

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: HAMPTON HOMES BY BM DEVELOPERS					2. Regulated Entity No.:				
3. Customer Name: BM21, LLC.					4. Customer No.:				
5. Project Type: (Please circle/check one)	<input checked="" type="radio"/> New	Modification			Extension		Exception		
6. Plan Type: (Please circle/check one)	WPAP	<input checked="" type="radio"/> CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		<input checked="" type="radio"/> Non-residential			8. Site (acres):		9.996	
9. Application Fee:	\$5000.00		10. Permanent BMP(s):			3			
11. SCS (Linear Ft.):			12. AST/UST (No. Tanks):						
13. County:	Williamson		14. Watershed:			Turkey Creek-Brushy Creek			

Application Distribution

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

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

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

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

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

John P. Sullivan, P.E.

Print Name of Customer/Authorized Agent

1/8/2024

Signature of Customer/Authorized Agent

Date

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

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

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.

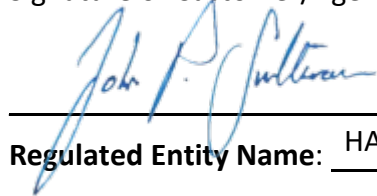
Signature

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: John P. Sullivan

Date: 1/8/2024

Signature of Customer/Agent:



Regulated Entity Name: HAMPTON HOMES BY BM DEVELOPERS

Project Information

1. County: Travis
2. Stream Basin: _____
3. Groundwater Conservation District (if applicable): _____
4. Customer (Applicant):

Contact Person: SWAMY DEVUNI

Entity: BM21, LLC.

Mailing Address: 1237 SUMMERBROOKE CIR

City, State: LEANDER, TX

Zip: 78641

Telephone: 703-220-7265

Fax: _____

Email Address: SWAMY@LATITUDE-INVESTMENT.COM

5. Agent/Representative (If any):

Contact Person: John P. Sullivan

Entity: Radius Civil Engineering

Mailing Address: 1914 W 36th St.

City, State: Austin, TX

Telephone: 512-431-8510

Email Address: jp@radiuscivil.com

Zip: 78731

Fax: _____

6. Project Location:

☒ The project site is located inside the city limits of Leander.

☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.

☐ The project site is not located within any city's limits or ETJ.

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 approximately 9.996 acres of undeveloped land on the west side of Ronald Reagan Blvd south of Journey Pkwy and North of Caballo Ranch Blvd at 14751 Ronald Reagan Blvd in Leander, TX

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: 72
☐ Commercial
☐ Industrial
☐ Other: _____

13. Total project area (size of site): 9.996 Acres

Total disturbed area: 9.2 Acres

14. Estimated projected population: 2 per unit / 72 units = 144

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	103,225	÷ 43,560 =	2.369
Parking	104,852	÷ 43,560 =	2.407
Other paved surfaces	16,314	÷ 43,560 =	0.375
Total Impervious Cover	224,391	÷ 43,560 =	5.151

Total Impervious Cover 5.151 ÷ **Total Acreage** 9.996 X 100 = 51.53 % 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: _____ City of Leander

☒ 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" = 80'.
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): _____.
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

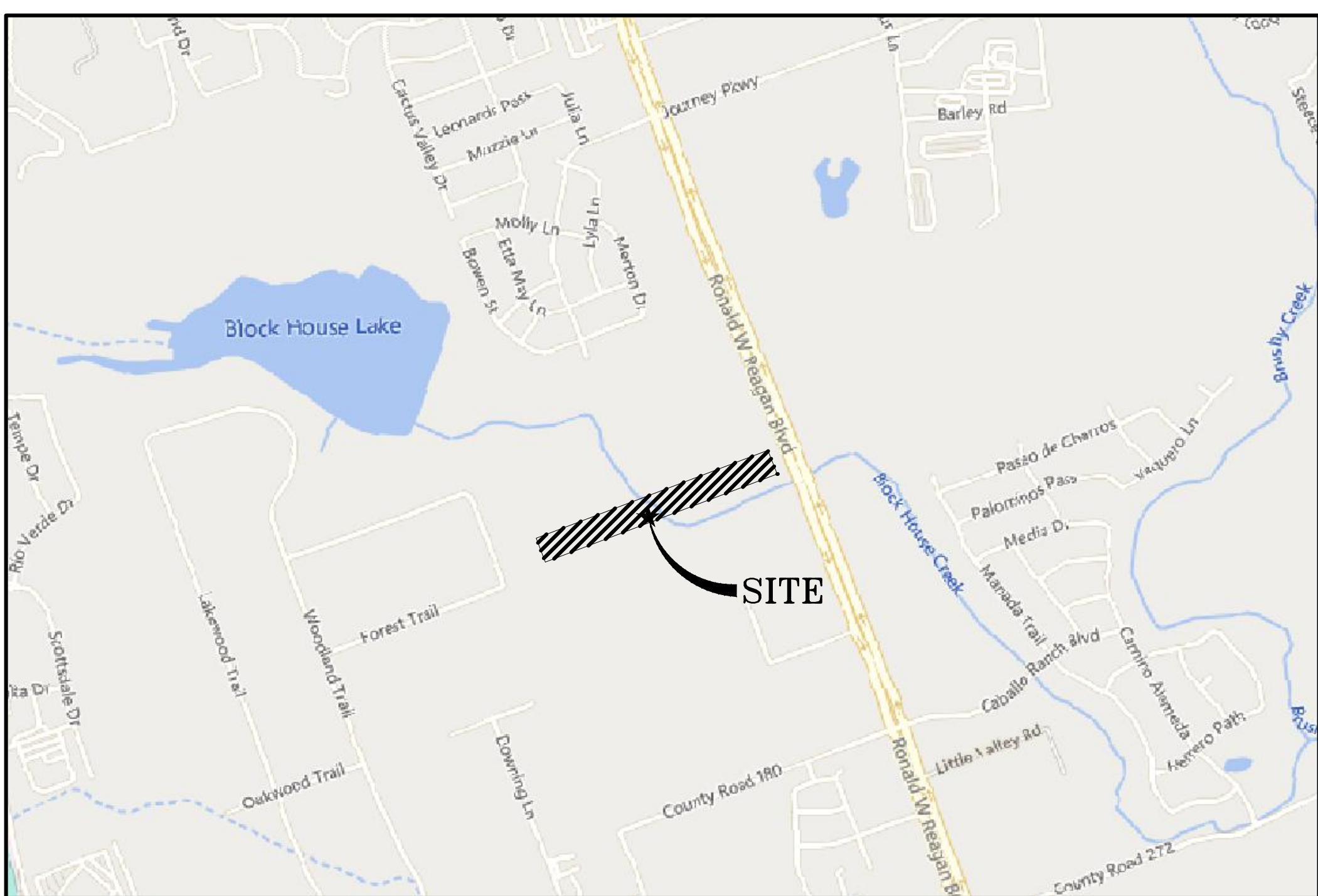
Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

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.



0' 500' 1000' 2000'



SCALE: 1"=1000'

LOCATION MAP

ATTACHMENT A

GRID: L20
MAPSCO: 466X



Produced by the United States Geological Survey

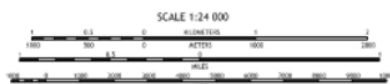
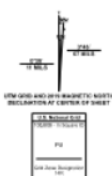
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government

grants and loans, map sales, private land, and government reservations may not be shown. Obtain permission before entering private land.

Agency	U.S.	July 8, September	October
Booth			
Name			

Hydrography.....	National Hydrography Data
Coastlines.....	National Ocean Service
Boundaries.....	Multiple sources, see metadata

Swedish	Swedish	Swedish	Swedish	Swedish
Norwegian	Norwegian	Norwegian	Norwegian	Norwegian



CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1985



ROAD CLASSIFICATION

Expressway		Local Connector	
Secondary Freeway		Local Road	
Artery		AVD	

Interstate Route US Route State Route

LEANDER, TX
2022



ATTACHMENT C – PROJECT NARRATIVE

The project is for a site that encompasses 9.996 acres of undeveloped land located at 14751 Ronald Reagan Blvd in Leander, Texas. Site has zoning approval for 72 units (townhomes) as well as an office and amenities building. The scope of the project will include utility, road, water, wastewater, drainage, stormwater detention, and water quality design for the purpose of developing the 9.996-acre tract.

Contributing Zone Plan Attachments

(TCEQ-10257)

ATTACHMENT D – FACTORS AFFECTING SURFACE WATER QUALITY

The proposed development may include factors that could affect storm and ground water quality:

- Disturbance of vegetated areas
- Construction spoils
- Leaking oil from parked vehicles
- Loss of vegetative ground cover due to inadequate watering or mismanagement
- Over fertilizing vegetative areas
- The use of roads by automotive traffic and subsequent oil / grease pollutants from normal use
- The accidental or improper discharge of the following:
 - a. Concrete
 - b. Cleaning solvents
 - c. detergents
 - d. Petroleum based products.
 - e. Paints
 - f. Paint solvents
 - g. Acids
 - h. Concrete additives
 - i. Portable restrooms

ATTACHMENT E – VOLUME AND CHARACTER OF STORMWATER

For the character and volume of the stormwater run-off, please see the accompanying Engineer's analysis.

ATTACHMENT J – BMPs FOR UPGRADIENT STORMWATER

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, 3 batch detention basins, designed using the TCEQ technical guidance Document *Complying with the Edwards Aquifer rules: Technical Guidance on Best Management Practices (2005)*, will be constructed to treat stormwater runoff.

ATTACHMENT K – BMPs FOR ON-SITE STORMWATER

Water Quality Pond: There is on-site stormwater quality control. Water quality ponds are often perceived as a positive aesthetic element in a community and offer significant opportunity for creative pond configuration and landscape design. In this case, a sand filtration pond is proposed to the City of Leander. Sheets are provided which show drainage areas and ponds containing each area. Calculations are also provided on the proposed ponds. See attached water quality pond sheets.

Leander. Sheets are provided which show drainage areas and ponds containing each area. Calculations are also provided on the proposed ponds. See attached water quality pond sheets.

ATTACHMENT L – BMPs FOR SURFACE STREAMS

Stormwater will be captured and treated by water quality ponds prior to being released into streams. During construction, streams will be protected with temporary erosion control measures such as silt screening and mulch socks to capture sediments.

ATTACHMENT M – CONSTRUCTION PLANS

Please see the attached construction plans proposed for this site.

ATTACHMENT N – INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

All control measures must be properly installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections performed by the applicant, or other information indicates a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

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.

Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges.

A Weekly Inspection and Maintenance Form has been created to maintain the BMPs onsite. The On-site Project Manager will be responsible for scheduling the weekly inspection and making sure all necessary repairs are made to ensure the proper performance of the onsite BMPs. The form consists of the BMP inspected, a list of items for each BMP, a date of last inspection/maintenance, the current condition of the item being inspected, a description of the maintenance or repair that is needed, and when the maintenance or repair was complete.

A batch detention basin is an extended detention basin modified to operate as a batch reactor. A valve on the first detention basin outlet is used to capture the produced runoff for a fixed amount of time and then release it. As in an extended detention basin, the batch detention basin is primarily used to remove particulate pollutants and to reduce maximum runoff rates associated with development to their pre-development levels. Batch detention basins have superior water quality performance than traditional extended detention basins and achieve a total suspended solids (TSS) removal efficiency of 91%. Substantial removal of TSS is achieved in the captured stormwater since the entire first flush volume is treated. Batch detention basins do not have a permanent water pool between storm events. A fixed vertical sediment depth marker should be installed in the first detention basin to indicate when sediment accumulation reaches a required removal depth of 6 inches.

Pest Management: The control of insects and weeds will be with minimal use of insecticides and herbicides.

Seasonal Mowing and Lawn Care: The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. If at the time of inspection, grass height exceeds 18 inches, notice will be provided to the owner/general contractor. Owner/general contractor are responsible to maintain grass height during construction and to correct to comply with TCEQ criteria.

Inspections: The facility will be inspected weekly. During each inspection, erosion areas inside and downstream of the BMP must be identified and repaired or revegetated immediately. If work must stop due to weather, hydro mulch will be applied to site to stabilize. With each inspection, any damage to the structural elements of the system will be identified and repaired immediately. Cracks, voids, and undermining will be patched/filled to prevent additional structural damage. Trees and root systems will be removed to prevent growth in cracks and joints that can cause structural damage.

Sediment Removal: A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

Basin Configuration: The basin should maintain a longitudinal slope between 1.0 – 5.0 % with a lateral slope between 1.0 – 1.5%. A low flow channel can be provided, if desired, to improve drainage. No specific length to width ratio is required since all the runoff is detained for 12 hours. Maximum water depth for the water quality volume should not exceed 5 feet.

Debris and Litter Removal: Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

Mowing: Grass areas in and around sand filters will be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. Vegetation on the pond embankments should be mowed as appropriate to prevent the establishment of woody vegetation.

Vegetation: A plan should be provided indicating how the basin will be stabilized, with vegetation, stone, or concrete. If vegetation is used for stabilization, the facility should be planted and maintained to provide full and robust cover. Vegetation on the basin embankments should be mowed as appropriate to prevent the establishment of woody vegetation.

Structural Repairs and Replacement: With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. An example of this type of repair can include patching of cracked concrete, sealing of voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

Basin Inlet: Energy dissipation is required at the basin inlet to reduce resuspension of accumulated sediment. Rock riprap or another filter system must be placed at the basin inlet to reduce velocities to less than 3 feet per second.

Outflow Structure: Batch extended detention facilities use the same outlet structures as extended detention basins with the replacement of an orifice with a single valve operated by an actuator. In general, the outflow structure should have a trash rack or other acceptable means of preventing clogging at the entrance to the outflow pipes or of the valve (see Figure 3 for an example). The outflow structure should be sized to allow for complete drawdown of the water quality volume within 48 hours after the required detention time. Velocity controls are required at the discharge point to prevent erosion and scour.

For online facilities, the principal and emergency spillways must be sized to provide 1.0 foot of freeboard during the 25-year event and to safely pass the flow from 100-year storm.

Splitter Box: When the basin is designed as offline, a splitter structure is used to isolate the water quality volume and bypass the remaining flow around the system once the entire water quality volume has been captured. The splitter box, or other flow diverting approach, should be designed to convey the 25-year storm event while providing at least 1.0 foot of freeboard along pond side slopes. Velocity controls are required at the bypass discharge point to prevent erosion and scour.

ATTACHMENT P – MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Measures for temporary controls: The purpose of a temporary gravel construction entrance is to provide a stable entrance/exit condition from the construction site and keep mud and sediment off public roads. A stabilized construction entrance is a stabilized pad of crushed stone located at any point where traffic will be entering or leaving the construction site from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking or

flowing of sediment onto public rights-of-way. This practice will be used at all points of construction ingress and egress. The entrance will be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed, or tracked onto public rights-of-way will be removed immediately by contractor. When necessary, wheels will be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it will be done on an area stabilized with crushed stone that drains into the appropriate designated area. All sediment will be prevented from entering a storm drain, ditch, or watercourse by using approved methods. Refer to sheets 13 and 14 attached to this section for location of the construction entrance and sheet 43 for the detail describing the construction entrance.

Silt Fence: A silt fence is a barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site. When properly used, silt fences can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond, allowing heavier solids to settle out. The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas of a limited extent. Silt fence will be used during the entire period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. This fence will remain in place until the disturbed area is permanently stabilized. All fencing will be inspected weekly, and after any rainfall. Sediment will be removed when buildup reaches 6 inches. Any torn fabric will be replaced, or a second line of fencing will be installed parallel to the torn section. Any sections of fencing that are crushed or collapsed during construction activity will be replaced or repaired. If a section of fence is obstructing vehicular access it will be relocated to a spot where it will provide equal protection but will not obstruct vehicles. When construction is complete, the sediment will be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence will be revegetated. The fence itself will be disposed of in an approved landfill.

Concrete Washout Area: The purpose of the concrete washout area is to prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employees and subcontractors.

The following steps will help reduce stormwater pollution from concrete wastes:

Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.

- Avoid mixing excess amounts of fresh concrete.
- Perform washout of concrete trucks in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite, except in designated areas.

For onsite washout:

- Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
- Wash out waste into the temporary pit where the concrete can set, be broken up, and then disposed properly.

Below grade concrete washout facilities are typical. These consist of a lined excavation sufficiently large to hold expected volume of washout material. Above grade facilities are used if excavation is not practical. Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this section, with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material. When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions, or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Measures for permanent control:

Three ponds are proposed on this project to minimize surface stream contamination and change the way in which water enters a stream because of the construction and development. A partial sand filtration and sedimentation system will be used to treat stormwater runoff for the subject site.

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.

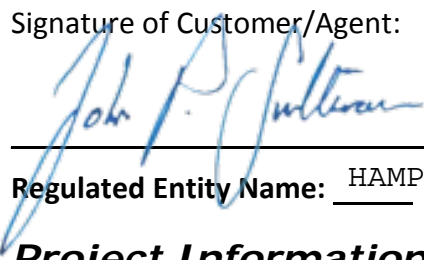
Signature

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: John P. Sullivan, P.E.

Date: 1/08/2024

Signature of Customer/Agent:



Regulated Entity Name: HAMPTON HOMES BY BM DEVELOPERS

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: N/A

Temporary Best Management Practices (TBMPs)

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

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

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

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

Soil Stabilization Practices

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

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

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

Administrative Information

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

ATTACHMENT A – Spill Response Actions

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

- We will hold regular safety meetings to discuss and reinforce appropriate disposal procedures.
- We will have our contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes will be contained and cleaned up immediately.
- Any hazardous materials and waste on site will be stored in covered containers and protected from vandalism.
- Spill cleanup materials will be stockpiled on site where they will be readily accessible.
- All employees will be trained in spill prevention and cleanup.
- Spills, should they occur, will be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise cleanup activities.
- We will not allow water used for cleaning and decontamination to enter storm drains or watercourses. We will collect and dispose of contaminated water in accordance with applicable regulations.
- We will place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

Cleanup

We will clean up leaks and spills immediately, using the following guidelines:

- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of it properly.

For minor spills (small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill) we will use the following guidelines.

- Contain the spread of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Recover spilled materials.
- Absorbent materials should be promptly removed and disposed of properly.
- Clean the contaminated area and properly dispose of contaminated materials.

Temporary Stormwater Section Attachments

(TCEQ-0602)

For semi-significant (spills which still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. but may require cessation of other activities) we will use the following guidelines:

- Spills should be cleaned up immediately.
- Contain spread of the spill.
- Notify the project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
- If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
- If the spill occurs during rain, cover the spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities we will use the following guidelines:

- Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM.
- After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
- Notification should first be made by telephone and followed up with a written report.
- The services of a spill's contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staff have arrived at the job site.
- Other agencies which may need to be consulted include, but are not limited to, the Leander Police Department, Travis County Sheriff Office, Leander Fire Department, etc.

ATTACHMENT B – POTENTIAL SOURCES OF CONTAMINATION

The proposed development may include factors that could affect storm and ground water quality:

- Disturbance of vegetated areas
- Construction spills
- Leaking oil from parked vehicles
- Loss of vegetative ground cover
- Fertilization of vegetative areas
- The use of roads by automotive traffic and subsequent oil / grease pollutants from normal use
- The accidental or improper discharge of the following:
 - Concrete
 - Cleaning solvents
 - Detergents
 - Petroleum based products.
 - Paints
 - Paint solvents
 - Acids
 - Concrete additives
 - Portable restrooms

ATTACHMENT C – SEQUENCE OF MAJOR ACTIVITIES

The general sequence of construction activities is as follows:

1. Reach out to the city for a pre-construction meeting and construction permit.
2. Set up E/S controls and tree protection and reach out to the city for inspection.
3. Setup temporary traffic controls
4. Construct drainage ponds and stormwater features.
5. Start utility, road, grading, franchise utility, and all necessary infrastructure construction.
6. Request final walkthrough and conduct walkthrough with engineer of record and city development department.
7. Engineer of record is responsible to prepare and submit closeout documents for project closeout.

ATTACHMENT D – TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

- 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.
- Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges.
- A Weekly Inspection and Maintenance Form has been created to maintain the BMPs onsite. The On-site Project Manager will be responsible for scheduling the weekly inspection and making sure all necessary repairs are made to ensure the proper performance of the onsite BMPs. The form consists of the BMP inspected, a list of items for each BMP, a date of last inspection/maintenance, the current condition of the item being inspected, a description of the maintenance or repair that is needed, and when the maintenance or repair was complete.
- Pest Management: The control of insects and weeds will be with minimal use of insecticides and herbicides.
- Seasonal Mowing and Lawn Care: The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. If at the time of inspection, grass height exceeds 18 inches, notice will be provided to the owner/general contractor. Owner/general contractor are responsible to maintain grass height during construction and to correct to comply with TCEQ criteria.
- Inspections: The facility will be inspected weekly. During each inspection, erosion areas inside and downstream of the site must be identified and repaired or revegetated immediately. If work must stop due to weather, hydro mulch will be applied to site to stabilize. With each inspection, any damage to the structural elements of the system will be identified and repaired immediately. Cracks, voids, and undermining will be patched/filled to prevent additional structural damage. Trees and root systems will be removed to prevent growth in cracks and joints that can cause structural damage.
- Sediment Removal: A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

ATTACHMENT F – STRUCTURAL PRACTICES

A list 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 included below.

- 3 Detention Ponds with sedimentation and biofiltration basins
- Triangular Sediment Filter Dikes
- Storm Inlet Sediment Traps
- Stabilized Construction Entrance
- Silt Fences
- Mulch Socks
- Skimmers
- Concrete Washouts
- Inlet Protection Grates

Placement of structural practices in floodplains has been avoided. For exact details see Pages 20-24 (Erosion and Sedimentation Plan) and Pages 50-59 (Pond Details) of the Site Plan.

Temporary Stormwater Section Attachments

(TCEQ-0602)

ATTACHMENT G – DRAINAGE AREA MAP

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

ATTACHMENT N – INSPECTION AND MAINTENANCE FOR BMPS

Subsurface Pond Maintenance:

Inspections:

Underground water quality facilities must be inspected at least once every six months and at least once annually during, or immediately following, a significant rainfall event to evaluate facility operation.

During each inspection, erosion areas inside and downstream of the underground water quality facility must be identified and repaired immediately. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) Must be identified and repaired immediately. Cracks, voids and undermining should be patched/filled to prevent additional structural damage. At least once annually, a pond drawdown report for each subsurface pond shall be completed in conjunction with a rainfall event equal to or greater than the design capture depth of the subsurface facility or a test of the pond after being filled by a secondary water source. The drawdown report shall indicate the date and time the pond(s) were observed full and the date and time the ponds were observed to be empty verifying that the sedimentation and filtration chambers both drawdown in the time frames as required by the ECM. At least one inspection shall be done annually by a 3rd party inspector and an annual 3rd party inspection report shall be submitted to the Watershed Protection Department (WPD) for review. WPD shall be notified at least seven days prior to the annual 3rd party inspection to allow for the opportunity for observation. The annual 3rd party inspection report shall be sealed by a Texas professional engineer, shall include photographs of the sedimentation and filtration chambers, and the drawdown verification report.

Sediment Removal:

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

Media replacement:

Maintenance of the filter media is necessary when the drawdown time exceeds 96 hours provided all other components of the pond are functioning correctly. When this occurs, the upper layer of sand should be removed and replaced with new material meeting the original specifications. If dewatering of the system is necessary due to lack of functionality, ensure dewatering is properly conducted.

Debris and litter removal:

Debris and litter should be removed regularly. Particular attention should be paid to floating debris that can eventually clog the control device or riser.

Filter underdrain:

Temporary Stormwater Section Attachments

(TCEQ-0602)

Clean underdrain piping network to remove any sediment buildup as needed to maintain design drawdown time.

Responsibility:

The responsibility of the inspection and maintenance of all subsurface ponds shall be the responsibility of the operator of the facilities.

Major maintenance requirements:

A) accumulated paper, trash and debris shall be removed every six (6) months or as necessary to maintain proper operation. Structural integrity shall be maintained at all times.

B) basins and all appurtenances shall be inspected annually, or more frequently if specified, and repairs shall be made if necessary. When maintenance or repairs are performed, the scm shall be restored to the original lines and grades.

C) corrective maintenance shall occur:

- I. Any time drawdown of the water quality volume does not occur within ninety-six (96) hours (i.e., no standing water is allowed), unless a greater maximum drawdown time is specified in the plans.
- II. For detention ponds only, any time drawdown does not occur within twenty-four (24) hours.

D) the inlet and outlet of SCMS shall be maintained unimpeded in order to always convey flow. Observed blockages to the inlet and outlet, due to vegetation, sediment, debris, or any other cause, shall be removed.

E) no unvegetated area shall exceed ten (10) square feet. This performance requirement applies to the entire pond including the pond bottom, side slopes, and areas adjacent to the pond, and is intended to limit erosion.

F) integrated pest management shall be performed and shall adhere to section 1.6.2.f, integrated pest management guidelines.

G) the minimum vegetation height shall be four (4) inches in the SCM and all appurtenances, including the toe of the berm or wall outside the SCM, where applicable.

H) sediment build-up shall be removed:

- I. When the accumulation exceeds six (6) inches in splitter boxes, wet wells and basins.
- II. When sediment traps are full.
- III. When sediment, of any amount, causes standing water conditions or reduces basin storage by more than 10%.

I) when sediment is removed, the following requirements apply:

Temporary Stormwater Section Attachments

(TCEQ-0602)

- I. Irrigation shall be provided, as needed, until vegetation is established (well rooted). See section 1.6.3.d, irrigation guidelines.
- II. The design depth of the filtration media shall be verified. See section 1.6.3.b.5.
- III. Tilling of the filtration medium is not allowed.

Mowing: Grass areas in and around sand filters will be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. Vegetation on the pond embankments should be mowed as appropriate to prevent the establishment of woody vegetation.

Structural Repairs and Replacement: With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. An example of this type of repair can include patching of cracked concrete, sealing of voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

ATTACHMENT J – SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Measures for temporary controls: The purpose of a temporary gravel construction entrance is to provide a stable entrance/exit condition from the construction site and keep mud and sediment off public roads. A stabilized construction entrance is a stabilized pad of crushed stone located at any point where traffic will be entering or leaving the construction site from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking or flowing of sediment onto public rights-of-way. This practice will be used at all points of construction ingress and egress. The entrance will be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed, or tracked onto public rights-of-way will be removed immediately by contractor. When necessary, wheels will be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it will be done on an area stabilized with crushed stone that drains into the appropriate designated area. All sediment will be prevented from entering a storm drain, ditch, or watercourse by using approved methods. Refer to sheets 13 and 14 attached to this section for location of the construction entrance and sheet 43 for the detail describing the construction entrance.

Silt Fence: A silt fence is a barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site. When properly used, silt fences can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond, allowing heavier solids to settle out. The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas of a limited extent. Silt fence will be used during the entire period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. This fence will remain in place until the disturbed area is permanently stabilized. All fencing will be inspected weekly, and after any rainfall. Sediment will be removed when buildup reaches 6 inches. Any torn fabric will be replaced, or a second line of fencing will be installed parallel to the torn section. Any sections of fencing that are crushed or collapsed during construction activity will be replaced or repaired. If a section of fence is obstructing vehicular access it will be relocated to a spot where it will provide equal protection but will not obstruct vehicles. When construction is complete, the sediment will be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence will be revegetated. The fence itself will be disposed of in an approved landfill.

Measures for permanent control:

Three ponds are proposed on this project to minimize surface stream contamination and change the way in which water enters a stream because of the construction and development. A partial sand filtration and sedimentation system will be used to treat stormwater runoff for the subject site.

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

I Swamp Devuni
Print Name
owner
Title - Owner/President/Other
of BM21, LLC.
Corporation/Partnership/Entity Name
have authorized JP SULLIVAN, P.E.
Print Name of Agent/Engineer
of RADIUS CIVIL 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:


Applicant's Signature

01/10/2024
Date

THE STATE OF Texas §

County of Williamson §

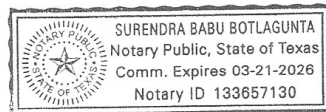
BEFORE ME, the undersigned authority, on this day personally appeared Swamy D. Vanni known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 10th day of January, 2024.

B. Surendra Babu
NOTARY PUBLIC

Surendra Babu Botlagunta
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 3/21/2026



Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: HAMPTON HOMES BY BM DEVELOPERS

Regulated Entity Location: Leander, TX

Name of Customer: BM21, LLC.

Contact Person: John P. Sullivan, P.E Phone: 512-656-6668

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

Type of Plan	Size	Fee Due
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	9.996 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: 1/8/2024

Application Fee Schedule

Texas Commission on Environmental Quality

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

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

Extension of Time Requests

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



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

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
<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)				<i>If new Customer, enter previous Customer below:</i>	
BM21, LLC.					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0805210970		32091503956			
11. Type of Customer:		<input checked="" type="checkbox"/> Corporation		<input 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 checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input 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:		2508 DAPPLE GRAY LN			
City		Leander	State	TX	ZIP
					78641
				ZIP + 4	5334
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information**21. General Regulated Entity Information** (If 'New Regulated Entity' is selected, a new permit application is also required.)
☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

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).

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

HAMPTON HOMES BY BM DEVELOPERS

23. Street Address of the Regulated Entity:

14571 Ronald Reagan Blvd

(No PO Boxes)

City

Leander

State

TX

ZIP

78641

ZIP + 4

24. County

Williamson

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

25. Description to Physical Location:**26. Nearest City**

State

Nearest ZIP Code

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).

27. Latitude (N) In Decimal:**28. Longitude (W) In Decimal:**

Degrees

Minutes

Seconds

Degrees

Minutes

Seconds

29. Primary SIC Code**30. Secondary SIC Code****31. Primary NAICS Code****32. Secondary NAICS Code**

(4 digits)

(4 digits)

(5 or 6 digits)

(5 or 6 digits)

1531

236117

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)

Land Development

34. Mailing Address:

1237 SUMMERBROOK CIR

City

Leander

State

TX

ZIP

78641

ZIP + 4

1463

35. E-Mail Address:

SWAMY@LATITUDE-INVESTMENT.COM

36. Telephone Number**37. Extension or Code****38. Fax Number** (if applicable)

703-220-7265

() -

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.

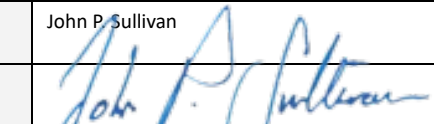
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input checked="" 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:	John P. Sullivan, P.E.		41. Title:	President
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(512) 431-8510		() -	jp@radiuscivil.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:	Radius Civil Engineering		Job Title:	President	
Name (In Print):	John P. Sullivan			Phone:	(512) 431- 8510
Signature:				Date:	1/8/2024

OWNER

BM ASSETS

1237 SUMMERBROOKE CIR

LEANDER, TEXAS 78641

CONTACT: SWAMY DEVUNI

SWAMY@LATITUDE-INVESTMENT.COM

ENGINEER

RADIUS ENGINEERING, LLC

1914 W 36TH ST

AUSTIN, TEXAS 78731

CONTACT: JP SULLIVAN, PE

(512) 431 - 8510

ARCHITECT

IDEO ART + DESIGN

409 TORONTO AVE

MCALLEN, TEXAS 78503

CONTACT: ELI OLIVAREZ

956-686-2466

SURVEYOR

MC SURVEYING

6448 E HWY. 290 STE. B-105

AUSTIN, TEXAS, 78723

CONTACT: GARRETT CAVAIUOLO, RPLS

(737) 202 8333

ZONING:

THE SITE IS ZONED CREEKS EDGE PUD - SFT & LO ZONING DISTRICTS

LAND USE SUMMARY:

EXISTING LAND USE: SINGLE FAMILY
PROPOSED LAND USE: TOWNHOME RESIDENTIAL LOCAL OFFICE, ATTACHED RESIDENTIAL TOWNHOUSES
GROSS ACREAGE: 9.986 ACRES
LIMITS OF CONSTRUCTION: 9.320 ACRES
TOTAL IMPERVIOUS COVER: 224,391 SQ. FT
BUILDING IMPERVIOUS COVER: 103,225 SF SQ. FT
FUTURE LAND USE CATEGORY: NEIGHBORHOOD RESIDENTIAL, MULTI-USE CORRIDOR-PRIORITY CORRIDOR

BENCHMARKS:

CUT SQUARE IN TOP OF CONCRETE HEADWALL
ELEV = 845.39' NAVD 1988 DATUM.

