0.018	4.06	9.1	174	0.036	Unpaved	3.04	1.0	0	0.10	0.0	10
P-3	0.15	100	0.030	4.06	7.4	178	0.022	Unpaved	2.42	1.2	468	3.79	2.1	11
OS-1	0.15	100	0.010	4.06	0.0	1	0.010	Unpaved	1.61	0.0	0	0.10	0.0	5
US-1	0.15	100	0.045	4.06	6.3	662	0.021	Unpaved	2.35	4.7	148	2.00	1.2	12

Note: The time of concentration for each watershed was calculated using equations given in Chapter 3 of TR-55 - Urban Hydrology for Small Watersheds. Values for each overland "n" are taken from Table 3-1 of the previously reference manual.

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS												
Drainage Area Designation	Drainage Area (ac)	Runoff Coefficient "C"				Time of Concentration (min)	2-Year Rainfall Intensity (I2)	2-Year Peak Discharge (Q2)	10-Year Rainfall Intensity (I10)	10-Year Peak Discharge (Q10)	25-Year Rainfall Intensity (I25)	25-Year Peak Discharge (Q25)
		2- Yr	10- Yr	25- Yr	100- Yr		(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)
-												
P-1	1.52	0.38	0.44	0.47	0.55	15	4.23	2.45	6.31	4.25	7.77	5.59
P-2	0.65	0.41	0.48	0.51	0.58	10	5.02	1.35	7.50	2.32	9.22	3.05
P-3	2.70	0.59	0.66	0.70	0.79	11	4.90	7.81	7.31	13.09	8.99	17.11
OS-1	0.22	0.35	0.41	0.44	0.51	5	6.27	0.48	9.43	0.84	11.62	1.11
Total	5.09							12.09		20.50		26.87
US-1	3.26	0.35	0.41	0.44	0.51	12	4.63	5.29	6.91	9.25	8.50	12.20

PEAK DISCHARGE AT DESIGN POINT										
Design Point	Existing Conditions					Proposed Conditions				
	2-Year (cfs)	10-Year (cfs)	25-Year (cfs)	100-Year (cfs)	Comments	2-Year (cfs)	10-Year (cfs)	25-Year (cfs)	100-Year (cfs)	Comments
1	7.63	13.32	17.58	26.83		6.97	12.68	16.90	26.14	POND RESULTS + OS-1

****NOTICE TO CONTRACTORS – UTILITIES****

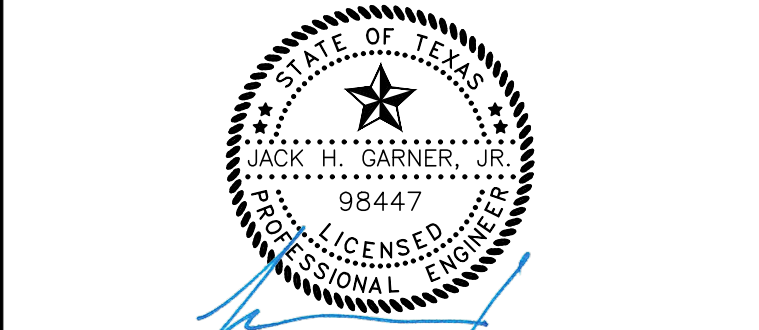
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Date	Description	No.
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Revisions



Signature: TBPE Registration #: 13079 Date:

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Austin, TX 78759

T: 737.289.7800 F: 737.289.7801 www.langan.com
TBPE FIRM REG. #F-13709

Project:

**350 COUNTY ROAD 258
IDM BUILDERS**

LIBERTY HILL-ETJ

WILLIAMSON TEXAS
Drawing Title

**PROPOSED
DRAINAGE
AREA MAP**

Project No. 531021601 Drawing No.

