Provence Phase 2, Section 2

Contributing Zone Plan

Texas Commission on Environmental Quality Edwards Aquifer Program

September 2025

Prepared for:

Masonwood HP II LLC

Project No. 2018-227.22

Moody Engineering, Inc.

Contributing Zone Plan Checklist

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- **Contributing Zone Plan Application (TCEQ-10257)**

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- **Storm Water Pollution Prevention Plan (SWPPP)**
- **Copy of Notice of Intent (NOI)**
- **Geologic Assessment**
- **Agent Authorization Form (TCEQ-0599), if application submitted by agent**
- **Application Fee Form (TCEQ-0574)**
- **Check Payable to the "Texas Commission on Environmental Quality"**
- **Core Data Form (TCEQ-10400)**
- **Letter Requesting Review of Compliance with Option OEM RG-348, Appendix A**

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: Provence Phase 2 Section 2						**2. Regulated Entity**			
3. Customer Name: Masonwood HP II LLC						**4. Customer No.:**			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**		50.30 acres	
9. Application Fee:	$6,500		**10. Permanent BMP(s):**			Extended Detention Ponds, VFS			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Travis		**14. Watershed:**			Little Barton Creek Watershed			

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.)	___	_X_	___
Region (1 req.)	___	_X_	___
County(ies)	___	_X_	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Alan Putnam
Print Name of Customer/Authorized Agent   9/11/2025
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.

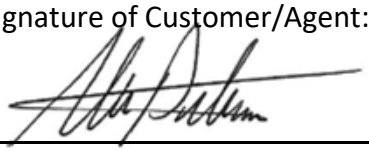
Signature

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: Alan Putnam, P.E.

Date: 9/03/2025

Signature of Customer/Agent:



Regulated Entity Name: Provence Phase 2, Section 2

Project Information

1. County: Travis
2. Stream Basin: Little Barton Creek
3. Groundwater Conservation District (if applicable): N/A
4. Customer (Applicant):

   Contact Person: Jack Meredith
   Entity: Masonwood HP II LLC
   Mailing Address: 4301 Westbank Dr, Bldg A, Ste 110
   City, State: Austin, TX Zip: 78746
   Telephone: 512-306-8300 Fax: _____
   Email Address: jack@mwdtx.com

5. Agent/Representative (If any):

Contact Person: Alan Putnam, P.E.
Entity: Moody Engineering, Inc.
Mailing Address: 9225 Bee Caves Road
City, State: Austin, TX Zip: 78733
Telephone: 512-502-8333 Fax: _____
Email Address: alan@moodyengineering.com

6. Project Location:

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

7. ☒ The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

The site is located in western Travis County, on the north side of Hamilton Pool Road, 0.5 miles north of the Hamilton Pool Road/Crumley Ranch Road intersection

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: 164
☐ Residential: # of Living Unit Equivalents: _____
☐ Commercial
☐ Industrial
☐ Other: _____

13. Total project area (size of site): 59.75 (does not include waterway areas within setbacks along adjacet creek) Acres Total

disturbed area: 50.30 Acres

14. Estimated projected population: 525

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

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	***Sq. Ft.***	***Sq. Ft./Acre***	***Acres***
Structures/Rooftops	446,926	÷ 43,560 =	10.26
Parking/Other	65,340	÷ 43,560 =	1.50
Other paved surfaces	270,943	÷ 43,560 =	6.22
Total Impervious Cover	783,209	÷ 43,560 =	17.98

Total Impervious Cover 17.98(after all homes are built) **÷ Total Acreage** 50.30 **X 100 =** 35.74**% 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 x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

21. Pavement Area:

    Length of pavement area: _____ feet.
    Width of pavement area: _____ feet.
    L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
    Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

22. ☐ A rest stop will be included in this project.

    ☐ A rest stop will not be included in this project.

23. ☐ Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ.

Stormwater to be generated by the Proposed Project

24. ☒ **Attachment E - Volume and Character of Stormwater**. A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

25. ☒ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☐ N/A

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 Travis County MUD No. 22 (name) Treatment Plant. The treatment facility is:

☐ Existing.
☒ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

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

☒N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1			
2			
3			

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
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 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

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*

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" = 40'.

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

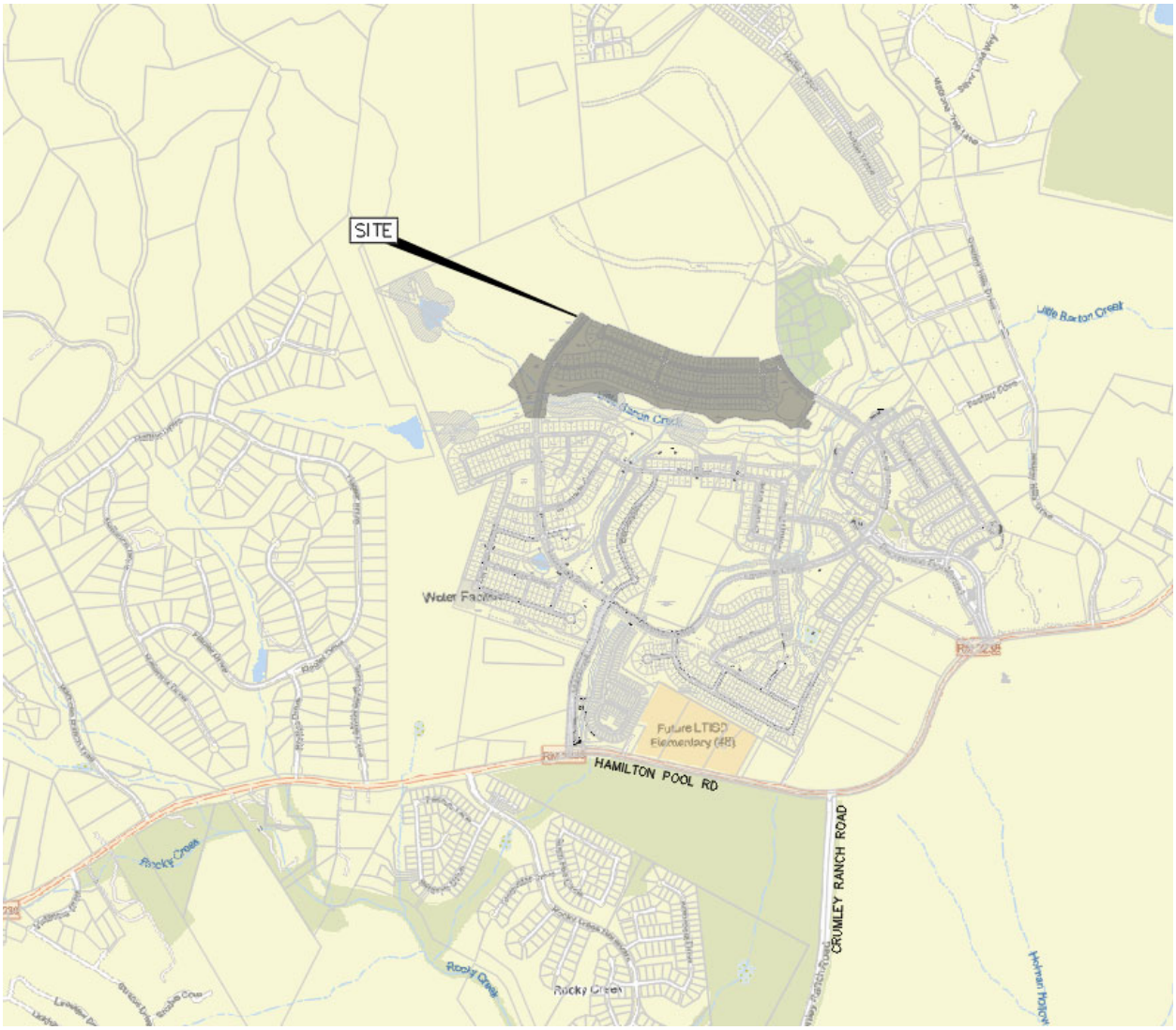
61. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.

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.

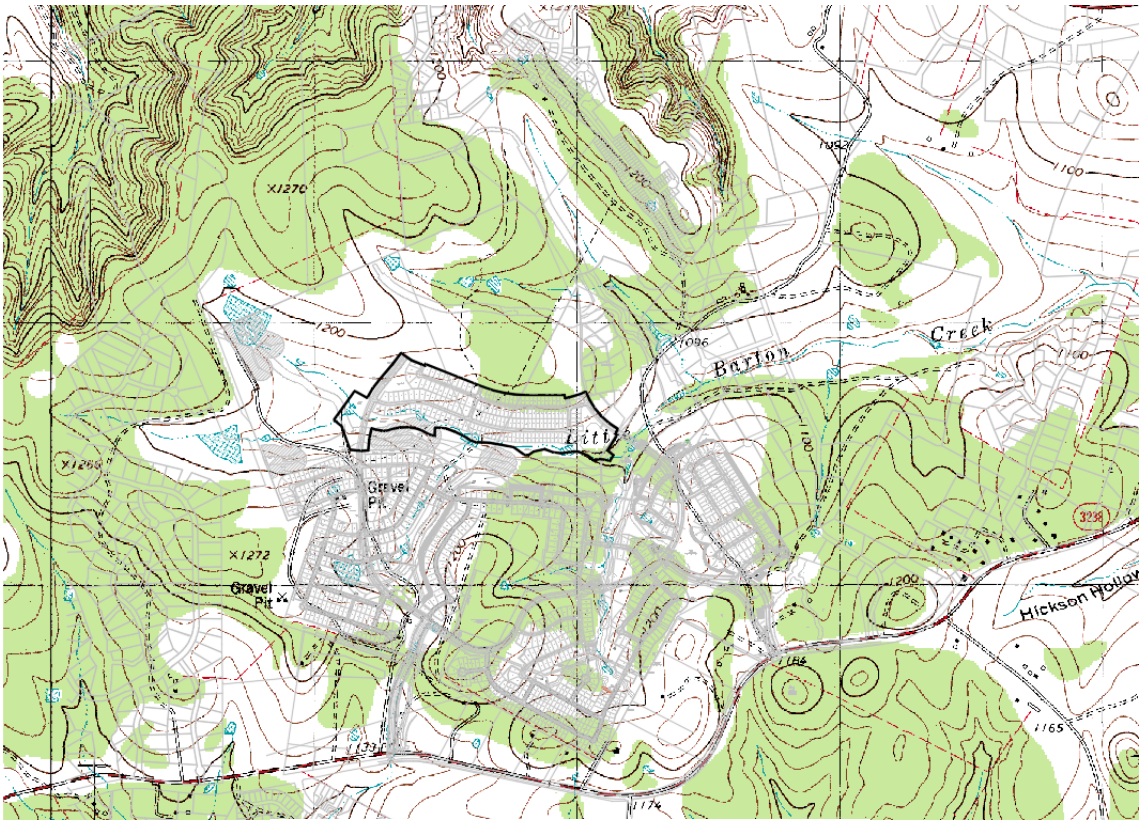
63. ☒ The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements 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.

ATTACHMENT A



ATTACHMENT B
USGS Quadrangle Map
Shingle Hills, Tex
SE/4 Spicewood
1”=2500’



ROAD CLASSIFICATION

Primary highway, hard surface

Secondary highway, hard surface

Light-duty road, hard or improved surface

Unimproved road

Interstate Route U. S. Route State Route

SHINGLE HILLS, TEX.

SE/4 SPICEWOOD 15' QUADRANGLE

30098-C1-TF-024

1986

DMA 6344 I SE-SERIES V882

ATTACHMENT C

PROJECT NARRATIVE

The Provence Phase 2 Section 2 tract is proposed to be subdivided into 164 single family residential lots and 6 open spaces, drainage, and easement lots. This site is located in western Travis County just west of Bee Caves, Texas. It is north of the Crumley Ranch Road and Hamilton Pool Rd intersection. The proposed development is located in the Contributing Zone of the Edwards Aquifer. The proposed tract is a part of the overall Provence community and adjacent to Phase 1 Section 7 & 8 and Phase 2 Section 1.

Development for this section will be consistent with previous sections in Phase 1. Improvements to the site will include paved roads and sidewalks, underground water and wastewater utilities, drainage infrastructure, and varying site grading. Water quality treatment will be done via the proposed extended detention pond and as well as through a combination of engineering and natural VFS. The ponds are sized according to the TCEQ RG-348 OEM technical guidance. TSS removal of at least 80% of the increased loading for the development and existing structures will be achieved in the proposed BMP layout. A summary table of loading calculations is provided in the Overall Water Quality Plan, breaking down TSS removal for the new development. See the construction documents for the pond location and detailed calculations.

Water and wastewater service to this tract will be provided by tying into existing West Travis County Public Utility Agency (WTCPUA) and Travis County MUD No. 22 infrastructure within the Provence Development. All proposed improvements will be in accordance with the standards and specifications established by the TCEQ, Travis County and the City of Austin, as applicable.

Temporary and permanent measures will be included in the development of the tract in order to minimize the risk of pollutants leaving the site, both during the construction period and on a permanent basis. Temporary measures will include installation of a stabilized construction entrance, silt fence, and inlet protection. Permanent measures will utilize full restoration of areas disturbed during construction, as well as the extended detention ponds. The proposed BMP is designed in accordance with TCEQ guidelines in order to remove a minimum of 80% of the increase of TSS loadings. Because no road within the tract will be capable of conveying 25,000 vehicles per day, Hazardous Material Traps (HMT, per Section 4.1 of RG-348 Appendix A Optional Enhanced Measures) will not be required.

ATTACHMENT D

FACTORS AFFECTING SURFACE WATER QUALITY

This subdivision will consist of lots that average approximately 9000 square feet in size. Asphalt streets with concrete curbs and gutters and standard residential sidewalks fronting homes will make up the final appearance of the site plan. Standard utility construction will be a part of the construction improvements, with all utilities slated for underground installation, including dry utilities. All construction activities are potential sources of sediment being added to stormwater runoff. All construction will be protected using standard accepted methods including silt fence, stabilized construction entrance, and revegetation of disturbed areas. In addition to the construction of the subdivision, standard residential construction activities are anticipated to follow the completion of subdivision improvements.

Potential sources affecting surface water quality other than sediment include:

- Small fueling activities
- Minor equipment maintenance
- Sanitary facilities
- Solvents, paints, adhesives, etc.
- Paving materials, concrete, mortar

ATTACHMENT E

VOLUME AND CHARACTER OF STORMWATER

The character of the stormwater will be consistent with that associated with single family development and the activity necessary for land development. During the construction process and prior to the re-vegetation of the disturbed areas, it is reasonable to expect an increase in the amount of TSS within the site boundary. The increase of TSS is designed to be contained during the construction process as shown on the ESC plan by utilizing stabilized construction entrances, silt fence, and inlet protection. Re-vegetation of all areas disturbed during construction will assist in limiting the increase of TSS. Reduction of TSS after development will be accomplished through the use of an extended detention pond designed in accordance with TCEQ guidelines.

ATTACHMENT F

SUITABILITY LETTER FROM AUTHORIZED AGENT

This requirement is not applicable to this project. No onsite sewage disposal is proposed with this development. Wastewater generated from this development, will be treated at the Travis County MUD No. 22 Wastewater Treatment plant.

ATTACHMENT G

ALTERNATIVE SECONDARY CONTAINMENT METHODS

This requirement is not applicable to this project. No AST's are associated with this project.

ATTACHMENT H

AST CONTAINMENT STRUCTURE DRAWINGS

This requirement is not applicable to this project. No AST's are associated with this project.

ATTACHMENT I

20% OR LESS IMPERVIOUS COVER WAIVER

No waiver due to impervious cover limits is requested for this project. The post development impervious cover is greater than 20%. Treatment methods for TSS removal are a part of the proposed site improvements.