LEGAL DESCRIPTION:

TRACT 1: CALLED 9.977 ACRE TRACT OUT OF THE WALTER CAMPBELL SURVEY ABSTRACT NO. 3

SURVEY:

EXISTING CONDITIONS SURVEY PREPARED BY MC SURVEYING DATED OCTOBER 14, 2022

GENERAL NOTES:

1. ALL WATER QUALITY AND DRAINAGE IMPROVEMENTS PROPOSED WITH THIS PLAN SET ARE PRIVATE, OWNED AND AMAINTED BY THE OWNER.
2. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETNESS, ACCURACY, REGULATORY COMPLIANCE, AND ADEQUACY OF THESE PLANS AND/OR SPECIFICATIONS WHETHER OR NOT THE PLANS AND/OR SPECIFICATIONS WERE REVIEWED BY THE CITY ENGINEERS(S).

ASSOCIATED PROJECT NUMBERS:

FINAL PLAT: XXXXXX
FLOODPLAIN DEVELOPMENT: XXXXXX

LEGAL DOCUMENTS:

DRAINAGE EASEMENTS: DOC# _____ O.P.R.W.C.T

APPROVED BY:

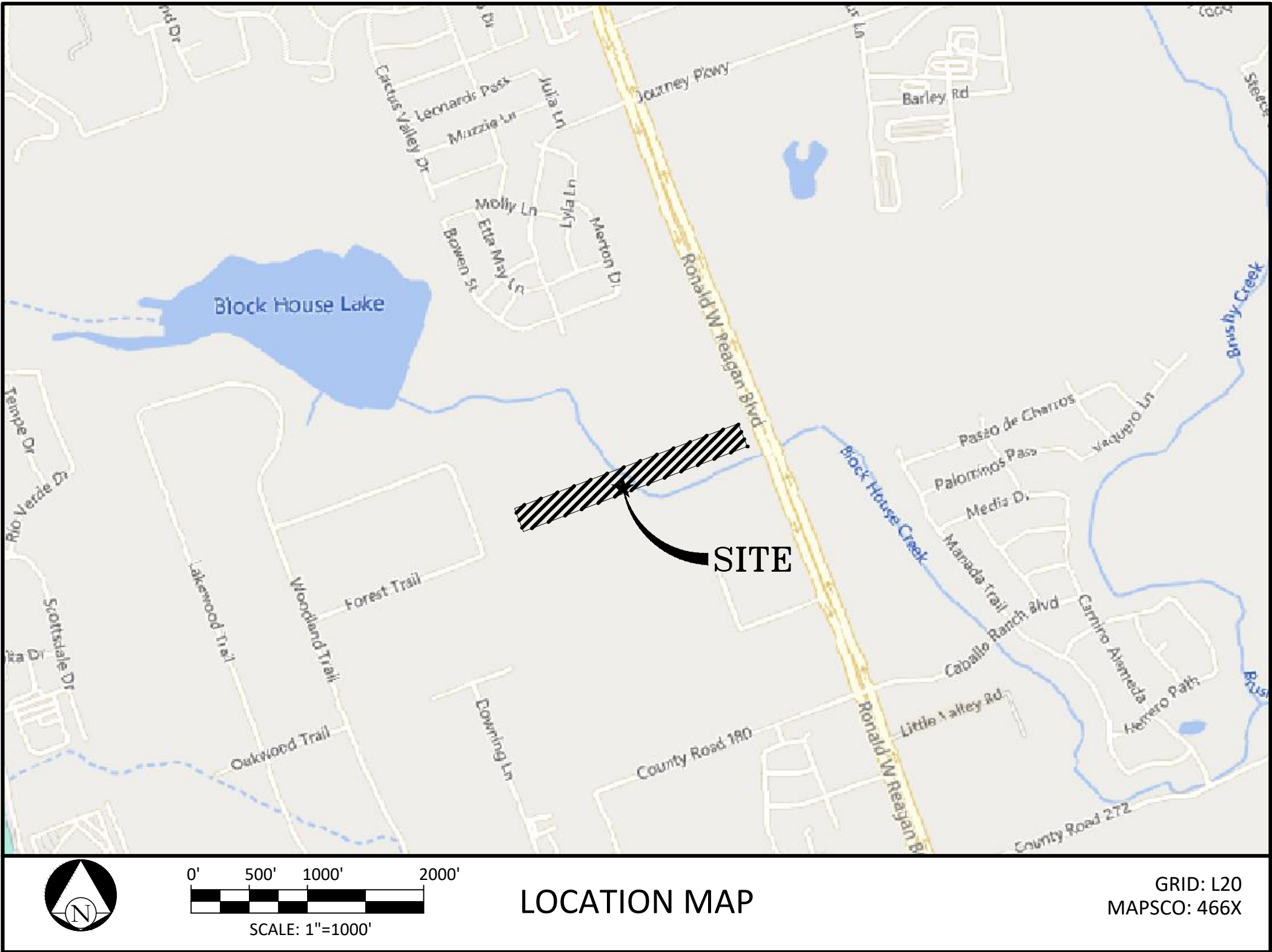
ROBIN M. GRIFFIN, AICP, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES	DATE
EMILY TRUMAN, P.E., CFM, CITY ENGINEER	DATE
MARK TUMMONS, CPRP, DIRECTOR OF PARKS AND RECREATION	DATE
CHIEF JOSHUA DAVIS, FIRE MARSHALL	DATE

HAMPTON HOMES BY BM DEVELOPERS

SITE DEVELOPMENT PLANS

SD-23-0132

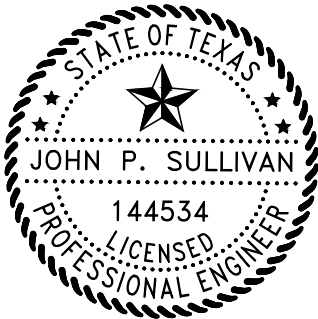
14751 RONALD REAGAN BLVD,
LEANDER, TEXAS 78641



SUBMITTAL DATE: JANUARY 3, 2024

SUBMITTED BY: *John P. Sullivan* 01/03/2024 DATE

JOHN P. SULLIVAN, P.E
RADIUS CIVIL ENGINEERING
JP@RADIUSCIVIL.COM
(512) 431 - 8510



I, JOHN P. SULLIVAN, P.E., CERTIFY THAT THESE ENGINEERING DOCUMENTS ARE COMPLETE, ACCURATE, AND ADEQUATE FOR THE INTENDED PURPOSES, INCLUDING CONSTRUCTION, BUT ARE NOT AUTHORIZED FOR CONSTRUCTION PRIOR TO FORMAL CITY APPROVAL

RADIUS

CIVIL ENGINEERING

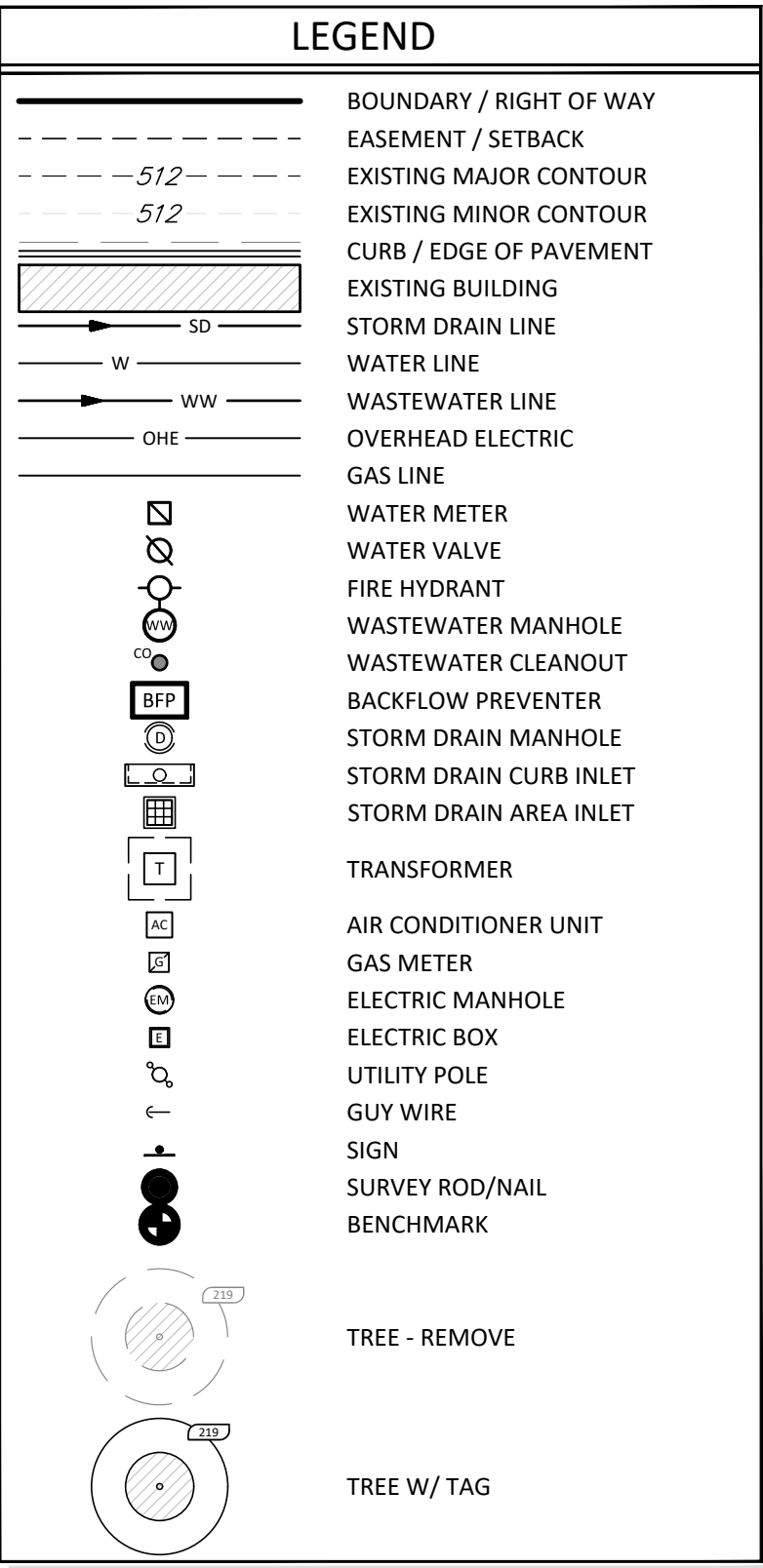
TX. REG. NO F-23684

1914 W 36TH ST
AUSTIN, TEXAS 78731
(512) 431-8510

REVISIONS/CORRECTIONS		
NO.	DESCRIPTION	APPROVAL

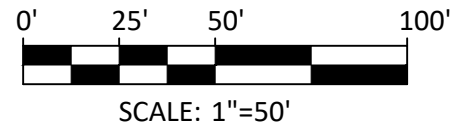
SHEET LIST TABLE	
Sheet Number	Sheet Title
01	COVER SHEET
02	GENERAL NOTES
03	FINAL PLAT (1 OF 4)
04	FINAL PLAT (2 OF 4)
05	FINAL PLAT (3 OF 4)
06	FINAL PLAT (4 OF 4)
07	EXISTING CONDITIONS PLAN (1 OF 2)
08	EXISTING CONDITIONS PLAN (2 OF 2)
09	TREE LIST TABLE
10	DEMOLITION PLAN
11	SITE PLAN OVERALL
12	DIMENSIONAL CONTROL PLAN (1 OF 3)
13	DIMENSIONAL CONTROL PLAN (2 OF 3)
14	DIMENSIONAL CONTROL PLAN (3 OF 3)
15	SITE PLAN CALCULATIONS & DETAILS
16	PAVING PLAN (1 OF 3)
17	PAVING PLAN (2 OF 3)
18	PAVING PLAN (3 OF 3)
19	ADDRESSING PLAN
20	EROSION & SEDIMENTATION CONTROL PLAN (1 OF 3)
21	EROSION & SEDIMENTATION CONTROL PLAN (2 OF 3)
22	EROSION & SEDIMENTATION CONTROL PLAN (3 OF 3)
23	EROSION AND SEDIMENTATION CONTROL DETAILS
24	EXISTING DRAINAGE AREA MAP
25	PROPOSED DRAINAGE AREA MAP
26	PROPOSED SUB-DRAINAGE AREA MAP
27	FLOODPLAIN STUDY EXISTING DRAINAGE AREA MAP
28	FLOODPLAIN STUDY - EXISTING FLOODPLAIN MAP & CALCULATIONS
29	FLOODPLAIN STUDY - PROPOSED FLOODPLAIN MAP & CALCULATIONS
30	FLOODPLAIN DEVELOPMENT PLAN
31	FLOODPLAIN STUDY - EX HECRAS CROSS SECTIONS & RESULTS
32	FLOODPLAIN STUDY - PROPOSED HECRAS CROSS SECTIONS & RESULTS
33	OVERALL GRADING PLAN
34	ENLARGED GRADING PLAN (1 OF 3)
35	ENLARGED GRADING PLAN (2 OF 3)
36	ENLARGED GRADING PLAN (3 OF 3)
37	CUT-FILL MAP
38	OVERALL STORM LAYOUT
39	ENLARGED STORM LAYOUT (1 OF 3)

40	ENLARGED STORM LAYOUT (2 OF 3)
41	ENLARGED STORM LAYOUT (3 OF 3)
42	STORM LINE A PLAN & PROFILE (1 OF 6)
43	STORM LINE B PLAN & PROFILE (2 OF 6)
44	STORM LINE C PLAN & PROFILE (3 OF 6)
45	STORM LINE D PLAN & PROFILE (4 OF 6)
46	STORM LINE E PLAN & PROFILE (5 OF 6)
47	STORM LINE F PLAN & PROFILE (6 OF 6)
48	CULVERT PLAN & PROFILE
49	STORM DETAILS
50	POND 1 PLAN & PROFILE (1 OF 2)
51	POND 1 PLAN & PROFILE (2 OF 2)
52	POND 1 NOTES & DETAILS
53	POND 2 PLAN & PROFILE (1 OF 2)
54	POND 2 PLAN & PROFILE (2 OF 2)
55	POND 2 NOTES & DETAILS
56	POND 3 PLAN & PROFILE (1 OF 2)
57	POND 3 PLAN & PROFILE (2 OF 2)
58	POND 3 NOTES & DETAILS
59	SUBSURFACE POND NOTES AND DETAILS
60	OVERALL UTILITY PLAN
61	ENLARGED WATER PLAN (1 OF 3)
62	ENLARGED WATER PLAN (2 OF 3)
63	ENLARGED WATER PLAN (3 OF 3)
64	ENLARGED WASTEWATER PLAN (1 OF 3)
65	ENLARGED WASTEWATER PLAN (2 OF 3)
66	ENLARGED WASTEWATER PLAN (3 OF 3)
67	WATER DETAILS (1 OF 2)
68	WATER DETAILS (2 OF 2)
69	WASTEWATER PLAN AND PROFILES (1 OF 3)
70	WASTEWATER PLAN AND PROFILES (2 OF 3)
71	WASTEWATER PLAN AND PROFILES (3 OF 3)
72	WASTEWATER DETAILS (1 OF 2)
73	WASTEWATER DETAILS (2 OF 2)
74	LANDSCAPE PLAN (1 OF 4)
75	LANDSCAPE PLAN (2 OF 4)
76	LANDSCAPE PLAN (3 OF 4)
77	LANDSCAPE PLAN (4 OF 4)

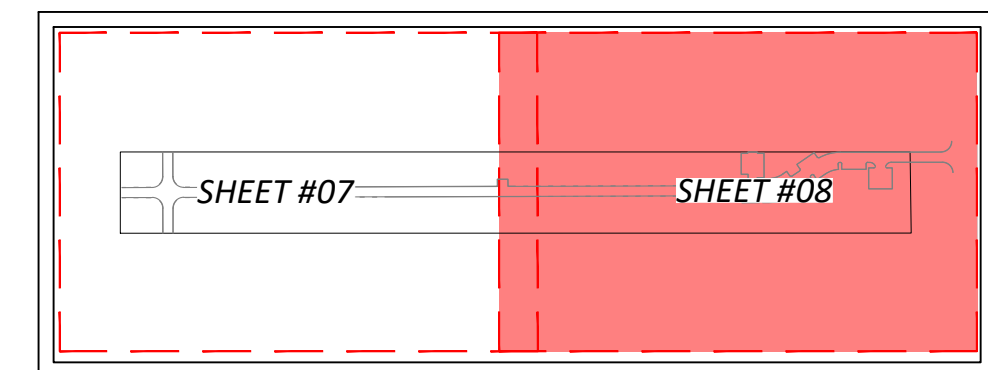
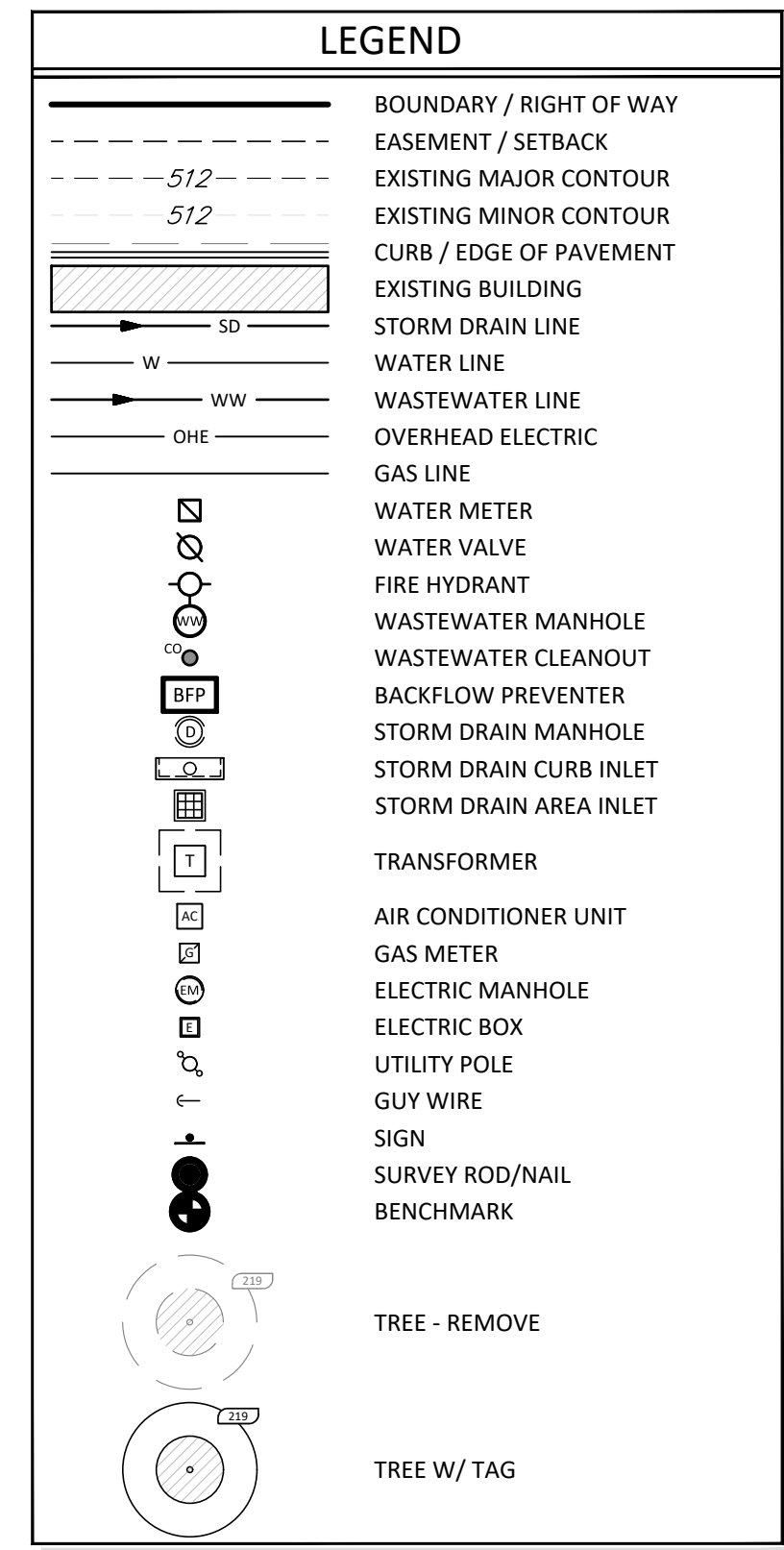


KEY MAP
SCALE: 1"=500'

SCALE: 1"=500'



BENCHMARK #1:
CUT SQUARE IN TOP OF CONCRETE HEADWALL
ELEV = 845.39'



KEY MAP
SCALE: 1"=500'

ATTENTION:

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THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. SHOULD THERE BE ANY DISCREPANCY BETWEEN UTILITY LOCATIONS IN THE FIELD, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY.

AT LEAST 48 HOURS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY TO REQUEST EXACT FIELD LOCATIONS AS REQUIRED. CONTRACTOR SHALL CONTACT THE TEXAS EXCAVATION SAFETY SYSTEM AT 800-344-8377 AT LEAST TWO FULL WORKING DAYS BEFORE COMMENCING ANY EXCAVATION OR UTILITY WORK.

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	0°42'43"	17011.73'	211.39'	S21°33'54"E	211.38'

- NOTES:**
1. EXISTING CONDITIONS SURVEY PREPARED BY MC SURVEYING ON OCTOBER 14, 2022.
 2. A PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
 3. WHERE TREE PROTECTION FENCING CANNOT BE INSTALLED AROUND THE FULL CRZ, PLACE FENCING AT THE 1/2 CRZ AND ADD 8" OF HARDWOOD MULCH FROM THE 1/2 CRZ TO THE FULL CRZ.
 4. THE SIZE AND LOCATION OF UTILITY STRUCTURES, (IF SHOWN), MAY BE EXAGGERATED FOR GRAPHICAL CLARITY. THE SURVEY SHOWS FIELD MEASURED SIZES AND DEPTHS AS OBSERVED FROM GROUND LEVEL OPENINGS.

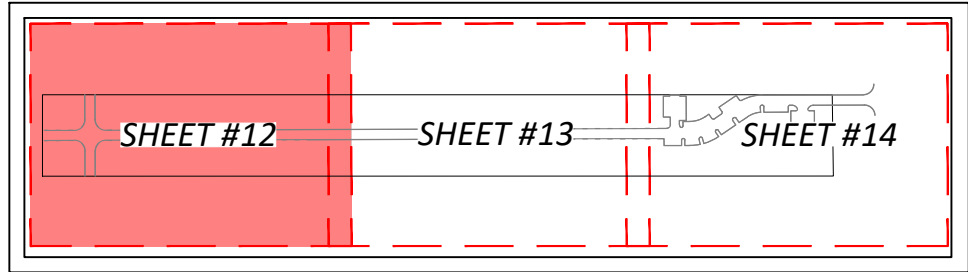
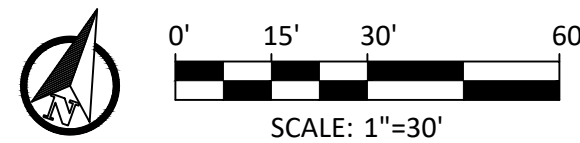
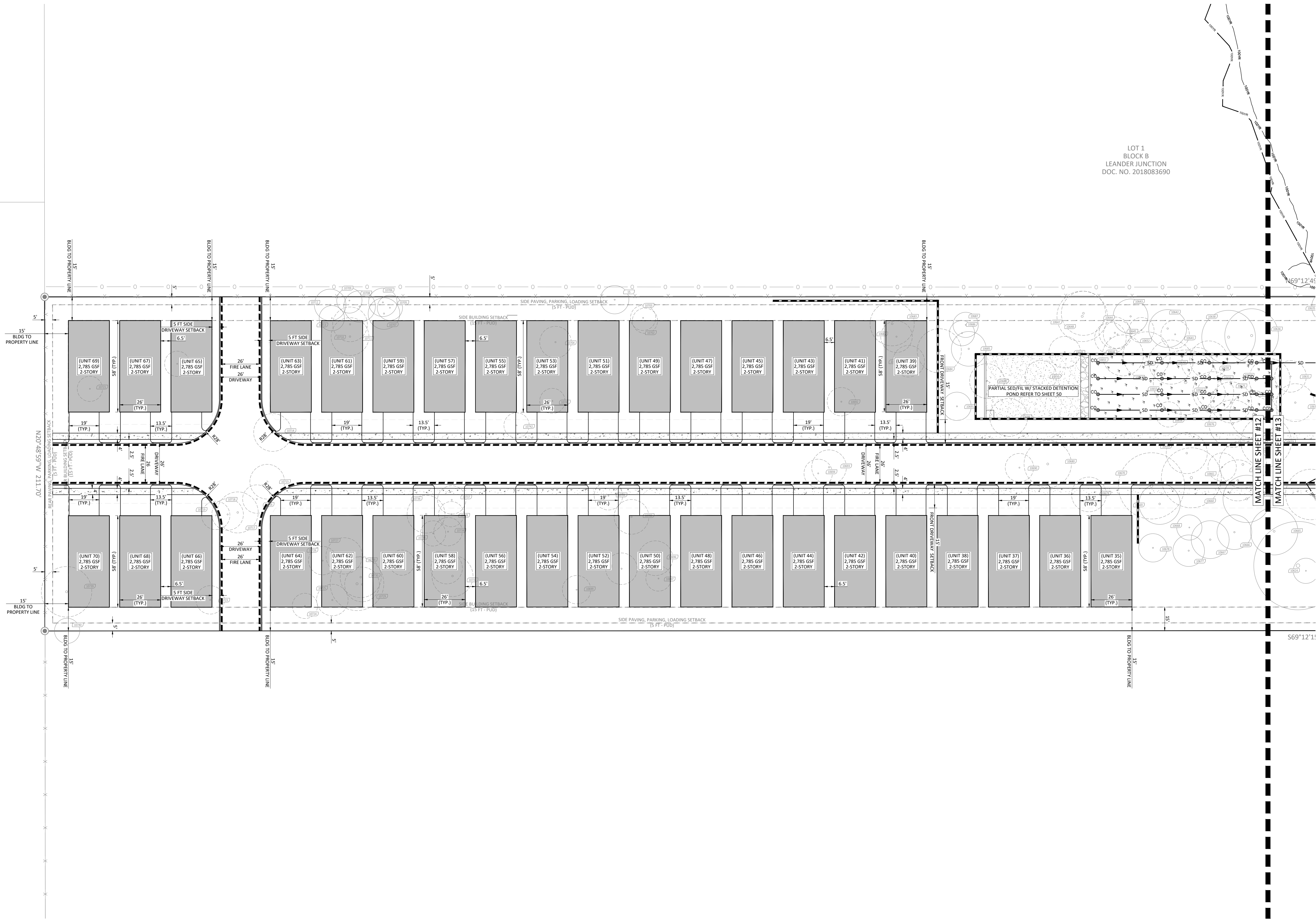
ON SITE BENCHMARK
BENCHMARK #1:
CUT SQUARE IN TOP OF CONCRETE HEADWALL
ELEV = 845.39'

Plot Date: 05/02/2024 @ 5:05 PM



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- NOTES:**
1. ALL FIRE DEPARTMENT ACCESS DRIVES/ROADS TO HAVE A MINIMUM 13'-6" VERTICAL CLEARANCE.
 2. ESTABLISH FIRE ZONES AS SHOWN ON SITE BY PAINTING CURB RED. STENCIL THE WORDS "FIRE ZONE/TOW-AWAY ZONE" IN WHITE LETTERS AT LEAST 3 INCHES HIGH AT 35-FOOT INTERVALS ALONG THE CURB. ALSO, SIGNS SHALL BE POSTED AT BOTH ENDS OF A FIRE ZONE. ALTERNATE MARKING OF THE FIRE LANES MAY BE APPROVED BY THE FIRE CHIEF, PROVIDED THE FIRE LANES ARE CLEARLY IDENTIFIED AT BOTH ENDS AND AT INTERVALS NOT TO EXCEED 35 FEET. SEC. 901.4.2
 3. ALL PARKING SPACES SHALL HAVE MINIMUM 7'-0" VERTICAL CLEARANCE. CONTRACTOR TO HAVE STAKING VERIFIED BY OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.
 4. SEE OVERALL SITE PLAN ON SHEET #11 FOR ADDITIONAL NOTES.
 5. RETAINING WALLS OVER FOUR FEET IN HEIGHT MEASURED FROM THE BOTTOM OF FOOTING TO THE TOP OF THE WALL SHALL BE ENGINEERED AND REQUIRED A SEPARATE BUILDING PERMIT [IBC 105.2].



KEY MAP
SCALE: 1"=500'

LEGEND	
	BOUNDARY / RIGHT OF WAY
	EASEMENT / SETBACK
	CURB / EDGE OF PAVEMENT
	FIRE LANE STRIPING
	RETAINING / SCREENING WALL
	BUILDING PAD AREA
	PAVEMENT / ASPHALT
	PAVEMENT / CONCRETE
	WATER METER
	WATER VALVE
	FIRE HYDRANT
	WASTEWATER MANHOLE
	WASTEWATER CLEANOUT
	BACKFLOW PREVENTER
	STORM DRAIN MANHOLE
	STORM DRAIN CURB INLET
	STORM DRAIN AREA INLET
	TRANSFORMER
	AIR CONDITIONER UNIT
	GAS METER
	ELECTRIC MANHOLE
	ELECTRIC BOX
	UTILITY POLE
	GUY WIRE
	SIGN
	MAIL BOX
	PARKING BUMPER
	ACCESSIBLE PARKING (ADA)
	CROSSWALK

HAMPTON HOMES BY BM DEVELOPERS
14751 RONALD REAGAN BLVD
LEANDER, TEXAS 78641

SHEET
12
OF 77

SD-23-0132

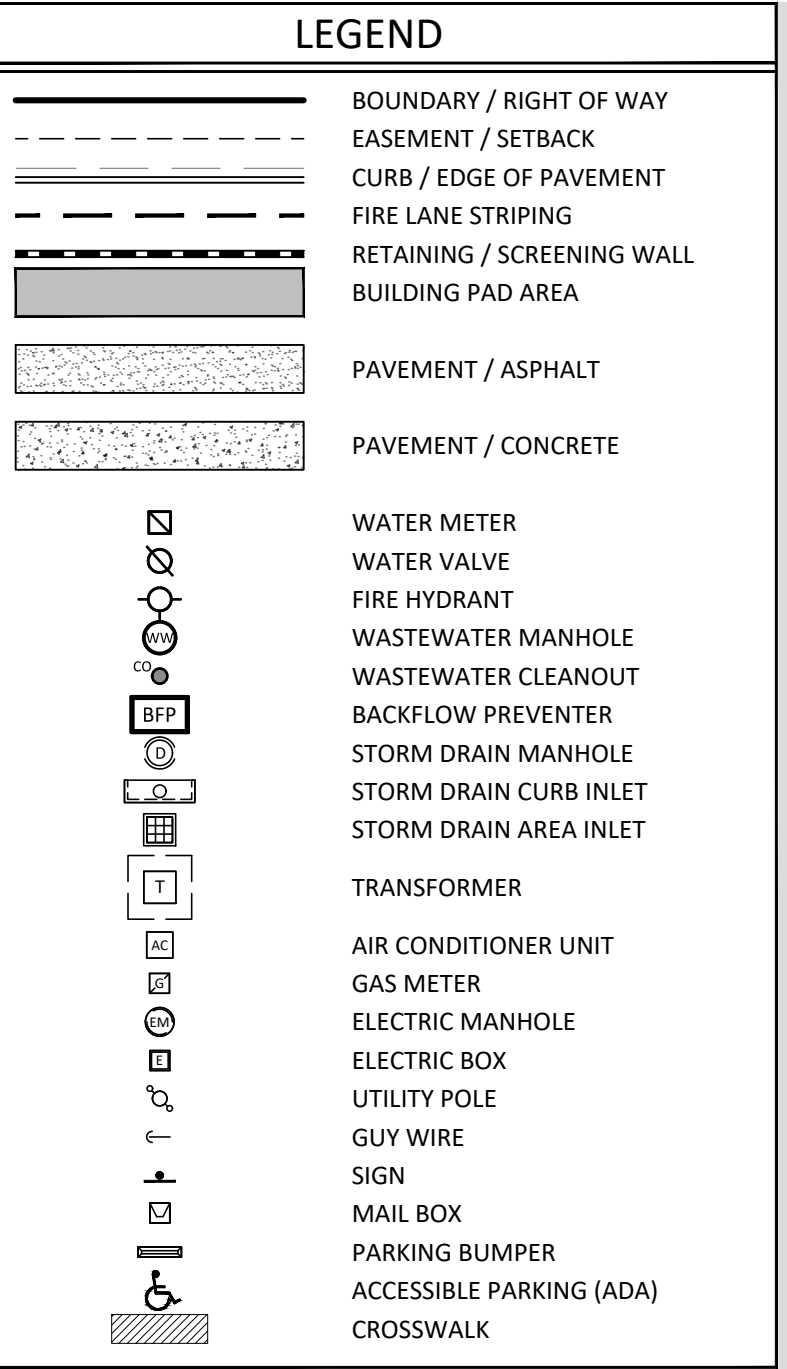
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(512) 431-8510
INFO@RADIUSCIVIL.COM



DIMENSIONAL CONTROL PLAN (1 OF 3)

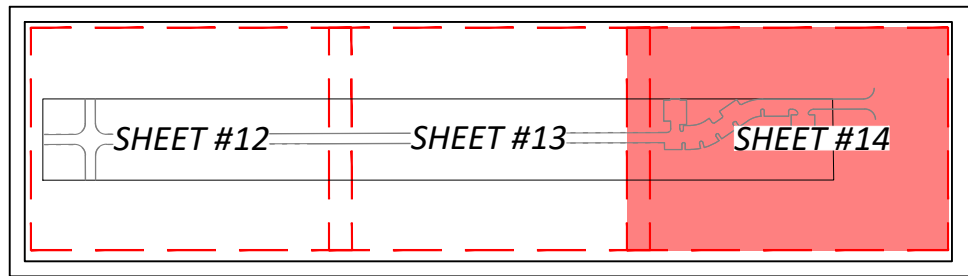
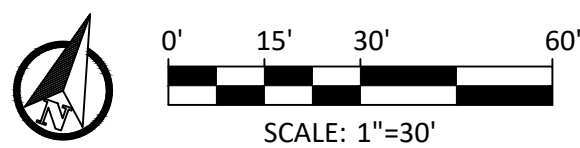
REVISION

NO. DATE



RONALD REAGAN BLVD
R.O.W. VARIES
(25 M.P.H. SPEED LIMIT)

1.870 ACRE TRACT CONVEYED TO
WILLIAMSON COUNTY FOR ROAD
R.O.W. DOC. NO. 2003023918
(SHOWN WITH DOT HATCH)



KEY MAP

SCALE: 1"=500'

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AT LEAST 48 HOURS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY TO REQUEST EXACT FIELD LOCATIONS AS REQUIRED. CONTRACTOR SHALL CONTACT THE TEXAS EXCAVATION SAFETY SYSTEM AT 800-344-8377 AT LEAST TWO FULL WORKING DAYS BEFORE COMMENCING ANY EXCAVATION OR UTILITY WORK.