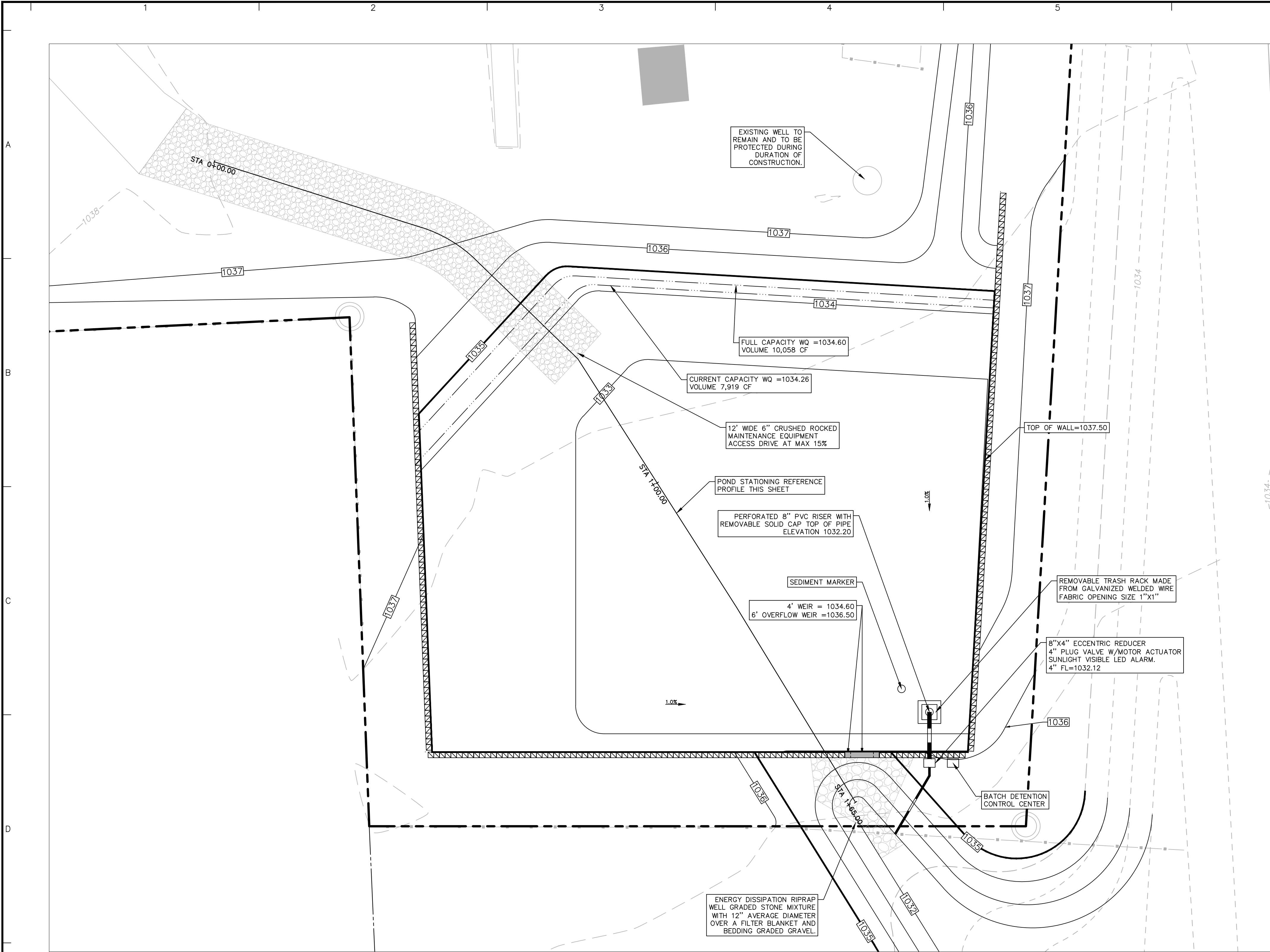
Date 11/30/23

Drawn By VM

Checked By AR

C5.01

Sheet 8 of 12

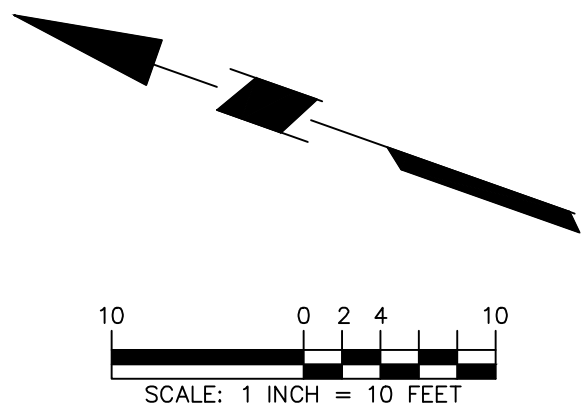


Pond STAGE-STORAGE VOLUME					
Elevation	Area (sq. ft.)	Avg. Area (sq. ft.)	Inc. Depth (ft.)	Inc. Volume (cu. ft.)	Total Volume (cu. ft.)
1033	4468				0
1034	7297	5882.5	1	5882.5	5,883
1034.6	7588	7442.5	0.6	4465.5	10,348
1035	7867	7727.5	0.4	3091	13,439
1036	8405	8136	1	8136	21,575
1037	8492	8448.5	1	8448.5	30,024
Required Water Quality (BMP) Volume = 10,058					
Required Detention volume = 12,846					
Provided Volume = 30,024					

Pond Bottom

Water Quality = 1034.6
Detention 2yr =1035.33
Detention 10yr =1035.69
Detention 25yr =1035.92
Detention 100yr =1036.35