ATTACHMENT J

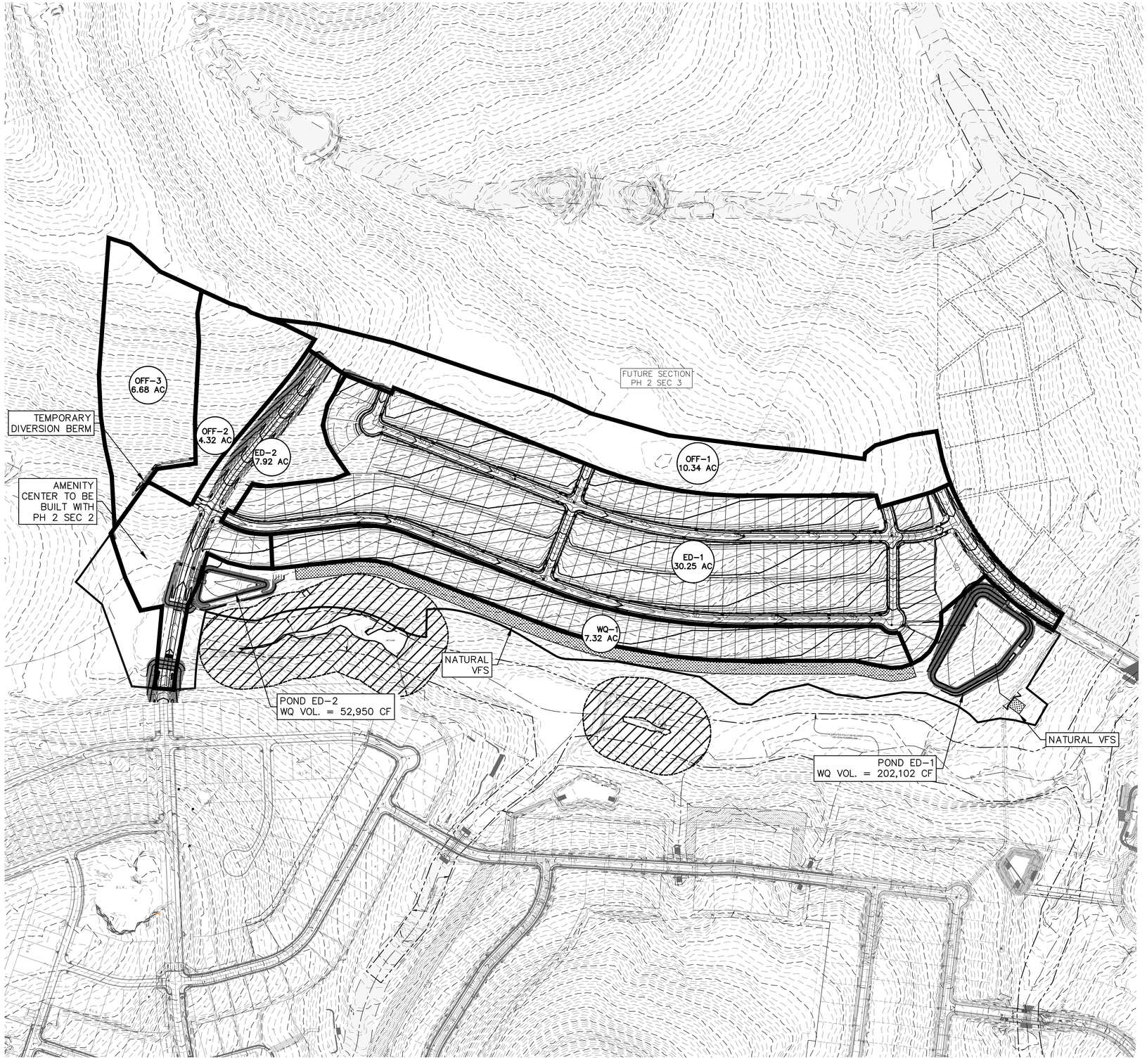
BMP'S FOR UPGRADIENT STORMWATER

All of the stormwater originating upstream of this site will be routed around the site via existing and proposed channels, storm drains and/or berms to proposed facilities. Any upstream stormwater that runs through the site will be routed to the proposed BMP and has been accounted for in the TSS calculations and sizing of the BMPs.

ATTACHMENT K

BMP'S FOR ON-SITE STORMWATER

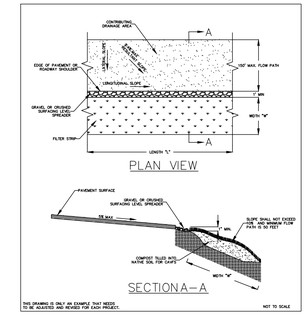
All stormwater originating within this subdivision has been considered in the design of temporary and permanent BMP for this project. Temporary BMP's include stabilized construction entrance, silt fence, and inlet protection. Permanent BMPs include revegetation of disturbed areas, and an extended detention pond with rock rip-rap. Due to the efficiency of the existing and proposed BMPs, more than 80% of the increase in the TSS loadings is treated, in compliance with TCEQ standards. No groundwater or surface water is known to exist. Rock rip-rap will be used at pond overflow locations to reduce velocity and also help return runoff to sheet flow conditions. Water quality calculations, including TSS loading calculations and the achieved treatment for each BMP, are included after this attachment for reference.



0 140 280 FEET

NOTES:

1. IMPERVIOUS COVER ASSUMPTIONS ARE IN COMPLIANCE WITH TCEQ RG-348 APPENDIX A, OEM TABLE 4-1 "IMPERVIOUS COVER ASSUMPTIONS FOR RESIDENTIAL TRACTS".
2. POND ED-2 HAS BEEN OVERSIZED TO ACCOUNT FOR ADDITIONAL FUTURE IMPERVIOUS COVER FROM PH 2 SEC 3.
3. OFF-1 WQ AREA DRAINS THROUGH THE SITE AND INTO POND ED-1 DURING THE INTERIM STAGE. THIS POND HAS BEEN OVERSIZED TO ACCOUNT FOR FUTURE IMPERVIOUS COVER IN FULLY DEVELOPED CONDITIONS.
4. OFF-2 WQ AREA DRAINS TO THE PROPOSED LAVONDE ROADSIDE CHANNEL AND INTO POND ED-2. THIS POND HAS BEEN OVERSIZED TO ACCOUNT FOR FUTURE IMPERVIOUS COVER IN FULLY DEVELOPED CONDITIONS.
5. OFF-3 WQ AREA IS REROUTED BY A TEMPORARY BERM/SWALE AROUND THE PROPERTY LINE AND INTO THE ADJACENT CREEK.



VEGETATIVE FILTER STRIP DETAIL

BMP TREATMENT AREA		
	WATER QUALITY BOUNDARY	TCEQ RG-348 (2017)
	VFS	TCEQ RG-348 (2017)

Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note: 1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet

Project: **Provence Phase 2 Section 2**

BMP		ED-1	WQ-1	ED-2	Total	
	Treatment Area	30.25	7.32	7.92	45.49	Acres
Impervious Cover						
	Street/ Parking	5.02	0.00	1.00	6.02	Acres
	Residential Lots	6.83	2.41	0.17	9.41	Acres
	Comm Building	0.00	0.00	1.50	1.50	Acres
	Total IC	11.85	2.41	2.67	16.93	Acres
	IC %	39%	33%	34%	37%	
TSS Treated (L_R)		11,934	2,341	2,287	16562	lbs
Total Required Capture Volume		163,263	N/A	39,704	202,967	cf
Total Provided Capture Volume		**202,102**	**N/A**	**52,950**	**255,052**	**cf**

Required $L_{M\ Total\ Project}$	15,009	lbs
Provided $L_{R\ Total\ Project}$	**16,562**	**lbs**

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE
92601
9/10/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL WATER QUALITY INTERIM PLAN

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet --

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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Provence Phase 2 Section 2
Date Prepared: 9/1/2025

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

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

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

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

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

County =	Travis	
Total project area included in plan * =	45.49	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	16.93	acres
Total post-development impervious cover fraction * =	0.37	
P =	32	inches

$L_{M\ TOTAL\ PROJECT}$ = **14738** lbs.

9/3/2025

Moody Engineering. Inc.
TBPE Firm No. F-18320

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

Drainage Basin/Outfall Area No. =	**ED-1**	
Total drainage basin/outfall area =	**30.25**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**11.85**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.39**	
$L_{M\ THIS\ BASIN}$ =	**10504**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Extended Detention**	
Removal efficiency =	**88.81**	percent

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

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

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**30.25**	acres
A_I =	**11.85**	acres
A_P =	**18.40**	acres
L_R =	**11934**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**11934**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.30**	
On-site Water Quality Volume =	**133050**	cubic feet

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

Off-site area draining to BMP =	**10.34**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**3003**	cubic feet
Storage for Sediment =	**27211**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**163263**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

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

Drainage Basin/Outfall Area No. =	**WQ-1**	
Total drainage basin/outfall area =	**7.32**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**2.41**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.33**	
$L_{M\ THIS\ BASIN}$ =	**2137**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Vegetated Filter Strips**	
Removal efficiency =	**85**	percent

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

Drainage Basin/Outfall Area No. =	**ED-2**	
Total drainage basin/outfall area =	**7.92**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**2.67**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.34**	
$L_{M\ THIS\ BASIN}$ =	**2369**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Extended Detention**
Removal efficiency = **75** percent

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

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

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

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**7.92**	acres
A_I =	**2.67**	acres
A_P =	**5.25**	acres
L_R =	**2287**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**2287**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.28**	
On-site Water Quality Volume =	**31832**	cubic feet

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

Off-site area draining to BMP =	**4.32**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**1255**	cubic feet
Storage for Sediment =	**6617**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**39704**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

Project	Provence - Phase 2 Section 2: Impervious Cover					
Drainage Area	ID	Subarea No.	ED-1	WQ-1	ED-2	Total
	Area	Acres	30.25	7.32	7.92	45.49

DETERMINE IMPERVIOUS COVER AREA (roads, parking lots, sidewalks, rooftops)

Total Street IC	IC1	ac	5.02	0.00	1.00	6.02

Residential Lots	Impervious Cover from Table 4-1 in OEM RG-348 Appendix A					
	>3 ac	#				
	2a area	ac	0.00	0.00	0.00	0.00
	1-3 ac	#				
	2b area	ac	0.00	0.00	0.00	0.00
	15,000 sf-1ac	#				
	2c area	ac	0.00	0.00	0.00	0.00
	10,000-15,000 sf	#	0			0
	2d Area	ac	0.00	0.00	0.00	0.00
	<10,000 sf	#	119	42	3	164
	2e Area	ac	6.83	2.41	0.17	9.41
Total Res Lot IC	IC 2	ac	6.83	2.41	0.17	9.41
Parking Lot IC	IC 3	ac	0.00	0.00	0.00	0.00
Comm Bldg IC	IC 4	ac	0.00	0.00	1.50	1.50

	Subarea No.	ED-1	WQ-1	ED-2	Total
Total Impervious Area	ac	11.85	2.41	2.67	16.93

#REF!

Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

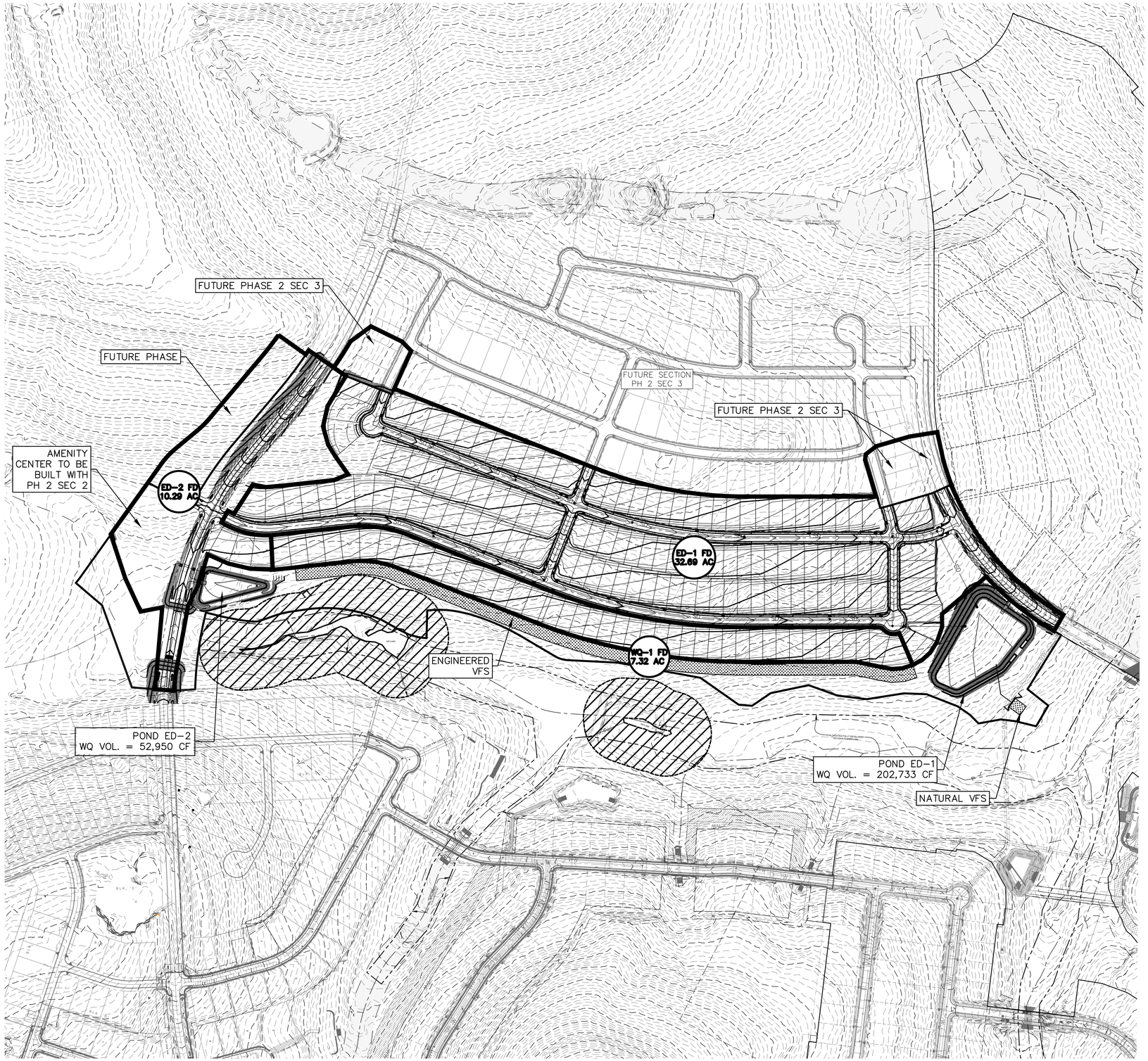
Note: 1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet

Project: **Provence Phase 2 Section 2**

BMP		ED-1	WQ-1	ED-2	Total	
	Treatment Area	30.25	7.32	7.92	45.49	Acres
Impervious Cover						
	Street/ Parking	5.02	0.00	1.00	6.02	Acres
	Residential Lots	6.83	2.41	0.17	9.41	Acres
	Comm Building	0.00	0.00	1.50	1.50	Acres
	Total IC	11.85	2.41	2.67	16.93	Acres
	IC %	39%	33%	34%	37%	
TSS Treated (L_R)		11,934	2,341	2,287	16562	lbs

Total Required Capture Volume	163,263	N/A	39,704	202,967	cf
Total Provided Capture Volume	**202,102**	**N/A**	**52,950**	**255,052**	**cf**

Required $L_{M\ Total\ Project}$	15,009	lbs
Provided $L_{R\ Total\ Project}$	**16,562**	**lbs**



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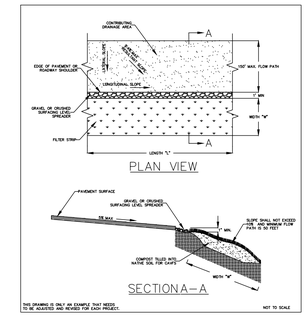
NOTES:

1. IMPERVIOUS COVER ASSUMPTIONS ARE IN COMPLIANCE WITH TCEQ RG-348 APPENDIX A, OEM TABLE 4-1 "IMPERVIOUS COVER ASSUMPTIONS FOR RESIDENTIAL TRACTS".
2. ED-2 FD ACCOUNTS FOR THE AMENITY CENTER SITE AND A SECTION OF A FUTURE PHASE WEST OF LAVONDE DR. ED-2 POND HAS BEEN OVERSIZED TO ACCOUNT FOR ADDITIONAL IMPERVIOUS COVER.
3. ED-1 FD ACCOUNTS FOR PORTION OF PHASE 2 SECTION 3 AND POND HAS BEEN SIZED ACCORDINGLY. ED-1 POND HAS BEEN OVERSIZED TO ACCOUNT FOR ADDITIONAL IMPERVIOUS COVER.



VEGETATIVE FILTER STRIP DETAIL

BMP TREATMENT AREA		
	WATER QUALITY BOUNDARY	TCEQ RG-348 (2017)
	VFS	TCEQ RG-348 (2017)

Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note:
1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet
3. FD Water Quality Plan includes future phases being accounted for in the BMP's

Project: **Provence Phase 2 Section 2 FD**

BMP		ED-1	WQ-1	ED-2	Total	
	Treatment Area	32.69	7.32	10.29	50.30	Acres
Impervious Cover						
	Street/ Parking	5.10	0.00	1.12	6.22	Acres
	Residential Lots	7.22	2.41	0.63	10.26	Acres
	Comm Building	0.00	0.00	1.50	1.50	Acres
	Total IC	12.32	2.41	3.25	17.98	Acres
	IC %	38%	33%	32%	36%	
TSS Treated (L_R)		12,427	2,341	2,791	17559	lbs
Total Required Capture Volume		172,098	N/A	47,732	219,829	cf
Total Provided Capture Volume		**202,102**	**N/A**	**52,950**	**255,052**	**cf**

Required $L_{M\ Total\ Project}$	15,939	lbs
Provided $L_{R\ Total\ Project}$	**17,559**	**lbs**

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE
92601
9/10/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL WATER QUALITY PLAN

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 37 of 72

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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Provence Phase 2 Section 2
Date Prepared: 9/1/2025

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

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

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

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

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

County =	Travis	
Total project area included in plan * =	50.30	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	17.98	acres
Total post-development impervious cover fraction * =	0.36	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	**15939**	lbs.