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2. ESTABLISH FIRE ZONES AS SHOWN ON SITE BY PAINTING CURB RED. STENCIL THE WORDS "FIRE ZONE/TOW-AWAY ZONE" IN WHITE LETTERS AT LEAST 3 INCHES HIGH AT 35-FOOT INTERVALS ALONG THE CURB. ALSO, SIGNS SHALL BE PLACED AT BOTH ENDS OF EACH FIRE ZONE. ALTERNATE MARKING OF THE FIRE LANES MAY BE APPROVED BY THE FIRE CHIEF, PROVIDED THE FIRE LANES ARE CLEARLY IDENTIFIED AT BOTH ENDS AND AT INTERVALS NOT TO EXCEED 35 FEET. SEE .901.4.2
3. ALL PARKING SPACES SHALL HAVE MINIMUM 7'-0" VERTICAL CLEARANCE.
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5. SEE OVERALL SITE PLAN ON SHEET #11 FOR ADDITIONAL NOTES.
6. RETAINING WALLS OVER FOUR FEET IN HEIGHT MEASURED FROM THE BOTTOM OF FOOTING TO THE TOP OF THE WALL SHALL BE ENGINEERED AND REQUIRED A SEPARATE BUILDING PERMIT [BC 105.2].



Plot Date: 05/02/2024 @ 5:06 PM



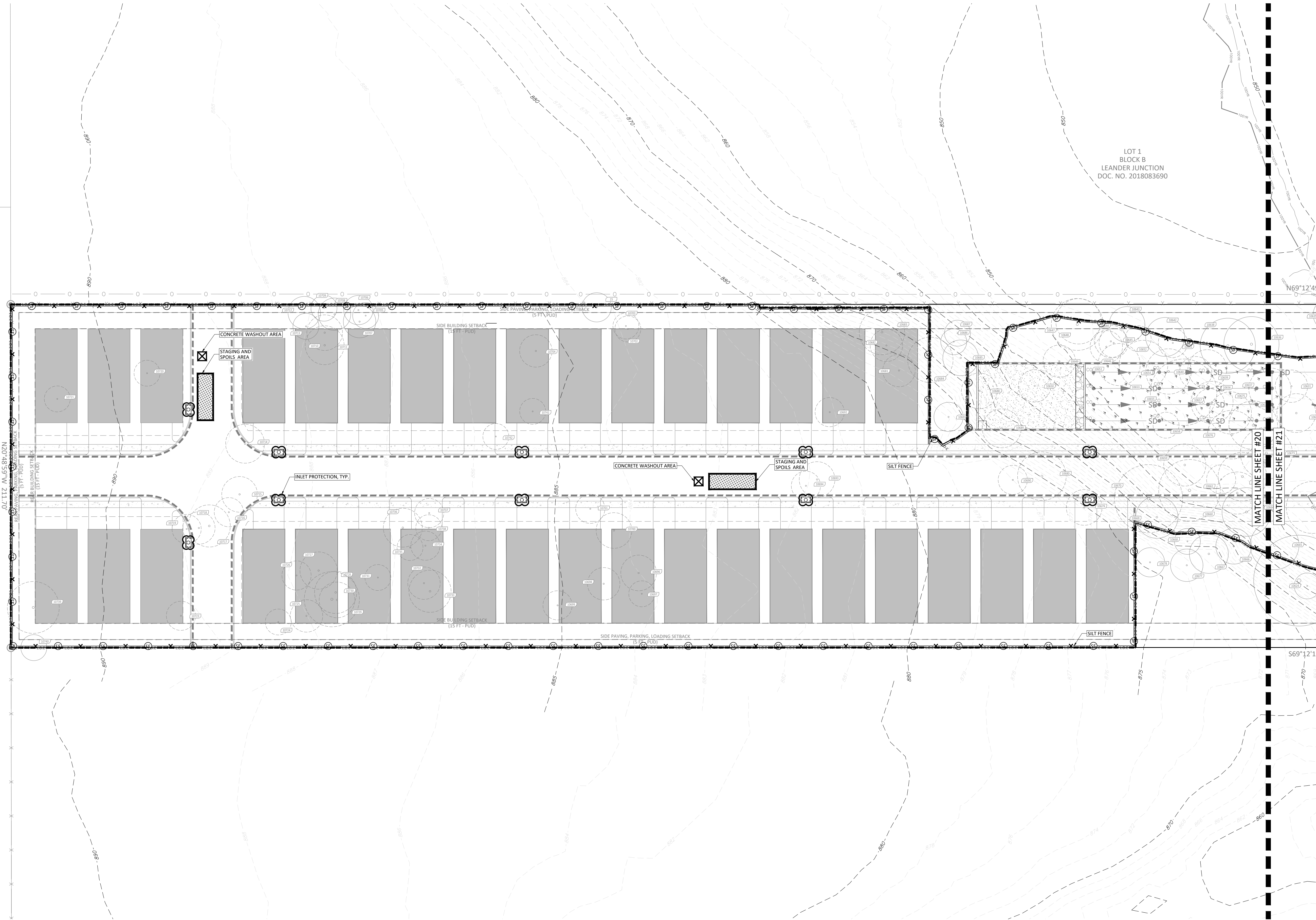
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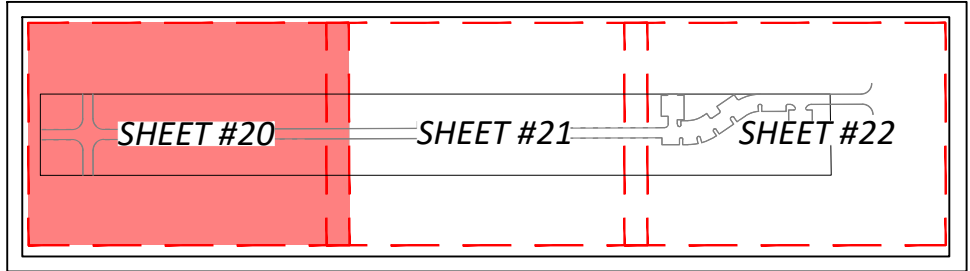
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- NOTES:**
- IF DISTURBED AREA IS NOT BE WORKE DON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP OR REVEGETATION MATTING. [ECM 1.4.4.B.3, SECTION 5, I.]
 - ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN-COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS. [LOC 25-8-183]
 - CONTRACTOR SHALL USE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY. [ECM 1.4.4.D.4]
 - A PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
 - WHEN INSTALLING MULCH LOGS, IF DAYLIGHT CAN BE SEEN UNDER MULCH DUE TO TOPOGRAPHIC CHANGES, ADD ADDITIONAL ROWS OF MULCH LOG TO CLOSE GAP.
 - CONTRACTOR SHALL PROVIDE AND MAINTAIN A DEWATERING SYSTEM TO ENSURE IT MEETS COMPLIANCE WITH TITLE 6, ARTICLE V OF THE AUSTIN CITY CODE. THE DEWATERING PLANS MUST BE APPROVED BY THE ENVIRONMENTAL INSPECTOR DURING THE PRE-CONSTRUCTION CONFERENCE. IF THE PERFORMANCE OF THE DEWATERING SYSTEM IS NOT IN COMPLIANCE, THE CONTRACTOR MUST IMMEDIATELY MAKE THE NECESSARY MODIFICATIONS, FOLLOWING THE ENVIRONMENTAL INSPECTOR'S DIRECTION, TO ENSURE ADEQUATE SYSTEM PERFORMANCE.



LEGEND	
	BOUNDARY / RIGHT OF WAY
	EASEMENT / SETBACK
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	TREE - REMOVE
	TREE W/ TAG
	TREE PROTECTION FENCE
	MULCH SOCK
	LIMIT OF CONSTRUCTION
	SILT FENCE
	FILTER DIKE
	POND SKIMMER
	STABILIZED CONSTRUCTION ENTRANCE
	STAGING AND SPOILS AREA
	CONCRETE WASHOUT AREA
	INLET PROTECTION



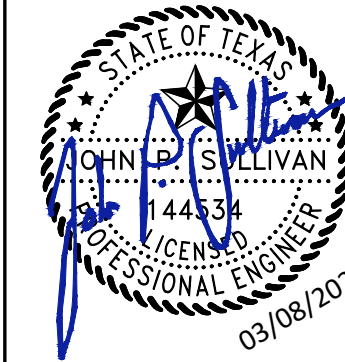
KEY MAP
SCALE: 1"=500'

HAMPTON HOMES BY BM DEVELOPERS
14751 RONALD REAGAN BLVD
LEANDER, TEXAS 78641

SHEET
20
OF 77

SD-23-0132

EROSION & SEDIMENTATION CONTROL PLAN (1 OF 3)



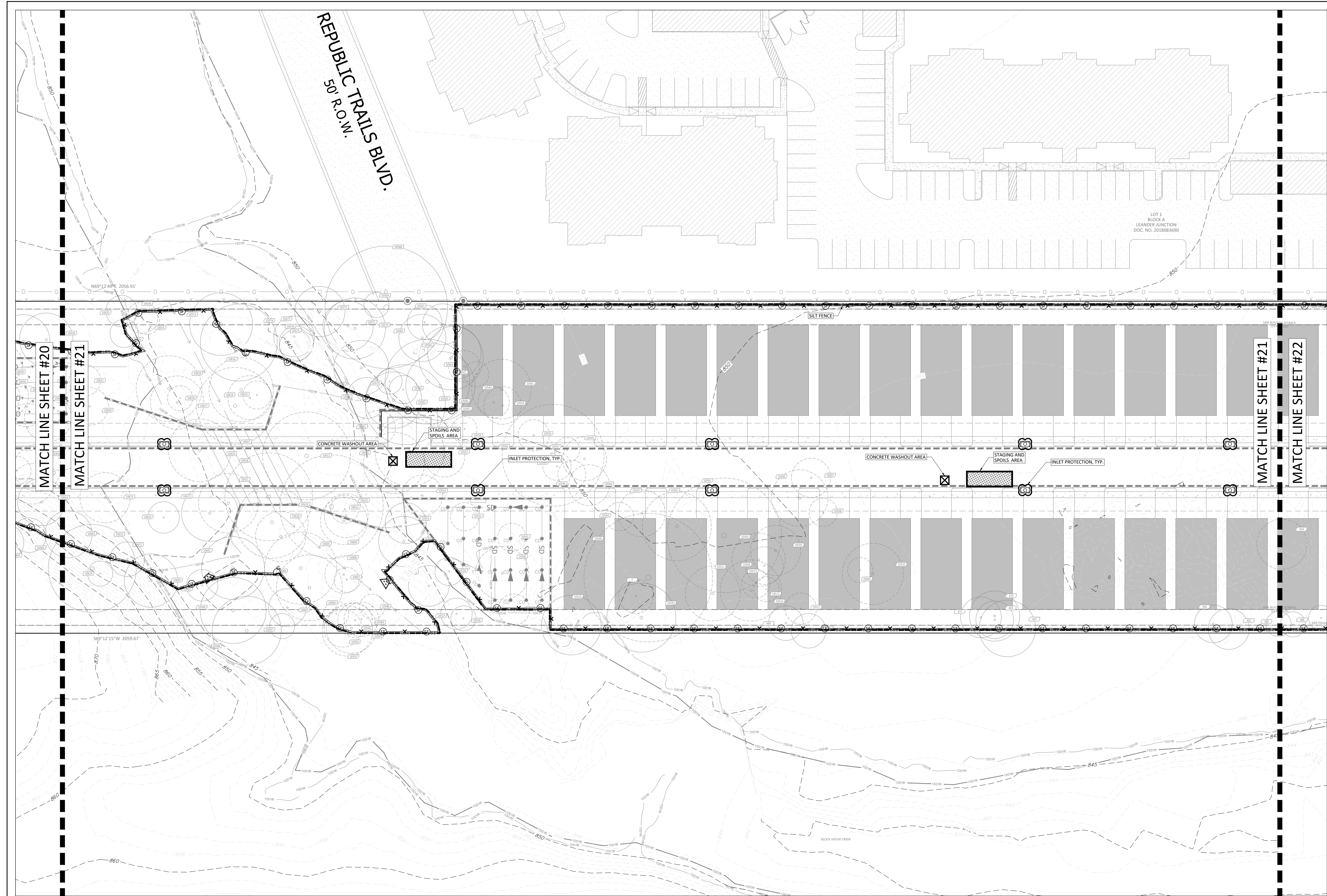
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FIRM NO: F-23684

NO. DATE

REVISION

Plot Date: 05/02/2024 @ 5:06 PM



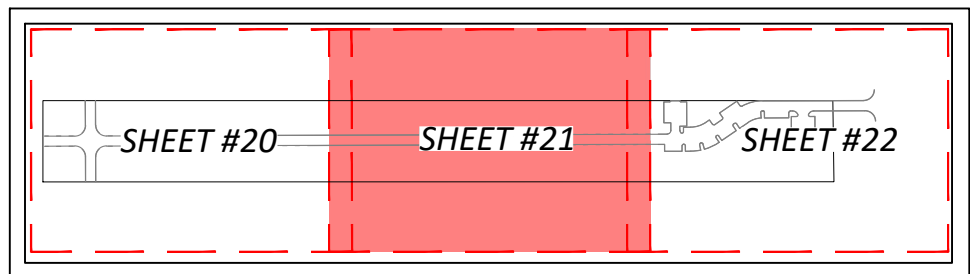
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- NOTES:**
- IF DISTURBED AREA IS NOT BE WORKE DON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP OR REVEGETATION MATTING. [ECM 1.4.4.B.3, SECTION 5, I.]
 - ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN-COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS. [LDC 25-8-183]
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KEY MAP
SCALE: 1"=500'



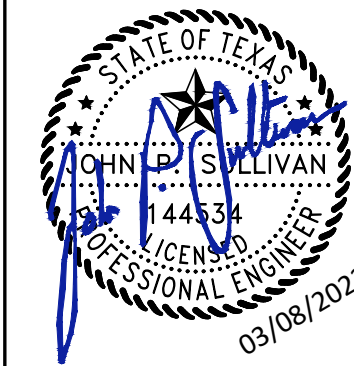
0' 15' 30' 60'
SCALE: 1"=30'

LEGEND	
	BOUNDARY / RIGHT OF WAY
	EASEMENT / SETBACK
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	TREE - REMOVE
	TREE W/ TAG
	TREE PROTECTION FENCE
	MULCH SOCK
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HAMPTON HOMES BY BM DEVELOPERS
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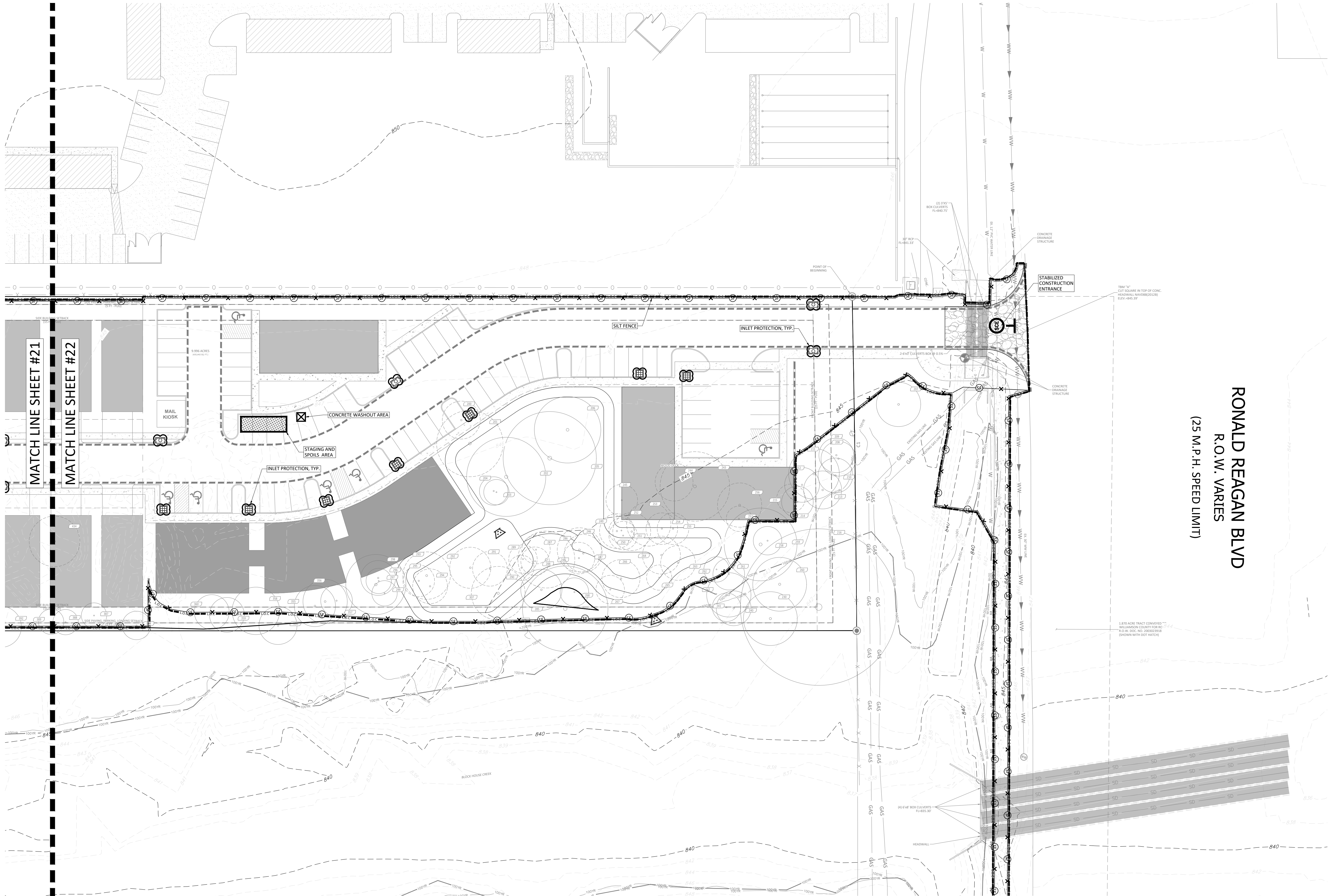
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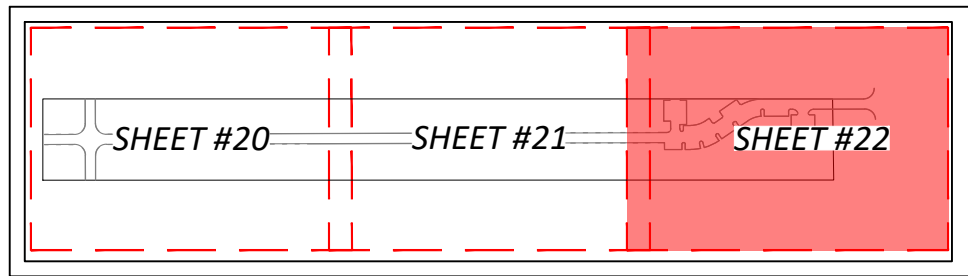
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- NOTES:**
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RONALD REAGAN BLVD
R.O.W. VARIES
(25 M.P.H. SPEED LIMIT)

LEGEND	
	BOUNDARY / RIGHT OF WAY
	EASEMENT / SETBACK
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	TREE - REMOVE
	TREE W/ TAG
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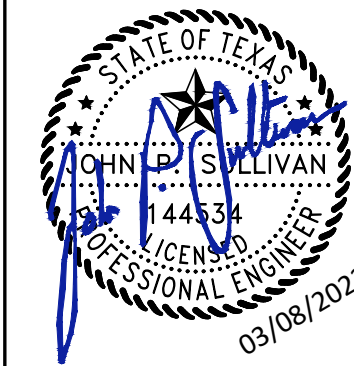


KEY MAP
SCALE: 1"=50'