Top of Wall =1037.5



LEGEND

EXISTING FLOW ARROWS

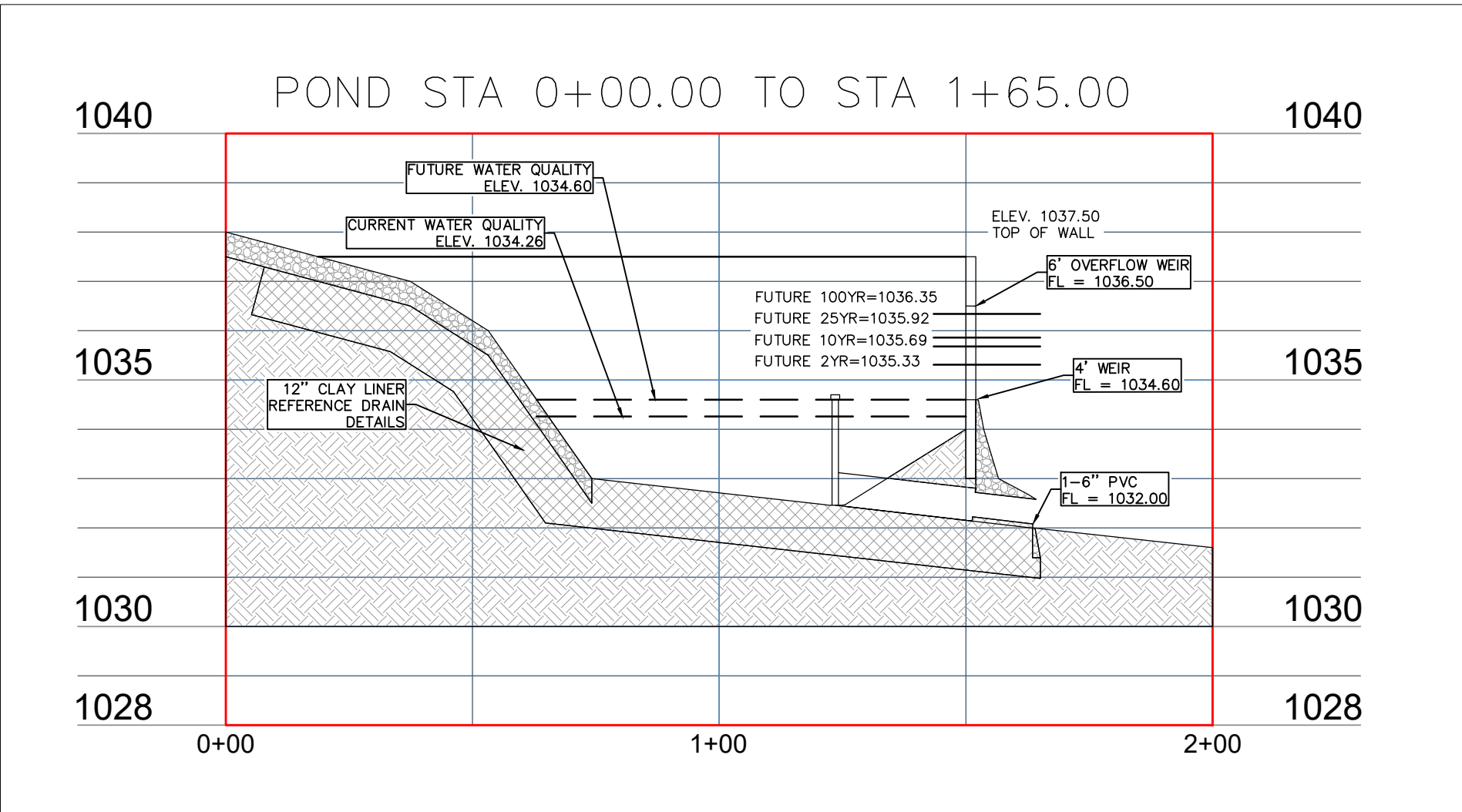
PROPOSED FLOW ARROWS

PROPERTY LINE

EXISTING CONTOURS

CONTOURS FROM LHSID MSH#3

PROPOSED CONTOURS



****NOTICE TO CONTRACTORS – UTILITIES****

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF ANY EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, THE GOVERNING MUNICIPALITY, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION PROVIDED IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