9/3/2025

Moody Engineering. Inc.
TBPE Firm No. F-18320

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

Drainage Basin/Outfall Area No. =	**ED-1 FD**	
Total drainage basin/outfall area =	**32.69**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**12.32**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.38**	
$L_{M\ THIS\ BASIN}$ =	**10920**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Extended Detention in line with VFS**	
Removal efficiency =	**88.81**	percent

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

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

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**32.69**	acres
A_I =	**12.32**	acres
A_P =	**20.37**	acres
L_R =	**12427**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**12427**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.30**	
On-site Water Quality Volume =	**140412**	cubic feet

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

Off-site area draining to BMP =	**10.34**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**3003**	cubic feet
Storage for Sediment =	**28683**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**172098**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

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

Drainage Basin/Outfall Area No. =	**WQ-1 FD**	
Total drainage basin/outfall area =	**7.32**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**2.41**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.33**	
$L_{M\ THIS\ BASIN}$ =	**2137**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Vegetated Filter Strips**	
Removal efficiency =	**85**	percent

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

Drainage Basin/Outfall Area No. =	**10.29**	
Total drainage basin/outfall area =	**10.29**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**3.25**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.32**	
$L_{M\ THIS\ BASIN}$ =	**2882**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Extended Detention**
Removal efficiency = **75** percent

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

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

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

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**10.29**	acres
A_I =	**3.25**	acres
A_P =	**7.04**	acres
L_R =	**2791**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**2791**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.27**	
On-site Water Quality Volume =	**39776**	cubic feet

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

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**7955**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**47732**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

Project	Provence - Phase 2 Section 2: Impervious Cover					
Drainage Area	ID	Subarea No.	ED-1 FD	WQ-1 FD	ED-2 FD	Total
	Area	Acres	32.69	7.32	10.29	50.30

DETERMINE IMPERVIOUS COVER AREA (roads, parking lots, sidewalks, rooftops)

Total Street IC	IC1	ac	5.10	0.00	1.12	6.22

Residential Lots	Impervious Cover from Table 4-1 in OEM RG-348 Appendix A					
	>3 ac	#				
	2a area	ac	0.00	0.00	0.00	0.00
	1-3 ac	#				
	2b area	ac	0.00	0.00	0.00	0.00
	15,000 sf-1ac	#				
	2c area	ac	0.00	0.00	0.00	0.00
	10,000-15,000 sf	#	2			2
	2d Area	ac	0.16	0.00	0.00	0.16
	<10,000 sf	#	123	42	11	176
	2e Area	ac	7.06	2.41	0.63	10.10
Total Res Lot IC	IC 2	ac	7.22	2.41	0.63	10.26
Parking Lot IC	IC 3	ac	0.00	0.00	0.00	0.00
Comm Bldg IC	IC 4	ac	0.00	0.00	1.50	1.50

	Subarea No.	ED-1 FD	WQ-1 FD	ED-2 FD	Total
Total Impervious Area	ac	12.32	2.41	3.25	17.98

Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note:
1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet
3. FD Water Quality Plan includes future phases being accounted for in the BMP's

Project: **Provence Phase 2 Section 2 FD**

BMP		ED-1	WQ-1	ED-2	Total	
	Treatment Area	32.69	7.32	10.29	50.30	Acres
Impervious Cover						
	Street/ Parking	5.10	0.00	1.12	6.22	Acres
	Residential Lots	7.22	2.41	0.63	10.26	Acres
	Comm Building	0.00	0.00	1.50	1.50	Acres
	Total IC	12.32	2.41	3.25	17.98	Acres
	IC %	38%	33%	32%	36%	
TSS Treated (L_R)		12,427	2,341	2,791	17559	lbs
Total Required Capture Volume		172,098	N/A	47,732	219,829	cf
Total Provided Capture Volume		**202,102**	**N/A**	**52,950**	**255,052**	**cf**

Required $L_{M\ Total\ Project}$	15,939	lbs
Provided $L_{R\ Total\ Project}$	**17,559**	**lbs**

ATTACHMENT L

BMP'S FOR SURFACE STREAMS

Temporary and permanent BMPs have been designed to prevent pollutants from entering surface streams, although no surface streams exist on this site. Temporary BMP's include stabilized construction entrances, silt fence, and inlet protection. Permanent BMPs include re-vegetation of disturbed areas, extended detention ponds and rock rip-rap. Due to the efficiency of the BMP being used, more than 80% of the increase in the TSS loadings are treated, in compliance with TCEQ standards. No groundwater is known to exist.

Rock rip-rap will be used at pond overflow locations to reduce velocity and also help return runoff to sheet flow conditions.

ATTACHMENT M

CONSTRUCTION PLANS

A copy of the construction drawings prepared under the supervision of a Registered Professional Engineer, including seal and signature, are included as a part of this Contributing Zone Plan. All calculations, details, notes and related documentation necessary for the complete review of the construction drawings are included.

PROVENCE

PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.

TRAVIS COUNTY, TX

SHEET INDEX

SHEET NO.	SHEET TITLE
1	COVER SHEET
2	FINAL PLAT SHEET 1 OF 3
3	FINAL PLAT SHEET 2 OF 3
4	FINAL PLAT SHEET 3 OF 3
5	GENERAL NOTES SHEET 1 OF 3
6	GENERAL NOTES SHEET 2 OF 3
7	GENERAL NOTES SHEET 3 OF 3
8	OVERALL DRAINAGE AREA MAP
9	OVERALL DRAINAGE AREA MAP 2 OF 2
10	EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 1 OF 2
11	EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 2 OF 2
12	OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 1 OF 2
13	OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 2 OF 2
14	EROSION CONTROL NOTES & DETAILS
15	LAVONDE DRIVE (WEST) STA 12+00 TO STA 20+00
16	LAVONDE DRIVE (WEST) STA 20+00 TO END
17	LAVONDE DRIVE (EAST) STA 0+00 TO END (2)
18	FLEURS DRIVE STA 1+00 TO STA 9+00
19	FLEURS DRIVE STA 9+00 TO STA 17+00
20	FLEURS DRIVE STA 17+00 TO STA 26+00
21	FLEURS DRIVE STA 26+00 TO END
22	RAMIER DRIVE STA 1+00 TO END
23	VIGNE DRIVE STA 1+00 TO STA 6+50
24	VIGNE DRIVE STA 6+50 TO STA 15+00
25	VIGNE DRIVE STA 15+00 TO END
26	SD "A" STA 1+00 TO STA 8+00
27	SD "A" STA 8+00 TO STA 13+50
28	SD "A" STA 13+50 TO STA 20+00
29	SD "A" STA 20+00 TO END
30	SD "B" STA 1+00 TO 7+00
31	SD "B" STA 7+00 TO 15+00
32	SD "B" STA 15+00 TO 22+00
33	SD "B" STA 22+00 TO END
34	SD "C" AND SD "D"
35	SD "E" AND SD "F"
36	CULVERTS "A" AND "B" AND "C"
37	OVERALL WATER QUALITY PLAN
38	WATER QUALITY BMP ED-1 SHEET 1 OF 2
39	WATER QUALITY BMP ED-1 SHEET 2 OF 2
40	WATER QUALITY BMP ED-2 SHEET 1 OF 2
41	WATER QUALITY BMP ED-2 SHEET 2 OF 2
42	WATER QUALITY BMP NOTES & DETAILS
43	OVERALL UTILITY LAYOUT SHEET 1 OF 2
44	OVERALL UTILITY LAYOUT SHEET 2 OF 2
45	WATER LINE "A" STA 1+00 TO STA 9+00
46	WATER LINE "A" STA 9+00 TO END
47	WATER LINE "B"
48	WATER LINE "C" STA 1+00 TO STA 10+00
49	WATER LINE "C" STA 10+00 TO STA 20+00
50	WATER LINE "C" STA 20+00 TO STA 29+00
51	WATER LINE "C" STA 29+00 TO END
52	WATER LINE "D" STA 1+00 TO STA 10+00
53	WATER LINE "D" STA 10+00 TO STA 19+00
54	WATER LINE "D" STA 19+00 TO END
55	WATER LINE "E"
56	WWTR LINE "A" STA 1+00 TO STA 10+00
57	WWTR LINE "A" STA 11+00 TO STA 20+00
58	WWTR LINE "A" STA 20+00 TO STA 28+50
59	WWTR LINE "A" STA 28+50 TO END
60	WWTR LINE "B" STA 1+00 TO STA 10+50
61	WWTR LINE "B" STA 10+50 TO STA 19+00
62	WWTR LINE "B" STA 19+00 TO END
63	WWTR LINE "C" & "D"
64	SIGNAGE PLAN SHEET 1 OF 2
65	SIGNAGE PLAN SHEET 2 OF 2 & DETAILS
66	GENERAL DETAILS SHEET 1
67	GENERAL DETAILS SHEET 2
68	GENERAL DETAILS SHEET 3
69	GENERAL DETAILS SHEET 4
70	TXDOT DETAILS CONCRETE HEADWALLS (FW-0) SHEET 1
71	TXDOT DETAILS BOX CULVERTS (SCP-MD) SHEET 2
72	TXDOT DETAILS SINGLE BOX CULVERTS (SCP-5) SHEET 3
73	TXDOT DETAILS SINGLE BOX CULVERTS (SCP-6) SHEET 4

LEGAL DESCRIPTION

24.91 ACRES, PROVENCE PHASE I, SECTION 8, DOC. NO._____ O.P.R.T.C., RECORDATION DATE OF _____

SURVEY

BENCHMARK:

WATERSHED

WATERSHED: LITTLE BARTON CREEK TCEQ SEGMENT ID# 1430B

EDWARDS AQUIFER

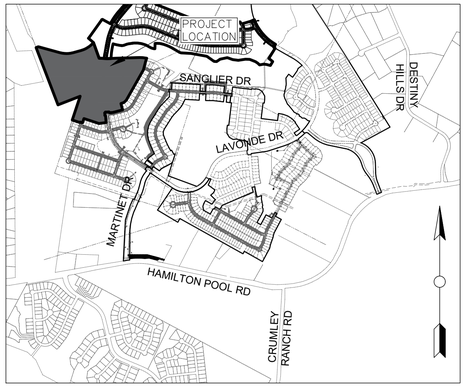
THIS PROJECT LIES WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE AS DEFINED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY.

FLOODPLAIN NOTE

THIS PROJECT DOES NOT LIE WITHIN THE 100-YEAR FLOODPLAIN, AS DEPICTED ON FEMA FIRM PANEL NO. 48453C0395H, DATED JANUARY 22, 2020.

REVISION/CORRECTION

NO.	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET NO	TOTAL # SHEET IN PLAN SET	NET CHANGE IMP. COVER (SQ.FT.)	TOTAL SITE IMP. COVER (SQ.FT.)/%	APPROVAL DATE



SITE LOCATION MAP - N.T.S.

MAPSCO: **PAGE 548T, 548W, 548X**

CITY GRID: **WU25**

CONSOLIDATED SITE PLAN NO.: **PHASE 2, SECTION 2**

ADDRESS: **17100 BLOCK HAMILTON POOL RD. AUSTIN, TEXAS 78738**

WATER PRESSURE ZONE: **WTCPUA 1340 HG (1420 REDUCED ZONE) WTCPUA GRID MAP-K04/L04 (HWY 71 WATER SYSTEM)**

SUBMITTED BY:

JOSHUA F. HENKE, P.E. 9/11/2025 DATE

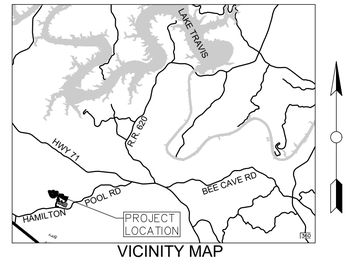
STATE OF TEXAS — JOSHUA F. HENKE — 92601 — LICENSED PROFESSIONAL ENGINEER

THE ENGINEER WHO PREPARED THESE PLANS IS RESPONSIBLE FOR THEIR ADEQUACY. IN APPROVING THESE PLANS, TRAVIS COUNTY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

MOODY ENGINEERING INC

TBPE FIRM REG. NO. F-18320

9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
PHONE: (512) 502-8333 or (800) 821-9112



VICINITY MAP

REVIEWED BY:

TRAVIS COUNTY TRANSPORTATION AND NATURAL RESOURCES DATE

TRAVIS COUNTY DEVELOPMENT PERMIT NUMBER

TRAVIS COUNTY ESD 6 DATE

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY DATE

TRAVIS COUNTY MUD #22 DATE

PROJECT CONTACTS

OWNER:	MASONWOOD HP, LTD. 4301 WESTBANK DRIVE BLDG. A STE. 110 AUSTIN TX. 78746	ENGINEER	MOODY ENGINEERING, INC. 9225 BEE CAVES ROAD BLDG. A STE. 200 AUSTIN, TEXAS 78735 (512) 502-8333	SURVEYOR:	LANDESIGN SERVICES, INC. 1220 MCNEIL RD, SUITE 201 ROUND ROCK, TX 78681 (512) 238-7901

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY NOTES:

1. WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY IS THE WATER PROVIDER.
2. 60 5/8" METER(S) ARE FOR DOMESTIC PURPOSES ONLY.
3. WTCPUA DOES NOT GUARANTEE FIRE FLOW.
4. A WTCPUA REPRESENTATIVE MUST BE PRESENT AT TIME OF CONNECTION TO EXISTING SYSTEM.
5. ALL WATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF AUSTIN WATER CONSTRUCTION SPECIFICATIONS AND WITH MATERIALS FROM THE APPROVED CITY OF AUSTIN STANDARD PRODUCT LIST.
6. TRAVIS COUNTY MUD #22 IS THE WASTEWATER PROVIDER.
7. LANDSCAPE IRRIGATION IS NOT PROPOSED.

TESD#6 NOTE:

UPON COMPLETION OF THE INSTALLATION OF ROADWAYS AND HYDRANT SYSTEMS SCHEDULE AN INSPECTION WITH THE FIRE PREVENTION OFFICE TO VERIFY COMPLIANCE WITH PLAN DETAILS. ITEMS THAT WILL BE VERIFIED ARE AS FOLLOWS:

A. BLUE HYDRANT MARKERS;
B. PAINTING OF HYDRANT CAPS ACCORDING TO PROPER FLOW CHARACTERISTICS;
C. HYDRANT PLACEMENT AND SPACING;
D. FIRE LANE MARKINGS OR SIGNAGE, IF APPLICABLE.

NOTES:

1. PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING ENSURE THAT ALL REQUIRED NOTICES AND PERMITS ARE POSTED AND THE CERTIFIED INSPECTOR FOR YOUR SITE HAS UPLOADED A SWP3 INSPECTION REPORT TO YOUR ACCOUNT THAT CONFIRMS THAT THE FIRST PHASE OF TEMPORARY ESC HAVE BEEN INSTALLED PER PLANS AND SPECIFICATIONS.

   FAILURE TO FOLLOW THE PRE-CONSTRUCTION MEETING REQUIREMENTS MAY RESULT IN WORK STOPPAGE AND ADDITIONAL PERMIT FEES.

2. SPECIAL PRE-CON NOTES:
   1. PROVIDE 48 HR. MINIMUM NOTICE TO SCHEDULE THE PRE-CON MEETING.
   2. PROVIDE A 1/2 SIZE SET OF PLANS FOR THE INSPECTOR AT THE PRE-CON.
   3. PROVIDE AN ANTICIPATED CONSTRUCTION SCHEDULE AT THE PRE-CON.
   4. BRING YOUR SWP3 FOR COMPLETENESS CHECK AT THE PRE-CON.
3. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE PLANS APPROVED BY TRAVIS COUNTY.
4. SCHEDULE YOUR PROJECTS PRE-CONSTRUCTION MEETING THROUGH THE MYPERMITNOW.ORG ACCOUNT AFTER THE INITIAL 3RD PARTY SWP3 INSPECTION REPORT HAS BEEN UPLOADED AND ALL PERMITS AND NOTICES HAVE BEEN POSTED, THEN FOLLOW UP WITH EMAILS TO THE ENVIRONMENTAL INSPECTOR AT **ENV-INSPECTION@TRAVISCOUNTYTX.GOV** AND THE ENGINEERING INSPECTOR, JOHNNY ANGLIN, AT **JOHNNY.ANGLIN@TRAVISCOUNTYTX.GOV**
5. PROVIDE NOTE THAT STATES: THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND THE SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE-OUT PROCESS.
6. PROVIDE A NOTE THAT STATES: ALL STRUCTURAL FIELD CHANGES REQUIRE A PLAN REVISION APPROVAL IN WRITING BEFORE COMMENCEMENT OF THE WORK.