HAMPTON HOMES BY BM DEVELOPERS
14751 RONALD REAGAN BLVD
LEANDER, TEXAS 78641

SHEET
22
OF 77

SD-23-0132



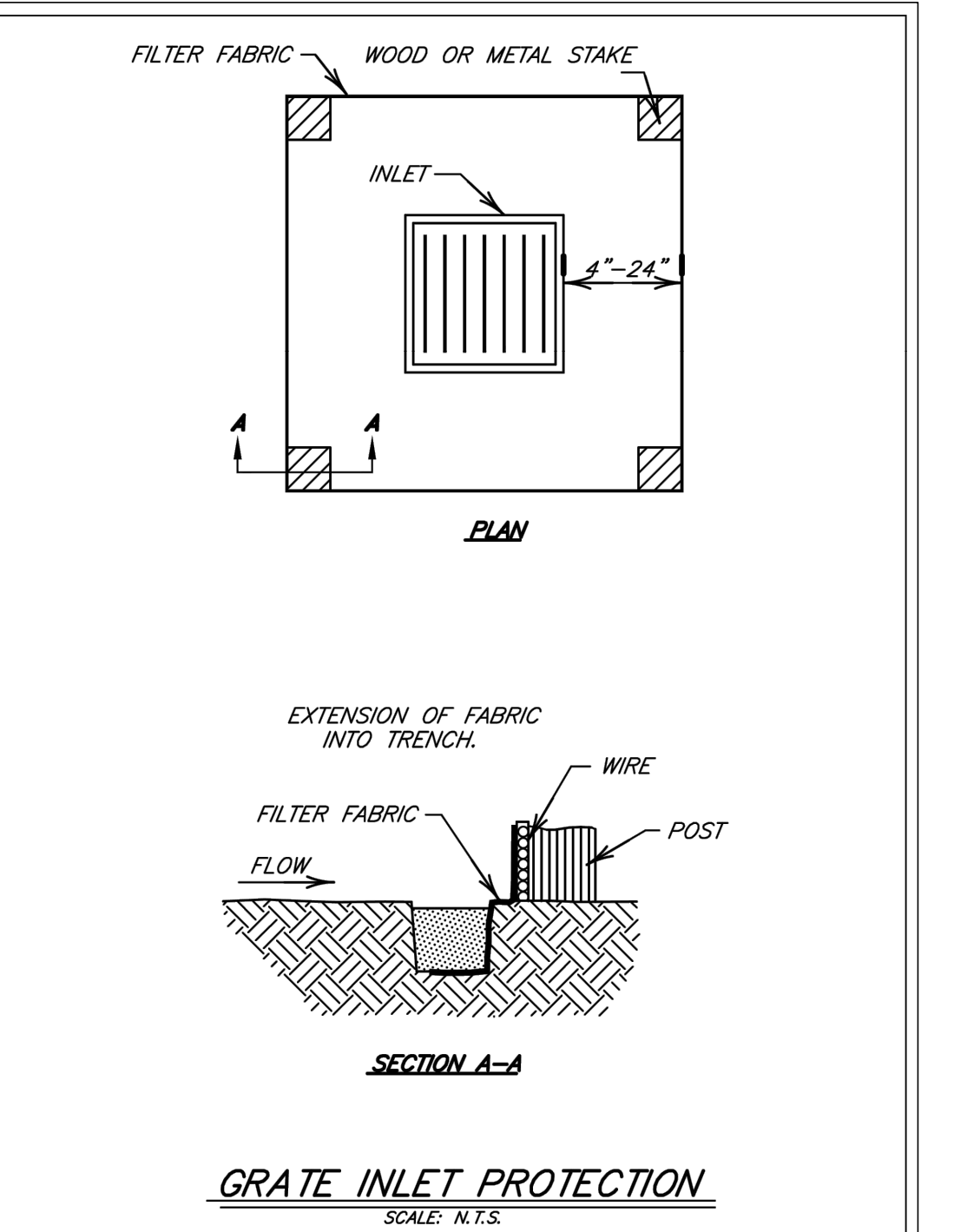
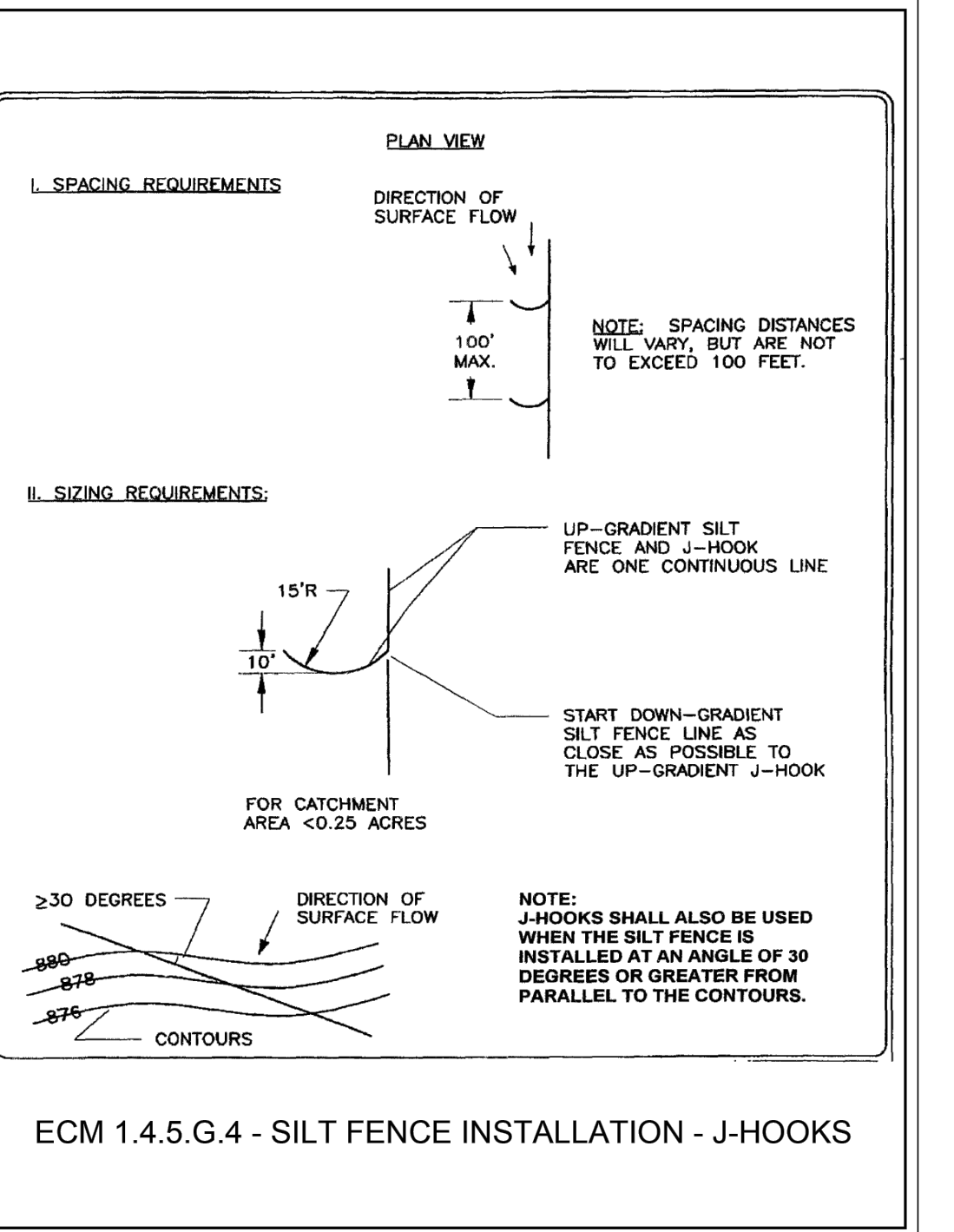
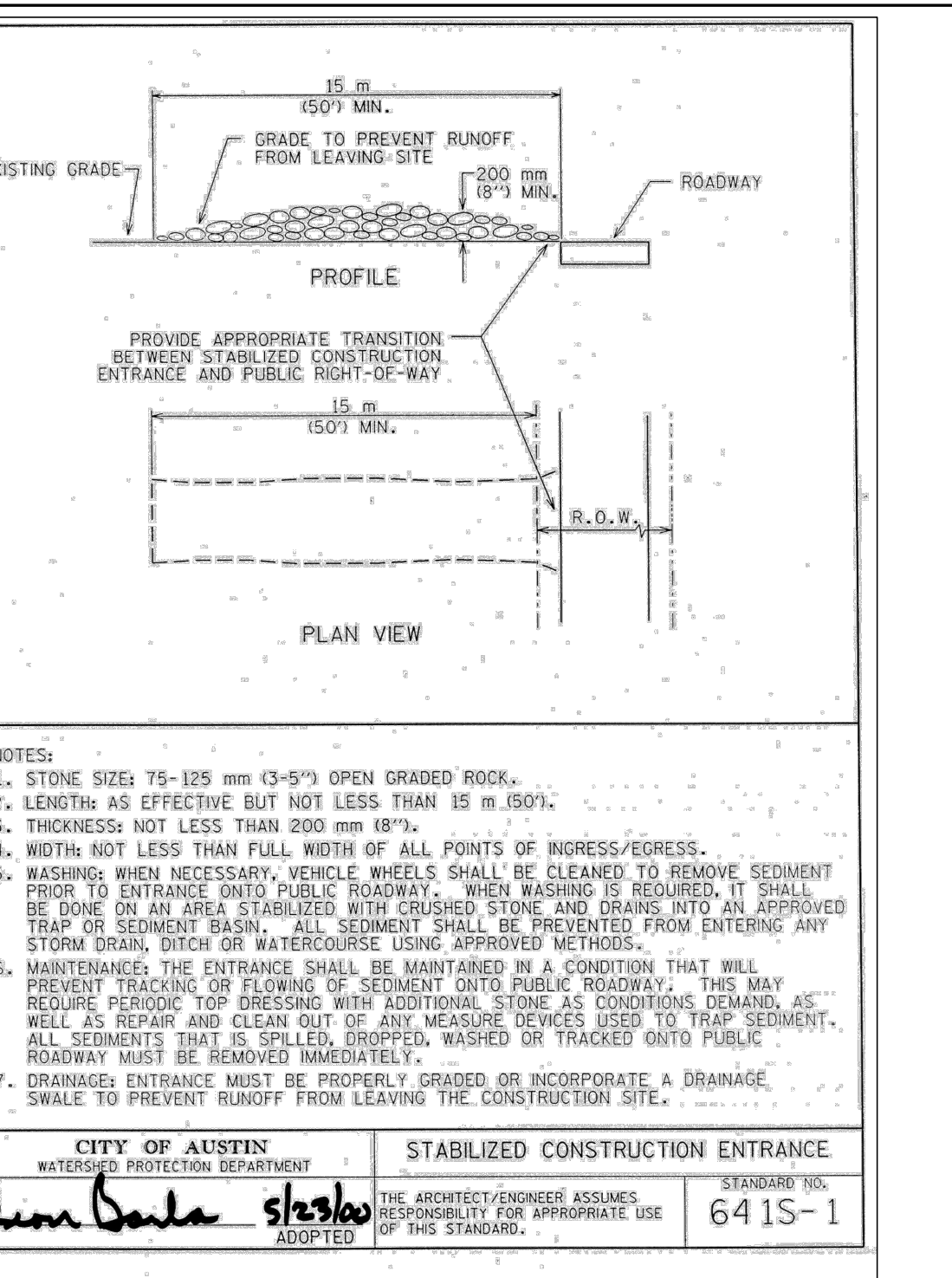
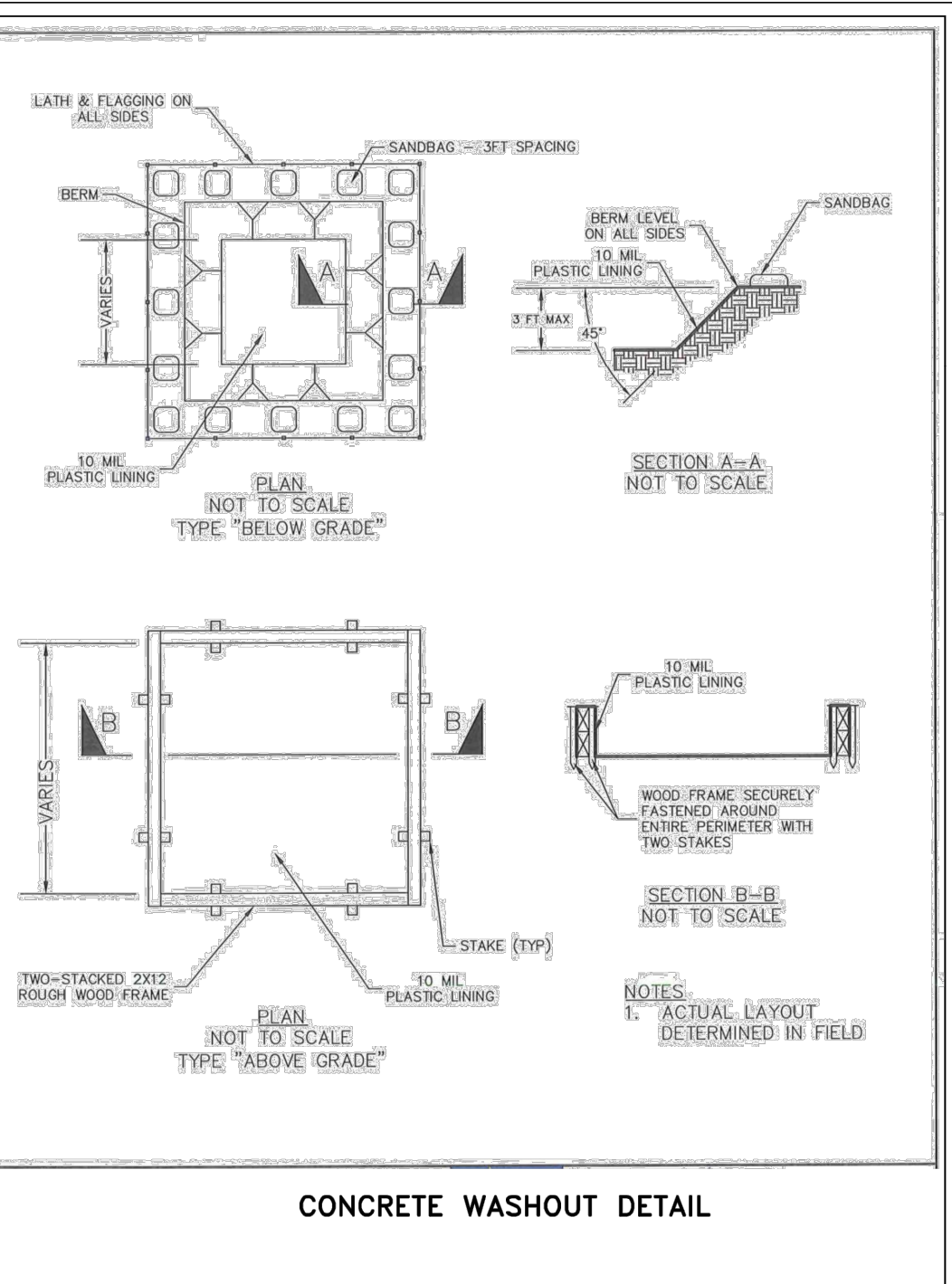
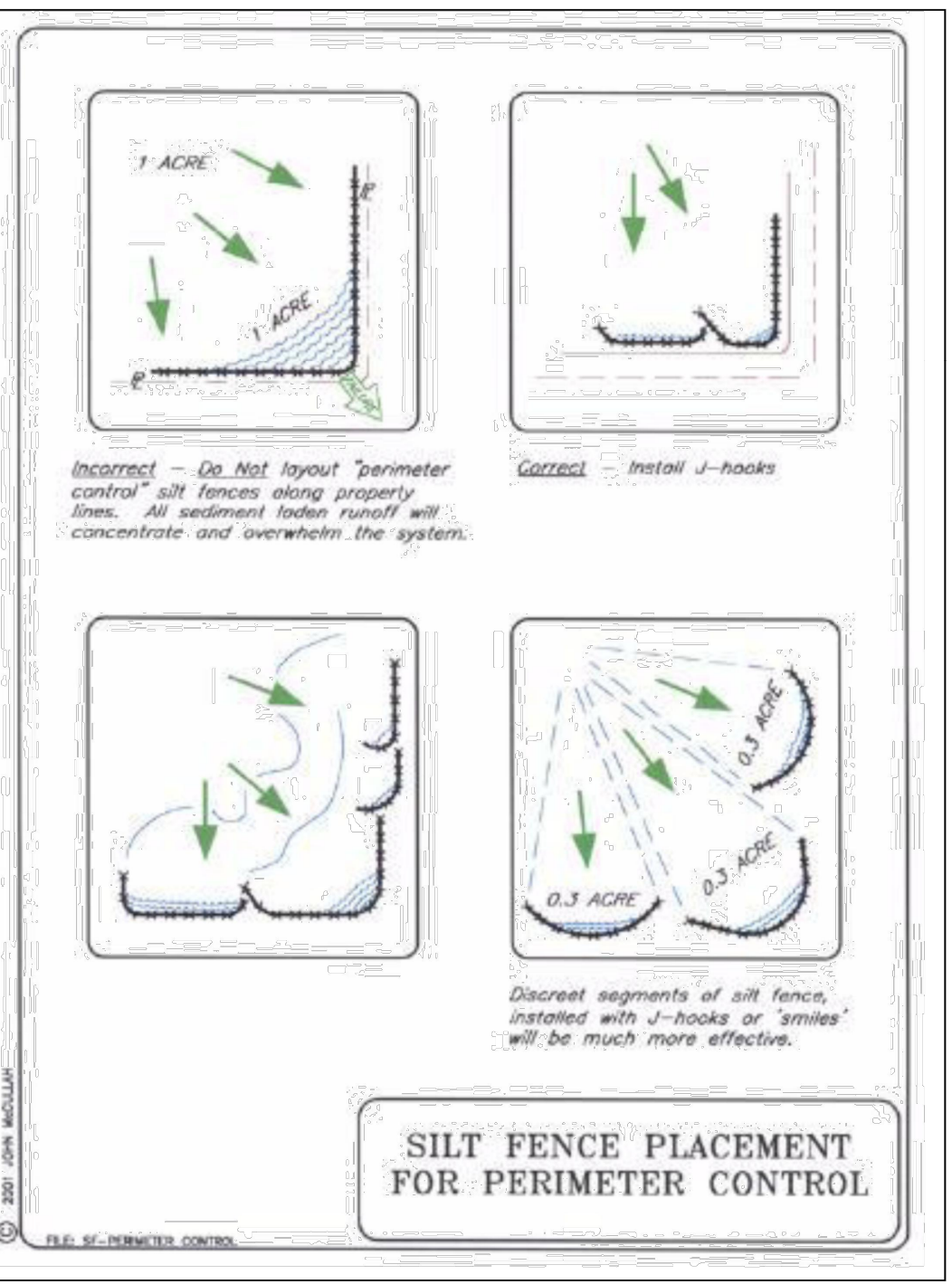
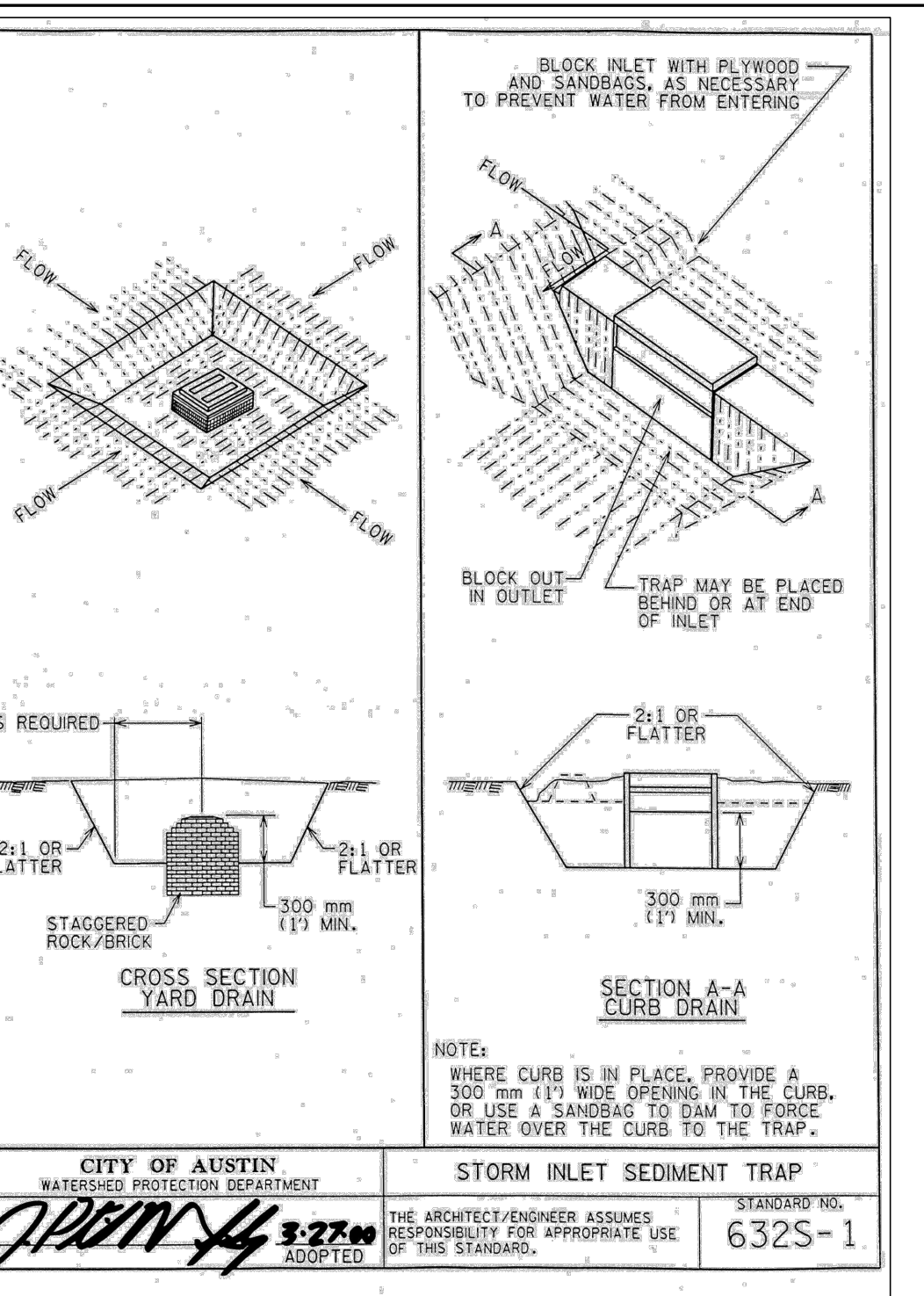
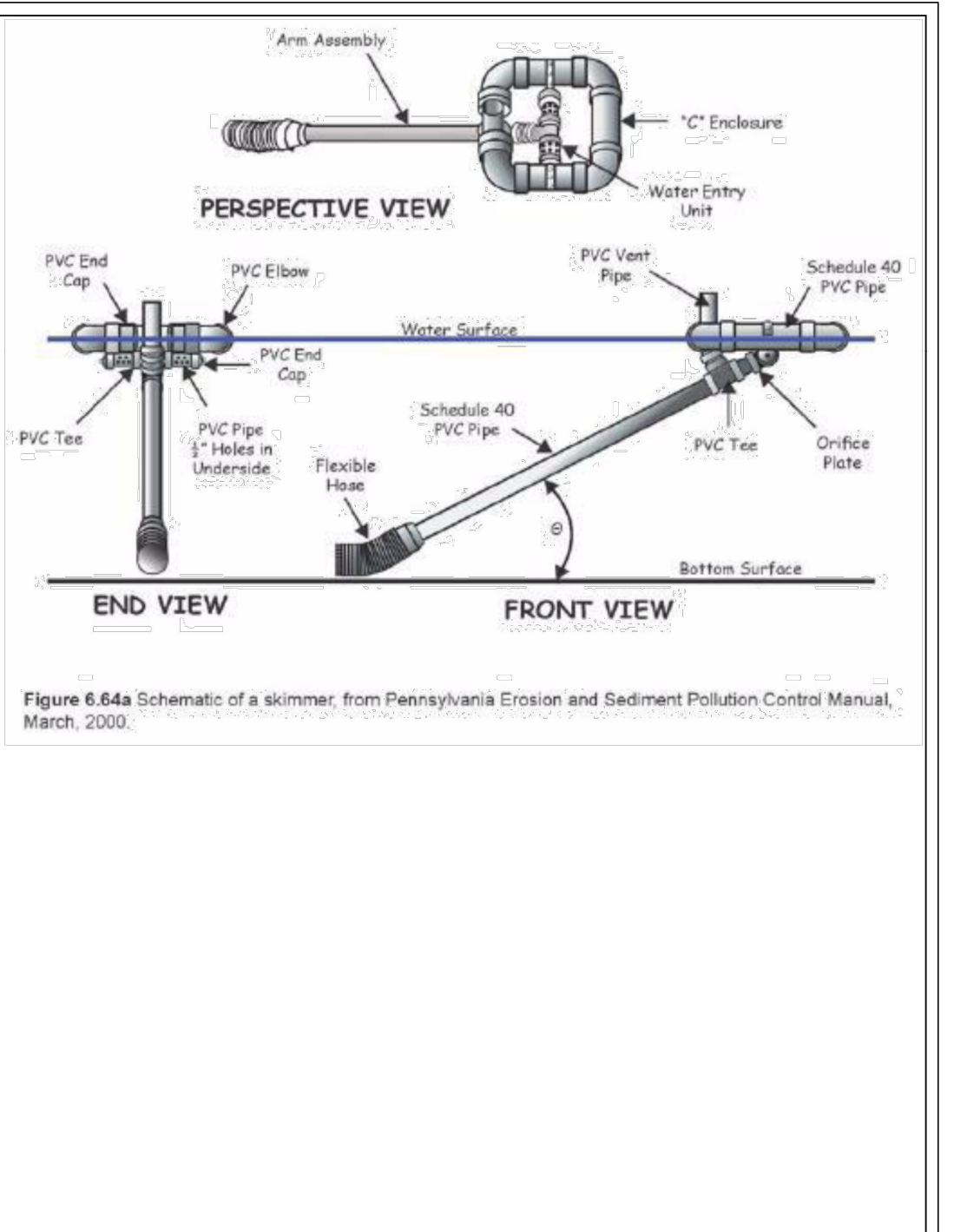
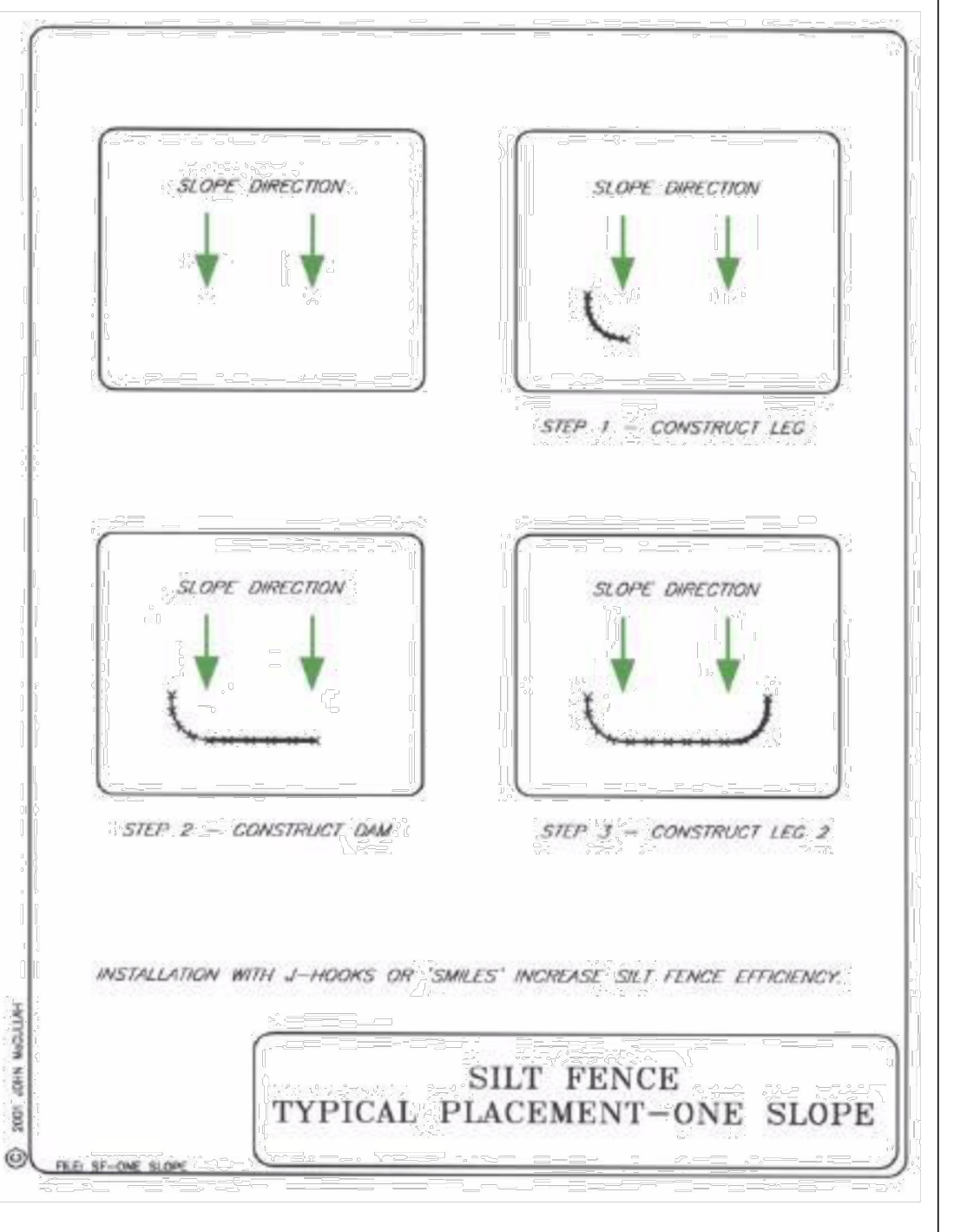
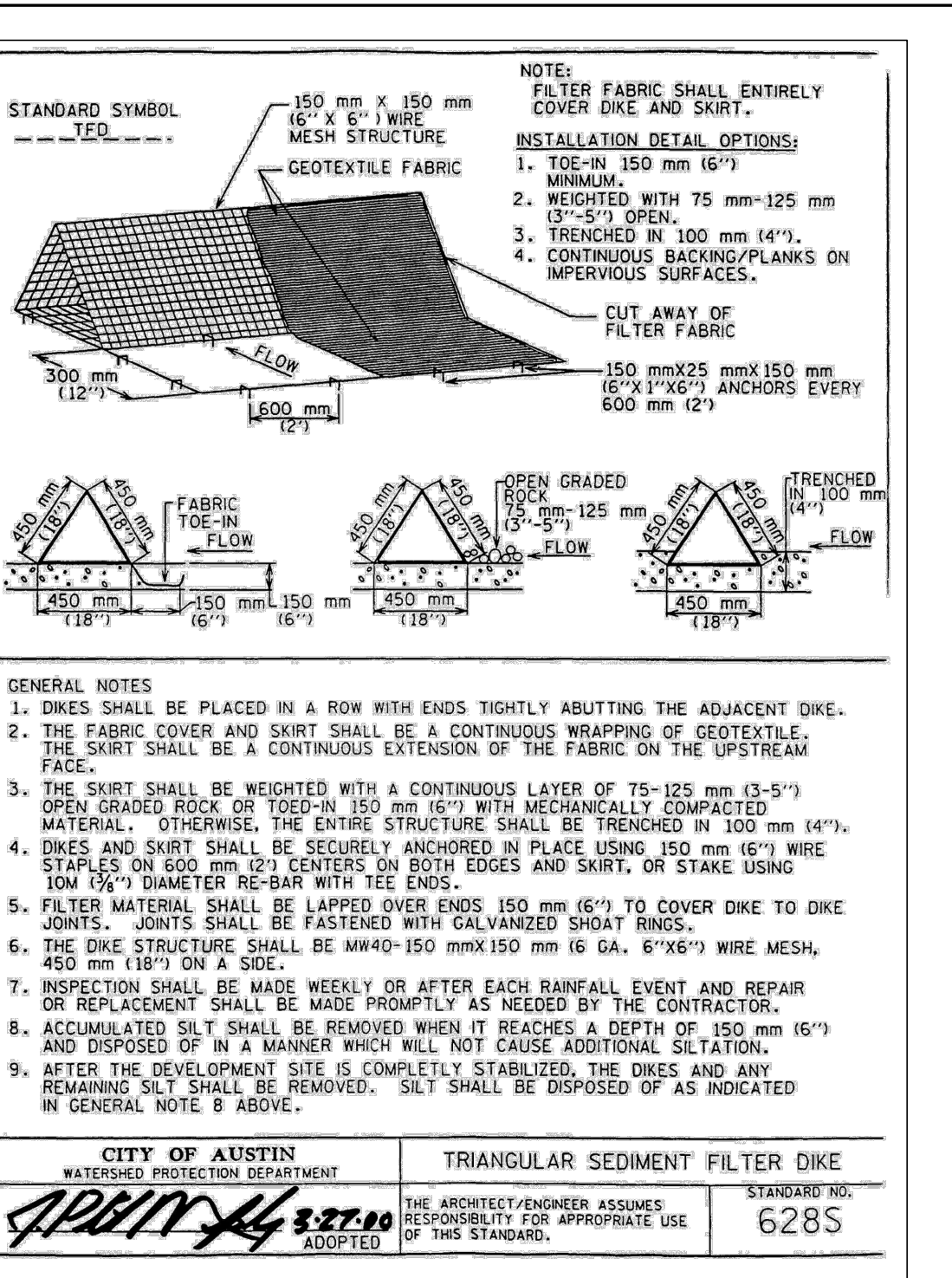
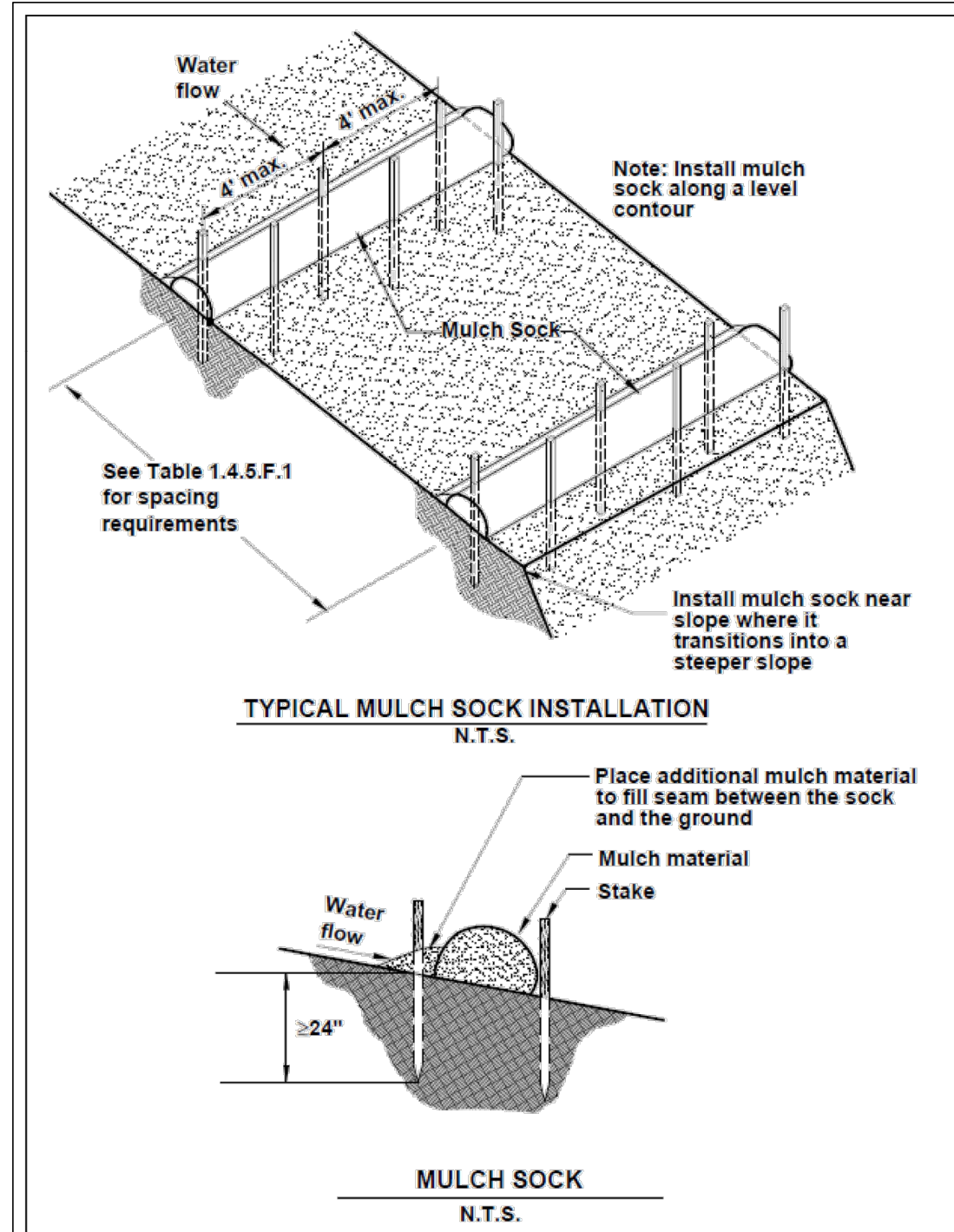
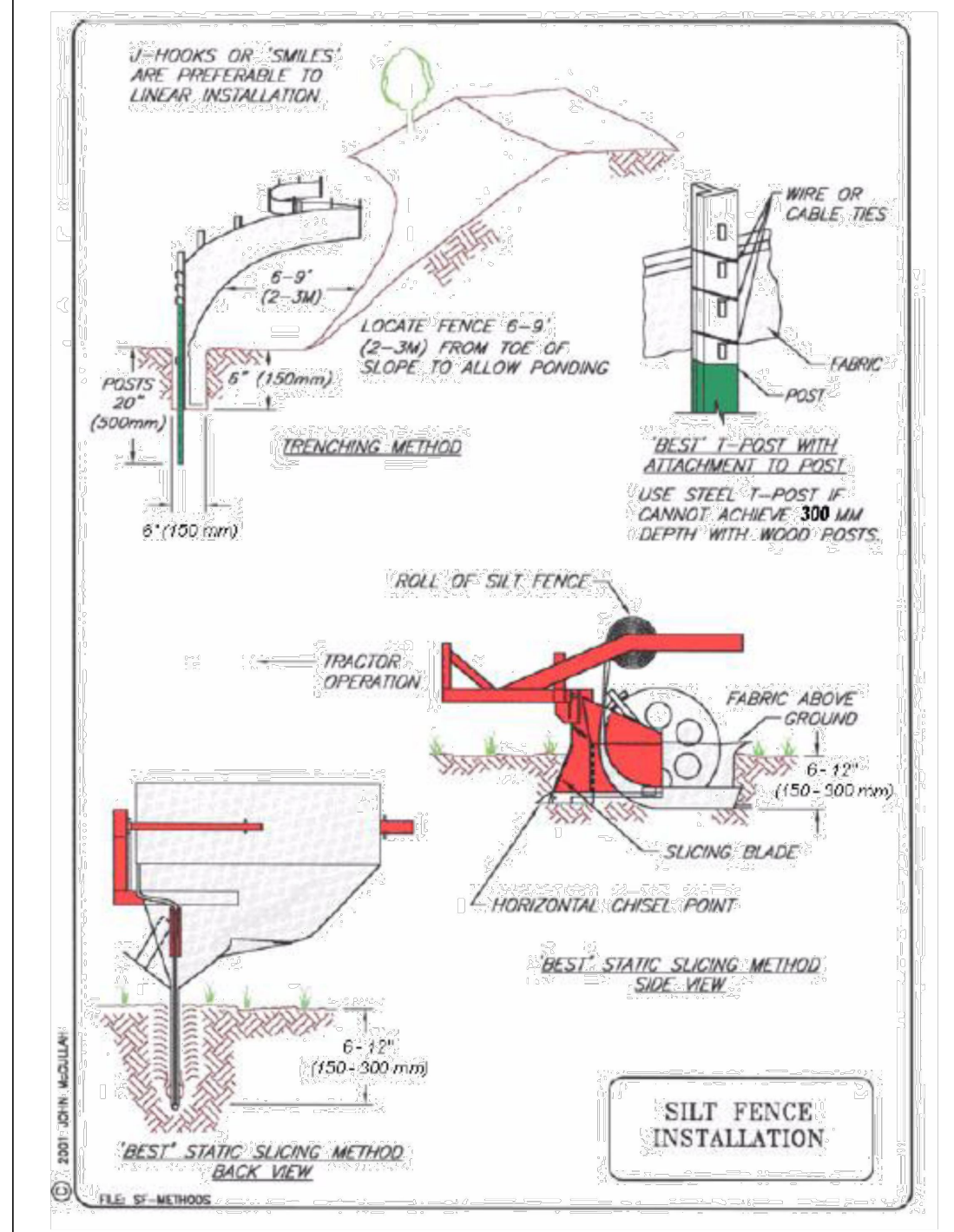
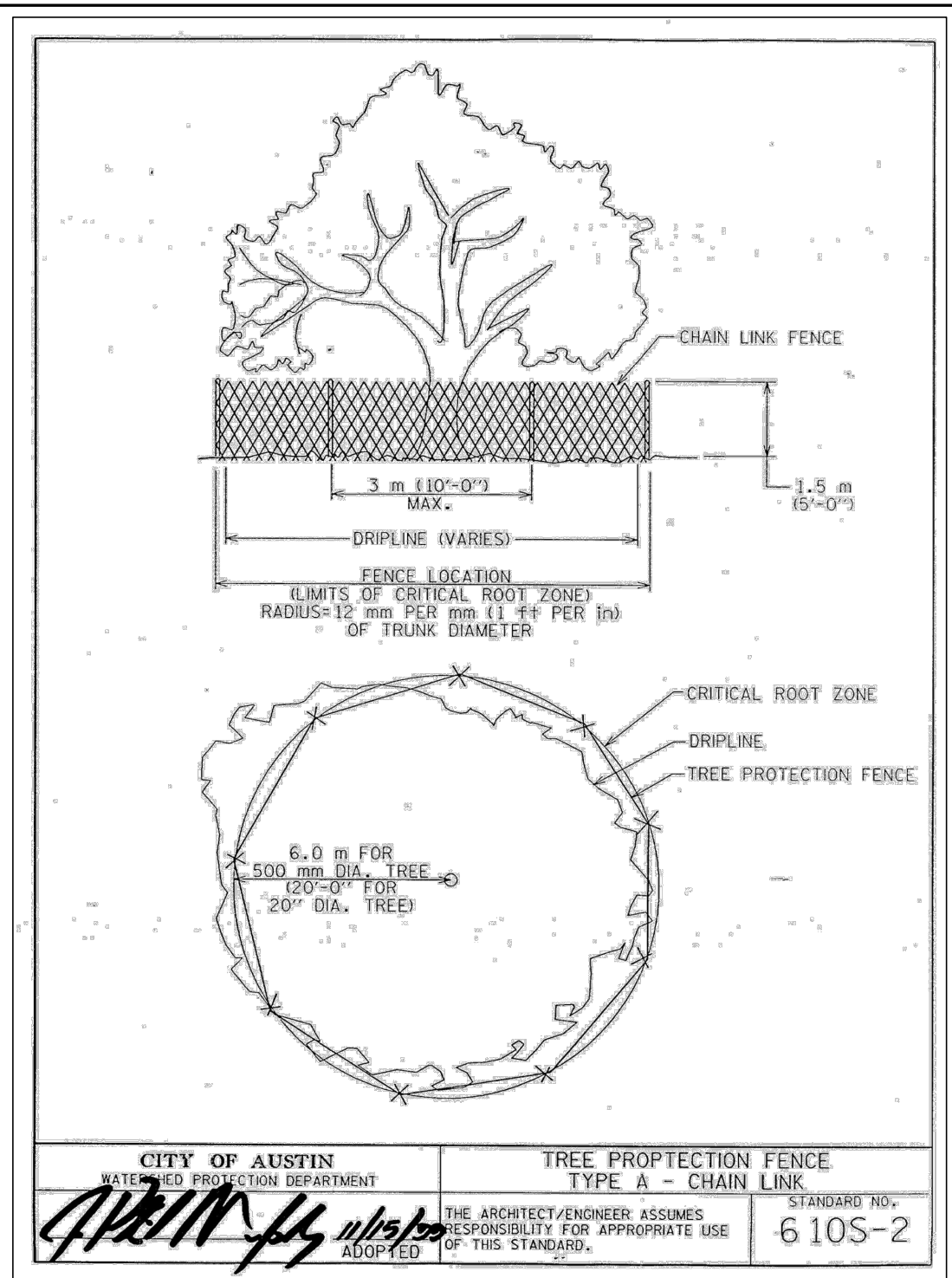
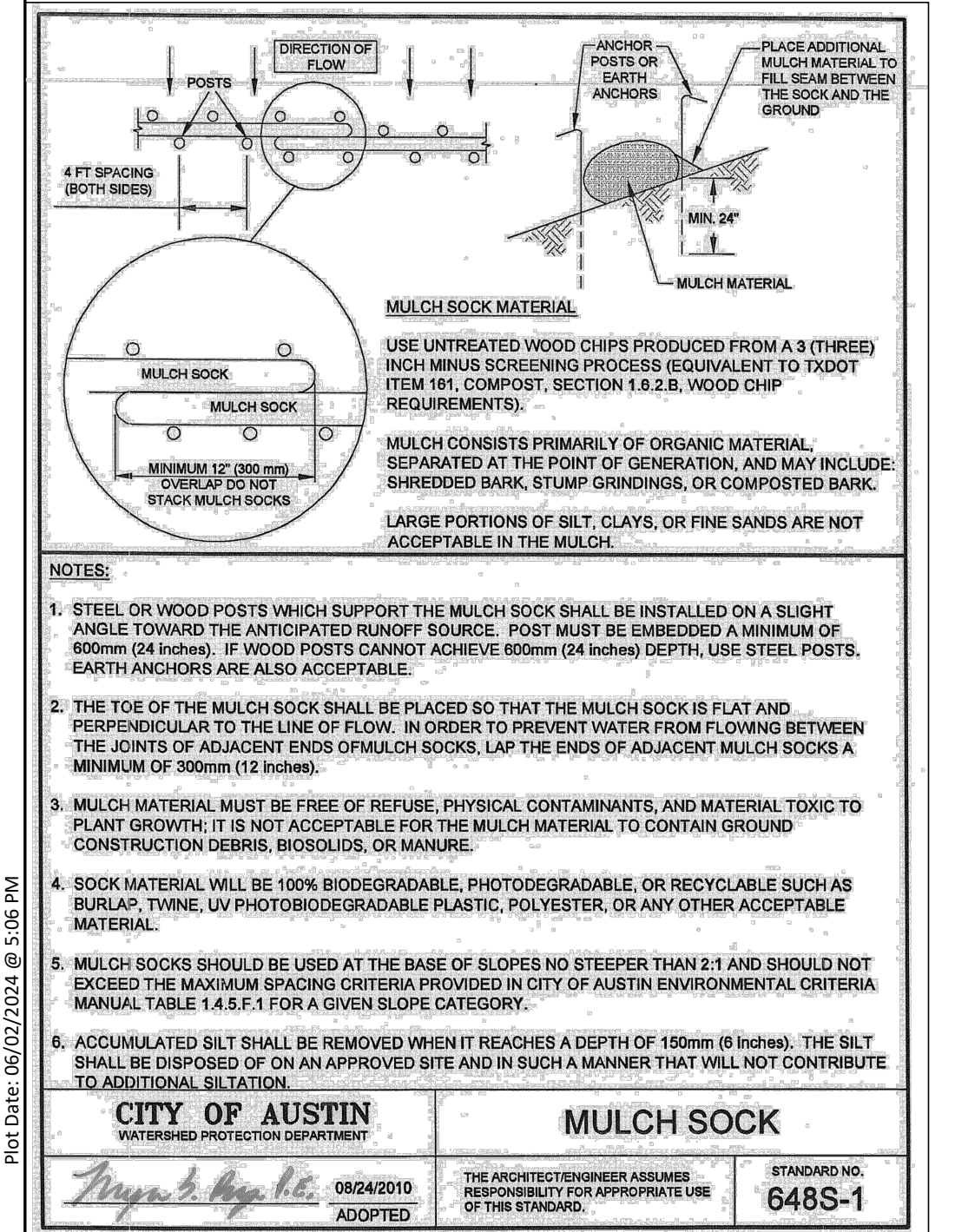
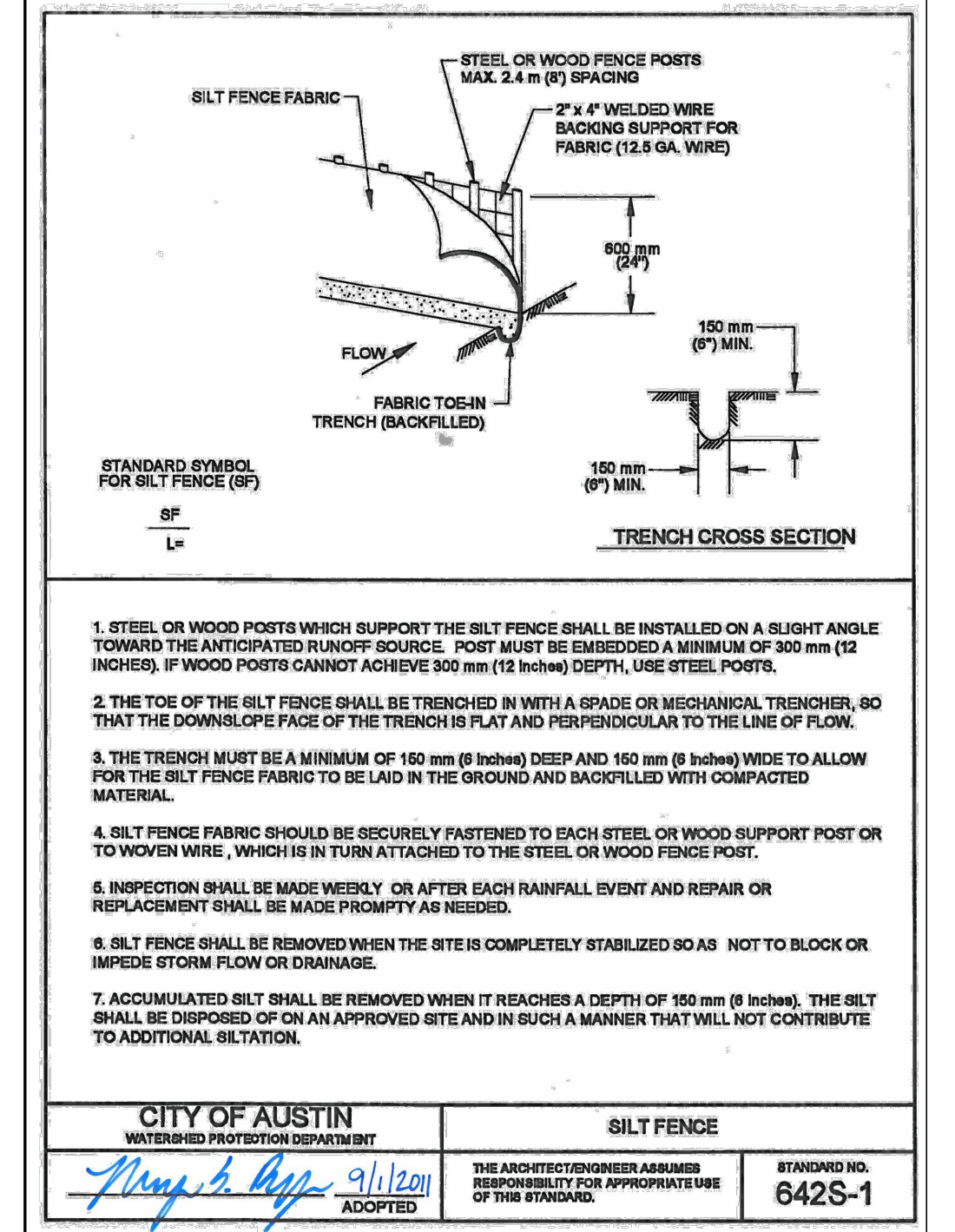
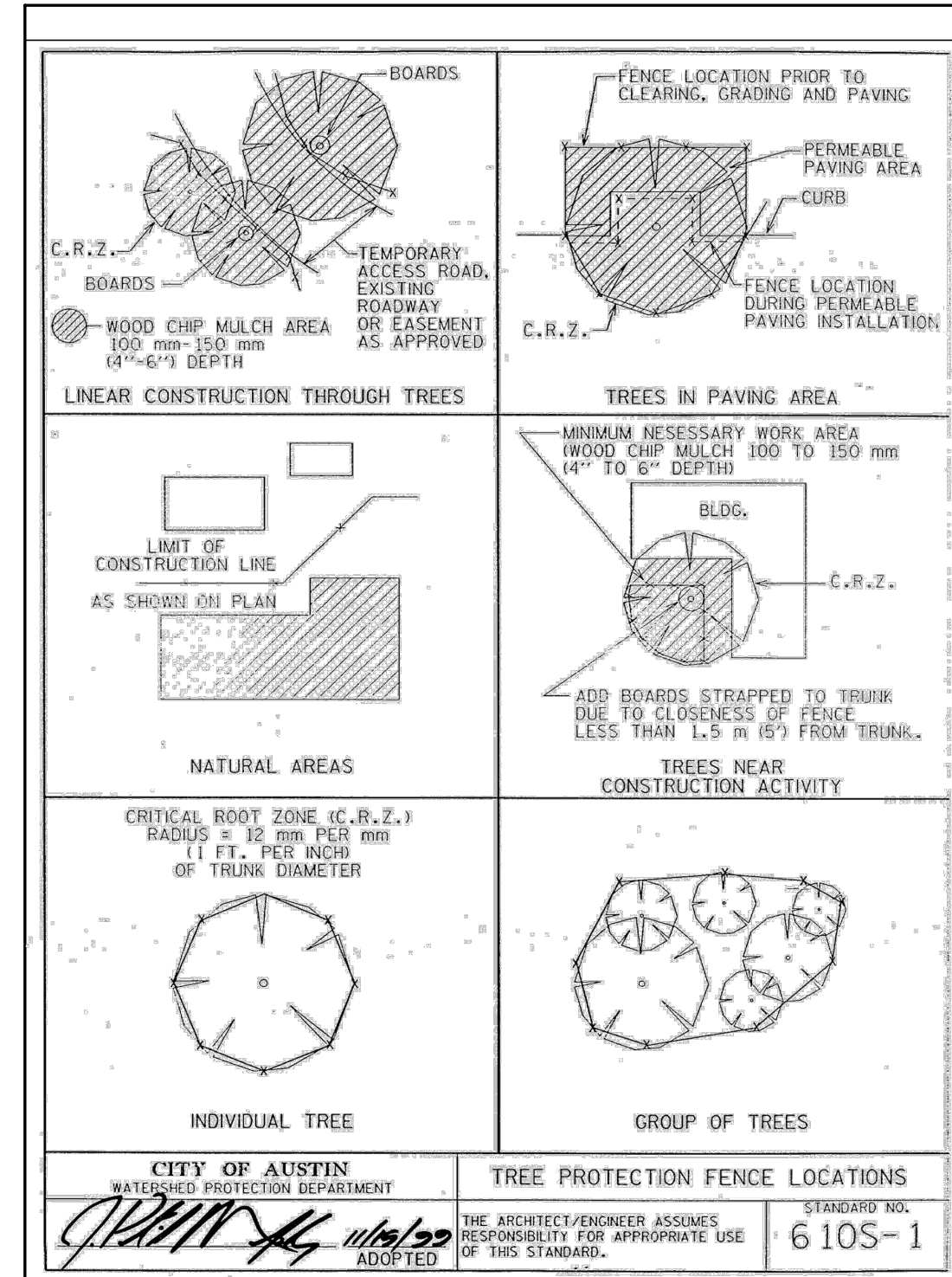
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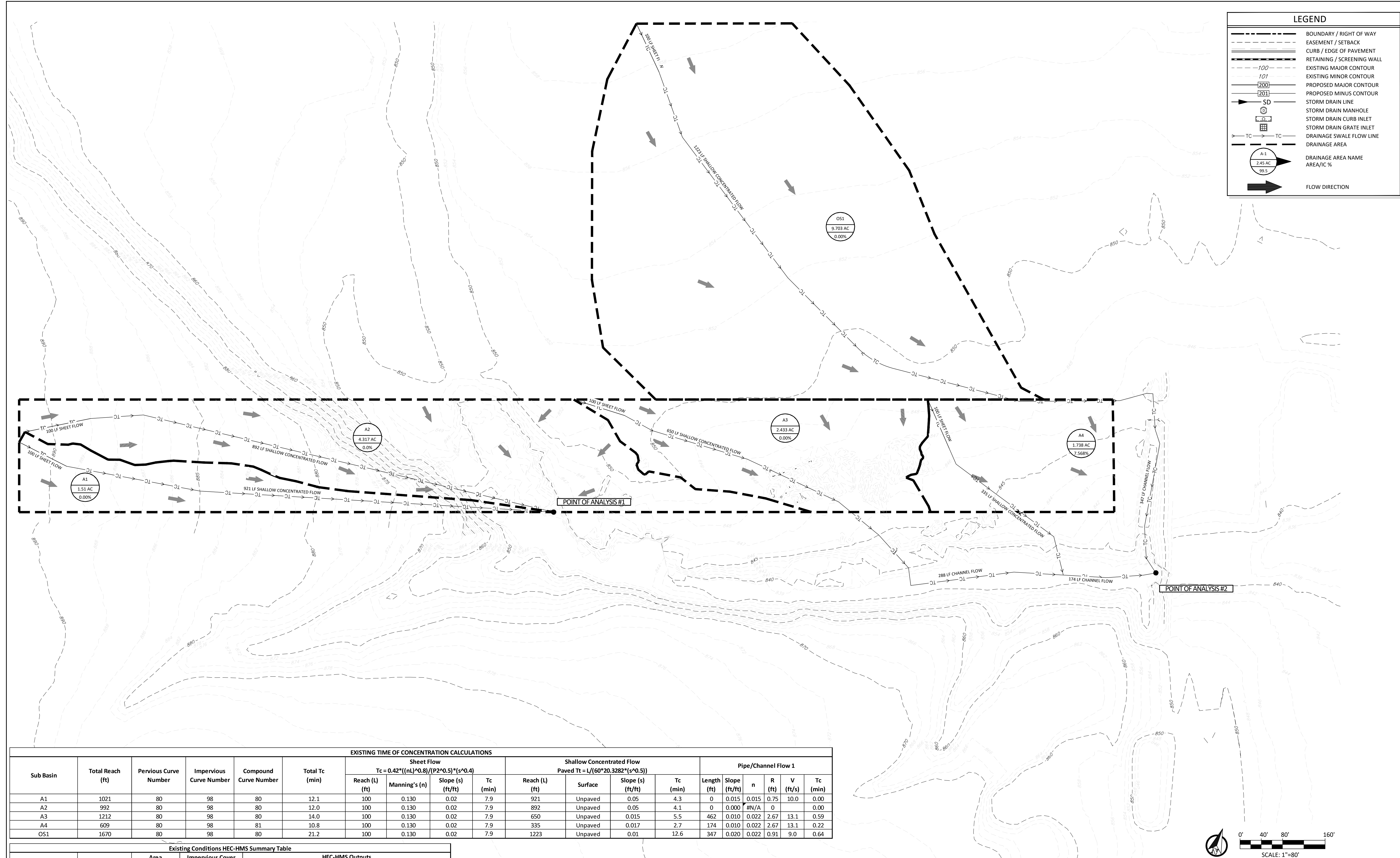
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03/08/2023