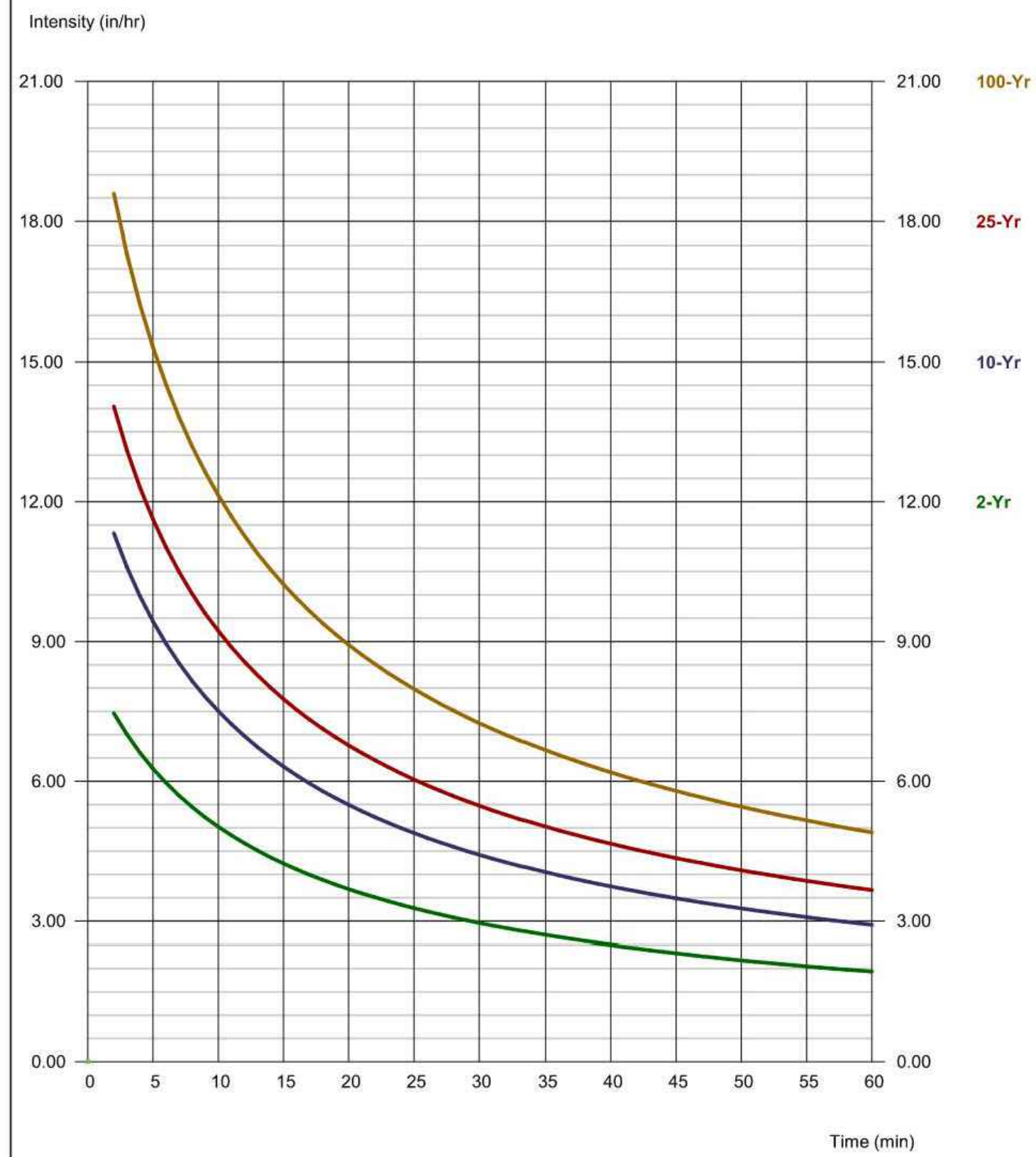
**** NOTICE TO CONTRACTORS – TOPOGRAPHIC SURVEY ****

TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY PERFORMED BY JPH LAND SURVEYING, INC.. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, IN WRITING, OF ANY DISCREPANCIES OR OMISSIONS TO THE TOPOGRAPHIC INFORMATION. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION (HORIZONTAL/VERTICAL) OF ANY BURIED CABLES, CONDUITS, PIPES, AND STRUCTURES (STORM SEWER, SANITARY SEWER, WATER, GAS, TELEVISION, TELEPHONE, ETC.) WHICH IMPACT THE CONSTRUCTION SITE. THE CONTRACTOR(S) SHALL NOTIFY THE OWNER AND ENGINEER IF ANY DISCREPANCIES ARE FOUND BETWEEN THE ACTUAL CONDITIONS VERSUS THE DATA CONTAINED IN THE CONSTRUCTION PLANS. ANY COSTS INCURRED AS THE RESULT OF NOT CONFIRMING THE ACTUAL LOCATION (HORIZONTAL/VERTICAL) OF SAID CABLES, CONDUITS, PIPES, AND STRUCTURES SHALL BE BORNE BY THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR(S) SHALL NOTIFY THE OWNER AND ENGINEER IF ANY ERRORS OR DISCREPANCIES ARE FOUND ON THE CONSTRUCTION DOCUMENTS (P&BE), WHICH NEGATIVELY IMPACT THE PROJECT. THE ENGINEER AND OWNER SHALL BE INDEMNIFIED OF PROBLEMS AND/OR COST WHICH MAY RESULT FROM CONTRACTOR'S FAILURE TO NOTIFY ENGINEER AND OWNER.

Date	Description	No.
Revisions		
Signature	11-30-2023	Date
TBPE Registration #: 13079		
LANGAN Langan Engineering and Environmental Services, Inc. 9606 N. Mopac Expressway, Suite 110 Austin, TX 78759 T: 737.289.7800 F: 737.289.7801 www.langan.com TBPE FIRM REG. #F-13709		
Project		
350 COUNTY ROAD 258 IDM BUILDERS LIBERTY HILL-ETJ WILLIAMSON TEXAS		
Drawing Title		
BATCH DETENTION POND PLAN		
Project No.	Drawing No.	
531021601	C5.02	
Date	11/30/23	
Drawn By	VM	
Checked By	AR	
		Sheet 9 of 12

Hydraflow IDF Curves

IDF file: Atlas 14 - Austin Zone 2.IDF



Hydrographs

Hydrograph Report

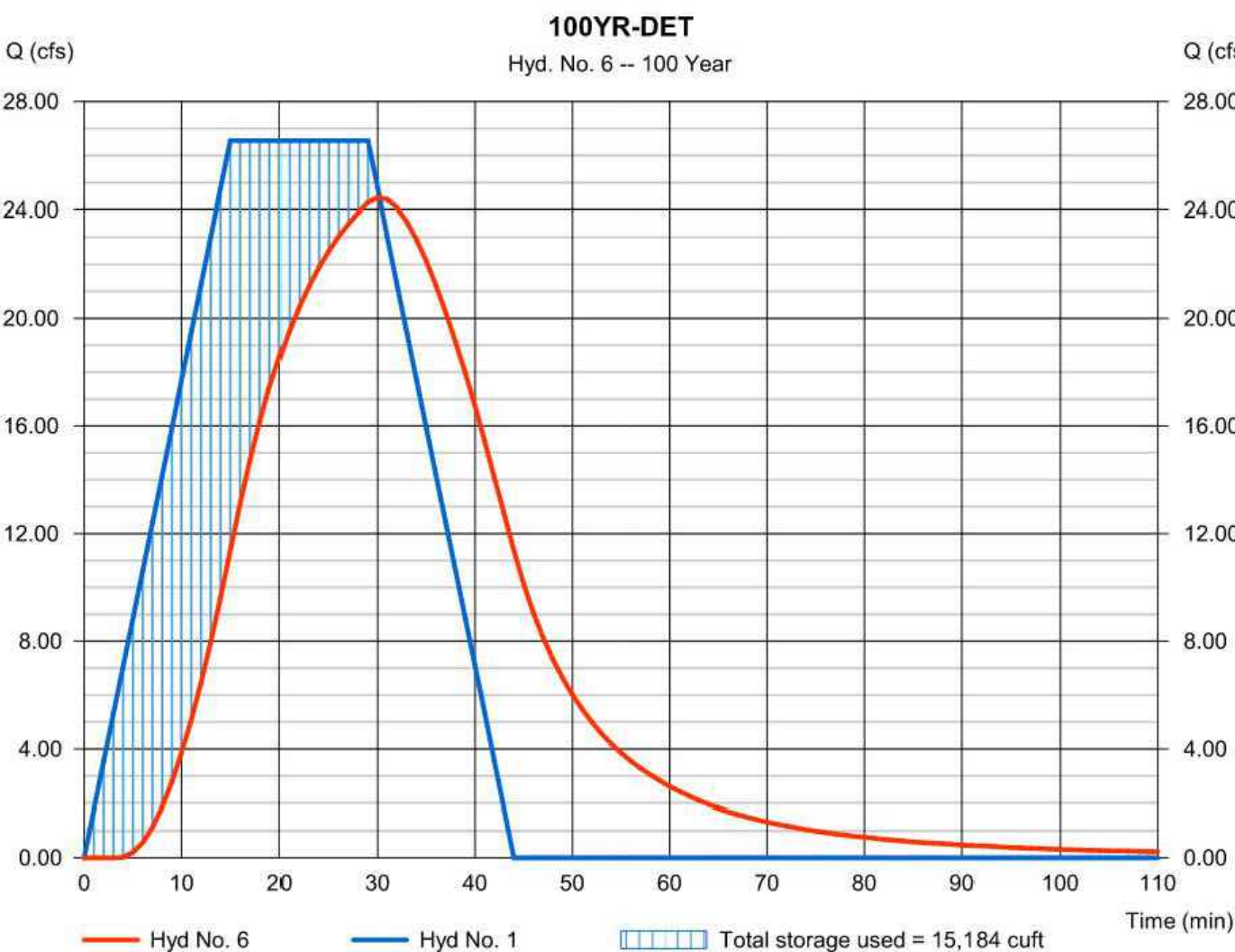
Hyd. No. 6

100YR-DET

Hydrograph type = Reservoir
Storm frequency = 100 yrs
Time interval = 1 min
Inflow hyd. No. = 1 - P-FUTURE (100)
Reservoir name = Detention

Peak discharge = 24.44 cfs
Time to peak = 30 min
Hyd. volume = 45,421 cuft
Max. Elevation = 1036.37 ft
Max. Storage = 15,184 cuft

Storage Indication method used.