TOTAL AREA OF DISTURBANCE: 8.48 AC.

TOTAL AREA OF NEW IMPERVIOUS COVER: 2.46 AC. (STREETS)
5.50 AC. (FUTURE HOMES/DRIVEWAYS)

TOTAL AREA OF SITE (ENTIRE AREA WITHIN L.O.C.): 8.48 AC.

Texas 811 — Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.
CALL 811 OR 800-344-8377

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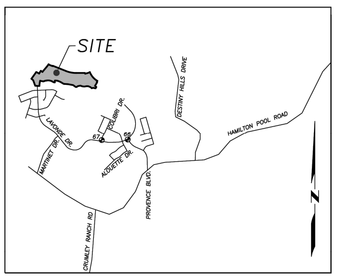


VICINITY MAP
(NOT TO SCALE)

PROVENCE PHASE 2
SECTION 2

TRAVIS COUNTY CONSUMER PROTECTION NOTICE FOR HOME BUYERS: IF YOU ARE BUYING A LOT OR HOME, YOU SHOULD DETERMINE WHETHER IT IS INSIDE OR OUTSIDE THE CITY LIMITS. DEPENDING ON STATE LAW AND OTHER FACTORS, LAND OUTSIDE THE CITY LIMITS MAY BE SUBJECT TO FEWER LOCAL GOVERNMENT CONTROLS OVER THE DEVELOPMENT AND USE OF LAND THAN INSIDE THE CITY LIMITS. BECAUSE OF THIS, LOCAL GOVERNMENT MAY NOT BE ABLE TO RESTRICT THE NATURE OR EXTENT OF DEVELOPMENT NEAR THE LOT OR HOME NOR PROHIBIT NEARBY LAND USES THAT ARE INCOMPATIBLE WITH A RESIDENTIAL NEIGHBORHOOD. THIS CAN AFFECT THE VALUE OF YOUR PROPERTY. TRAVIS COUNTY REQUIRES THIS NOTICE TO BE PLACED ON SUBDIVISION PLATS. IT IS NOT A STATEMENT OR REPRESENTATION OF THE OWNER OF THE PROPERTY, THE SUBDIVIDER, OR THEIR REPRESENTATIVES.

LANDESIGN SERVICES, INC.
10999 W HIGHWAY 29, LIBERTY HILL, TEXAS 78642
(TBPELS FIRM REGISTRATION #10010500)
512-236-7991

FINAL PLAT
PROVENCE PHASE 2
SECTION 2

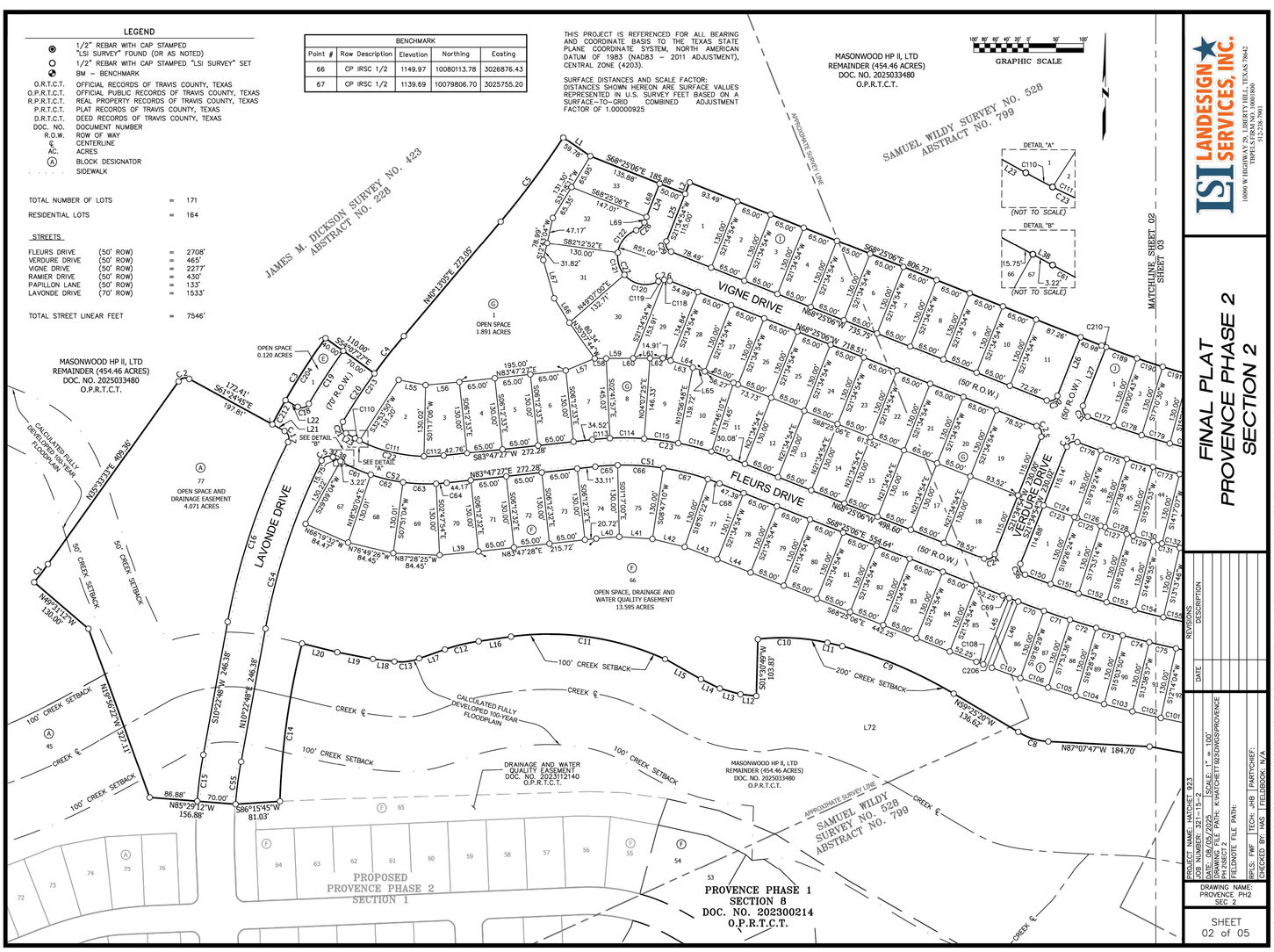
REVISIONS	
DATE	DESCRIPTION

PROJECT NAME: MITCHELL 923
JOB NUMBER: 324-MITCHELL-923 | SCALE: 1" = 100'
DATE: 08/05/2025 | DRAWING FILE PATH: K:\ARTCHETT 8523\DWGS\PROVENCE FIELDNOTE FILE PATH:
RPLS: FWF | TECH: JHB | PARTYCHIEF:
CHECKED BY: HAS | FIELDBOOK: N/A

DRAWING NAME: PROVENCE PH2 SEC 2

SHEET 01 of 05

DRAWING PATH: K:\ARTCHETT 8523\DWGS\PROVENCE PH 2\SECT 2\PROVENCE PH2 SECT 2.DWG SHEET PLOT SIZE: ARCH FULL BLEED C (18.00 X 24.00 INCHES) LAST SAVED: 8/21/2025 2:24 PM PLOT DATE: 8/21/2025 2:25 PM



LANDESIGN SERVICES, INC.
10999 W HIGHWAY 29, LIBERTY HILL, TEXAS 78642
(TBPELS FIRM REGISTRATION #10010500)
512-236-7991

FINAL PLAT
PROVENCE PHASE 2
SECTION 2

REVISIONS	
DATE	DESCRIPTION

PROJECT NAME: MITCHELL 923
JOB NUMBER: 324-MITCHELL-923 | SCALE: 1" = 100'
DATE: 08/05/2025 | DRAWING FILE PATH: K:\ARTCHETT 8523\DWGS\PROVENCE FIELDNOTE FILE PATH:
RPLS: FWF | TECH: JHB | PARTYCHIEF:
CHECKED BY: HAS | FIELDBOOK: N/A

DRAWING NAME: PROVENCE PH2 SEC 2

SHEET 02 of 05

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Sheet 2 of 73

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

FINAL PLAT SHEET 1 OF 3

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

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MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

FINAL PLAT SHEET 2 OF 3

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 3 of 73

P:\Active Projects\2018-227 Provence\22-Phase_2_Sec_2\CAD\Construction Sheets\22_plot_01.dwg 9/11/2025 4:05 PM

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CHECKED BY: N/A	
FIELDBOOK FILE PATH:	
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DATE: 08/29/2025 SCALE: 1" = 100'	
JOB NUMBER: 221-15-2	
PROJECT NAME: HATCHET 923	

REVISIONS		
	DATE	DESCRIPTION

FINAL PLAT PROVENCE PHASE 2 SECTION 2

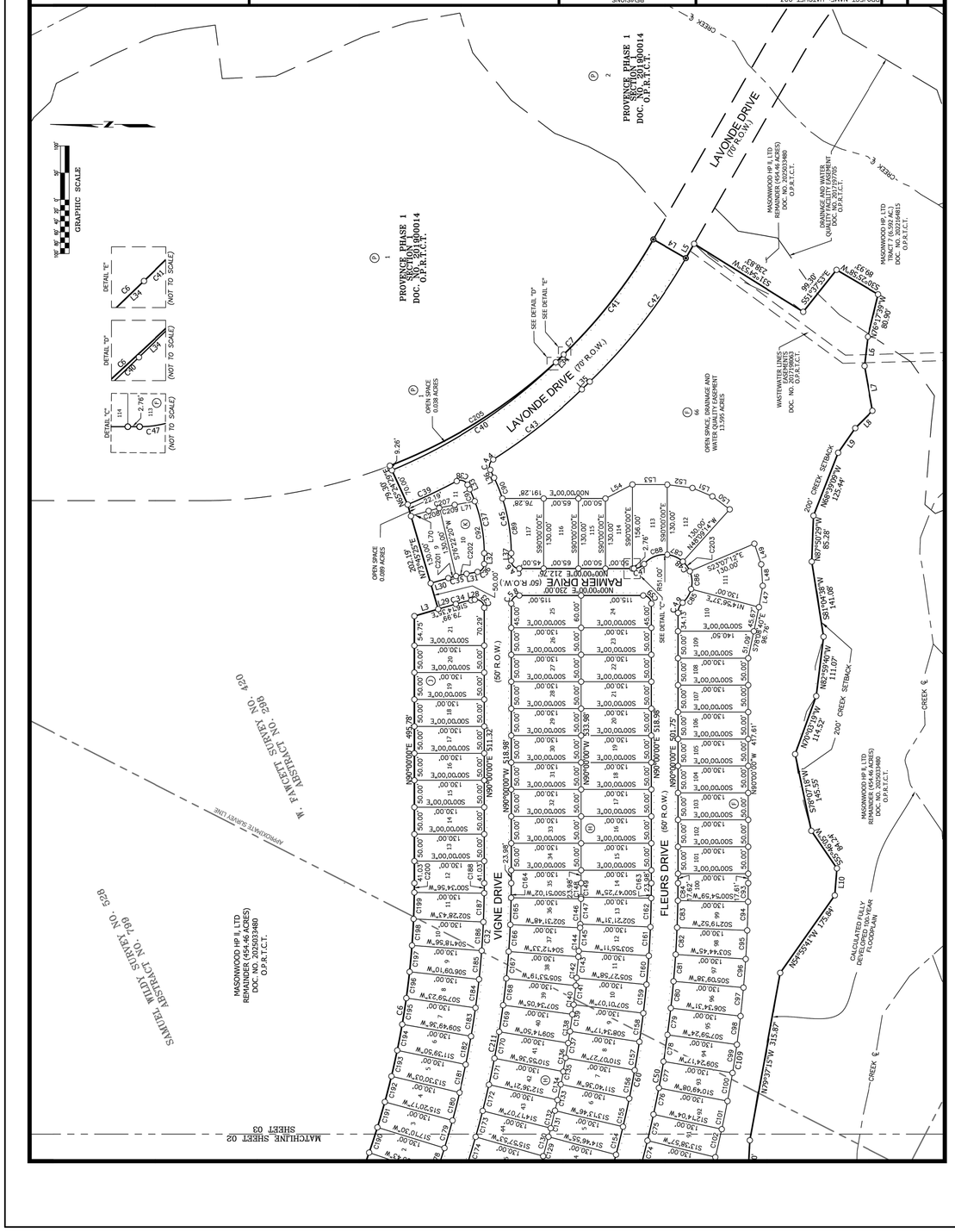
LANDESIGN SERVICES, INC.
10090 W HIGHWAY 29, LIBERTY HILL, TEXAS 78642
TBPELS FIRM NO. 10001800
512-238-7901

CURVE TABLE						
CURVE #	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD
C64	325.00'	19.35'	3°24'38"	S85°26'03"W	19.34'
C65	475.00'	40.84'	4°55'33"	N86°15'14"E	40.82'
C66	475.00'	83.48'	10°04'10"	S86°14'55"E	83.37'
C67	475.00'	83.48'	10°04'13"	S76°10'44"E	83.38'
C68	475.00'	22.59'	2°43'31"	S69°46'52"E	22.59'
C69	2025.00'	12.77'	0°21'41"	S68°35'57"E	12.77'
C70	2025.00'	49.99'	1°24'52"	S69°59'05"E	49.99'
C71	2025.00'	50.00'	1°24'53"	S71°23'58"E	50.00'
C72	2025.00'	50.00'	1°24'53"	S72°48'51"E	50.00'
C73	2025.00'	50.00'	1°24'53"	S74°13'44"E	50.00'
C74	2025.00'	50.00'	1°24'53"	S75°38'37"E	50.00'
C75	2025.00'	50.00'	1°24'53"	S77°03'30"E	50.00'
C76	2025.00'	50.03'	1°24'56"	S78°28'24"E	50.03'
C77	2025.00'	49.97'	1°24'56"	S79°53'18"E	49.97'
C78	2025.00'	50.00'	1°24'53"	S81°18'09"E	50.00'
C79	2025.00'	50.00'	1°24'53"	S82°43'02"E	50.00'
C80	2025.00'	50.00'	1°24'53"	S84°07'55"E	50.00'
C81	2025.00'	50.00'	1°24'53"	S85°32'48"E	50.00'
C82	2025.00'	50.00'	1°24'53"	S86°57'42"E	50.00'
C83	2025.00'	50.00'	1°24'53"	S88°22'35"E	50.00'
C84	2025.00'	32.39'	0°54'59"	S89°33'21"E	32.39'
C85	51.00'	30.19'	33°55'00"	S58°05'52"E	29.75'
C86	51.00'	33.88'	38°03'49"	N85°54'43"E	33.26'
C87	51.00'	32.24'	36°13'11"	N23°44'10"E	31.71'
C88	51.00'	48.50'	54°29'12"	N21°37'02"W	46.69'
C89	325.00'	103.30'	18°12'39"	S86°05'40"W	102.86'
C90	325.00'	4.66'	0°20'02"	S68°07'19"W	41.57'
C91	275.00'	24.04'	5°00'32"	N68°57'34"E	24.03'
C92	275.00'	98.57'	20°32'10"	N79°43'55"E	98.04'
C93	2155.00'	34.47'	0°54'59"	S89°33'21"E	34.46'
C94	2155.00'	53.21'	1°24'53"	S88°22'35"E	53.21'
C95	2155.00'	53.21'	1°24'53"	S86°57'42"E	53.21'
C96	2155.00'	53.21'	1°24'53"	S85°32'48"E	53.21'
C97	2155.00'	53.21'	1°24'53"	S84°07'55"E	53.21'
C98	2155.00'	53.21'	1°24'53"	S82°43'02"E	53.21'
C99	2155.00'	53.21'	1°24'53"	S81°18'09"E	53.21'
C100	2155.00'	53.18'	1°24'50"	S79°53'18"E	53.18'
C101	2155.00'	53.24'	1°24'56"	S78°28'24"E	53.24'
C102	2155.00'	53.21'	1°24'53"	S77°03'30"E	53.21'
C103	2155.00'	53.21'	1°24'53"	S75°38'37"E	53.21'
C104	2155.00'	53.21'	1°24'53"	S74°13'44"E	53.21'
C105	2155.00'	53.21'	1°24'53"	S72°48'51"E	53.21'
C106	2155.00'	53.21'	1°24'53"	S71°23'58"E	53.21'
C107	2155.00'	55.15'	1°27'59"	S69°57'31"E	55.15'
C108	2155.00'	13.49'	0°21'31"	N68°35'52"W	13.49'
C109	2155.00'	781.35'	20°46'27"	N78°27'02"W	777.08'
C110	275.00'	9.01'	1°52'34"	N62°21'02"W	9.00'
C111	275.00'	25.97'	5°24'59"	N58°59'31"W	25.97'
C112	525.00'	62.52'	6°49'22"	N64°42'57"W	62.48'
C113	525.00'	32.16'	3°30'36"	N61°33'45"W	32.16'
C114	525.00'	62.52'	6°49'22"	N57°53'23"W	62.48'
C115	525.00'	62.52'	6°49'22"	S82°27'53"E	62.48'
C116	525.00'	62.52'	6°49'22"	S75°38'31"E	62.48'
C117	525.00'	34.93'	3°48'44"	S70°19'28"E	34.92'
C118	25.00'	10.30'	23°35'56"	N80°31'04"W	10.22'
C119	25.00'	11.02'	25°15'45"	N57°21'07"W	10.93'
C120	51.00'	68.00'	76°23'44"	N79°04'52"W	63.07'
C121	51.00'	43.32'	48°40'08"	S39°06'50"E	42.03'
C122	51.00'	55.77'	62°39'24"	N39°06'50"E	53.03'
C123	1845.00'	60.00'	1°51'48"	S69°07'42"E	60.00'
C124	1845.00'	65.13'	2°01'21"	S69°42'28"E	65.12'
C125	1845.00'	1.33'	0°02'57"	S71°20'11"E	50.00'
C126	1845.00'	53.81'	1°40'16"	S73°31'03"E	53.81'