HAMPTON HOMES BY BM DEVELOPERS

14751 RONALD REAGAN BLVD

LEANDER, TEXAS 78641

EXISTING DRAINAGE AREA MAP

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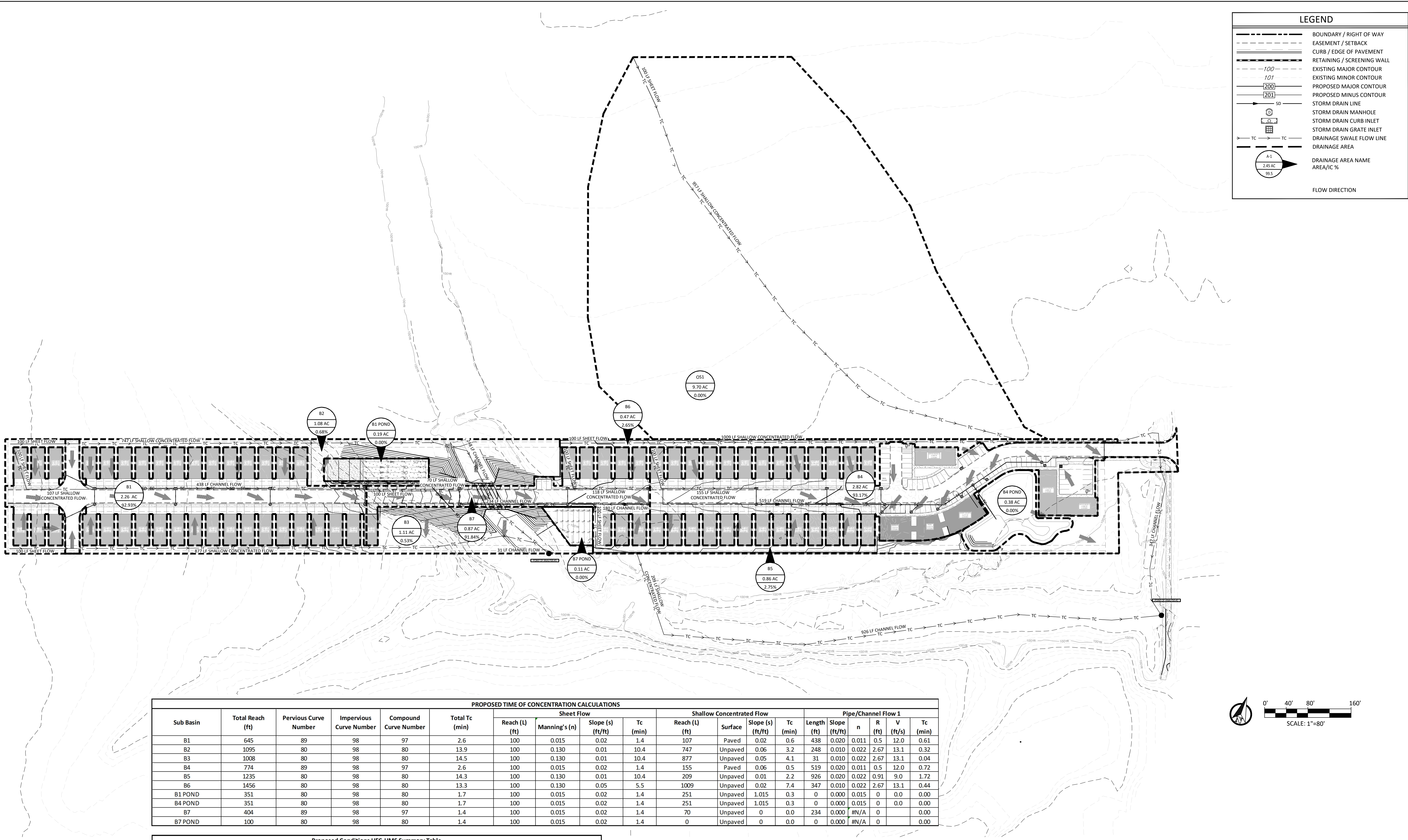
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PROPOSED TIME OF CONCENTRATION CALCULATIONS																			
Sub Basin	Total Reach (ft)	Pervious Curve Number	Impervious Curve Number	Compound Curve Number	Total Tc (min)	Sheet Flow				Shallow Concentrated Flow				Pipe/Channel Flow 1					
						Reach (L) (ft)	Manning's (n)	Slope (s) (ft/ft)	Tc (min)	Reach (L) (ft)	Surface	Slope (s) (ft/ft)	Tc (min)	Length (ft)	Slope (ft/ft)	n	R (ft)	V (ft/s)	Tc (min)
B1	645	89	98	97	2.6	100	0.015	0.02	1.4	107	Paved	0.02	0.6	438	0.020	0.011	0.5	12.0	0.61
B2	1095	80	98	80	13.9	100	0.130	0.01	10.4	747	Unpaved	0.06	3.2	248	0.010	0.022	2.67	13.1	0.32
B3	1008	80	98	80	14.5	100	0.130	0.01	10.4	877	Unpaved	0.05	4.1	31	0.010	0.022	2.67	13.1	0.04
B4	774	89	98	97	2.6	100	0.015	0.02	1.4	155	Paved	0.06	0.5	519	0.020	0.011	0.5	12.0	0.72
B5	1235	80	98	80	14.3	100	0.130	0.01	10.4	209	Unpaved	0.01	2.2	926	0.020	0.022	0.91	9.0	1.72
B6	1456	80	98	80	13.3	100	0.130	0.05	5.5	1009	Unpaved	0.02	7.4	347	0.010	0.022	2.67	13.1	0.44
B1 POND	351	80	98	80	1.7	100	0.015	0.02	1.4	251	Unpaved	1.015	0.3	0	0.000	0.015	0	0.0	0.00
B4 POND	351	80	98	80	1.7	100	0.015	0.02	1.4	251	Unpaved	1.015	0.3	0	0.000	0.015	0	0.0	0.00
B7	404	89	98	97	1.4	100	0.015	0.02	1.4	70	Unpaved	0	0.0	234	0.000	#N/A	0		0.00
B7 POND	100	80	98	80	1.4	100	0.015	0.02	1.4	0	Unpaved	0	0.0	0	0.000	#N/A	0		0.00

Proposed Conditions HEC-HMS Summary Table							
Sub Basin	Downstream	Area (ac)	Impervious Cover (%)	HEC-HMS Outputs			
				Q2 (cfs)	Q10 (cfs)	Q25 (cfs)	Q100 (cfs)
B1	Point of Analysis 1	2.261	92.93%	11.4	17.2	21.3	28.2
B2	Point of Analysis 1	1.079	0.68%	2.5	4.9	6.5	9.3
B3	Point of Analysis 2	1.103	0.53%	2.5	4.9	6.5	9.3
B4	Point of Analysis 2	2.822	93.17%	13.5	20.5	25.4	33.7
B5	Point of Analysis 2	0.856	2.75%	1.9	3.6	4.8	6.9
B6	Point of Analysis 2	0.465	2.65%	1.1	2.1	2.8	4.0
B1 POND	Point of Analysis 1	0.187	0.00%	0.6	1.1	1.4	2.1
B4 POND	Point of Analysis 2	0.376	0.00%	1.3	2.4	3.3	4.7
B7	Point of Analysis 3	0.872	91.84%	0.4	0.7	0.8	1.1
B7 POND	Point of Analysis 4	0.112	0.00%	0.3	0.6	0.9	1.2
Point of Analysis 1				5.6	12.8	27.6	46.0
Point of Analysis 2				39.1	63.8	81.3	111.4
Increase in Runoff Point of Analysis 1 (Negative values mean controlled flows)				-8.9	-15.1	-9.7	-7.2
Increase in Runoff Point of Analysis 2 (Negative values mean controlled flows)				0.0	-0.6	-0.5	-0.1

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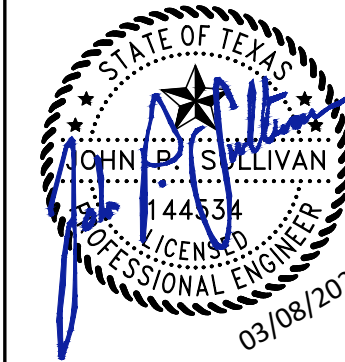
PROPOSED DRAINAGE AREA MAP

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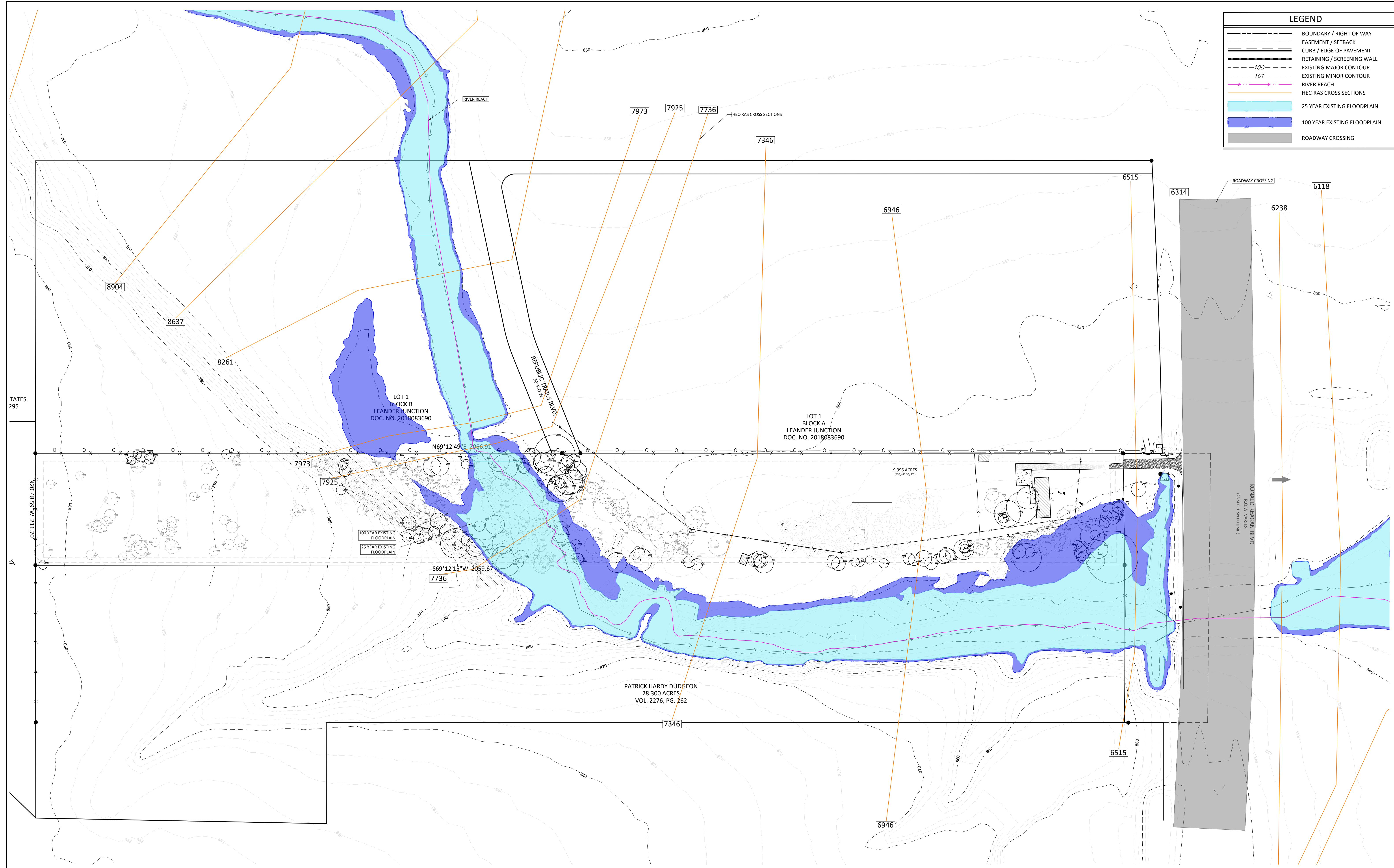
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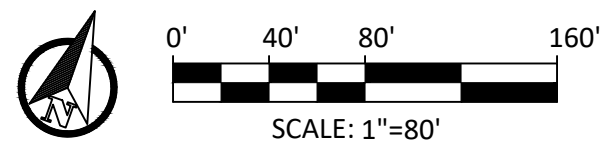
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	CURB / EDGE OF PAVEMENT
	RETAINING / SCREENING WALL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	RIVER REACH
	HEC-RAS CROSS SECTIONS
	25 YEAR EXISTING FLOODPLAIN
	100 YEAR EXISTING FLOODPLAIN
	ROADWAY CROSSING