Pond Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Thursday, 11 / 9 / 2023

Pond No. 1 - Detention

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Beginning Elevation = 1034.50 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1034.50	7,588	0	0
0.50	1035.00	7,867	3,863	3,863
1.50	1036.00	8,405	8,134	11,997
2.50	1037.00	8,942	8,571	20,568

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRar]		[A]	[B]	[C]	[D]
Rise (in)	Inactive	Inactive	Inactive	Inactive	Crest Len (ft)	= 4.00	6.00	Inactive	Inactive
Span (in)	= 0.00	0.00	0.00	0.00	Crest EL (ft)	= 1034.60	1036.50	0.00	0.00
No. Barrels	= 1	1	1	0	Weir Coeff.	= 2.60	2.60	3.33	3.33
Invert EL (ft)	= 0.00	0.00	0.00	0.00	Weir Type	= Broad	Broad	---	---
Length (ft)	= 0.00	0.00	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 0.00	0.00	0.00	n/a	Exit EL (in/hr)	= 0.000 (by Wet area)			
N-Value	= 0.13	0.13	n/a		TW Elev. (ft)	= 0.00			
Orifice Coeff.	= 0.60	0.60	0.60	0.60					
Multi-Stage	= n/a	No	No	No					

Note: Culvert/Orifice outfalls are analyzed under inlet (ic) and outlet (oc) control. Weir flows checked for orifice conditions (ic) and submergence (oc).



Texas Commission on Environmental Quality

Existing Conditions

TSS Removal Calculations 04-20-2009

Project Name: **Morgan Tract**
Date Prepared: **11/9/2023**

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

Page 3-29 Equation 3.3: $L_d = 27.2(A_{iu} \times P)$	Calculations from RG-348	Pages 3-27 to 3-30
where:	L_d TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load A_{iu} = 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 =	5.09 acres	
Predevelopment impervious area within the limits of the plan =	0.00 acres	
Total post-development impervious area within the limits of the plan =	1.84 acres	
Total post-development impervious cover fraction =	0.36	
P =	32 inches	
L_d TOTAL PROJECT =	1602 lbs.	
* The values entered in these fields should be for the total project area.		
Number of drainage basins / outfalls areas leaving the plan area =	1	

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

Drainage Basin/Outfall Area No. =	1
Total drainage basin/outfall area =	4.97 acres
Predevelopment impervious area within drainage basin/outfall area =	0.00 acres
Post-development impervious area within drainage basin/outfall area =	1.84 acres
Post-development impervious fraction within drainage basin/outfall area =	0.36
L_d THIS BASIN =	1602 lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	Batch Detention
Removal efficiency =	91 percent
Aquaglogic Cartridge Filter	
Batch Detention	
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_d) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_d = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$	
where:	A_i = Total On-Site drainage area in the BMP catchment area A_p = Impervious area proposed in the BMP catchment area A_p = Pervious area remaining in the BMP catchment area L_d = TSS Load removed from this catchment area by the proposed BMP
A_i =	4.97 acres
A_p =	1.84 acres
A_p =	3.03 acres
L_d =	1902 lbs

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

Desired L_d THIS BASIN =	1602 lbs.
F =	0.84

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
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 =	1320 cubic feet
Total Capture Volume (required water quality volume(s) x 1.20) =	7919 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.

Texas Commission on Environmental Quality

Full Capacity

TSS Removal Calculations 04-20-2009

Project Name: **Morgan Tract**
Date Prepared: **11/9/2023**

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

Page 3-29 Equation 3.3: $L_d = 27.2(A_{iu} \times P)$	Calculations from RG-348	Pages 3-27 to 3-30
where:	L_d TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load A_{iu} = 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 =	5.09 acres	
Predevelopment impervious area within the limits of the plan =	0.00 acres	
Total post-development impervious area within the limits of the plan =	2.45 acres	
Total post-development impervious cover fraction =	0.48	
P =	32 inches	
L_d TOTAL PROJECT =	2132 lbs.	
* The values entered in these fields should be for the total project area.		
Number of drainage basins / outfalls areas leaving the plan area =	1	

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

Drainage Basin/Outfall Area No. =	1
Total drainage basin/outfall area =	4.97 acres
Predevelopment impervious area within drainage basin/outfall area =	0.00 acres
Post-development impervious area within drainage basin/outfall area =	2.45 acres
Post-development impervious fraction within drainage basin/outfall area =	0.50
L_d THIS BASIN =	2132 lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	Batch Detention
Removal efficiency =	91 percent
Aquaglogic Cartridge Filter	
Batch Detention	
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_d) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_d = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$	
where:	A_i = Total On-Site drainage area in the BMP catchment area A_p = Impervious area proposed in the BMP catchment area A_p = Pervious area remaining in the BMP catchment area L_d = TSS Load removed from this catchment area by the proposed BMP
A_i =	4.97 acres
A_p =	2.45 acres
A_p =	2.42 acres
L_d =	2507 lbs

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

Desired L_d THIS BASIN =	2132 lbs.
F =	0.85

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
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 =	1676 cubic feet
Total Capture Volume (required water quality volume(s) x 1.20) =	10058 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.