LINE TABLE		
LINE #	BEARING	DISTANCE
L37	N30°00'00"E	13.43'
L38	S81°24'45"E	18.97'
L39	N84°28'26"E	71.24'
L40	N85°31'38"E	42.04'
L41	S88°14'35"E	60.55'
L42	N76°10'44"W	60.56'
L43	N68°40'19"W	63.80'
L44	S68°30'49"E	69.55'
L45	N21°16'04"E	130.00'
L46	S21°43'54"W	130.01'
L47	S79°51'59"E	40.35'
L48	N85°52'22"E	40.00'
L49	N7°40'47"E	40.19'
L50	N37°02'49"E	40.21'
L51	N22°50'18"E	40.00'
L52	N07°39'45"E	47.20'
L53	S00°12'59"W	383.22'
L54	N27°58'27"W	56.36'
L55	S79°05'35"E	49.98'
L56	S84°57'54"W	61.68'
L57	N67°32'53"E	57.05'
L58	N89°47'00"E	20.89'
L59	S89°47'00"W	70.01'
L60	N89°47'00"E	79.83'
L61	N89°47'00"E	54.00'
L62	N89°47'00"E	23.39'
L63	S72°40'32"E	57.26'
L64	S72°40'32"E	65.18'
L65	S72°40'32"E	22.82'
L66	S32°01'35"E	52.16'
L67	N15°53'22"W	72.26'
L68	N21°34'54"E	65.00'
L69	N21°34'54"E	10.63'
L70	N16°14'35"W	34.03'
L71	N10°00'00"W	38.40'

CURVE TABLE						
CURVE #	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD
C190	1535.00'	49.22'	1°50'13"	N71°54'23"W	49.21'
C191	1535.00'	49.22'	1°50'13"	N73°44'37"W	49.21'
C192	1535.00'	49.22'	1°50'13"	N75°34'50"W	49.21'
C193	1535.00'	49.22'	1°50'13"	N77°25'04"W	49.21'
C194	1535.00'	49.22'	1°50'13"	N79°15'17"W	49.21'
C195	1535.00'	49.22'	1°50'13"	N81°05'30"W	49.21'
C196	1535.00'	49.22'	1°50'13"	N82°55'44"W	49.21'
C197	1535.00'	49.22'	1°50'13"	N84°45'57"W	49.21'
C198	1535.00'	49.22'	1°50'13"	N86°36'10"W	49.21'
C199	1535.00'	49.18'	1°50'08"	N88°26'21"W	49.17'
C200	1535.00'	17.23'	0°38'35"	N89°40'43"W	17.23'
C201	325.00'	14.84'	2°36'55"	S14°56'08"E	14.83'
C202	325.00'	20.38'	3°37'40"	S11°48'50"E	20.57'
C203	51.00'	22.28'	25°02'02"	N34°21'47"E	22.11'
C204	1255.00'	134.64'	6°08'49"	N32°48'09"E	134.58'
C205	965.00'	385.79'	22°54'20"	S32°35'09"E	383.22'
C206	2025.00'	17.58'	0°29'51"	S69°01'43"E	17.58'
C207	455.00'	49.38'	6°14'35"	N13°07'18"W	49.55'
C208	455.00'	20.77'	2°36'55"	S14°56'08"E	20.77'
C209	455.00'	28.81'	3°37'40"	S11°48'50"E	28.80'
C210	1535.00'	9.02'	0°20'12"	N68°35'04"W	9.02'
C211	1715.00'	622.26'	20°47'19"	S79°36'23"E	618.85'
C212	1255.00'	50.00'	2°16'58"	N28°35'15"E	50.00'
C213	1145.00'	191.72'	9°35'37"	N33°25'16"E	191.50'

LINE TABLE		
LINE #	BEARING	DISTANCE
L1	S55°18'35"E	59.78'
L2	N21°34'54"E	22.14'
L3	S16°47'35"E	45.97'
L4	S32°49'56"W	70.05'
L5	S80°10'04"E	30.77'
L6	N83°14'50"W	54.64'
L7	S79°42'41"W	84.49'
L8	N44°54'26"W	45.70'
L9	N55°13'11"W	55.58'
L10	N85°28'07"W	50.30'
L11	N77°20'07"W	27.91'
L12	N82°38'43"W	29.15'
L13	N74°23'48"W	38.97'
L14	N63°55'47"W	38.30'
L15	N60°32'50"W	74.98'
L16	S81°50'11"W	59.63'
L17	S70°32'31"W	49.63'
L18	N83°33'01"W	38.35'
L19	N79°00'54"W	66.23'
L20	N76°08'44"W	66.03'
L21	S61°24'45"E	23.40'
L22	N61°24'45"W	23.40'
L23	S81°24'45"E	18.97'
L24	S21°34'54"W	75.63'
L25	N21°34'54"E	92.86'
L26	S21°34'54"W	115.00'
L27	S21°34'54"W	114.85'
L28	N10°00'00"W	6.53'
L29	N16°14'35"W	34.45'
L30	S16°14'35"E	34.03'
L31	S10°00'00"E	20.63'
L32	S80°00'00"E	19.87'
L33	N84°27'18"E	9.43'
L34	N44°32'19"E	20.68'
L35	S44°32'19"E	20.68'
L36	N64°27'18"E	16.33'


GRAPHIC SCALE
1" = 100'
PROVENCE PHASE 1 SECTION 1 DOC. NO. 201900014 O.P.R.T.C.T.
PROVENCE PHASE 1 SECTION 2 DOC. NO. 201900014 O.P.R.T.C.T.
LAVONDE DRIVE (70' R.O.W.)
FAMMIER DRIVE (60' R.O.W.)
VIGNE DRIVE (50' R.O.W.)
FLEURS DRIVE (60' R.O.W.)
MASONWOOD HP & LTD REMAINDER (454.46 ACRES) DOC. NO. 202503480 O.P.R.T.C.T.
SAMUEL MUNY SURVEY NO. 528 ABSTRACT NO. 749
M. PARROTT SURVEY NO. 420 ABSTRACT NO. 298
OPEN SPACE 0.089 ACRES
OPEN SPACE 0.038 ACRES
OPEN SPACE, DRAINAGE AND WATER QUALITY EASEMENT 13.595 ACRES
WASTEWATER LINES EASEMENTS DOC. NO. 201900014 O.P.R.T.C.T.
DRAINAGE AND WATER QUALITY EASEMENT DOC. NO. 201709705 O.P.R.T.C.T.
MASONWOOD HP & LTD TRACT 7 (6.59± AC.) DOC. NO. 202503480 O.P.R.T.C.T.
MASONWOOD HP & LTD REMAINDER (454.46 ACRES) DOC. NO. 202503480 O.P.R.T.C.T.
CALCULATED FULLY DEVELOPED 100-YEAR FLOODPLAIN
200' CREEK SETBACK
CREEK
SEE DETAIL "A"
SEE DETAIL "B"
SEE DETAIL "C"
SEE DETAIL "D"
SEE DETAIL "E"
DETAIL "A" (NOT TO SCALE)
DETAIL "B" (NOT TO SCALE)
DETAIL "C" (NOT TO SCALE)
DETAIL "D" (NOT TO SCALE)
DETAIL "E" (NOT TO SCALE)
MATCHLINE SHEET 02 SHEET 03
MATCHLINE SHEET 03 SHEET 02
N89°57'13"W 315.07'
N89°57'29"W 85.28'
N87°36'36"W 141.08'
S89°04'36"W 175.84'
S87°47'59"W 80.80'
S55°18'35"E 59.78'
S51°09'53"W 238.83'
N89°47'00"E 495.28'
N89°47'00"E 511.32'
N89°47'00"E 518.98'
N89°47'00"E 533.98'
N89°47'00"E 518.98'
N89°47'00"E 41.61'
N89°47'00"E 23.98'
N89°47'00"E 41.03'
N89°47'00"E 230.36'
N89°47'00"E 212.28'
N89°47'00"E 190.28'
N89°47'00"E 76.28'
N89°47'00"E 65.00'
N89°47'00"E 65.00'
N89°47'00"E 65.00

THE STATE OF TEXAS {}

KNOW ALL MEN BY THESE PRESENTS:

THE COUNTY OF TRAVIS {}

THAT MASONWOOD HP, LTD., A TEXAS LIMITED PARTNERSHIP ACTING BY AND THROUGH JAMES W. MEREDITH, BEING THE OWNER OF THAT CERTAIN 6.592 ACRES OF LAND CONVEYED MASONWOOD HP, LTD, BY SPECIAL WARRANTY DEED IN DOCUMENT NO. 2022164815 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS (O.P.R.T.C.T.), AND THAT MASONWOOD HP II, LTD, BEING THE OWNER OF THAT CERTAIN 454.46 ACRES OF LAND CONVEYED MASONWOOD HP II, LTD, BY SPECIAL WARRANTY DEED WITH VENDORS LIEN IN DOCUMENT NO. 2025033480 OF SAID O.P.R.T.C.T., IN THE JAMES M. DICKSON SURVEY NO. 423 ABSTRACT NO. 228, THE SAMUEL WILDY SURVEY NO. 528, ABSTRACT 799, AND THE W. FAWCETT SURVEY NO. 420, ABSTRACT NO. 298 ALL IN TRAVIS COUNTY, TEXAS, DO HEREBY SUBDIVIDE 58.36 ACRES OF LAND IN ACCORDANCE WITH THIS PLAT AND CHAPTER 232 OF THE TEXAS LOCAL GOVERNMENT CODE TO BE KNOW AS.

PROVENCE PHASE 2 SECTION 2

AND DO HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

IN WITNESS WHEREOF, _____, HAS CAUSED THESE PRESENTS TO BE EXECUTED BY THEIR _____ THIS THE _____ DAY OF _____ 2025 A.D.

_____
JAMES W. MEREDITH
4301 WESTBANK DRIVE
BUILDING A, STE. 110
AUSTIN, TEXAS 78746

THE STATE OF TEXAS
THE COUNTY OF TRAVIS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED JAMES W. MEREDITH, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND HE ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

WITNESS MY HAND AND SEAL THIS THE _____ DAY OF _____, 2025, A.D.

_____
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

ENGINEER'S CERTIFICATION:

THE STATE OF TEXAS

COUNTY OF TRAVIS

KNOW ALL MEN BY THESE PRESENTS THAT I, JOSHUA F. HENKE, A LICENSED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THE PLAT COMPLIES WITH THE ENGINEERING RELATED PORTIONS OF CHAPTER 482.

FLOODPLAIN CERTIFICATION
NO PORTION OF THIS TRACT IS WITHIN THE DESIGNATED FLOOD HAZARD AREA AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP(FIRM) NO. 48453C0395J, TRAVIS COUNTY, TEXAS, DATED JANUARY 22, 2020.

_____
JOSHUA F. HENKE
LICENSED PROFESSIONAL ENGINEER NO. 92601
MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BUILDING A, SUITE 200
AUSTIN, TEXAS 78733
TBPELS REGISTRATION NO. F-18320

LAND SURVEYOR'S STATEMENT

I, FRANK W. FUNK, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT THIS PLAT COMPLIES WITH THE SURVEY RELATED PORTIONS OF CHAPTER 482, TRAVIS COUNTY SUBDIVISION REGULATIONS, IS TRUE AND CORRECT TO THE BEST OF MY ABILITY, AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND AND THAT ALL SURVEY MONUMENTS SHOWN HEREON WERE SET UNDER MY SUPERVISION.

PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.

_____ DATE
FRANK W. FUNK
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF TEXAS NO. 6803

LANDESIGN SERVICES, INC.
10090 W HIGHWAY 29
LIBERTY HILL, TEXAS 78642
(512) 238-7901
TBPELS REGISTRATION NO. 10001800

NOTES:

1. PROPERTY OWNER AND/OR HIS/HER ASSIGNEES SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS/ STORM SEWER EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY TRAVIS COUNTY OR TRAVIS COUNTY MUD NO. 22 FOR INSPECTION OF SAID EASEMENTS.
2. THIS PROPERTY HAS ACCESS TO AND FROM A DEDICATED PUBLIC ROADWAY.
3. A TRAVIS COUNTY DEVELOPMENT PERMIT IS REQUIRED PRIOR TO ANY SITE DEVELOPMENT.
4. NO OBJECTS INCLUDING BUT NOT LIMITED TO, BUILDINGS, FENCES OR LANDSCAPE SHALL BE ALLOWED IN DRAINAGE EASEMENT/STORM SEWER EASEMENTS, EXCEPT AS APPROVED BY TRAVIS COUNTY AND TRAVIS COUNTY MUD NO. 22.
5. THE OWNER OF THE PROPERTY SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE TEMPORARY EROSION CONTROL RE-VEGITATION AND TREE PROTECTION. PEDERNALES ELECTRIC COOPERATIVE (PEC) WORK ON THE PROPERTY SHALL BE INCLUDED WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROPERTY.
6. THE OWNER OF THE PROPERTY OR HIS/HER ASSIGNS IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A) REGULATIONS, PEDERNALES ELECTRIC CO-OP RULES AND REGULATIONS AND STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. PEDERNALES ELECTRIC COOPERATIVE (PEC) WILL NOT RENDER ELECTRIC SERVICES UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
7. THE WATER SYSTEM FOR THIS SUBDIVISION WILL/SHALL BE DESIGNED TO SUPPLY THE FIRE FLOWS AS REQUIRED BY ORDINANCE 2010-1. ENACTED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6. PLANS SHALL BE REVIEWED AND APPROVED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS AND SITE DEVELOPMENT ON ALL LOTS, EXCEPTING SINGLE FAMILY.
8. THE PROPERTY IS SUBJECT TO A WATER QUALITY MAINTENANCE PLAN RECORDED IN THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS
9. THIS SUBDIVISION IS LOCATED WITHIN THE LITTLE BARTON CREEK WATERSHED.
10. THIS SUBDIVISION IS SITUATED IN THE EDWARDS AQUIFER CONTRIBUTING ZONE.
11. A 10 FOOT WIDE PUBLIC UTILITY EASEMENT (P.U.E.) IS DEDICATED FOR USE FOR PUBLIC UTILITIES ADJACENT TO ALL STREET SIDE PROPERTY LINES OF ALL LOTS SHOWN ON THIS PLAT.
12. THIS SUBDIVISION IS SUBJECT TO THE DECLARATIONS OF THE COVENANTS, CONDITIONS AND RESTRICTIONS IN DOCUMENT NO. 2018195864 O.P.R.T.C.T.
13. PROPERTY OWNER OR HIS/HER ASSIGNS SHALL PROVIDE FOR ACCESS TO THE DRAINAGE EASEMENT AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY TRAVIS COUNTY FOR INSPECTION OR MAINTENANCE OF SAID EASEMENT.
14. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER AND/OR HIS/HER ASSIGNEES OR TRAVIS COUNTY M.U.D. NO. 22.
15. ALL STREETS & DRAINAGE FACILITIES WILL BE DESIGNED IN ACCORDANCE TO TRAVIS COUNTY CONSTRUCTION STANDARDS FOR STREET & DRAINAGE IN SUBDIVISIONS.
16. WATER SERVICE TO BE PROVIDED BY WEST TRAVIS COUNTY P.U.A. OR STATE APPROVED WATER SYSTEM.
17. WASTEWATER SERVICE TO BE PROVIDED BY TRAVIS COUNTY M.U.D. NO. 22.
18. ELECTRIC SERVICE TO BE PROVIDED BY PEDERNALES ELECTRIC CO-OP.
19. TELEPHONE SERVICE TO BE PROVIDED BY AT&T.
20. CONTOUR DATA SOURCE: CAPCOG 2009 LIDAR AND ON THE GROUND SURVEY
21. PROJECT IS LOCATED WITHIN TRAVIS COUNTY AND IS NOT LOCATED WITHIN ANY OTHER CITY'S EXTRA TERRITORIAL JURISDICTION (ETJ).
22. NO STRUCTURE SHALL BE OCCUPIED UNTIL CONNECTED TO WEST TRAVIS COUNTY P.U.A. WATER SYSTEM OR STATE APPROVED WATER SYSTEM.
23. NO STRUCTURE SHALL BE OCCUPIED UNTIL CONNECTED TO THE TRAVIS COUNTY M.U.D. NO. 22 WASTEWATER SYSTEM.
24. ALL STREETS SHALL BE PUBLIC WITHIN THE FINAL PLAT.
25. STREETS IN THIS SUBDIVISION WILL INCLUDE SIDEWALKS AND ACCESSIBLE ROUTE IN COMPLIANCE WITH FEDERAL AND STATE STANDARDS, AS REQUIRED BY TRAVIS COUNTY CHAPTER 82, SECTION 202(a)(3)(A), AND PER THE APPROVED PRELIMINARY PLAN.
26. THIS PROPOSED FINAL PLAT PLAN COMPLIES WITH THE CONDITIONS OF THE MASTER DEVELOPMENT PLAN INCLUDING IMPERVIOUS COVER.
27. TO THE EXTENT REQUIRED BY THE AGREEMENT (THE 'AGREEMENT') TO PROVIDE UTILITY SERVICE TO THE SUBDIVISION BY W.T.C.P.U.A. OR ANY SUBSEQUENT UTILITY PROVIDER (THE 'UTILITY'), DEVELOPMENT IN THE SUBDIVISION SHALL COMPLY WITH ENVIRONMENTAL AND WATER QUALITY REQUIREMENTS THAT ARE MORE STRINGENT THAN TRAVIS COUNTY REGULATIONS. THE COUNTY WILL DENY APPROVAL OF A FINAL PLAT BASED ON THIS NOTE ONLY IF THE UTILITY (BY OFFICIAL ACT OF ITS GOVERNING BODY OR AUTHORIZED REPRESENTATIVE) DETERMINES THE FINAL PLAT DOES NOT COMPLY WITH THE AGREEMENT THEN IN EFFECT AND AS MAY BE AMENDED FROM TIME TO TIME.
28. CORNER LOTS SHALL BE RESTRICTED FROM TAKING ACCESS FROM THE LARGER ROAD FRONTAGE OF THE LOTS.
29. LOT 77, BLOCK A, LOT 1, BLOCK E, LOT 1, BLOCK G, LOT 66, BLOCK F, LOT 11, BLOCK K, AND LOT 1, BLOCK P ARE OPEN SPACE/DRAINAGE/WATER QUALITY EASEMENTS AND WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION OR ITS ASSIGNS.
30. AS DEPICTED ON THE PLAT, ALL WATER QUALITY EASEMENTS ARE SUBJECT TO PERIODIC INSPECTION AND MONITORING BY TRAVIS COUNTY FOR THE PURPOSE OF ENSURING WATER QUALITY COMPLIANCE ACCORDING TO SEC. 16.014 OF THE TEXAS WATER CODE.
31. AS DEPICTED ON THE PLAT, THE SETBACK AREA IDENTIFIED FOR EACH WATER QUALITY CONTROL IS A PROTECTIVE EASEMENT THAT MUST REMAIN UNDEVELOPED AND ACTIVITIES MUST BE LIMITED WITHIN THE EASEMENT. THE PROTECTIVE EASEMENT MUST REMAIN FREE OF CONSTRUCTION, DEVELOPMENT, AND OTHER ALTERATIONS EXCEPT WHEN SPECIFICALLY APPROVED IN A TRAVIS COUNTY DEVELOPMENT PERMIT.
32. THE PRELIMINARY PLAT FOR PROVENCE PHASE 2 SECTION 2 WAS APPROVED AND THIS PLAT IS SUBJECT TO THE TRAVIS COUNTY WATER QUALITY RULES IN EFFECT AT THAT TIME.
34. THE LOTS IN THIS SUBDIVISION RECEIVE POTABLE WATER SERVICE, EITHER DIRECTLY OR VIA WHOLESALE CONTRACT, FROM THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY. AS SUCH, THE PROPERTY IS SUBJECT TO COMPLIANCE WITH THE TERMS SET FORTH IN THE MAY 24, 2000 UNITED STATES FISH AND WILDLIFE SERVICE MEMORANDUM OF UNDERSTANDING WITH THE LOWER COLORADO RIVER AUTHORITY. THE SUBDIVISION WILL COMPLY WITH THE PROVISIONS OF THE MEMORANDUM OF UNDERSTANDING THROUGH ADHERENCE TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY OPTIONAL ENHANCED MEASURES, APPENDIX A AND APPENDIX B TO RG48, WHICH HAS BEEN ACCEPTED AS A REGIONAL PLAN PURSUANT TO THE MEMORANDUM OF UNDERSTANDING.
35. THE PROPOSED IMPROVEMENTS SHALL COMPLY WITH THE WATER QUALITY PLAN, IF ANY, APPROVED FOR THIS SUBDIVISION AND SHALL NOT BE ALTERED.
36. LOT 77, BLOCK A, AND LOT 66, BLOCK F CONTAINS USFWS STREAM BUFFER ZONES AND/OR SENSITIVE FEATURE BUFFER ZONES AS INDICATED HEREON THAT MUST REMAIN FREE OF CONSTRUCTION, DEVELOPMENT, OR OTHER ALTERATIONS.

SUBDIVISION PLAT ENVIRONMENTAL NOTES:

1. NO CUT OR FILL ON ANY LOT MAY EXCEED EIGHT FEET, EXCLUDING DRIVEWAYS, A BUILDING STRUCTURE'S FOOTPRINT, OR A PARKING AREA FOOTPRINT, IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.
2. AS DEPICTED ON THE PLAT, EACH PROTECTIVE EASEMENT FROM A CRITICAL ENVIRONMENTAL FEATURE, INCLUDING A CAVE, SINKHOLE, POINT RECHARGE FEATURE, BLUFF, CANYON RIMROCK FEATURE, WETLAND, AND SPRING MUST REMAIN IN ITS EXISTING, UNDEVELOPED, NATURAL STATE. NATURAL VEGETATIVE COVER MUST BE RETAINED. CONSTRUCTION ACTIVITIES, WASTEWATER DISPOSAL, AND WASTEWATER IRRIGATION ARE PROHIBITED WITHIN A PROTECTIVE EASEMENT. A RESIDENTIAL LAWN OR HIKING TRAIL IS ALLOWED IF IT IS LOCATED AT LEAST 50 FEET FROM THE EDGE OF A CRITICAL ENVIRONMENTAL FEATURE IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.
3. AS DEPICTED ON THE PLAT, THE SETBACK AREA IDENTIFIED FOR EACH WATERWAY IS A PROTECTIVE EASEMENT THAT MUST REMAIN UNDEVELOPED AND ACTIVITIES MUST BE LIMITED WITHIN THE EASEMENT. THE PROTECTIVE EASEMENT MUST REMAIN FREE OF CONSTRUCTION, DEVELOPMENT, AND OTHER ALTERATIONS EXCEPT WHEN SPECIFICALLY APPROVED IN A TRAVIS COUNTY DEVELOPMENT PERMIT.
4. BEFORE BEGINNING CONSTRUCTION ACTIVITIES ON A SUBDIVISION LOT, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND, WHEN APPLICABLE, IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE SWP3 REQUIRES IMPLEMENTATION OF TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES, INCLUDING EROSION AND SEDIMENT CONTROLS, FOR PROTECTION OF STORM WATER RUNOFF QUALITY, IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.
5. THE OWNER IS RESPONSIBLE FOR MAINTAINING AND OPERATING ALL PERMANENT WATER QUALITY CONTROLS IN COMPLIANCE WITH ALL APPLICABLE STANDARDS AND REQUIREMENTS OF THE TRAVIS COUNTY CODE.
6. AN ACTIVITY THAT MAY ADVERSELY AFFECT A TREE OF EIGHT INCHES OR MORE IN TRUNK DIAMETER (MEASURED AT FOUR FEET HEIGHT ABOVE THE GROUND) IN A RIGHT-OF-WAY ACCEPTED FOR MAINTENANCE BY TRAVIS COUNTY MUST COMPLY WITH ALL STANDARDS AND REQUIREMENTS IN THE TRAVIS COUNTY CODE.

COMMISSIONERS COURT

IN APPROVING THIS PLAT, THE COMMISSIONERS COURT OF TRAVIS COUNTY, TEXAS, ASSUMES NO OBLIGATION TO BUILD THE STREETS, ROADS AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR ANY BRIDGES OR CULVERTS IN CONNECTION THEREWITH. THE BUILDING OF ALL STREET, ROADS AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT, AND ALL BRIDGES AND CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED IN SUCH STREETS, ROADS OR OTHER PUBLIC THOROUGHFARES OR IN CONNECTION THEREWITH IS THE RESPONSIBILITY OF THE OWNER AND / OR DEVELOPER OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH PLANS AND SPECIFICATIONS PRESCRIBED BY THE COMMISSIONERS COURT OF TRAVIS COUNTY, TEXAS.

THE OWNER OF THE SUBDIVISION SHALL CONSTRUCT THE SUBDIVISION'S STREET AND DRAINAGE IMPROVEMENTS (THE 'IMPROVEMENTS') TO COUNTY STANDARDS IN ORDER FOR THE COUNTY TO ACCEPT THE PUBLIC IMPROVEMENTS FOR MAINTENANCE OR TO RELEASE FISCAL SECURITY POSTED TO SECURE PRIVATE IMPROVEMENTS. TO SECURE THIS OBLIGATION, THE OWNER(S) MUST POST FISCAL SECURITY WITH THE COUNTY IN THE AMOUNT OF THE ESTIMATED COST OF IMPROVEMENTS. THE OWNER(S) OBLIGATION TO CONSTRUCT THE IMPROVEMENTS TO COUNTY STANDARDS AND TO POST THE FISCAL SECURITY TO SECURE SUCH CONSTRUCTION IS A CONTINUING OBLIGATION BINDING UPON THE OWNERS AND THEIR SUCCESSORS AND ASSIGNS UNTIL THE PUBLIC IMPROVEMENTS HAVE BEEN ACCEPTED FOR MAINTENANCE BY THE COUNTY OR THE PRIVATE IMPROVEMENTS HAVE BEEN CONSTRUCTED AND ARE PERFORMING TO COUNTY STANDARDS.

THE AUTHORIZATION OF THIS PLAT BY THE COMMISSIONERS COURT FOR FILING OF THE SUBSEQUENT ACCEPTANCE FOR MAINTENANCE BY TRAVIS COUNTY, TEXAS, OF ROADS AND STREETS IN THE SUBDIVISION DOES NOT OBLIGATE THE COUNTY TO INSTALL STREET NAME SIGNS OR ERECT TRAFFIC CONTROL SIGNS SUCH AS A SPEED LIMIT, STOP SIGNS, AND YIELD SIGNS, WHICH IS CONSIDERED TO BE PART OF THE DEVELOPER'S CONSTRUCTION.

THIS PLAT, FINAL PLAT OF_____. HAS BEEN SUBMITTED TO AND CONSIDERED BY THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY.

APPROVED. THIS _____ DAY OF _____. 2025

BY: _____
JENNIFER RIECHERS, GENERAL MANAGER
WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY

_____
DEPUTY

STATE OF TEXAS {}

COUNTY OF TRAVIS {}

I, DYANA LIMON-MERCADO, CLERK OF THE COUNTY COURT OF TRAVIS COUNTY, TEXAS, DO HEREBY CERTIFY THAT ON THE _____DAY OF _____ 2025, A.D. THE COMMISSIONERS' COURT OF TRAVIS COUNTY, TEXAS PASSED AN ORDER AUTHORIZING THE FILING FOR RECORD OF THIS PLAT AND THAT SAID ORDER WAS DULY ENTERED IN THE MINUTES OF SAID COURT.

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY COURT OF SAID COUNTY, THE _____, DAY OF _____, 2025, A.D.

REBECCA GUERRERO, COUNTY CLERK, TRAVIS COUNTY, TEXAS.

_____
DEPUTY

STATE OF TEXAS {}

COUNTY OF TRAVIS {}

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING AND ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE _____ DAY OF _____, 2025, A.D. AT _____ O'CLOCK ___.M., DULY RECORDED ON THE _____ DAY OF _____, 2025, A.D. AT _____ O'Clock __.M., OF SAID COUNTY AND STATE IN DOCUMENT NUMBER _____ OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY.

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THIS _____ DAY OF _____, 2025, A.D.

REBECCA GUERRERO, COUNTY CLERK
TRAVIS COUNTY, TEXAS

_____
DEPUTY

LANDESIGN SERVICES, INC.
10090 W HIGHWAY 29, LIBERTY HILL, TEXAS 78642
TBPELS FIRM NO. 10001800 512-238-7901

FINAL PLAT PROVENCE PHASE 2 SECTION 2

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT NAME: HATCHET 923
JOB NUMBER: 321-15-2
DATE: 08/05/2025 | SCALE: 1" = 100'
DRAWING FILE PATH: K:\HATCHETT 923\DWGS\PROVENCE PH2\SECT 2
FIELDNOTE FILE PATH:
RPLS: FWF | TECH: JHB | PARTYCHIEF:
CHECKED BY: HAS | FIELDBOOK: N/A

DRAWING NAME: PROVENCE PH2 SEC 2

SHEET 05 of 05

DRAWING PATH: K:\HATCHETT 923\DWGS\PROVENCE PH2\SECT 2\PROVENCE PH2 SECT 2.DWG SHEET PLOT SIZE: ARCH FULL BLEED C (18.00 X 24.00 INCHES) LAST SAVED: 8/21/2025 2:24 PM PLOT DATE: 8/21/2025 2:26 PM

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

P:\Active Projects\2018-227 Provence\22-Phase_2_Sec_2\CAD\Construction Sheets\22_plot_01.dwg 9/11/2025 4:00 PM

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

FINAL PLAT SHEET 3 OF 3

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 4 of 73

EXHIBIT 482.301C TRAVIS COUNTY STANDARD CONSTRUCTION NOTES FOR SUBDIVISION DEVELOPMENT STREETS, DRAINAGE, WATER AND WASTEWATER

1. EACH DRIVEWAY MUST BE CONSTRUCTED IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.302(G), AND EACH DRAINAGE STRUCTURE OR SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN DRAINAGE CRITERIA MANUAL, UNLESS OTHER DESIGN CRITERIA ARE APPROVED BY TRAVIS COUNTY.

2. BEFORE BEGINNING ANY CONSTRUCTION, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND POST THE DEVELOPMENT PERMIT, THE TCEQ SITE NOTICE, AND ANY OTHER REQUIRED PERMITS AT THE JOB SITE.

3. CONSTRUCTION MAY NOT TAKE PLACE WITHIN TRAVIS COUNTY RIGHT-OF-WAY UNTIL AFTER THE OWNER HAS SUBMITTED A TRAFFIC CONTROL PLAN TO TRAVIS COUNTY AND OBTAINED WRITTEN APPROVAL OF THE TRAFFIC CONTROL PLAN FROM TRAVIS COUNTY.

4. THE CONTRACTOR AND PRIMARY OPERATOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION AND THE SWP3 IN THESE APPROVED PLANS. THE CONTRACTOR AND PRIMARY OPERATOR SHALL REQUEST TRAVIS COUNTY INSPECTION AT SPECIFIC MILESTONES IN THE SEQUENCE OF THE CONSTRUCTION OF THE SITE DEVELOPMENT CORRESPONDING TO THE PRIORITY INSPECTIONS SPECIFIED IN CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS. DEVELOPMENT OUTSIDE THE LIMITS OF CONSTRUCTION SPECIFIED IN THE APPROVED PERMIT AND CONSTRUCTION PLANS IS PROHIBITED.

5. BEFORE BEGINNING ANY CONSTRUCTION, ALL STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS SHALL BE MET, AND THE FIRST PHASE OF THE TEMPORARY EROSION CONTROL (ESC) PLAN INSTALLED WITH A SWP3 INSPECTION REPORT UPLOADED TO MYPERMITNOW.ORG. ALL SWP3 AND ESC PLAN MEASURES AND PRIMARY OPERATOR SWP3 INSPECTIONS MUST BE PERFORMED BY THE PRIMARY OPERATOR IN ACCORDANCE WITH THE APPROVED PLANS AND SWP3 AND ESC PLAN NOTES THROUGHOUT THE CONSTRUCTION PROCESS.

6. BEFORE STARTING CONSTRUCTION, THE OWNER OR CONTRACTOR OR THEIR DESIGNATED REPRESENTATIVES SHALL SUBMIT A REQUEST VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY TO REQUEST AND SCHEDULE A MANDATORY PRECONSTRUCTION CONFERENCE AND ESC INSPECTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF OR TNR STORM WATER MANAGEMENT PROGRAM STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383.