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FLOODPLAIN STUDY - EXISTING FLOODPLAIN MAP & CALCULATIONS

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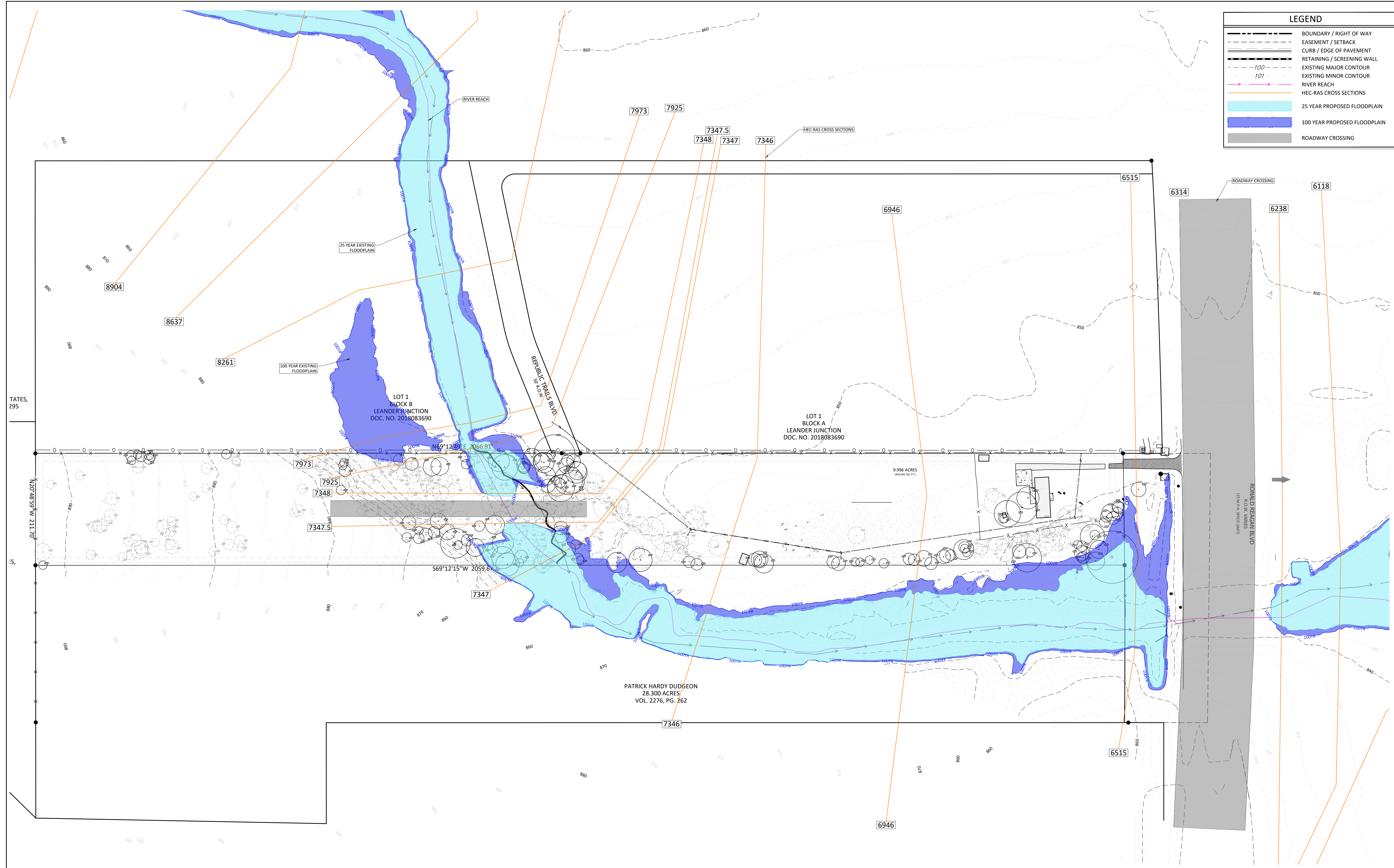


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- RETAINING / SCREENING WALL
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- RIVER REACH
- HEC-RAS CROSS SECTIONS
- 25 YEAR PROPOSED FLOODPLAIN
- 100 YEAR PROPOSED FLOODPLAIN
- ROADWAY CROSSING



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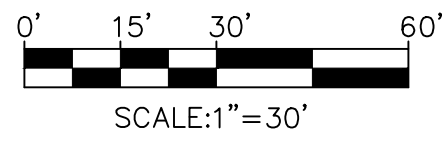
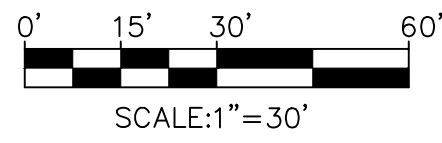


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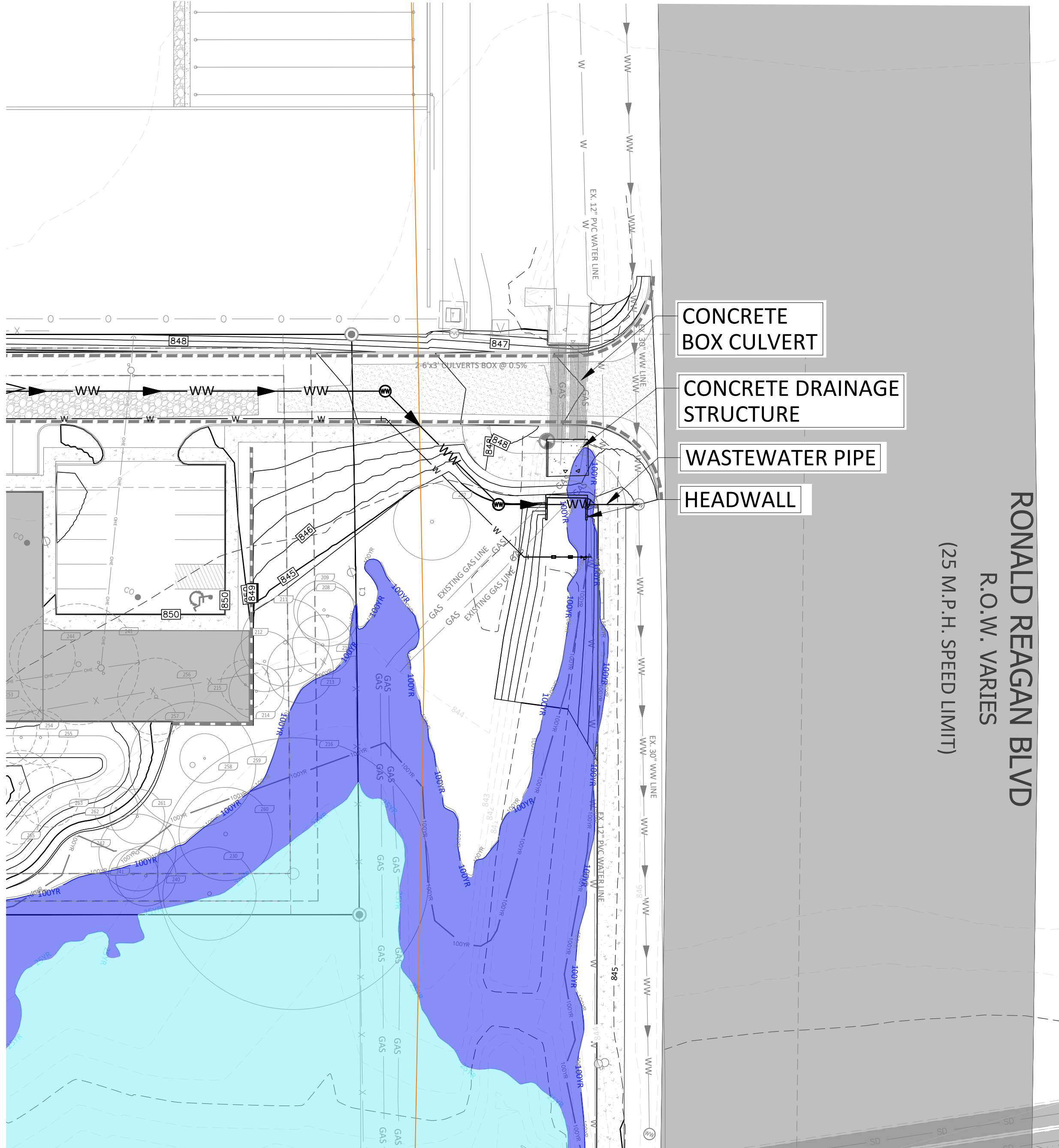
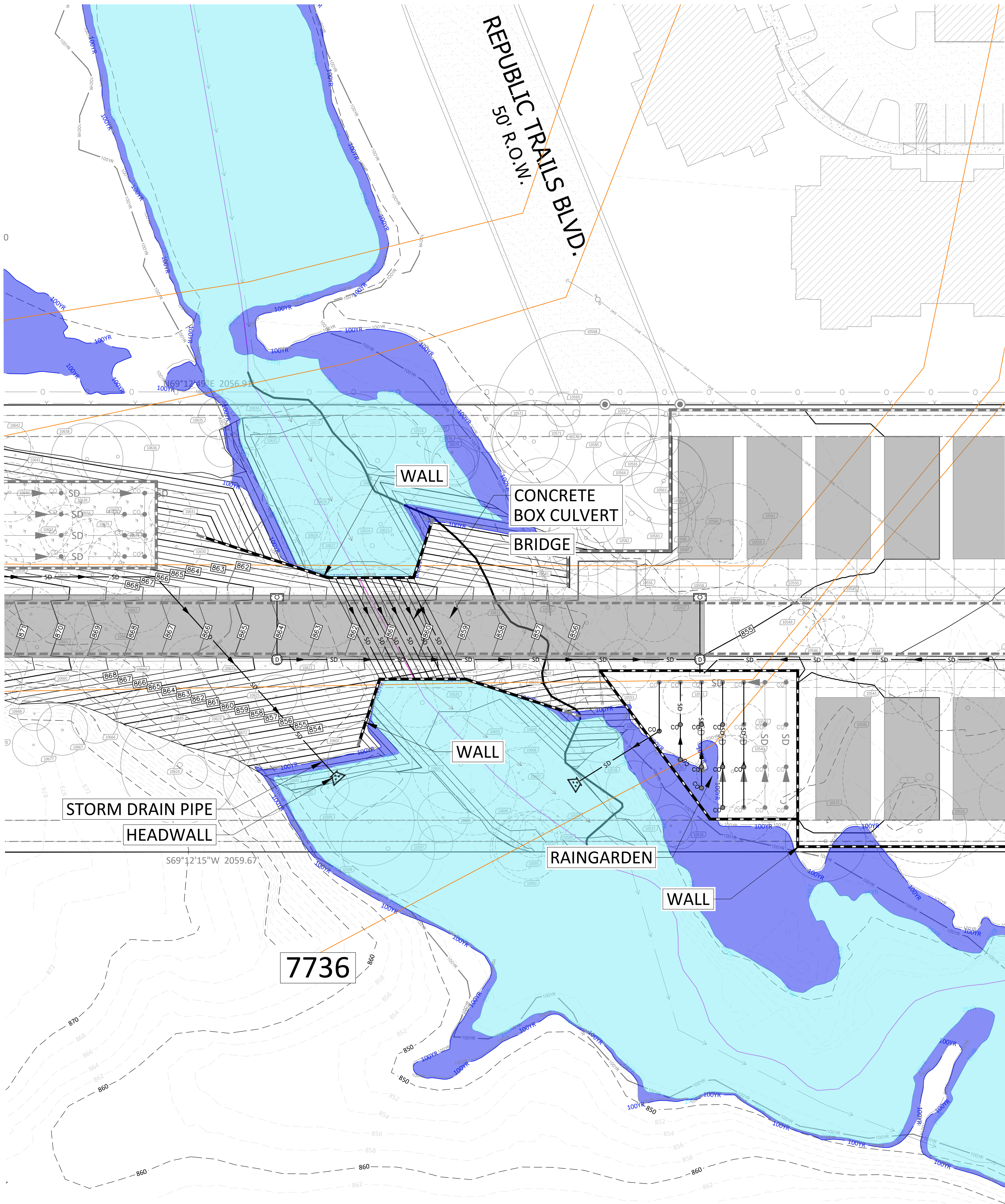
- UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE DEVELOPMENT SERVICES DEPARTMENT, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DETENTION AND FILTRATION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
- CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET R.O.W.

FLOODPLAIN NOTE:

THE 100- AND 25- YEAR FLOODPLAIN SHOWN ON THIS PLAN WERE MODELED AND DELINEATED IN ACCORDANCE WITH AUSTIN DRAINAGE CRITERIA MANUAL REQUIREMENTS.



LEGEND	
	BOUNDARY / RIGHT OF WAY
	EASEMENT / SETBACK
	CURB / EDGE OF PAVEMENT
	RETAINING / SCREENING WALL
	EXISTING MANOR CONTOUR
	EXISTING MINUS CONTOUR
	RIVER REACH
	HEC-RAS CROSS SECTIONS
	25 YEAR EXISTING FLOODPLAIN
	100 YEAR EXISTING FLOODPLAIN
	ROADWAY CROSSING