INTENSITY-DURATION-FREQUENCY DATA				
Variables	Return Period			
	2	10	25	100
E	0.7517	0.7185	0.6814	0.6554
B	46.99	60.75	64.56	76.9
D	9.575	8.361	7.382	6.726

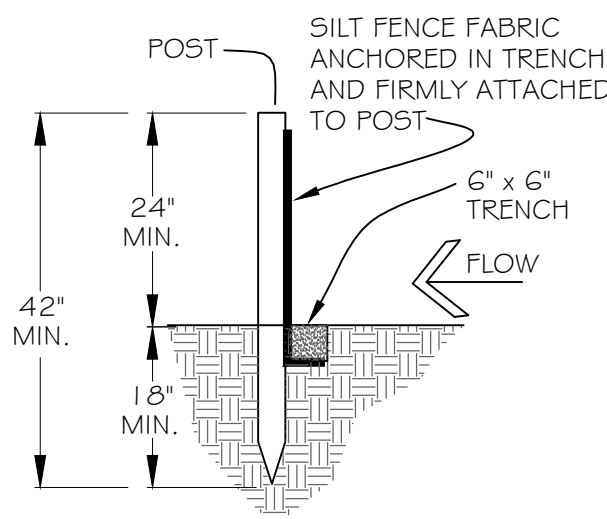
IDF Variables taken from table 2-28 in the City of Austin Drainage Criteria Manual.

PEAK DISCHARGE AT DESIGN POINT									
Design Point	Existing Conditions				Comments	Proposed Conditions			
	2-Year	10-Year	25-Year	100-Year		2-Year	10-Year	25-Year	100-Year
	(cfs)	(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)
1	7.63	13.32	17.58	26.83		6.97	12.68	16.90	26.14
POND RESULTS + OS-1									

PRE-DEVELOPMENT DRAINAGE AREA CALCULATIONS												
Drainage Area Designation	Drainage Area	Runoff Coefficient "C"				Time of Concentration	2-Year Rainfall Intensity (I2)	2-Year Peak Discharge (Q2)	10-Year Rainfall Intensity (I10)	10-Year Peak Discharge (Q10)	25-Year Rainfall Intensity (I25)	25-Year Peak Discharge (Q25)
-	(ac)	2- Yr	10- Yr	25- Yr	100- Yr	(min)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)
EX-1	5.09	0.35	0.41	0.44	0.51	15	4.28	7.63	6.38	13.32	7.85	17.58
Total	5.09							7.63		13.32		17.58
Note: Calculations based on the Rational Method: Q = C*I*A per the 2020 Round Rock Drainage Criteria Manual												

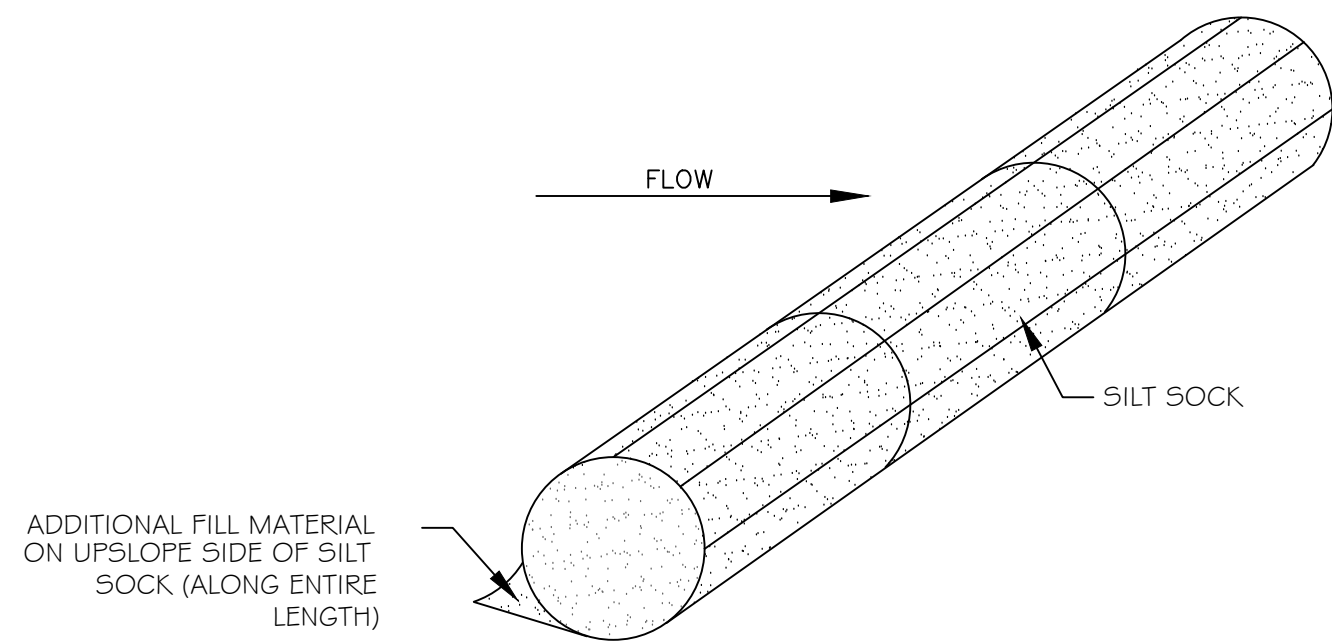
POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS												
Drainage Area Designation	Drainage Area	Runoff Coefficient "C"				Time of Concentration	2-Year Rainfall Intensity (I2)	2-Year Peak Discharge (Q2)	10-Year Rainfall Intensity (I10)	10-Year Peak Discharge (Q10)	25-Year Rainfall Intensity (I25)	25-Year Peak Discharge (Q25)
-	(ac)	2- Yr	10- Yr	25- Yr	100- Yr	(min)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)
P-1	1.52	0.38	0.44	0.47	0.55	15	4.23	2.45	6.31	4.25	7.77	5.59
P-2	0.65	0.41	0.48	0.51	0.58	10	5.02	1.35	7.50	2.32	9.22	3.05
P-3	2.70	0.59	0.66	0.70	0.79	11	4.90	7.81	7.31	13.09	8.99	17.11
OS-1	0.22	0.35	0.41	0.44	0.51	5	6.27	0.48	9.43	0.84	11.62	1.11
Total	5.09							12.09		20.50		26.87
US-1	3.26	0.35	0.41	0.44	0.51	12	4.63	5.29	6.91	9.25	8.50	12.20
Note: Calculations based on the Rational Method: Q = C*I*A per the 2020 Round Rock Drainage Criteria Manual												