7. THE CONTRACTOR SHALL KEEP TRAVIS COUNTY TNR ASSIGNED INSPECTION STAFF CURRENT ON THE STATUS OF SITE DEVELOPMENT AND UTILITY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY TRAVIS COUNTY AND REQUEST PRIORITY INSPECTIONS THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY IN ACCORDANCE WITH THE SPECIFIC MILESTONES IN THE CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS.

8. CONTOUR DATA SOURCE: TOPOGRAPHIC DESIGN SURVEY BY LANDESIGN SERVICES INC, OCTOBER 2019

9. FILL MATERIAL MUST BE MANAGED AND DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS SPECIFIED IN THE APPROVED PLANS, SWP3, AND THE TRAVIS COUNTY CODE. THE CONTRACTOR SHALL STOCKPILE FILL AND CONSTRUCTION MATERIALS ONLY IN THE AREAS DESIGNATED ON THE APPROVED PLANS AND NOT WITHIN THE 100-YEAR FLOOD PLAIN, WATERWAY SETBACK, CRITICAL ENVIRONMENTAL FEATURE SETBACK, OR OUTSIDE THE LIMITS OF CONSTRUCTION. DISPOSAL OF SOLID WASTE MATERIALS, AS DEFINED BY STATE LAW (E.G., LITTER, TIRES, DECOMPOSABLE WASTES, ETC.) IS PROHIBITED IN PERMANENT FILL SITES.

10. BEFORE DISPOSING ANY EXCESS FILL MATERIAL OFF-SITE, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR DOCUMENTATION THAT DEMONSTRATES THAT ALL REQUIRED PERMITS FOR THE PROPOSED DISPOSAL SITE LOCATION, INCLUDING TRAVIS COUNTY, TCEQ NOTICE, AND OTHER APPLICABLE DEVELOPMENT PERMITS, HAVE BEEN OBTAINED. THE OWNER OR PRIMARY OPERATOR MUST REVISE THE SWP3 AND ESC PLAN IF HANDLING OR PLACEMENT OF EXCESS FILL ON THE CONSTRUCTION SITE IS REVISED FROM THE EXISTING SWP3. IF THE FILL DISPOSAL LOCATION IS OUTSIDE TRAVIS COUNTY OR DOES NOT REQUIRE A DEVELOPMENT PERMIT, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR THE SITE ADDRESS, CONTACT INFORMATION FOR THE PROPERTY OWNER OF THE FILL

11. THE DESIGN ENGINEER IS RESPONSIBLE FOR THE ADEQUACY OF THE CONSTRUCTION PLANS. IN REVIEWING THE CONSTRUCTION PLANS, TRAVIS COUNTY WILL RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

12. IN THE EVENT OF ANY CONFLICTS BETWEEN THE CONTENT IN THE SWP3 SITE NOTEBOOK AND THE CONTENT IN THE CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY, THE CONSTRUCTION PLANS SHALL TAKE PRECEDENCE.

13. A MINIMUM OF TWO SURVEY BENCHMARKS SHALL BE SET, INCLUDING DESCRIPTION, LOCATION, AND ELEVATION; THE BENCHMARKS SHOULD BE TIED TO A TRAVIS COUNTY CONTROL BENCHMARK WHEN POSSIBLE.

14. ANY EXISTING PAVEMENT, CURBS, SIDEWALKS, OR DRAINAGE STRUCTURES WITHIN COUNTY RIGHT-OF-WAY WHICH ARE DAMAGED, REMOVED, OR SILTED, WILL BE REPAIRED BY THE CONTRACTOR AT OWNER OR CONTRACTOR'S EXPENSE BEFORE APPROVAL AND ACCEPTANCE OF THE CONSTRUCTION BY TRAVIS COUNTY.

15. CALL THE TEXAS EXCAVATION SAFETY SYSTEM AT 8-1-1 AT LEAST 2 BUSINESS DAYS BEFORE BEGINNING EXCAVATION ACTIVITIES.

16. ALL STORM SEWER PIPES SHALL BE CLASS III RCP, UNLESS OTHERWISE NOTED.

17. CONTRACTOR IS REQUIRED TO OBTAIN A UTILITY INSTALLATION PERMIT IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.901(A)(3) BEFORE ANY CONSTRUCTION OF UTILITIES WITHIN ANY TRAVIS COUNTY RIGHT-OF-WAY.

18. THIS PROJECT IS LOCATED ON FLOOD INSURANCE RATE MAP 48453C0039SH.

19. TEMPORARY STABILIZATION MUST BE PERFORMED IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.

20. PERMANENT SITE STABILIZATION/RE-VEGETATION MUST BE PERFORMED IMMEDIATELY IN ALL SITE AREAS WHICH ARE AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED IN THE APPROVED PLANS FOR PHASED RE-VEGETATION, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.

21. ALL TREES WITHIN THE RIGHT-OF-WAY AND DRAINAGE EASEMENTS SHALL BE SAVED OR REMOVED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS. TRAVIS COUNTY TREE PRESERVATION STANDARDS IN TRAVIS COUNTY CODE SECTION 482.973, INCLUDING INSTALLATION AND MAINTENANCE OF ALL SPECIFIED TREE PROTECTION MEASURES, MUST BE FOLLOWED DURING CONSTRUCTION.

22. AN ENGINEER'S CONCURRENCE LETTER IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.953 MUST BE SUBMITTED VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE. THE ENGINEER'S CONCURRENCE LETTER MUST BE SUBMITTED BEFORE THE CONTRACTOR OR PRIMARY OPERATOR REQUESTS A FINAL INSPECTION BY TRAVIS COUNTY.

23. SITE IMPROVEMENTS MUST BE CONSTRUCTED IN CONFORMANCE WITH THE ENGINEER'S CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY. NON-CONFORMANCE WITH THE APPROVED PLANS WILL DELAY FINAL INSPECTION APPROVAL BY THE COUNTY UNTIL PLAN CONFORMANCE IS ACHIEVED OR ANY REQUIRED PLAN REVISIONS ARE APPROVED.

24. FINAL SITE STABILIZATION. ALL AREAS DISTURBED BY THE CONSTRUCTION MUST BE PERMANENTLY REVEGETATED AND ALL TEMPORARY SEDIMENT CONTROLS AND ACCUMULATED SEDIMENTATION MUST BE REMOVED BEFORE THE COUNTY WILL ISSUE A CERTIFICATE OF COMPLIANCE FOR FINAL SITE STABILIZATION AS PART OF FINAL INSPECTION AND PROJECT COMPLETION. A DEVELOPERS CONTRACT, AS DESCRIBED IN THE SWP3 AND ESC NOTES SHEET MAY BE EXECUTED WITH TRAVIS COUNTY FOR CONDITIONAL ACCEPTANCE OF A PROJECT FOR WHICH HAS ESC FISCAL SECURITY POSTED AND FOR WHICH ALL ITEMS ARE COMPLETE

25. ALL SUBDIVISION LOTS AND AREAS OUTSIDE THE RIGHT-OF-WAY WHICH ARE DISTURBED DURING THE CONSTRUCTION PROCESS MUST BE INCLUDED IN THE FINAL STABILIZATION/REVEGETATION PLAN OF THE SUBDIVISION FOR FINAL INSPECTION APPROVAL, EXCEPT FOR SUBDIVISION LOTS THAT ARE SUBJECT TO SEPARATE TRAVIS COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), AND ESC PLAN(S).

26. SOIL DATA SOURCES: GEOTECHNICAL ENGINEERING REPORT, THE PROVENCE-PHASE 1 SECTION 4.

27. THE OWNER, UTILITY CONTRACTOR, OR A DESIGNATED REPRESENTATIVE SHALL SUBMIT A NOTICE OF CONSTRUCTION VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383

28. THE WORK WILL NOT BE ACCEPTED AND THE ONE-YEAR WARRANTY PERFORMANCE PERIOD WILL NOT BEGIN UNTIL AFTER THE CONTRACTOR HAS OBTAINED TNR APPROVAL OF THE CONSTRUCTION.

29. THE CONTRACTOR SHALL INSTALL ALL TRAFFIC MARKINGS, BARRICADES, AND SIGNAGE IN ACCORDANCE WITH THE LATEST EDITION OF TXDOT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PRIOR TO TNR APPROVAL OF THE ROADWAY CONSTRUCTION.

EXHIBIT 482.301E SEQUENCE OF CONSTRUCTION AND PRIORITY INSPECTIONS – SUBDIVISION DEVELOPMENT

THE OWNER AND PRIMARY OPERATOR MUST FOLLOW THIS BASIC SEQUENCE OF CONSTRUCTION FOREACH SUBDIVISION DEVELOPMENT. WITHIN THE FOLLOWING SEQUENCE OF CONSTRUCTION ARE LISTED PRIORITY INSPECTIONS THAT THE OWNER AND PRIMARY OPERATOR MUST REQUEST FROM A REPRESENTATIVE OF TRAVIS COUNTY'S STORM WATER MANAGEMENT PROGRAM INSPECTION TEAM. EACH PRIORITY INSPECTION MUST BE REQUESTED ON-LINE THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. THE PRIORITY INSPECTIONS IN THIS EXHIBIT ARE CONSISTENT WITH THE PRIORITY INSPECTIONS FOUND IN THE CUSTOMER PORTAL FOR THE PROJECT. FOR ASSURANCE PURPOSES, A SECOND REQUEST TO TRAVIS COUNTY IS STRONGLY ENCOURAGED BY ADDITIONALLY SENDING AN E-MAIL TO THE FOLLOWING ADDRESS: ENV-INSPECT@TRAVISCOUNTYTX.GOV. THE SEQUENCE FOR ITEMS 1-4 AND ITEMS 17-22 MUST NOT BE ALTERED, BUT THE SEQUENCE FOR ITEMS 5-16 MAY BE MODIFIED WITH THE WRITTEN APPROVAL OF THE COUNTY.

1. ESC INSTALLATION. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS (ESC) AND TREE PROTECTION MEASURES IN ACCORDANCE WITH THE APPROVED ESC PLAN SHEETS AND THE SWP3.
   A. HAVE A QUALIFIED INSPECTOR (AS SPECIFIED IN SECTION 482.934(C)(3) OF THE TRAVIS COUNTY CODE) INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROLS AND PREPARE A CERTIFIED SWP3 INSPECTION REPORT REGARDING WHETHER THE TEMPORARY EROSION AND SEDIMENT CONTROLS WERE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS;
   B. UPLOAD THE QUALIFIED INSPECTOR'S CERTIFIED SWP3 INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY; AND
   C. REQUEST A MANDATORY PRE-CONSTRUCTION MEETING WITH TRAVIS COUNTY THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY GIVING AT LEAST 3 BUSINESS DAYS NOTIFICATION.
2. PRE-CONSTRUCTION MEETING AND ESC INSPECTION. HOLD A MANDATORY PRE-CONSTRUCTION MEETING THAT ADDRESSES THE ITEMS IN EXHIBIT 482.950 AND THE ESC PRE-CONSTRUCTION INSPECTION BY THE COUNTY AND OBTAIN COUNTY'S APPROVAL TO START CONSTRUCTION. (PRIORITY INSPECTION)
3. INSPECT FOR COMPLIANCE WITH SWP3 AND ESC PLAN. MAINTAIN AND INSPECT THE SWP3 CONTROLS AND PREPARE AND UPLOAD A WEEKLY CERTIFIED SWP3 INSPECTION REPORT THAT INCLUDES THE CONTENTS LISTED IN EXHIBIT 482.951 TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY.
4. CONSTRUCT SEDIMENT BASIN(S). CONSTRUCT ANY STORM WATER POND(S) FIRST, WHENEVER APPLICABLE, TO BE FUNCTIONAL AS CONSTRUCTION SEDIMENT BASIN(S) BEFORE GRADING AND EXCAVATING THE ENTIRE SITE, AS FOLLOWS:
   A. CLEAR, GRUB, AND EXCAVATE ONLY THE SITE AREAS AND CUT AND FILL QUANTITIES NECESSARY TO CONSTRUCT THE POND(S) IN ACCORDANCE WITH THESE APPROVED PLANS AND THE MINIMUM STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES FOR THE TEMPORARY SEDIMENT BASIN EMBANKMENTS, WALLS, INFLOWS, OUTFALLS, DRAINAGE CONVEYANCE MEASURES, SEDIMENT CONTROLS, AND STABILIZATION.
   B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE TEMPORARY SEDIMENT BASIN(S) BEFORE PROCEEDING FURTHER IN THE SEQUENCE OF CONSTRUCTION. (PRIORITY INSPECTION)
5. CONSTRUCT SUBDIVISION IMPROVEMENTS. BEGIN THE PRIMARY SUBDIVISION CLEARING, EXCAVATION, AND CONSTRUCTION ACTIVITIES AND CONTINUE THE SWP3 AND ESC PLAN IMPLEMENTATION AND MAINTENANCE PER THE APPROVED PLANS.
6. ROUGH GRADE STREETS.
7. INSTALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT.
8. BEGIN INSTALLATION OF STORM SEWER LINES.
9. REGRADE STREETS TO SUBGRADE.
10. PERFORM TEMPORARY STABILIZATION IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER.
11. PERFORM PERMANENT SITE STABILIZATION/RE-VEGETATION IMMEDIATELY IN ALL SITE AREAS AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED FOR PHASED RE-VEGETATION.
12. COMPLETE UNDERGROUND UTILITY CROSSINGS ON ALL STREETS.
13. INSTALL CURB AND GUTTER.
14. LAY FINAL BASE COURSE MATERIAL.
15. INSTALL ALL TRAFFIC CONTROL SIGNING, STRIPING, AND PAVEMENT MARKERS.
16. COMPLETE ALL UNDERGROUND INSTALLATIONS WITHIN THE RIGHT-OF-WAY.
17. COMPLETE PERMANENT WATER QUALITY CONTROLS. BEGIN COMPLETION OF PERMANENT WATER QUALITY CONTROL(S) AND INSTALL THE UNDERDRAIN PER APPROVED PLANS, WHEN APPLICABLE.
   A. REMOVE CONSTRUCTION SEDIMENT, RE-ESTABLISH THE BASIN SUBGRADE, AND INSTALL UNDERDRAIN PIPING.
   B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE UNDERDRAIN PIPING INSTALLATION AND ASSOCIATED CONSTRUCTION MATERIALS (AGGREGATE, FILTER MEDIA, ETC.) BEFORE COVERING THE UNDERDRAIN AND PROCEEDING WITH CONSTRUCTION OF THE CONTROL. (PRIORITY INSPECTION)
18. COMPLETE FINAL SITE STABILIZATION INCLUDING STABILIZATION OF ALL DISTURBED SUBDIVISION LOTS STILL UNDER THE SWP3 AND ESC PLAN OF THE PRIMARY OPERATOR FOR THE SUBDIVISION STREET AND DRAINAGE CONSTRUCTION.
19. PROVIDE ENGINEER'S CONCURRENCE LETTER THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE AND REQUEST A FINAL INSPECTION BY TRAVIS COUNTY.
20. PERFORM A FINAL INSPECTION WITH THE COUNTY AND PREPARE A PUNCH LIST WITH REMAINING ITEMS THAT NEED TO BE COMPLETED FOR PROJECT ACCEPTANCE. (PRIORITY INSPECTION)
21. OBTAIN A CERTIFICATE OF COMPLIANCE FOR FINAL STABILIZATION FROM THE COUNTY WHEN ALL FINAL INSPECTION PUNCH LIST ITEMS ARE FINISHED AND FINAL SITE STABILIZATION AND REMOVAL OF TEMPORARY SEDIMENT CONTROLS IS COMPLETE. (PRIORITY INSPECTION)
   A. PROVIDE SEPARATE PERMIT DOCUMENTATION FOR ANY SUBDIVISION LOTS NOT STABILIZED AS PART OF THE FINAL SUBDIVISION STABILIZATION PLAN, IF NECESSARY - INCLUDING SEPARATE COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), ESC PLAN(S).
   B. PROVIDE A DEVELOPERS CONTRACT, IF NECESSARY, IF ALL ITEMS ARE COMPLETE EXCEPT RE-VEGETATION COVERAGE AND CONDITIONAL ACCEPTANCE IS REQUESTED. REQUEST RE-INSPECTION WHEN RE-VEGETATION COVERAGE IS COMPLETE.
22. RECEIVE A CONDITIONAL ACCEPTANCE FROM TRAVIS COUNTY TO BEGIN THE CONSTRUCTION WARRANTY PERIOD WHEN ALL PUNCH LIST ITEMS ARE COMPLETE. (PRIORITY INSPECTION).
23. BEFORE PROJECT APPROVAL/ISSUANCE OF THE CERTIFICATE OF COMPLETION (COC) AND FISCAL RELEASE THE FOLLOWING MUST BE COMPLETE;
24. THE OWNER MUST COMPLETE AND SUBMIT A PWQC PERMIT APPLICATION AND PWQC MAINTENANCE PLAN FOR REVIEW AND APPROVAL. BOTH DOCUMENTS MUST BE SUBMITTED AND APPROVED PRIOR TO THE PROJECT FINAL ACCEPTANCE.
25. UPON APPROVAL, THE MAINTENANCE PLAN ALONG WITH THE ORIGINAL NOTARIZED DOCUMENT MUST BE FILED IN THE REAL PROPERTY RECORDS OF TRAVIS COUNTY. PROOF OF FILING MUST BE PROVIDED PRIOR TO THE PROJECT FINAL ACCEPTANCE.
26. THE PWQC MAINTENANCE PERMIT MUST BE SIGNED BY THE SITE OWNER.
27. THE PWQC MAINTENANCE PLAN MUST BE SEALED AND SIGNED BY THE DESIGN ENGINEER.
28. UPON REQUEST A PWQC PERMIT APPLICATION AND/OR A TEMPLATE FOR A PWQC MAINTENANCE PLAN WILL BE PROVIDED OR UPLOADED TO THE MYPERMITNOW.ORG ACCOUNT.