HAMPTON HOMES BY BM DEVELOPERS
14751 RONALD REAGAN BLVD
LEANDER, TEXAS 78641

FLOODPLAIN DEVELOPMENT PLAN

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OF 77

SD-23-0132

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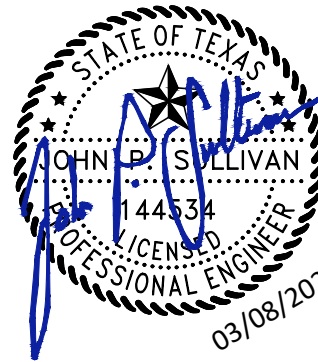
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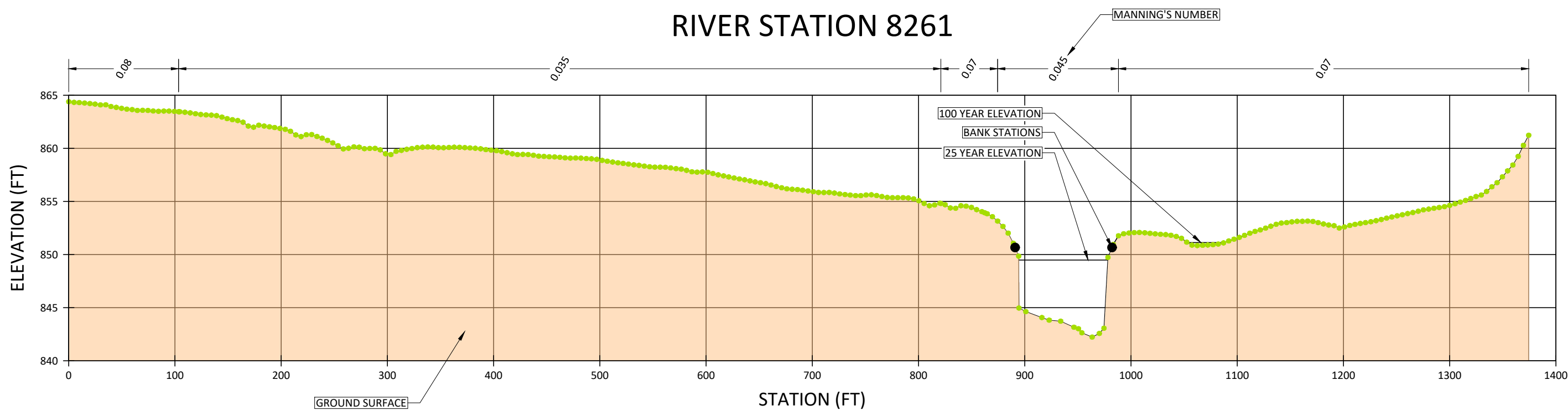
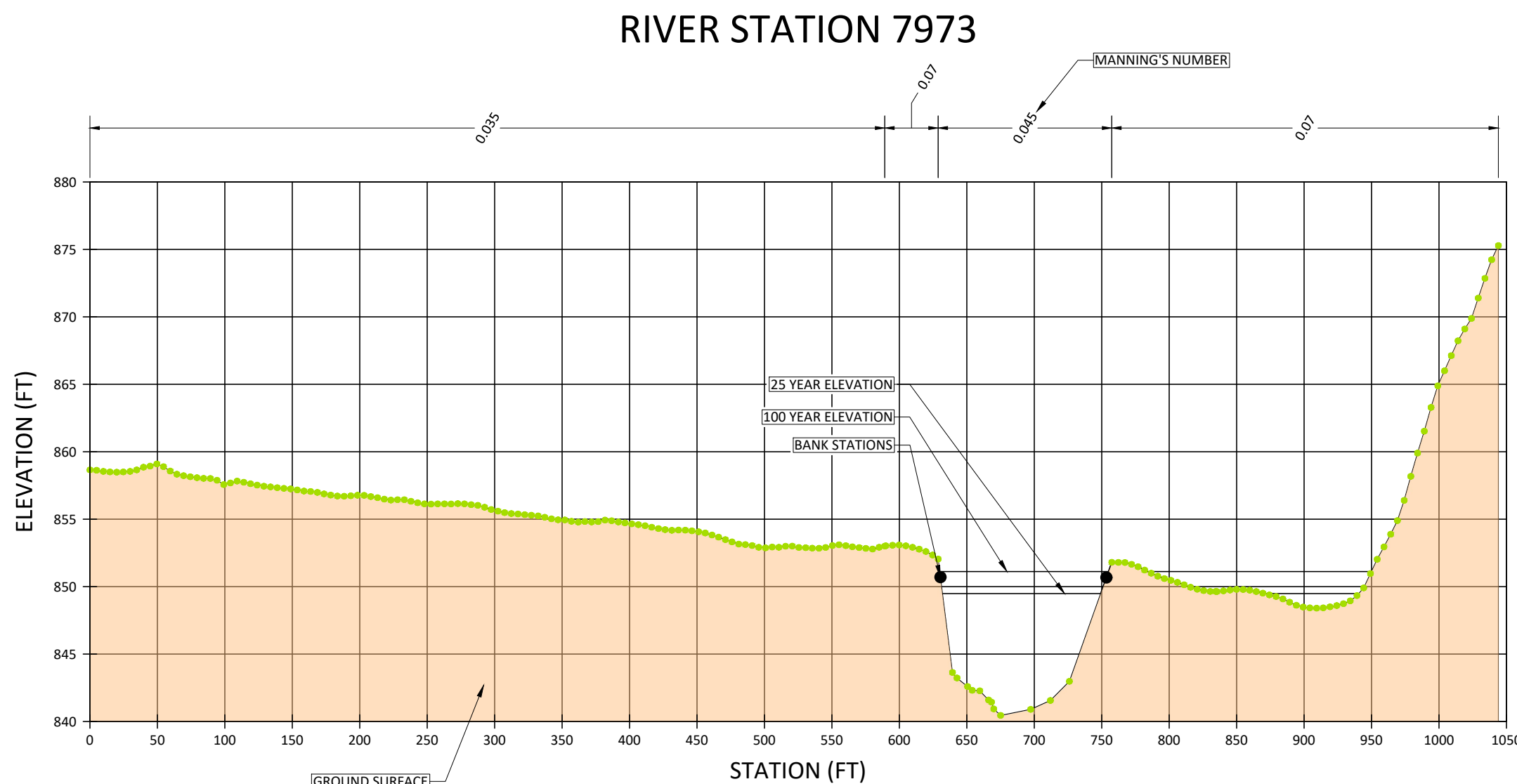
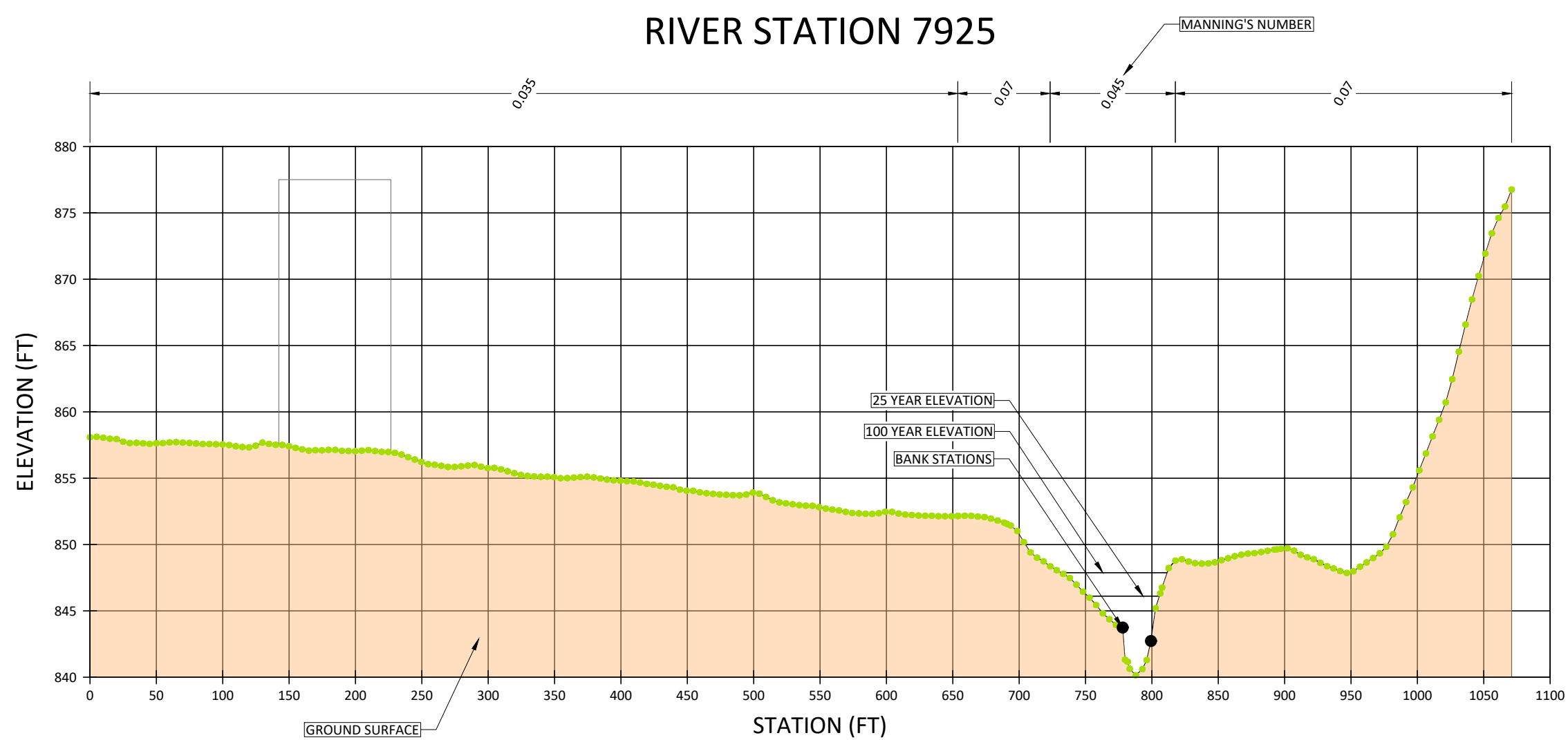
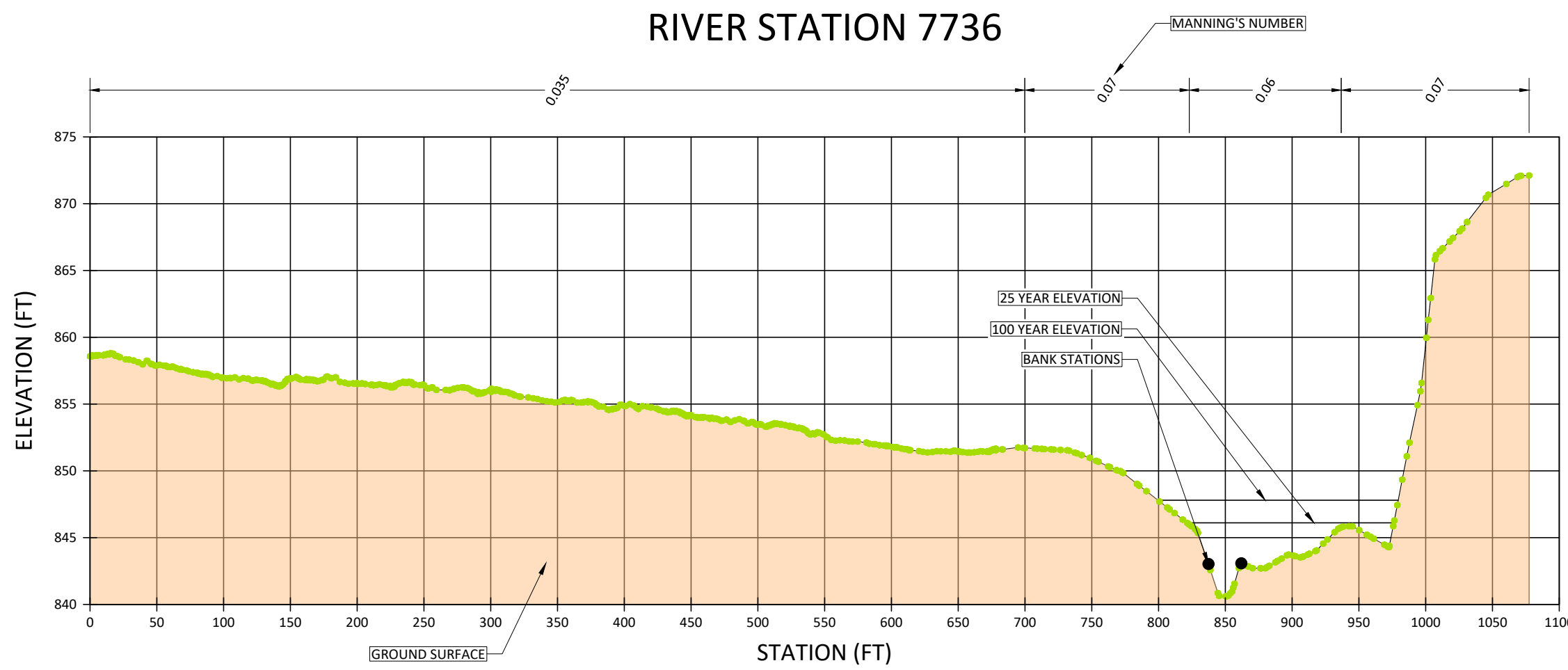
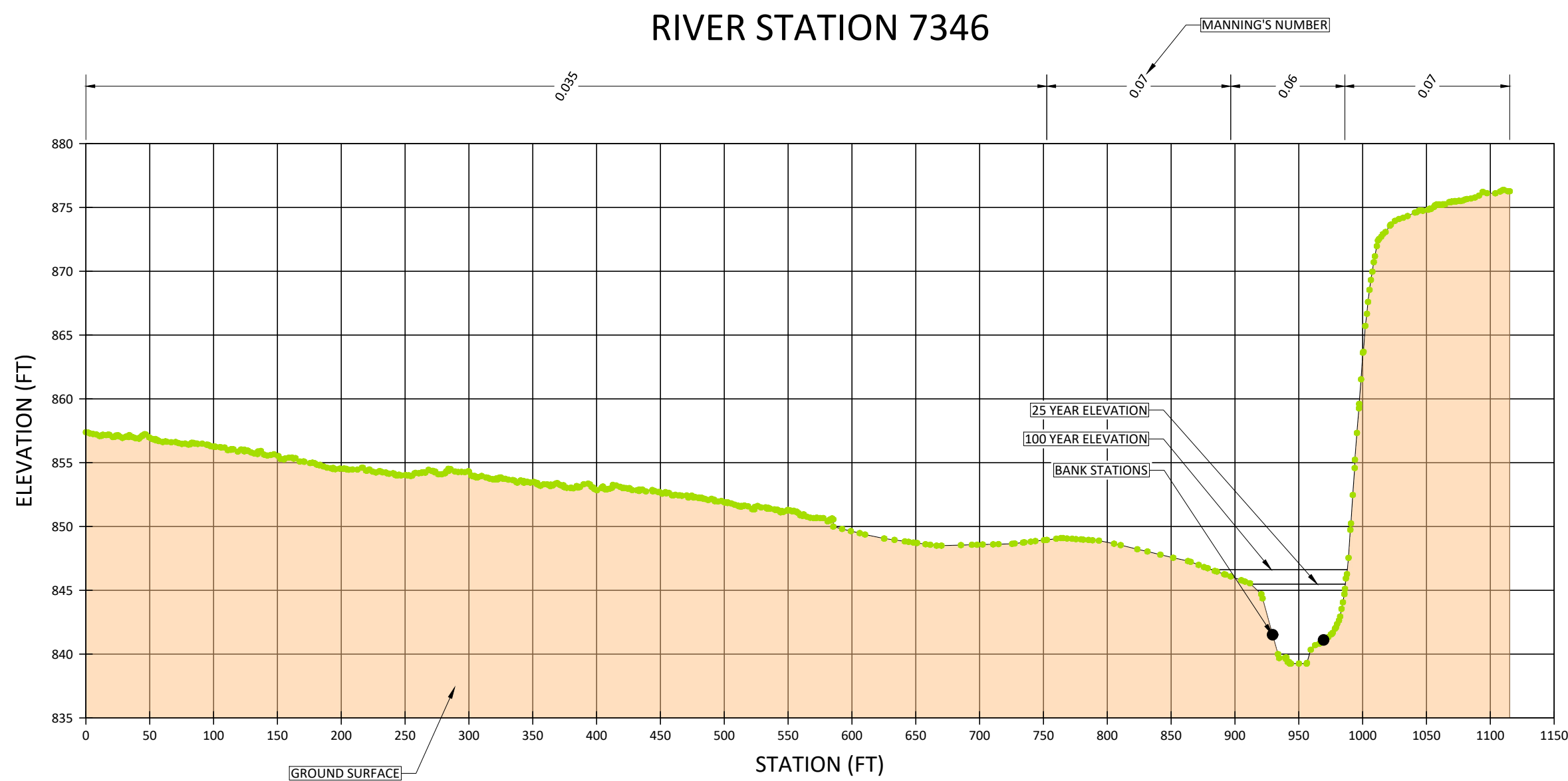
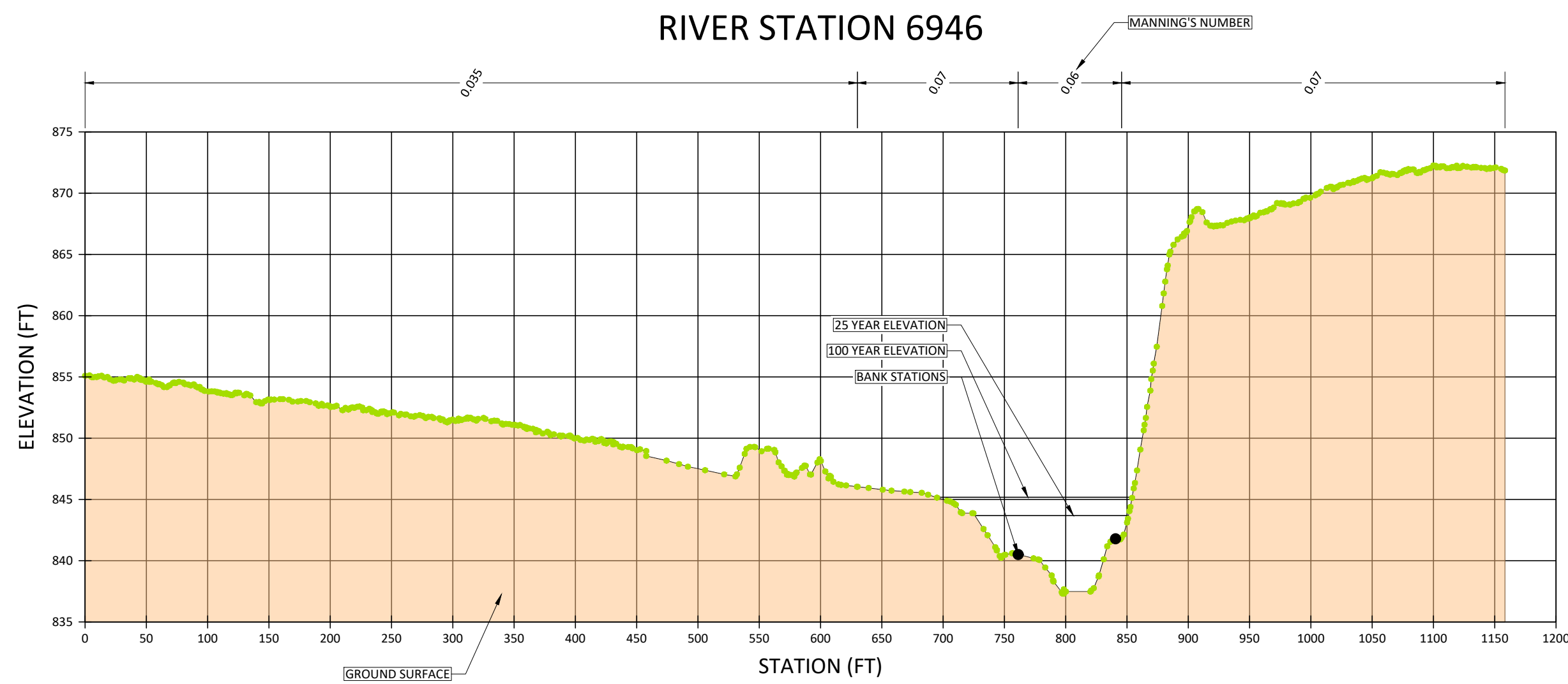
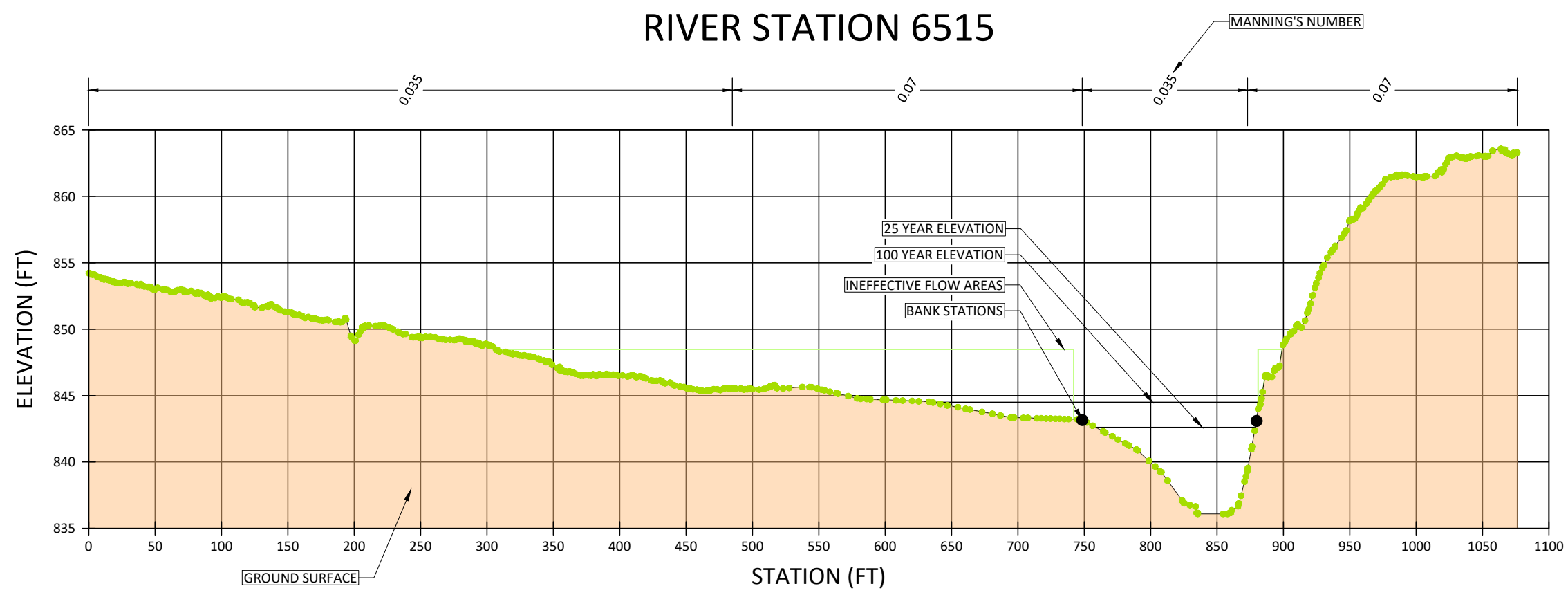
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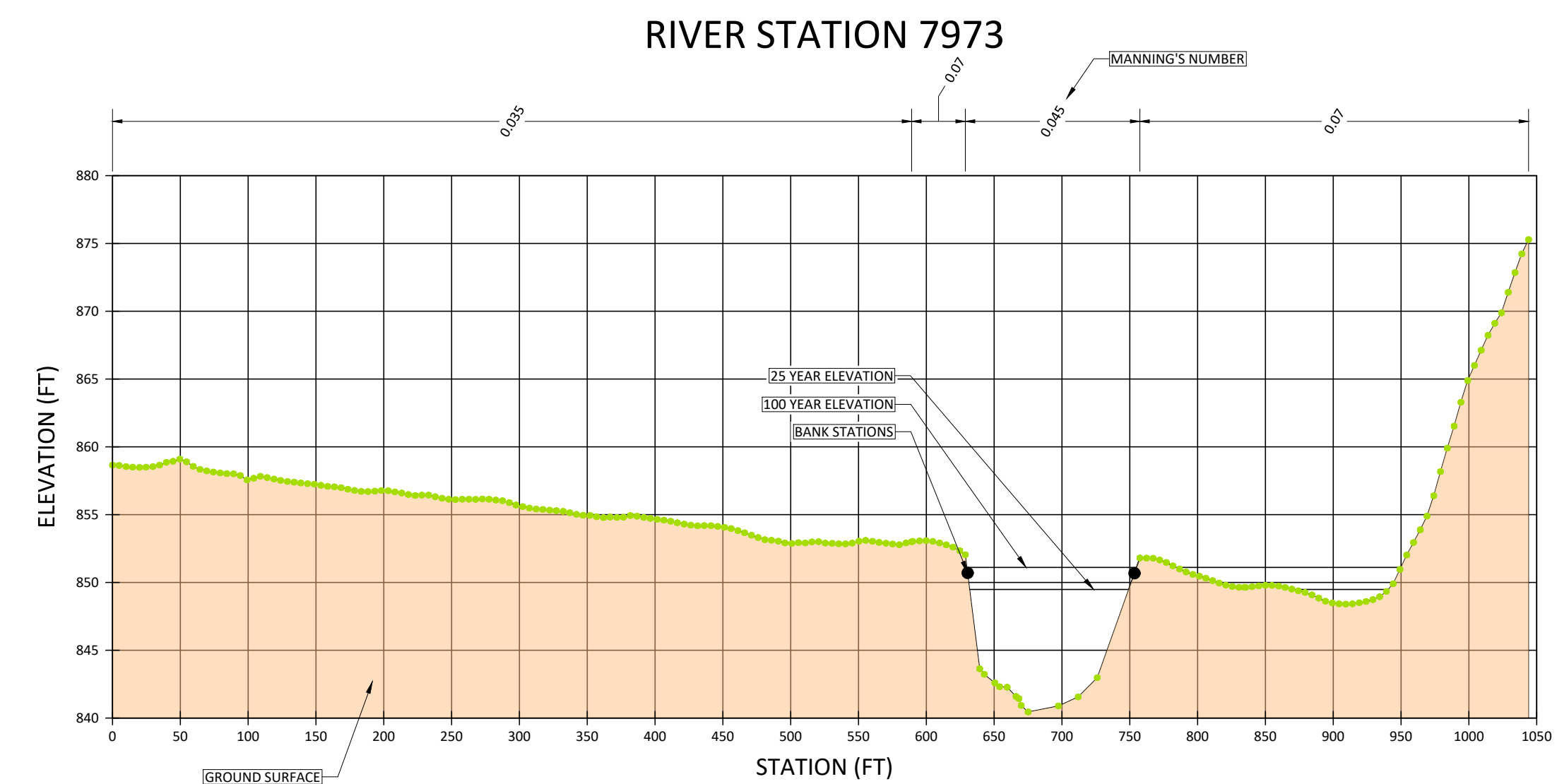
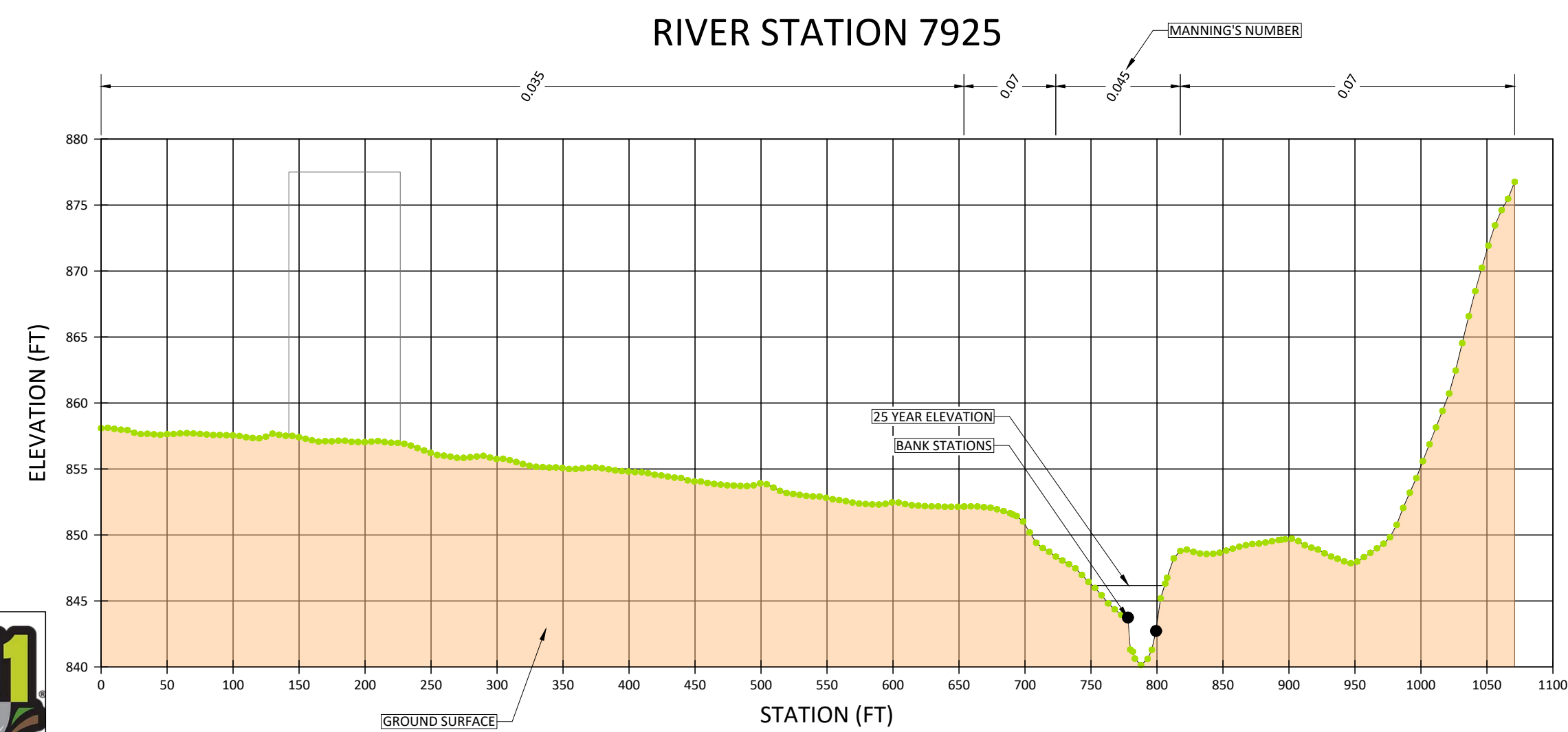
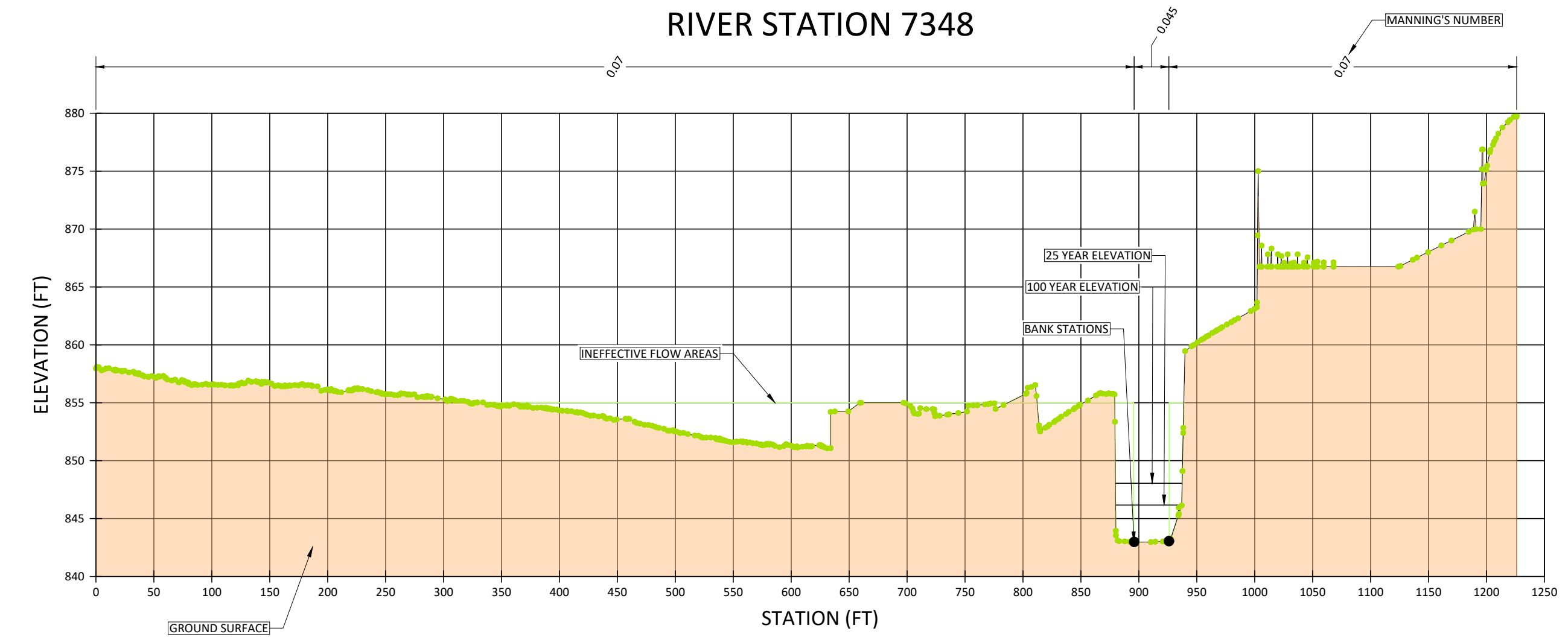
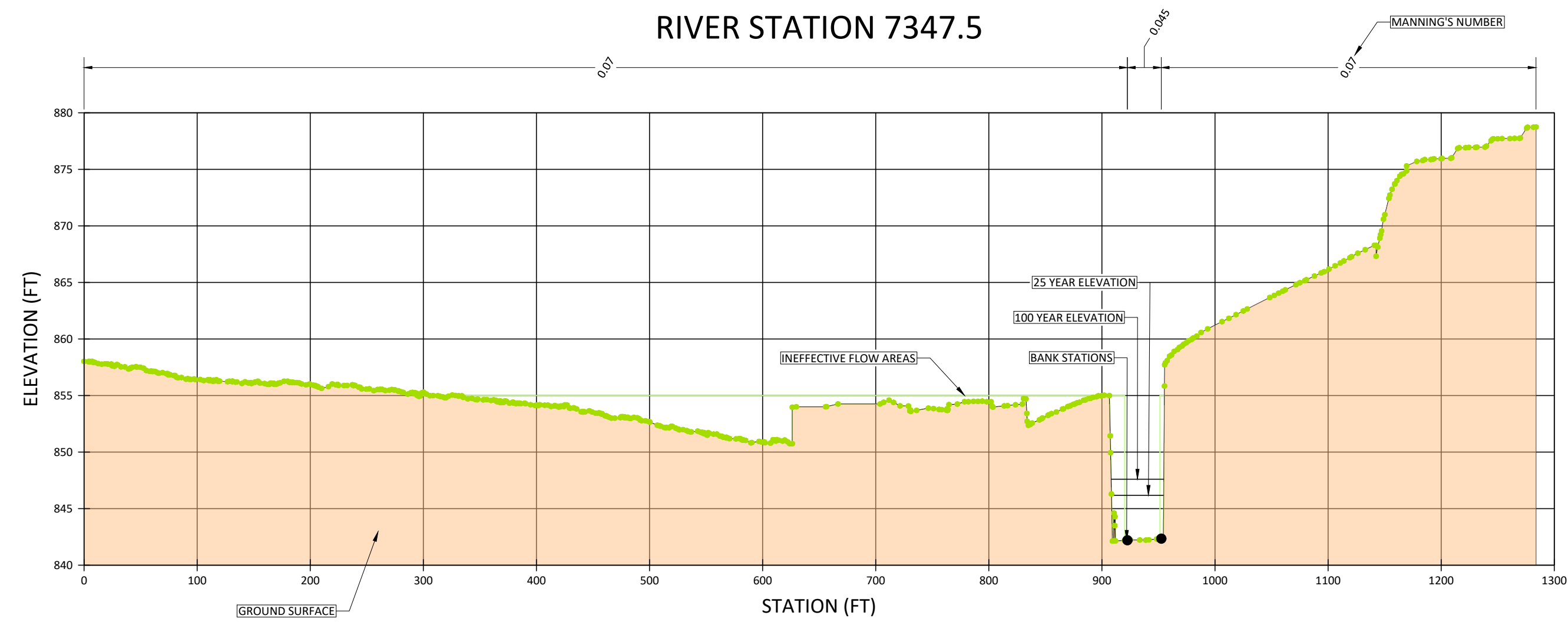
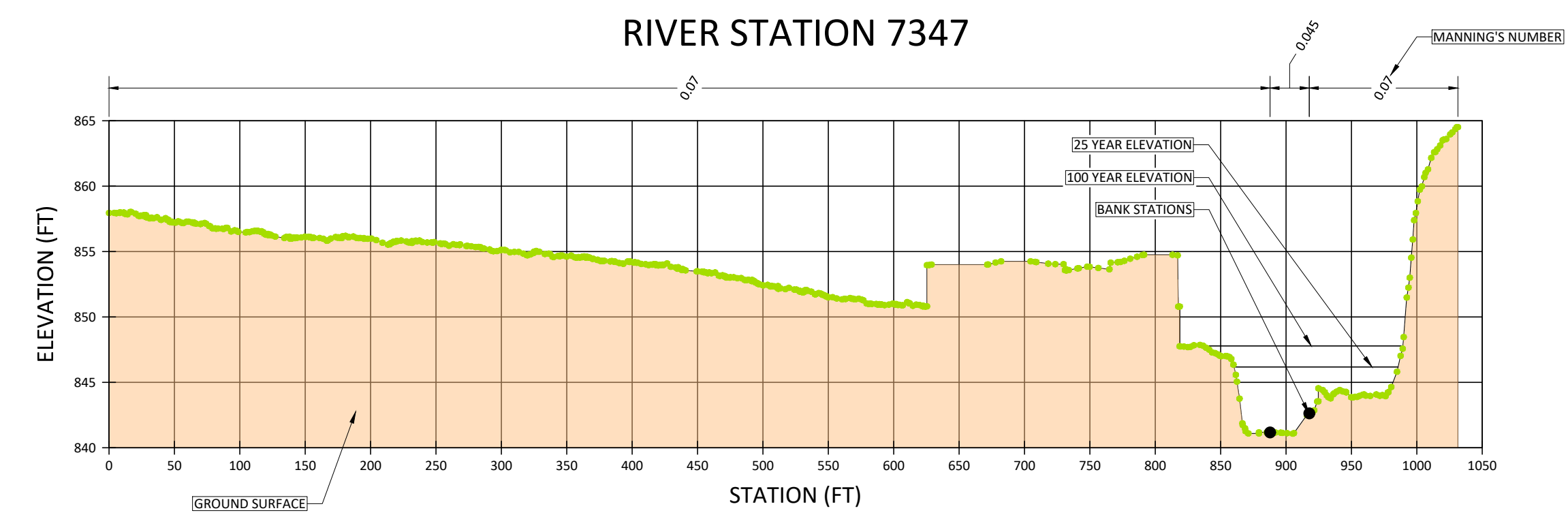
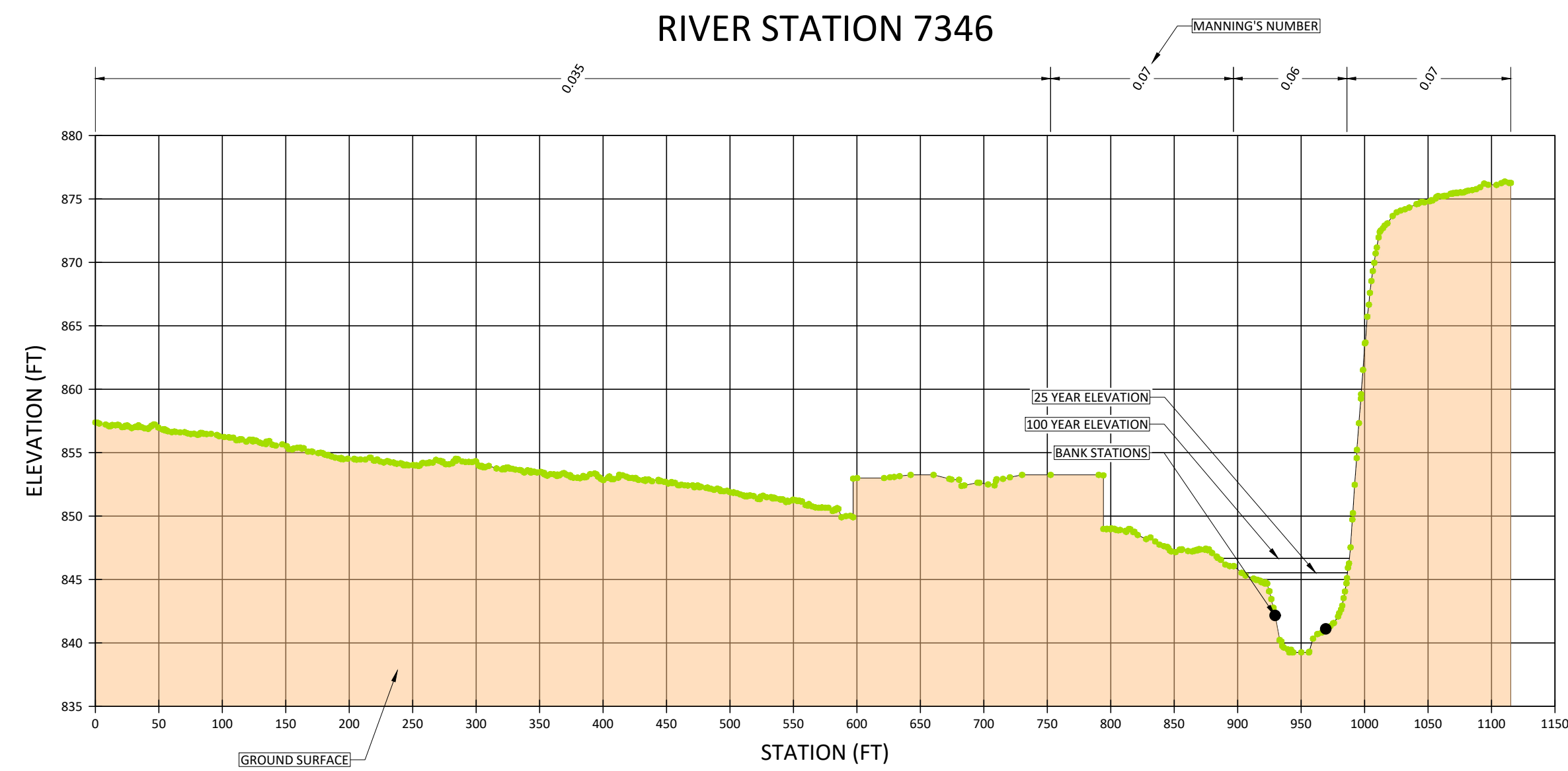
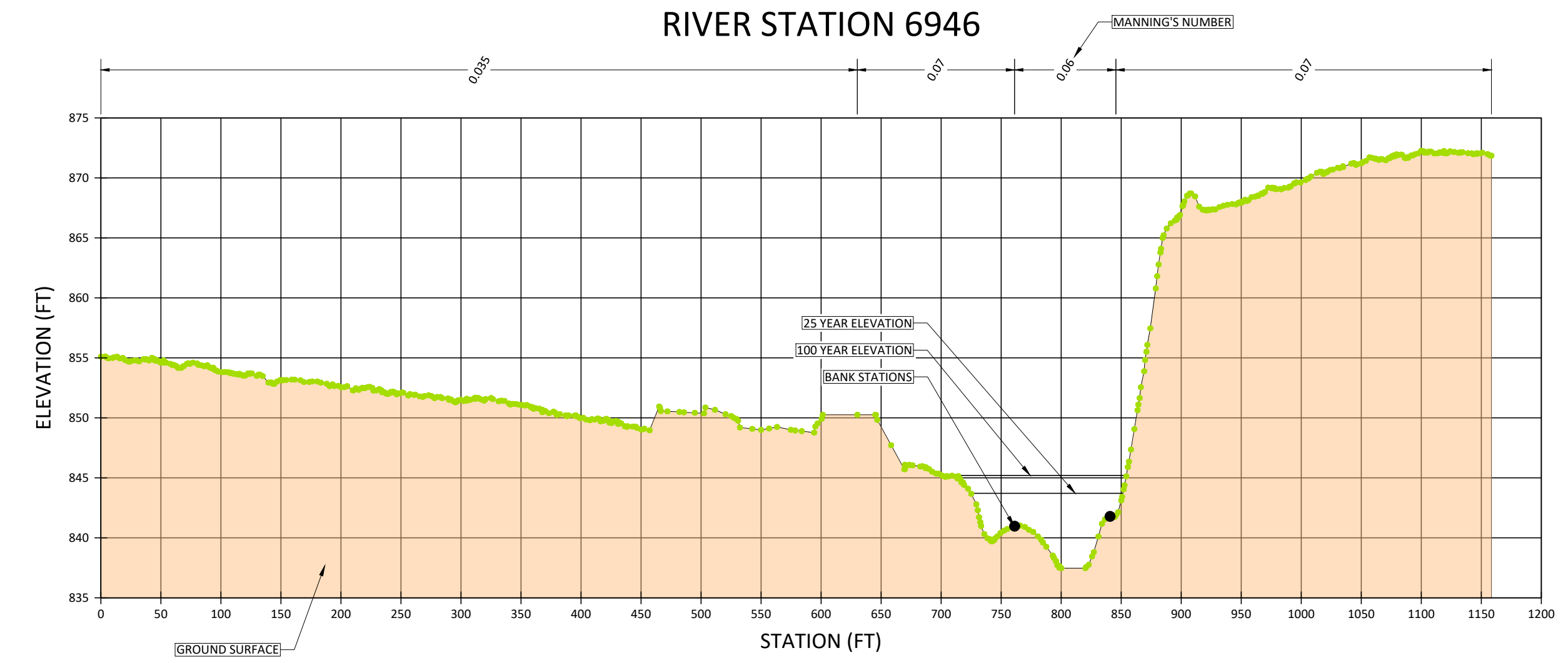
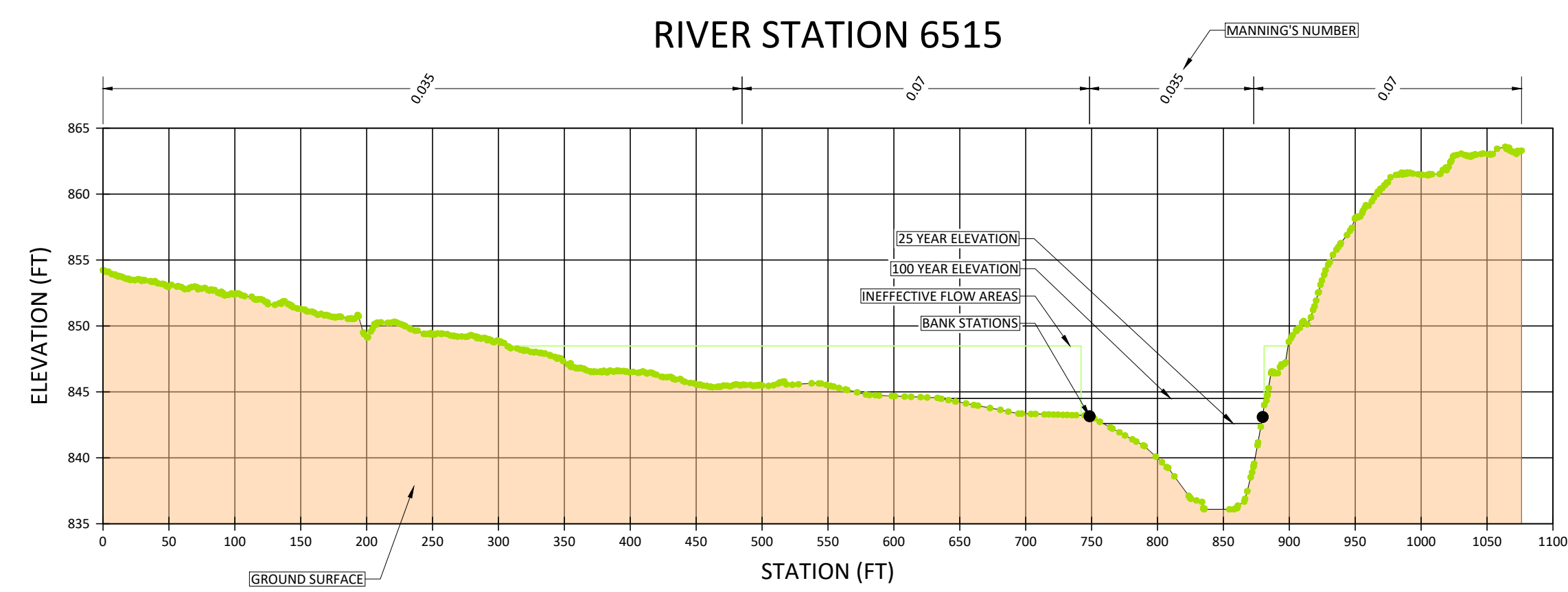