Date	Description	No.
Revisions		
Signature	11-30-2023	Date
TBPE Registration #: 13079		
LANGAN Langan Engineering and Environmental Services, Inc. 9606 N. Mopac Expressway, Suite 110 Austin, TX 78759 T: 737.289.7800 F: 737.289.7801 www.langan.com TBPE FIRM REG. #F-13709		
Project		
350 COUNTY ROAD 258 IDM BUILDERS LIBERTY HILL-ETJ		
WILLIAMSON TEXAS		
Drawing Title		
DRAINAGE CALCULATIONS		
Project No.	Drawing No.	
531021601		
Date	11/30/23	
Drawn By	VM	
Checked By	AR	
		Sheet 10 of 12



NOTES:

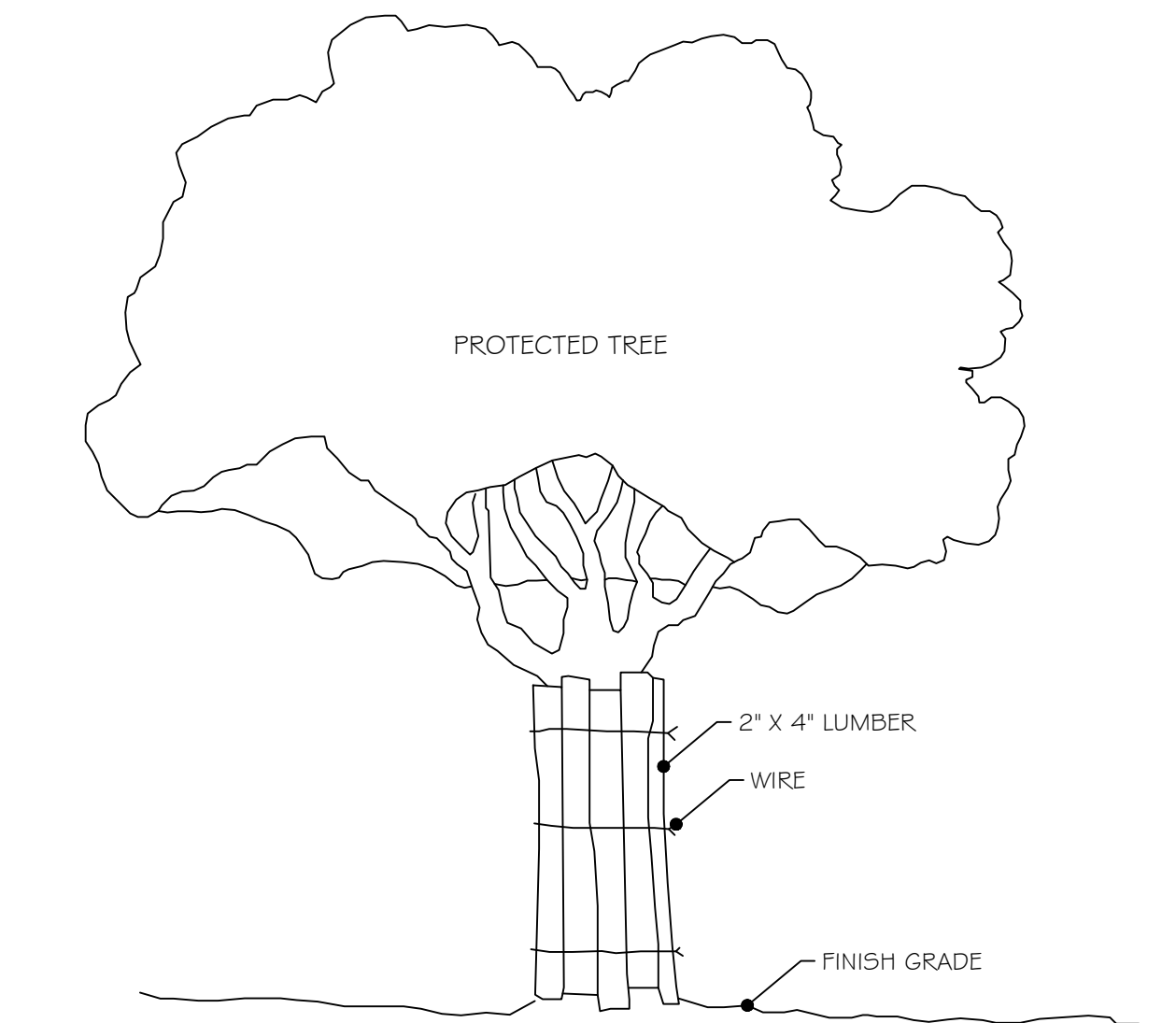
1. THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE DRESSING WITH ADDITIONAL STONE AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY. WASHING SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT CONTROLLING STRUCTURE. USE SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS TO PREVENT SEDIMENT FROM ENTERING ANY STORM DRAIN, DITCH, OR WATER COURSE.
3. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.