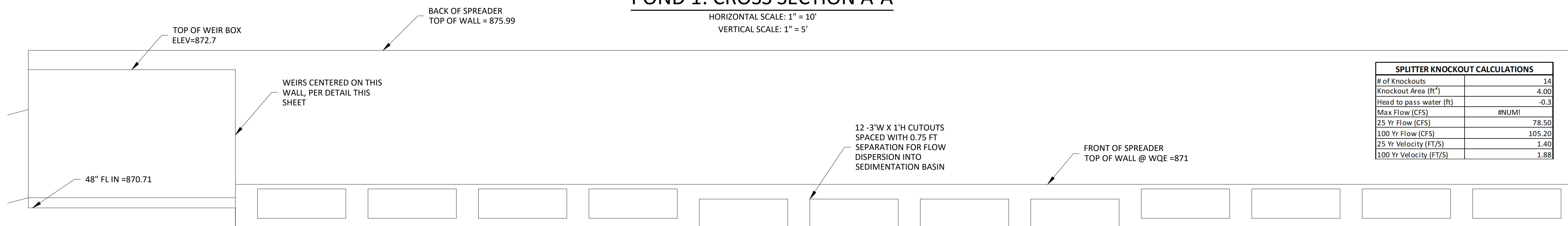
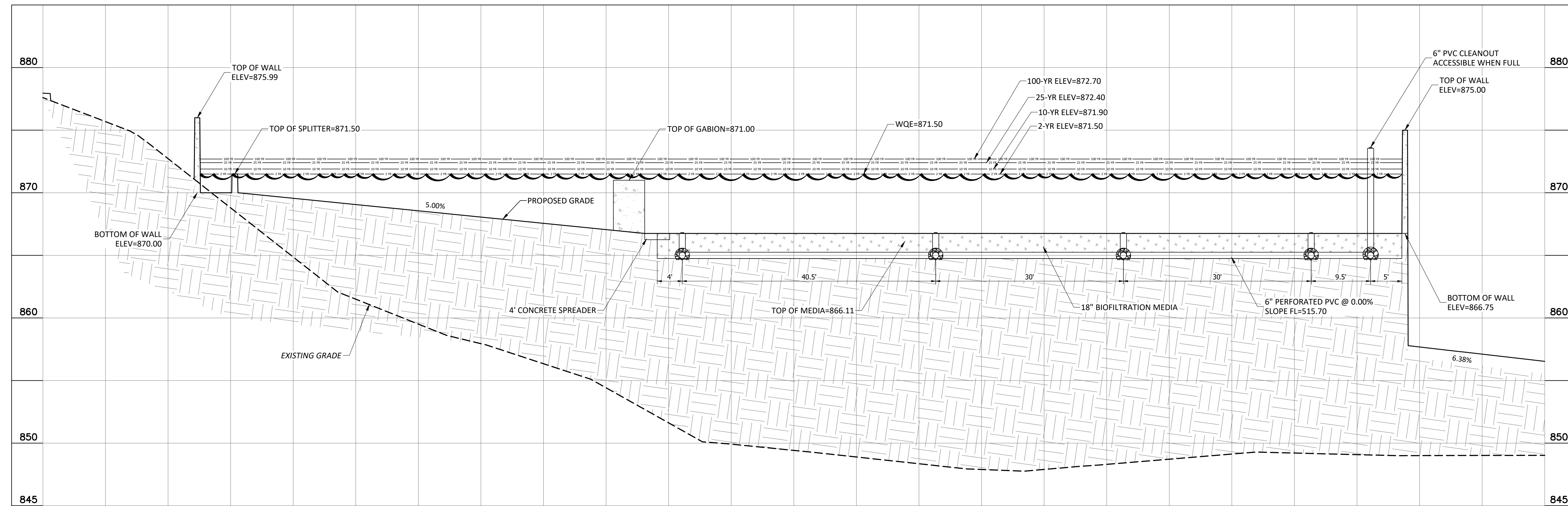
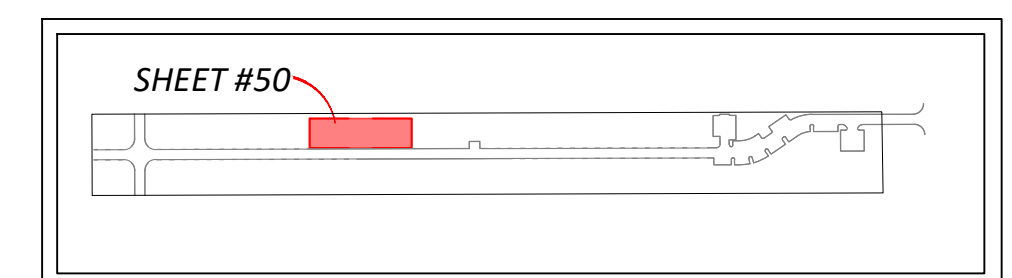
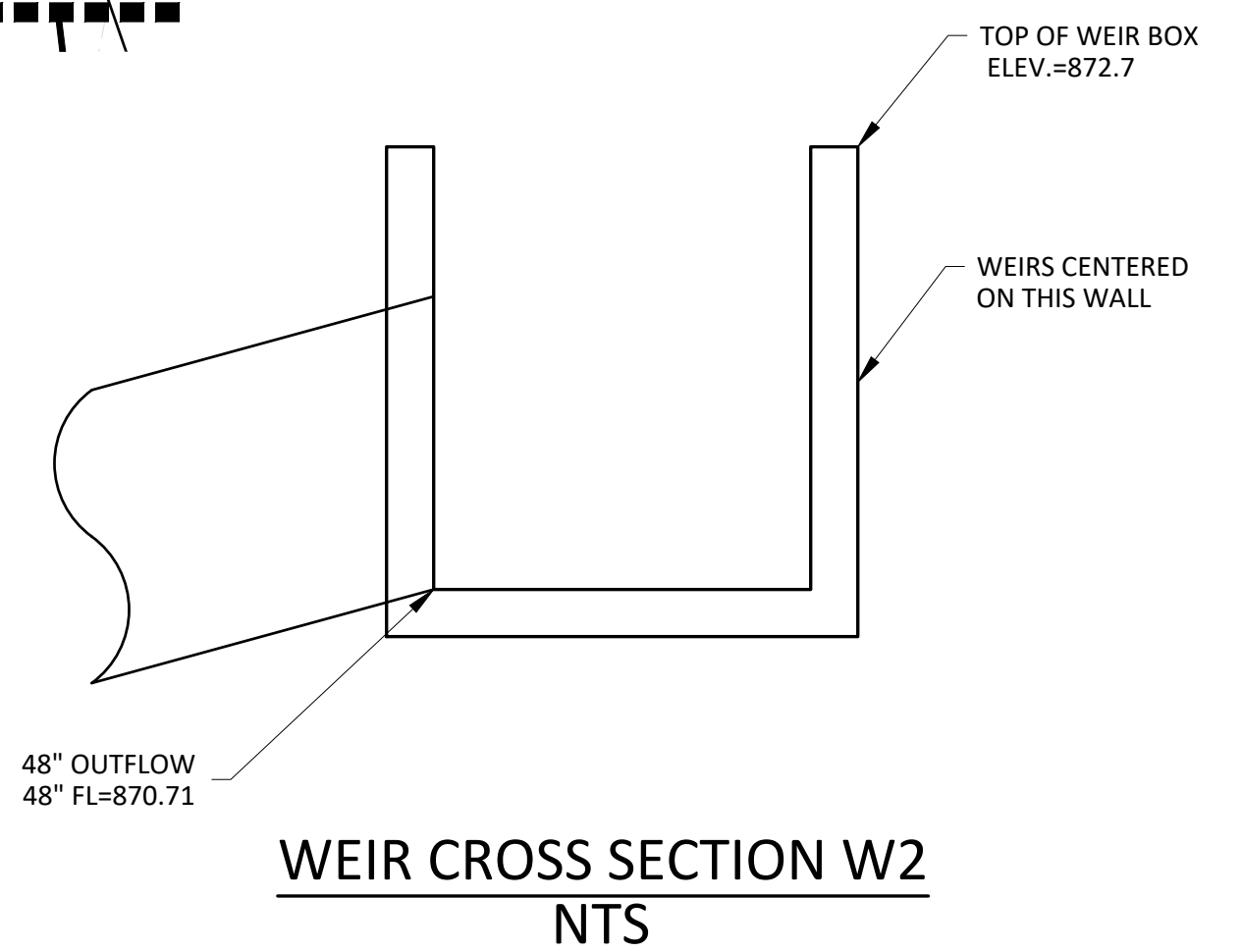
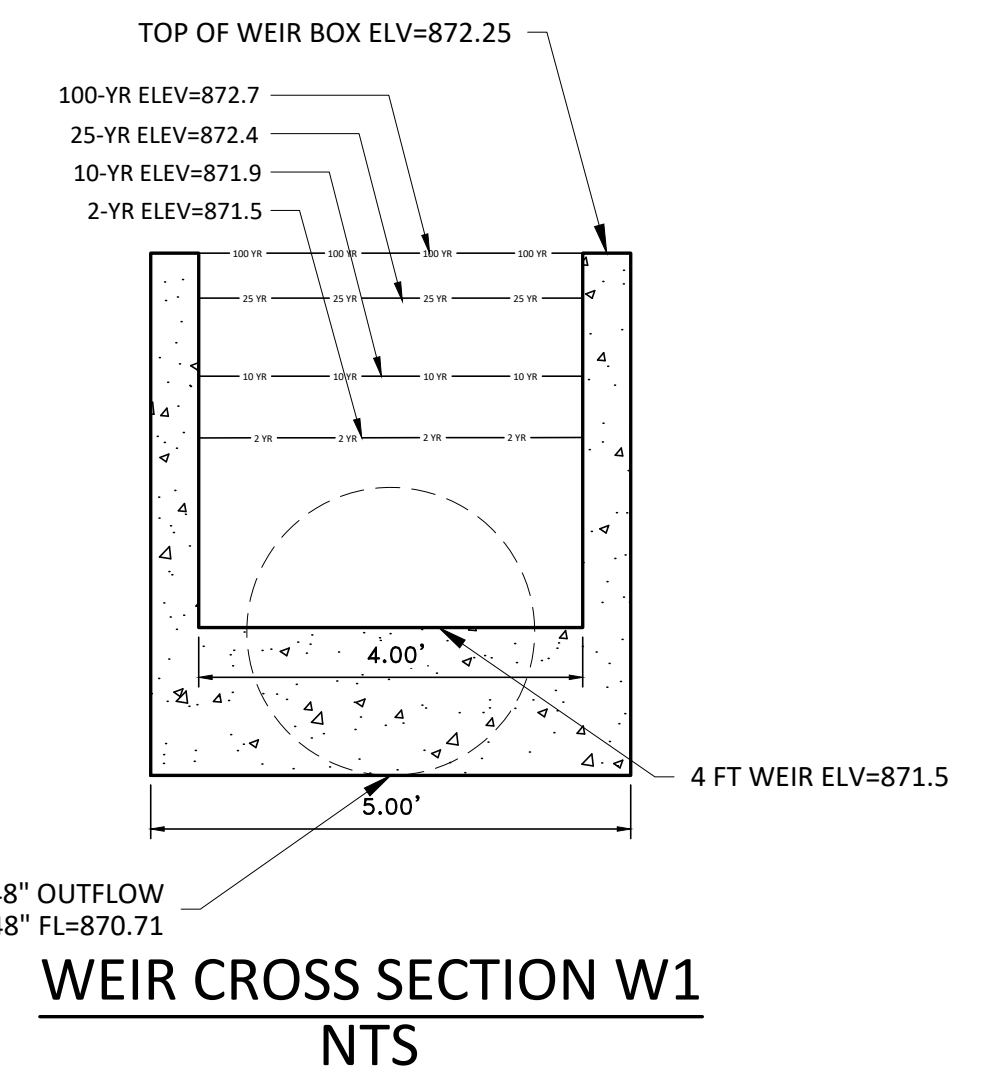
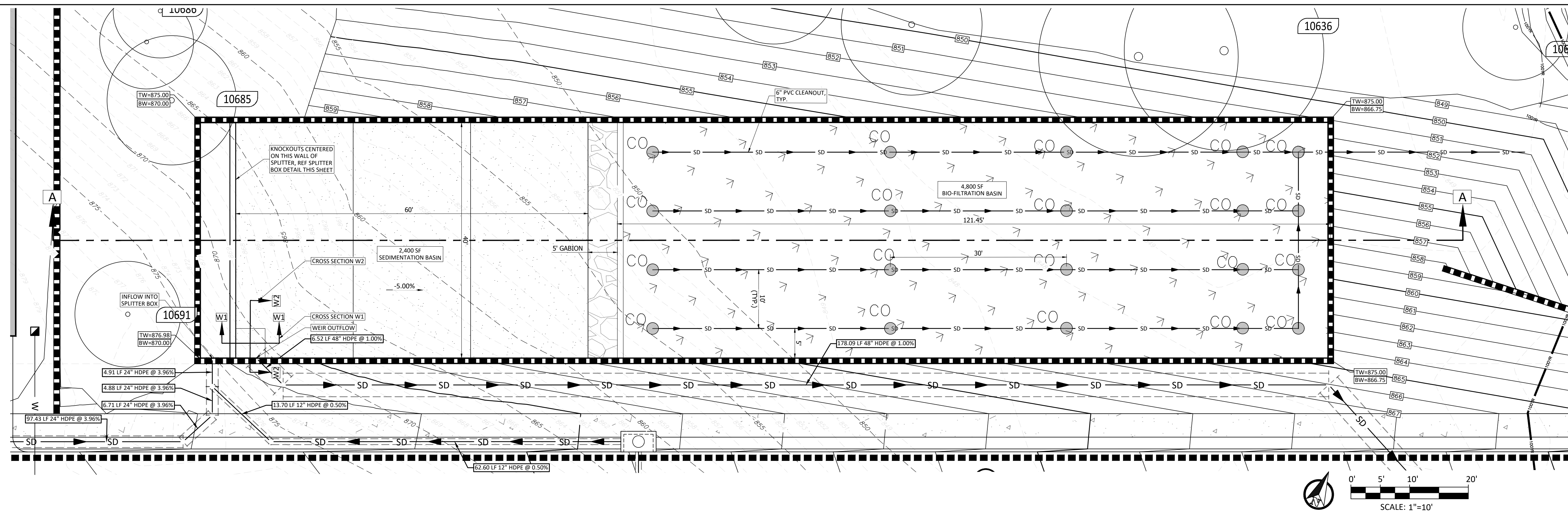
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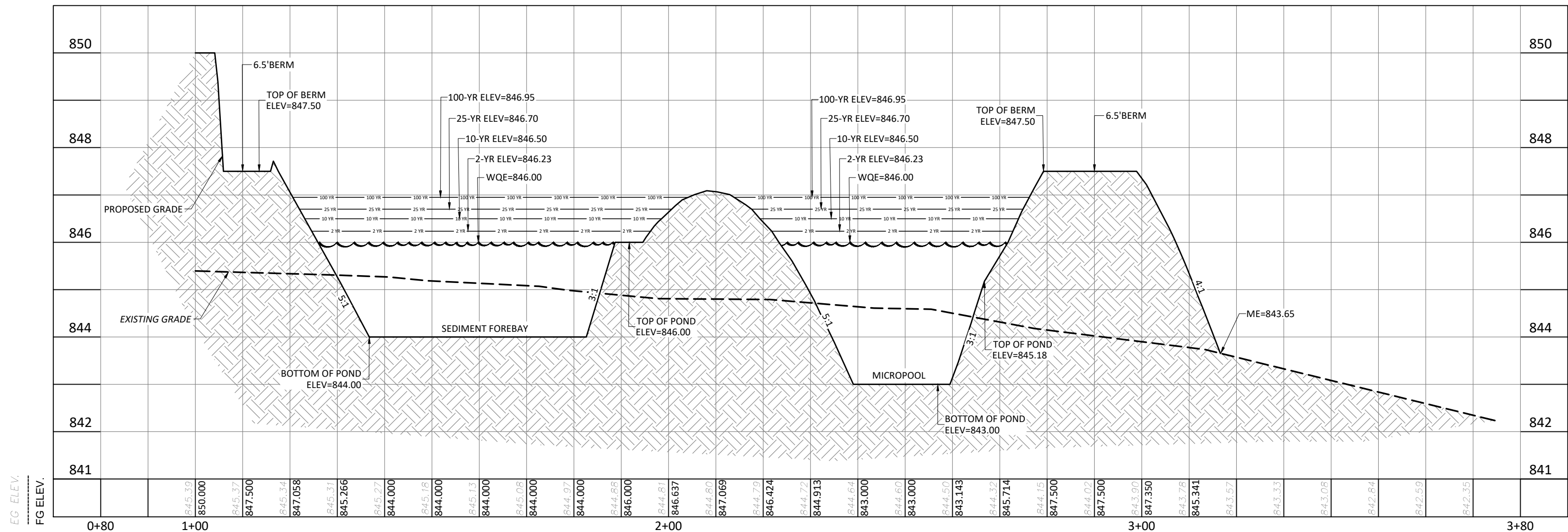
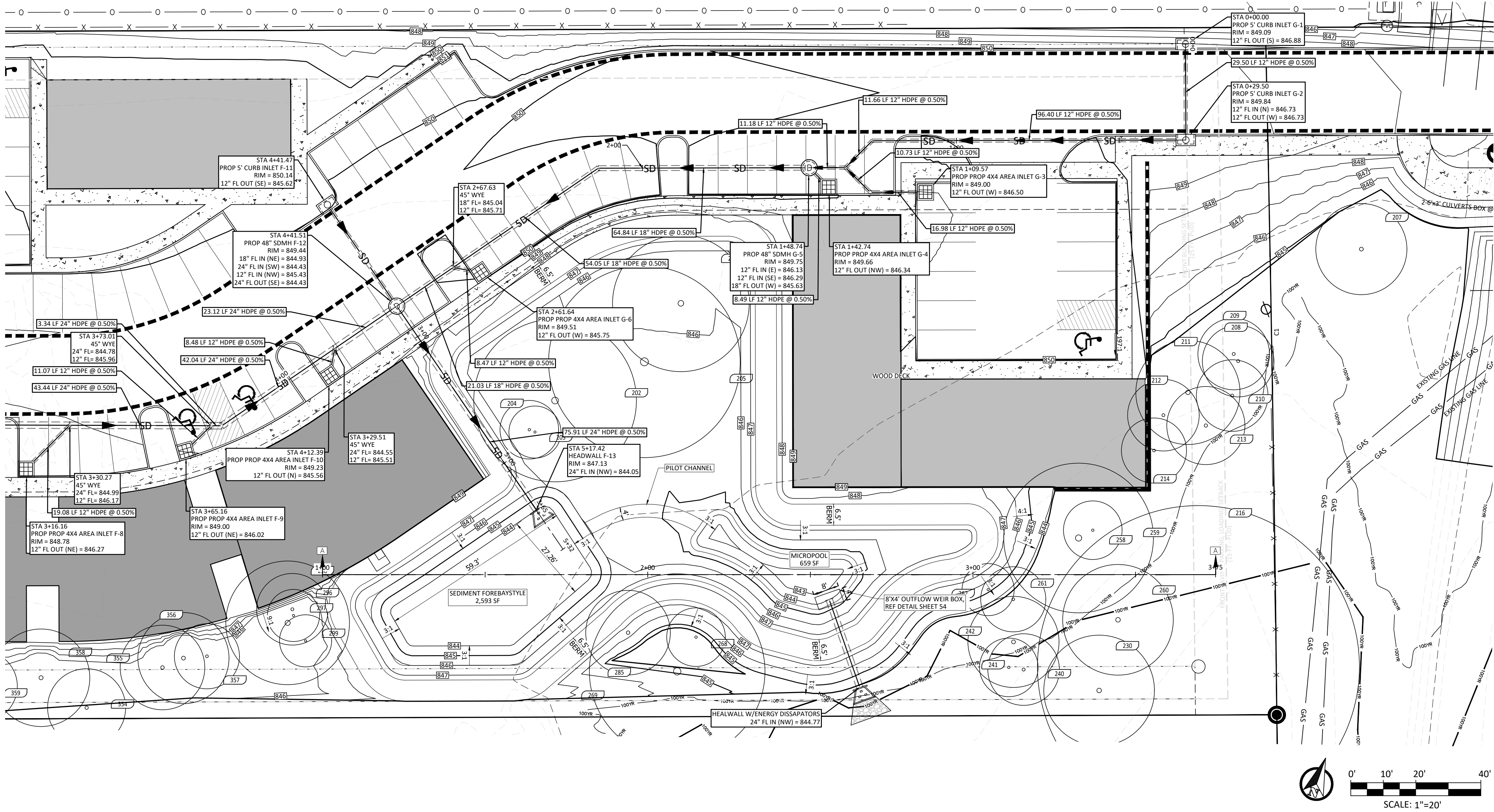
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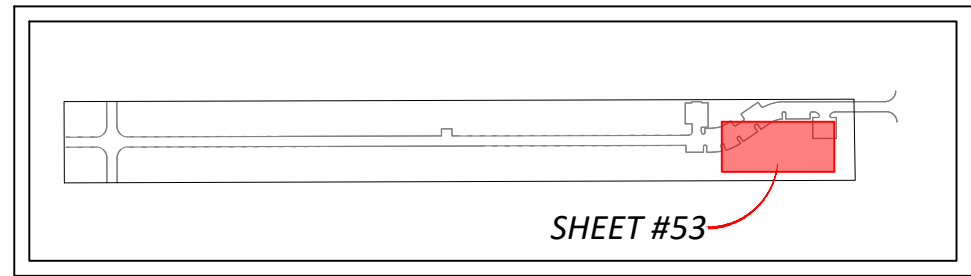


SPLITTER KNOCKOUT CALCULATIONS	
# of Knockouts	1
Knockout Area (ft ²)	4.01
Head to pass water (ft)	-0.2
Max Flow (CFS)	#NUM!
25 Yr Flow (CFS)	78.5
100 Yr Flow (CFS)	105.2
25 Yr Velocity (FT/S)	1.4
100 Yr Velocity (FT/S)	1.8



POND 2: CROSS SECTION A-A

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'



KEY MAP
SCALE: 1"=500'

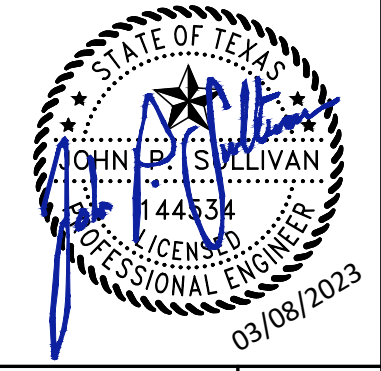
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POND 2 PLAN & PROFILE (1 OF 2)

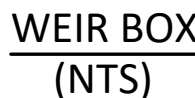
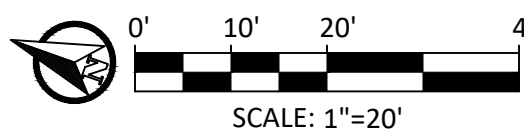
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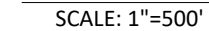
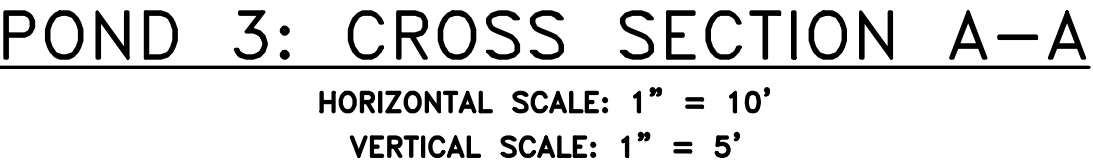
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1. SEDIMENT REMOVED DURING CONSTRUCTION OF A DETENTION, RETENTION, OR WATER QUALITY FACILITIES MAY BE DISPOSED OF ON-SITE IF PROPERLY STABILIZED ACCORDING TO THE PRACTICES OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL CRITERIA CHART IN SECTION 1.4.0 OF THIS MANUAL. AFTER THE CITY OF AUSTIN HAS ACCEPTED A STORMWATER FACILITY, DISPOSAL OF SEDIMENT MUST BE AT AN APPROVED LANDFILL.
2. DURING CONSTRUCTION OF SCMS, TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED.
3. IF RUNOFF IS TO ENTER THE SAND FILTRATION CHAMBER OF A WATER QUALITY CONTROL FACILITY PRIOR TO COMPLETION OF SITE STRUCTURE AND REVEGETATION, INSPECTION AND MAINTENANCE OF ALL TEMPORARY EROSION/SEDIMENTATION CONTROLS ARE REQUIRED, AS DESCRIBED IN THE ENVIRONMENTAL CRITERIA MANUAL SECTION 1.4.4, TO PREVENT HEAVY SEDIMENT LOADS CAUSED BY HOME CONSTRUCTION FROM CLOGGING THE FILTRATION MEDIA.
4. IN ALL CASES, TREES SHALL BE PRESERVED ACCORDING TO THE REQUIREMENTS OF SECTION 3 OF THE ENVIRONMENTAL CRITERIA MANUAL. THE ACCESS DRIVE AND STAGING AREA SHALL BE DESIGNED TO PRESERVE TREES 8" (INCHES) IN DIAMETER AND GREATER TO THE MAXIMUM EXTENT POSSIBLE. TREES 8" IN DIAMETER AND LARGER SHALL BE SURVEYED AND SHOWN FOR THE PROPOSED PROJECT. TREE REMOVAL SHALL BE LIMITED TO THE MINIMUM AMOUNT OF CONSTRUCTION PLAN PERMITTING.
5. FOR FILTRATION SYSTEMS THE DESIGN MEDIA DEPTH MUST BE VERIFIED, ACCOUNTING FOR CONSOLIDATION. IF INSUFFICIENT DEPTH IS PRESENT, ADDITIONAL MEDIA MUST BE ADDED AND PRE-SOAKED UNTIL THE DESIGN DEPTH IS ACHIEVED. PRE-SOAKING - APPLY 5-10 GALLONS OF WATER PER SQUARE FOOT OF MEDIA AREA WITHIN ONE HOUR.
6. RETAINING WALLS - RETAINING WALLS WITHIN SCMS REQUIRE WATER-TIGHTNESS. WATER-TIGHTNESS IN RETAINING WALLS IS ESSENTIAL TO THE FUNCTION OF THE STRUCTURE. WATERSTOPS SHALL BE PROVIDED DURING CONSTRUCTION OF EXPANSION JOINTS IN RETAINING WALLS PER STANDARD SPECIFICATION 414S, CONCRETE RETAINING WALLS.
7. GROUTED ROCK WALLS - GROUTED ROCK WALLS ARE ACCEPTABLE ONLY IF THE DESIGN INCLUDES AN IMPERMEABLE BARRIER SUCH AS AN APPROVED GOMEMBRANE LINER OR REINFORCED CONCRETE RETAINING WALL. FREE STANDING DRY STACKED ROCK WALLS ARE NOT ACCEPTABLE IN ANY SCM.
8. AS-BUILT SURVEYS - AS-BUILT SURVEYS OF ALL FLOOD DETENTION BASINS AND WATER QUALITY SCMS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION OF FINAL GRADE. SURVEYS SHALL BE CONDUCTED BY A LICENSED SURVEYOR OR THE ENGINEER OR RECORD AND INCLUDE REPRESENTATIVE SURVEY POINTS WITH ELEVATIONS TAKEN AT TOP OF WALL, BOTTOM OF WALL, CENTER OF BASIN, INLETS, OUTLETS, OVERFLOW STRUCTURES, AND SIDE SLOPES. ADDITIONAL SURVEY POINTS MAY BE REQUIRED AT THE DISCRETION OF THE CITY INSPECTOR TO ENSURE BASIN INTEGRITY. WATER QUALITY BASINS WITH A DRAINAGE AREA OF LESS THAN TWO (2) ACRES AS WELL AS VEGETATED FILTER STRIPS DO NOT REQUIRE SUBMITTAL OF AS-BUILT SURVEYS UNLESS DEEMED NECESSARY BY THE CITY INSPECTOR.
9. MAJOR MAINTENANCE REQUIREMENTS:
 - A) ACCUMULATED PAPER, TRASH AND DEBRIS SHALL BE REMOVED EVERY SIX (6) MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
 - B) STRUCTURAL INTEGRITY SHALL BE MAINTAINED AT ALL TIMES. BASINS AND ALL APPURTENANCES SHALL BE INSPECTED ANNUALLY, OR MORE FREQUENTLY IF SPECIFIED, AND REPAIRS SHALL BE MADE IF NECESSARY. WHEN MAINTENANCE OR REPAIRS ARE PERFORMED, THE SCM SHALL BE RESTORED TO THE ORIGINAL LINES AND GRADES.
 - C) CORRECTIVE MAINTENANCE SHALL OCCUR:
 - I. ANY TIME DRAWDOWN OF THE WATER QUALITY VOLUME DOES NOT OCCUR WITHIN NINETY-SIX (96) HOURS (I.E., NO STANDING WATER IS ALLOWED), UNLESS A GREATER MAXIMUM DRAWDOWN TIME IS SPECIFIED IN THE PLANS.
 - II. FOR DETENTION PONDS ONLY, ANY TIME DRAWDOWN DOES NOT OCCUR WITHIN TWENTY-FOUR (24) HOURS.
 - D) THE INLET AND OUTLET OF SCMS SHALL BE MAINTAINED UNIMPEDED IN ORDER TO CONVEY FLOW AT ALL TIMES. OBSERVED BLOCKAGES TO THE INLET AND OUTLET, DUE TO VEGETATION, SEDIMENT, DEBRIS, OR ANY OTHER CAUSE, SHALL BE REMOVED.
 - E) NO UNVEGETATED AREA SHALL EXCEED TEN (10) SQUARE FEET. THIS PERFORMANCE REQUIREMENT APPLIES TO THE ENTIRE POND INCLUDING THE POND BOTTOM, SIDE SLOPES, AND AREAS ADJACENT TO THE POND, AND IS INTENDED TO LIMIT EROSION.
 - F) INTEGRATED PEST MANAGEMENT SHALL BE PERFORMED AND SHALL ADHERE TO SECTION 1.6.2.F, INTEGRATED PEST MANAGEMENT GUIDELINES.
 - G) THE MINIMUM VEGETATION HEIGHT SHALL BE FOUR (4) INCHES IN THE SCM AND ALL APPURTENANCES, INCLUDING THE TOE OF THE BERM OR WALL OUTSIDE THE SCM, WHERE APPLICABLE.
- H) SEDIMENT BUILD-UP SHALL BE REMOVED:
 - I. WHEN THE ACCUMULATION EXCEEDS SIX (6) INCHES IN SPLITTER BOXES, WET WELLS AND BASINS.
 - II. WHEN SEDIMENT TRAPS ARE FULL.
 - III. WHEN SEDIMENT, OF ANY AMOUNT, CAUSES STANDING WATER CONDITIONS OR REDUCES BASIN STORAGE BY MORE THAN 10%.
- I) WHEN SEDIMENT IS REMOVED, THE FOLLOWING REQUIREMENTS APPLY:
 - I. IRRIGATION SHALL BE PROVIDED, AS NEEDED, UNTIL VEGETATION IS ESTABLISHED (WELL ROOTED). SEE SECTION 1.6.3.D, IRRIGATION GUIDELINES.
 - II. THE DESIGN DEPTH OF THE FILTRATION MEDIA SHALL BE VERIFIED. SEE SECTION 1.6.3.B.5.
 - III. TILTING OF THE FILTRATION MEDIA IS NOT ALLOWED.

INSPECTIONS:

UNDERGROUND WATER QUALITY FACILITIES MUST BE INSPECTED AT LEAST ONCE EVERY SIX MONTHS AND AT LEAST ONCE ANNUALLY DURING, OR IMMEDIATELY FOLLOWING, A SIGNIFICANT RAINFALL EVENT TO EVALUATE FACILITY OPERATION. DURING EACH INSPECTION, EROSION AREAS INSIDE AND DOWNSTREAM OF THE UNDERGROUND WATER QUALITY FACILITY MUST BE IDENTIFIED AND REPAIRED IMMEDIATELY. WITH EACH INSPECTION, ANY DAMAGE TO THE STRUCTURAL ELEMENTS OF THE SYSTEM (PIPES, CONCRETE DRAINAGE STRUCTURES, RETAINING WALLS, ETC.) MUST BE IDENTIFIED AND REPAIRED IMMEDIATELY. CRACKS, VOIDS AND UNDERMINING SHOULD BE PATCHED/FILLED TO PREVENT ADDITIONAL STRUCTURAL DAMAGE. AT LEAST ONCE ANNUALLY, A POND DRAWDOWN REPORT FOR EACH SUBSURFACE POND SHALL BE COMPLETED IN CONJUNCTION WITH A RAINFALL EVENT EQUAL TO OR GREATER THAN THE DESIGN CAPTURE DEPTH OF THE SUBSURFACE FACILITY OR A TEST OF THE POND AFTER BEING FILLED BY A SECONDARY WATER SOURCE. THE DRAWDOWN REPORT SHALL INDICATE THE DATE AND TIME THE POND(S) WERE OBSERVED FULL AND THE DATE AND TIME THE PONDS WERE OBSERVED TO BE EMPTY VERIFYING THAT THE SEDIMENTATION AND FILTRATION CHAMBERS BOTH DRAWDOWN IN THE TIME FRAMES AS REQUIRED AND BE RE-EMPTY AT LEAST ONE INSPECTION SHALL BE DONE ANNUALLY BY A 3RD PARTY INSPECTOR AND AN ANNUAL 3RD PARTY INSPECTION REPORT SHALL BE SUBMITTED TO WATERSHED PROTECTION DEPARTMENT (WPD) FOR REVIEW. WPD SHALL BE NOTIFIED AT LEAST SEVEN DAYS PRIOR TO THE ANNUAL 3RD PARTY INSPECTION TO ALLOW FOR THE OPPORTUNITY FOR OBSERVATION. THE ANNUAL 3RD PARTY INSPECTION REPORT SHALL BE SEALED BY A TEXAS PROFESSIONAL ENGINEER, SHALL INCLUDE PHOTOGRAPHS OF THE SEDIMENTATION AND FILTRATION CHAMBERS, AND THE DRAWDOWN VERIFICATION REPORT.

- **SEDIMENT REMOVAL:**
REMOVE SEDIMENT FROM THE INLET STRUCTURE AND SEDIMENTATION CHAMBER WHEN SEDIMENT BUILDUP REACHES A DEPTH OF 6 INCHES OR WHEN THE PROPER FUNCTIONING OF INLET AND OUTLET STRUCTURES IS IMPAIRED. SEDIMENT SHOULD BE CLEARED FROM THE INLET STRUCTURE AT LEAST EVERY YEAR AND FROM THE SEDIMENTATION BASIN AT LEAST EVERY 5 YEARS.
- **MEDIA REPLACEMENT:**
MAINTENANCE OF THE FILTER MEDIA IS NECESSARY WHEN THE DRAWDOWN TIME EXCEEDS 96 HOURS PROVIDED ALL OTHER COMPONENTS OF THE POND ARE FUNCTIONING CORRECTLY. WHEN THIS OCCURS, THE UPPER LAYER OF SAND SHOULD BE REMOVED AND REPLACED WITH NEW MATERIAL MEETING THE ORIGINAL SPECIFICATIONS. IF DETERMINING OF THE SYSTEM IS NECESSARY DUE TO LACK OF FUNCTIONALITY, ENSURE DETERMINING IS PROPERLY CONDUCTED.
- **DEBRIS AND LITTER REMOVAL:**
DEBRIS AND LITTER SHOULD BE REMOVED REGULARLY. PARTICULAR ATTENTION SHOULD BE PAID TO FLOATING DEBRIS THAT CAN EVENTUALLY CLOG THE CONTROL DEVICE OR RISER.
- **FILTER UNDERDRAIN:**
CLEAN UNDERDRAIN PIPING NETWORK TO REMOVE ANY SEDIMENT BUILDUP AS NEEDED TO MAINTAIN DESIGN DRAWDOWN TIME.
- **RESPONSIBILITY:**
THE RESPONSIBILITY OF THE INSPECTION AND MAINTENANCE OF ALL SUBSURFACE PONDS SHALL BE THE RESPONSIBILITY OF THE OPERATOR OF THE FACILITIES.