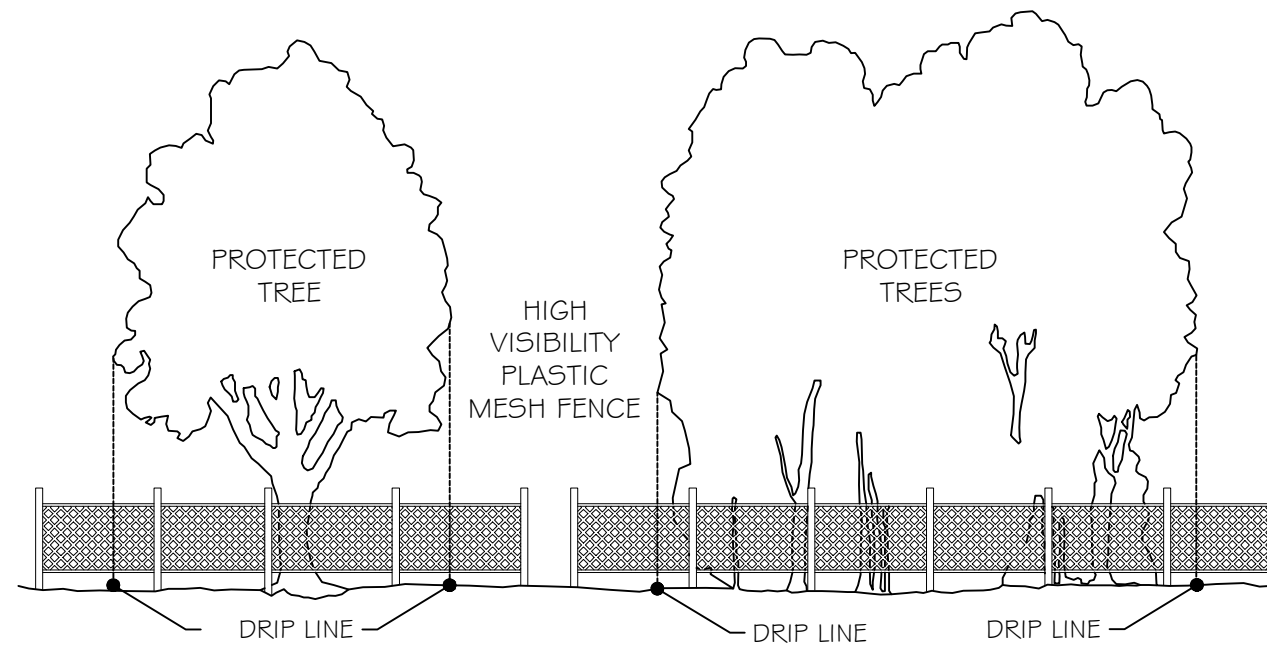
NOTES:

1. FILL AND INSTALL SILT SOCK WITH COMPOST MATERIAL AS PER MANUFACTURER'S SPECIFICATIONS. INSTALL ADDITIONAL FILL MATERIAL ON THE UPSLOPE SIDE OF THE BARRIER TO SEAL JOINT BETWEEN SURFACE AND SILT SOCK.
2. SILT SOCK SECTION SHALL BE PLACED IN A ROW, OR STAGGERED, WITH ENDS TIGHTLY ABUTTING ADJACENT SILT SOCK SECTIONS TO PREVENT FLOW OF WATER OVER THE BARRIER.
3. MAINTENANCE IS REQUIRED WHEN COMPOST ACCUMULATION EQUALS 1/2 OF THE SOCK HEIGHT. REMOVE ACCUMULATED SILT BY HAND OR INSTALL A SECOND ROW OF SOCKS POSITIONED ON TOP OF OR UP SLOPE OF THE ORIGINAL SOCK.
4. SMALL HOLES OR NARROW RIPS SHORTER THAN 12 INCHES MAY BE STITCHED CLOSED USING PLASTIC ZIP TIES. TEARS LONGER THAN 12 INCHES REQUIRE THE SOCK BE REPLACED.
5. WHEN A PINCH OR LOCALIZED DIAMETER REDUCTION OF MORE THAN 1/2 OF THE ORIGINAL DIAMETER INSTALL NEW SECTION OF SOCK UPSLOPE OF THE DAMAGED SECTION.
6. UPON REMOVAL, SWEEP WORK AREA CLEAN OF ALL SEDIMENT AND FILL MATERIAL; DISPOSE OF LEGALLY OFF-SITE.
7. SILT SOCK SHALL BE AS MANUFACTURED BY FILTREX INTERNATIONAL (FILTREX SEDIMENT CONTROL), OR APPROVED EQUAL.
8. SILT SOCKS USED FOR GENERAL EROSION CONTROL SHALL BE 12-INCHES DIAMETER; SILT SOCK USED FOR INLET PROTECTION SHALL BE 6-INCHES DIAMETER OR GREATER.

N.T.S.



N.T.S.



PRIOR TO CONSTRUCTION: The contractor or subcontractor shall construct and maintain, for each protected tree or group of trees on a construction site, a protective fencing which encircles the outer limits of the critical root zone of the trees to protect it from construction activity. All protective fencing shall be in place prior to commencement of any site work and remain in place until all exterior work has been completed.

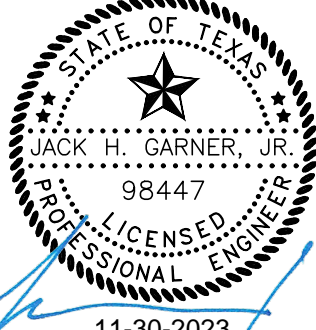
N.T.S.

N.T.S.

SIZE OF ROCK LBS.	% SMALLER BY WEIGHT
200	100
50	35-65
3	0

Date	Description	No.
------	-------------	-----

Revisions



Signature _____ Date _____
TBPE Registration #: 13079

LANGAN
Langan Engineering and
Environmental Services, Inc.
9606 N. Mopac Expressway, Suite 110
Austin, TX 78759

T: 737.289.7800 F: 737.289.7801 www.langan.com
TBPE FIRM REG. #F-13709

350 COUNTY ROAD 258
IDM BUILDERS

LIBERTY HILL-ETJ

Drawing Title

EROSION CONTROL DETAILS

Project No.	Drawing No.
-------------	-------------

531021601

Date _____

Drawn By

VM

C6.00

Sheet 11 of 12