EXHIBIT 482.950 PRE-CONSTRUCTION CONFERENCE PLANNING AND AGENDA FOR SWP3 AND ESC PLAN

BEFORE STARTING CONSTRUCTION, THE OWNER OR THEIR REPRESENTATIVE MUST SUBMIT A REQUEST, USING THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY, TO PARTICIPATE IN A PRE-CONSTRUCTION CONFERENCE WITH THE DESIGNATED COUNTY INSPECTOR. PRIOR TO THE PRE-CONSTRUCTION CONFERENCE REQUEST, THE OWNER OR OWNER'S REPRESENTATIVE SHALL ENSURE THE FIRST PHASE OF THE ESC CONTROLS ARE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS, THE OWNER'S QUALIFIED INSPECTOR HAS INSPECTED THE CONTROLS AND VERIFIED COMPLIANCE WITH THE PLANS, AND AN SWP3 INSPECTION REPORT DOCUMENTING THIS INFORMATION HAS BEEN SENT TO THE COUNTY THROUGH THE METHOD SPECIFIED BY THE DESIGNATED COUNTY INSPECTOR.

AFTER ARRANGING AN AGREED UPON DATE WITH THE COUNTY AND PROVIDING THE INITIAL SWP3 INSPECTION REPORT, THE OWNER OR OWNER'S DESIGNATED REPRESENTATIVE SHALL PROVIDE NOTICE OF THE SWP3 PRE-CONSTRUCTION CONFERENCE AND A COPY OF THE APPROVED PLANS, IF REQUESTED, TO THE FOLLOWING PERSONS OR ENTITIES AT LEAST TWO BUSINESS DAYS BEFORE THE CONFERENCE:

1. DESIGNATED COUNTY INSPECTOR(S)
2. DESIGN ENGINEER FOR THE APPROVED PLANS AND SWP3, OR THEIR REPRESENTATIVE
3. CONTRACTOR(S)/PRIMARY OPERATOR(S)
4. PRIMARY OPERATOR'S QUALIFIED INSPECTOR RESPONSIBLE FOR PREPARING THE SWP3 INSPECTION REPORTS
5. OTHER STAKEHOLDERS, AS APPROPRIATE: MUNICIPALITIES, UTILITIES, ETC.

THE SWP3 PRE-CONSTRUCTION CONFERENCE MAY BE A STANDALONE MEETING OR A PART OF A LARGER PRE-CONSTRUCTION CONFERENCE, BUT MUST INCLUDE AN ON-SITE INSPECTION APPROVAL OF THE FIRST PHASE OF THE PROJECT'S ESC PLAN BY THE COUNTY INSPECTOR BEFORE CONSTRUCTION BEGINS. THE COUNTY INSPECTOR WILL DISCUSS THE FOLLOWING APPLICABLE ITEMS IN THE APPROVED PLANS AND THE SWP3 WITH THE PARTICIPANTS:

1. THE SWP3 SITE NOTEBOOK FOR THE PROJECT, INCLUDING REVIEW OF COMPLETENESS, SIGNATURES, CONSISTENCY WITH THE APPROVED CONSTRUCTION AND ESC PLANS, AND THE REQUIREMENTS FOR MAINTAINING THE SWP3 SITE NOTEBOOK DURING THE CONSTRUCTION PROCESS.
2. THE SEQUENCE OF CONSTRUCTION AND ESC PLAN IMPLEMENTATION; SEDIMENT BASIN CONSTRUCTION SCOPE PRIOR TO FULL SITE GRADING; NON-STRUCTURAL EROSION SOURCE CONTROLS; START DATES AND SCHEDULE OF EVENTS.
3. SEDIMENT CONTROLS; PHASING OF PERIMETER AND INTERIOR SEDIMENT CONTROLS DURING CONSTRUCTION; STRUCTURAL EROSION SOURCE CONTROLS SUCH AS DRAINAGE DIVERSION; ESC MAINTENANCE REQUIREMENTS.
4. ADEQUACY OF THE FIRST ESC PHASE AND FUTURE ESC PHASES TO ADDRESS SPECIFIC SITE CONDITIONS, AND ADJUSTMENT AND REVISION OF THE ESC PLAN AND SWP3 CONTROLS DURING CONSTRUCTION.
5. TEMPORARY AND PERMANENT STABILIZATION AND RE-VEGETATION REQUIREMENTS, INCLUDING SCHEDULE, CRITICAL SITE IMPROVEMENTS AND PRIORITY RE-VEGETATION AREAS.
6. ON AND OFF-SITE TEMPORARY AND PERMANENT SPOIL AND FILL DISPOSAL AREAS, HAUL ROADS, STAGING AREAS, AND STABILIZED CONSTRUCTION ENTRANCES;
7. PERMANENT WATER QUALITY CONTROLS CONSTRUCTION AND COUNTY INSPECTIONS, AND RELATED GRADING AND DRAINAGE CONSTRUCTION.
8. SUPERVISION OF THE SWP3 IMPLEMENTATION BY THE PRIMARY OPERATOR'S DESIGNATED PROJECT MANAGER, INCLUDING ROLES, RESPONSIBILITIES, AND COORDINATION WHEN MORE THAN ONE OPERATOR IS RESPONSIBLE FOR IMPLEMENTATION.
9. INSPECTION AND PREPARATION OF THE WEEKLY SWP3 INSPECTION REPORTS BY THE PRIMARY OPERATOR'S QUALIFIED INSPECTOR; REPORT SUBMITTAL BY THE PRIMARY OPERATOR, AND SWP3 MONITORING INSPECTIONS CONDUCTED BY THE COUNTY INSPECTOR.
10. OBSERVATION AND DOCUMENTATION OF EXISTING SITE CONDITIONS ADJACENT TO THE LIMITS OF CONSTRUCTION BEFORE CONSTRUCTION, INCLUDING WATERWAYS AND POTENTIAL OUTFALL DISCHARGE ROUTES, RIGHTS-OF-WAY AND EASEMENTS, BUFFER ZONES, AND CRITICAL ENVIRONMENTAL FEATURES.
11. SPECIAL SITE CONDITIONS AND PLAN PROVISIONS, SUCH AS PROTECTION OF WATERWAYS, CRITICAL ENVIRONMENTAL FEATURES, TREES TO BE SAVED, AND FUTURE HOMEBUILDING ON SUBDIVISION LOTS.12. RAIN GAGE LOCATION OR RAINFALL INFORMATION SOURCE TO BE USED DURING CONSTRUCTION AND REPORTING.
13. FINAL INSPECTION AND ACCEPTANCE REQUIREMENTS, INCLUDING THE ENGINEER'S CONCURRENCE LETTER, COMPLETION OF REVEGETATION COVERAGE BEFORE THE NOTICE OF TERMINATION IS SUBMITTED BY THE PRIMARY OPERATOR, STABILIZATION OF RESIDENTIAL SUBDIVISION LOTS, REMOVAL OF TEMPORARY SEDIMENT CONTROLS, THE CERTIFICATE OF COMPLIANCE AND RELEASE OF ESC FISCAL SURETY.
14. EXCHANGE OF TELEPHONE NUMBERS AND CONTACT INFORMATION FOR THE PRIMARY PARTICIPANTS.

THE DESIGN ENGINEER SHALL PREPARE AND DISTRIBUTE NOTES, KEY DECISIONS, AND FOLLOW UP FROM THE PRECONSTRUCTION CONFERENCE TO ALL PARTICIPANTS WITHIN THREE BUSINESS DAYS AFTER COMPLETION OF THE CONFERENCE.

EXHIBIT 482.951 SWP3 INSPECTION AREAS AND REPORT CONTENTS

THE OWNER OR PRIMARY OPERATOR OF THE CONSTRUCTION SITE SHALL DESIGNATE A QUALIFIED INSPECTOR POSSESSING THE REQUIRED CERTIFICATION (AS SPECIFIED IN SECTION 482.934(C)(3)) TO PERFORM A WEEKLY SWP3 INSPECTION AND PREPARE A SIGNED SWP3 INSPECTION REPORT OF THE INSPECTION FINDINGS.

THE CONSTRUCTION SITE AREAS AND THE CONTROL MEASURES LISTED HEREIN ARE TO BE USED AS A MINIMUM AS THE UNIFORM CRITERIA BY THE OWNER'S QUALIFIED INSPECTOR, AS WELL AS THE COUNTY INSPECTOR, TO EVALUATE AND DETERMINE A PROJECT'S COMPLIANCE STATUS WITH THE APPROVED SWP3 AND ESC PLAN.

IN ADDITION, ON AN ONGOING BASIS AND FOLLOWING STORM EVENTS, THE PRIMARY OPERATOR'S RESPONSIBLE ON-SITE PERSONNEL SHALL ALSO INSPECT AND ADDRESS THESE ITEMS DURING CONSTRUCTION AS REQUIRED BY THE SWP3, ESC PLAN, AND TRAVIS COUNTY CODE, SECTION 482.951.

AREAS OF INSPECTION. AT THE VERY LEAST, THE FOLLOWING AREAS MUST BE INSPECTED:

1. DISTURBED AREAS AND THE APPROVED LIMITS OF CONSTRUCTION.
2. PERIMETER AND INTERIOR SEDIMENT CONTROLS.
3. AREAS UNDERGOING TEMPORARY STABILIZATION OR PERMANENT VEGETATION ESTABLISHMENT.
4. TEMPORARY AND PERMANENT FILL AND SPOIL STORAGE OR DISPOSAL AREAS.
5. STORAGE AREAS FOR MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO RAINFALL.
6. OUTFALL LOCATIONS AND THE AREAS IMMEDIATELY DOWNSTREAM.
7. STRUCTURAL CONTROLS, INCLUDING SEDIMENT PONDS, SEDIMENT TRAPS, AND DRAINAGE DIVERSIONS.
8. HAUL ROADS AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND ADJACENT ROADWAYS FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
9. WATERWAY CROSSINGS AND AREAS ADJACENT TO WATERWAYS AND CRITICAL ENVIRONMENTAL FEATURES.
10. CONCRETE WASH OUT AREAS AND ALL AREAS REQUIRING CONTROL MEASURES FOR NON-STORM WATER DISCHARGES, INCLUDING DUST, SOLID WASTE, DE-WATERING, MATERIAL SPILLS, VEHICLE MAINTENANCE AND WASHING, AND WASH WATER DISCHARGES.
11. LOCATIONS OF ALL CONTROL MEASURES THAT REQUIRE MAINTENANCE, INCLUDING ANY CONTROL MEASURE IDENTIFIED IN THE PREVIOUS SWP3 INSPECTION REPORT WHICH REQUIRED MAINTENANCE OR REVISION BY THE OWNER OR PRIMARY OPERATOR.
12. LOCATIONS OF ANY DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE AND ANY DISTURBANCE BEYOND THE APPROVED LIMITS OF CONSTRUCTION.
13. LOCATIONS OF CONTROL MEASURES THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION.
14. LOCATIONS WHERE AN ADDITIONAL ESC OR CONTROL MEASURE IS NEEDED.

THE SWP3 INSPECTION REPORT MUST INCLUDE:

A. FINDINGS AS TO WHETHER THE FOLLOWING STRUCTURAL AND NON-STRUCTURAL CONTROLS REQUIRED FOR THE SITE AREAS LISTED ABOVE ARE FUNCTIONING :IN COMPLIANCE WITH THE APPROVED SWP3 AND ESC PLAN:
   1. EROSION SOURCE CONTROLS, INCLUDING THE APPROVED SEQUENCE OF CONSTRUCTION AND GRADING PLAN LIMITS, DRAINAGE DIVERSION MEASURES, TEMPORARY AND PERMANENT FILL DISPOSAL AND STOCKPILE MANAGEMENT MEASURES.
   2. SEDIMENT CONTROLS, INCLUDING PERIMETER AND INTERIOR CONTROLS, SEDIMENT TRAPS AND BASINS, AND THE SEQUENCE OF CONSTRUCTION REQUIREMENTS FOR THE SEDIMENT CONTROLS.
   3. PERMANENT EROSION AND SOIL STABILIZATION CONTROLS, BASED ON THE SEQUENCE OF CONSTRUCTION AND CRITICAL SITE IMPROVEMENTS, AND THE CESSATION OF CONSTRUCTION ACTIVITIES, INCLUDING TEMPORARY STABILIZATION MEASURES FOR AREAS INACTIVE FOR LONGER THAN 14 DAYS, AND PERMANENT STABILIZATION MEASURES FOR AREAS AT FINAL GRADE.
   4. OTHER APPLICABLE CONTROLS AND POLLUTION PREVENTION MEASURES.

B. RAINFALL DOCUMENTATION:
   1. FOR PROJECTS THAT COMPRISE TEN ACRES OR MORE, THE DOCUMENTATION MUST INCLUDE RAINFALL DATES AND AMOUNTS IN ACCORDANCE WITH SECTION 482.934(E); AND
   2. FOR PROJECTS THAT COMPRISE LESS THAN TEN ACRES, THE DOCUMENTATION MUST INCLUDE ACCURATE RAINFALL DATA FROM A LOCATION CLOSEST TO THE SITE.

C. CORRECTIVE ACTIONS REQUIRED FOR ANY NON-COMPLIANT ITEMS AND THE SCHEDULE FOR

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."

2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].

3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [§290.44(A)(2)].

4. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY [§290.44(A)(3)].

5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].

6. WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [§290.44(A)(4)].

7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [§290.44(B)].

8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].

9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].

10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [§290.44(F)(2)].

11. PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS.

    - THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

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

      WHERE:
      - Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
      - L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
      - D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
      - P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

    - THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-600 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

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

      WHERE:
      - L = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
      - S = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
      - D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
      - P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED MUST MEET §290.44(E)(1)-(4).

13. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT [§290.44(E)(5)].

14. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION[§290.44(E)(6)].

15. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE [§290.44(E)(7)].

16. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAIN FIELDS [§290.44(E)(8)].

17. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14 OR MOST RECENT, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].

18. DECHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

Texas Commission on Environmental Quality
Contributing Zone Plan
General Construction Notes

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any ground disturbance or construction activities. This notice must include:
    - the name of the approved project;
    - the activity start date; and
    - the contact information of the prime contractor.

2. All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan (CZP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on- site.

3. No hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.

4. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.

5. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.

6. Sediment must be removed from the sediment traps or sedimentation basins when it occupies 50% of the basin's design capacity.

7. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.

8. All excavated material that will be stored on-site must have proper E&S controls.

9. If portions of the site will have a cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.

10. The following records should be maintained and made available to the TCEQ upon request:
    - the dates when major grading activities occur;
    - the dates when construction activities temporarily or permanently cease on a portion of the site; and
    - the dates when stabilization measures are initiated.

11. The holder of any approved CZP must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

    A. any physical or operational modification of any best management practices (BMPs) or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;

    B. any change in the nature or character of the regulated activity from that which was originally approved;

    C. any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer; or

    D. any development of land previously identified as undeveloped in the approved contributing zone plan.

Austin Regional Office
12100 Park 35 Circle, Building A
Austin, Texas 78753-1808
Phone (512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office 14250 Judson Road
San Antonio, Texas 78233-4480 Phone (210) 490-3096
Fax (210) 545-4329

TCEQ 217.53(d) SEPARATION DISTANCES

(1) Collection system pipes must be installed in trenches separate from water supply trenches.
(2) Wherever possible, a collection system pipe must be located below a water supply pipe. If a collection system pipe cannot be located below a water supply pipe, the owner must justify in the engineering report why it is not possible to locate the collection system pipe below the public water supply pipe.
(3) Wherever possible, collection system pipes and manholes must be located at least nine feet from all water supply pipes. If a collection system pipe or manhole cannot be located at least nine feet away from a water supply pipe, the owner must justify in the engineering report why it is not possible to provide at least nine feet of separation. Table C.1. in Figure: 30 TAC §217.53(d)(3) provides a reference to paragraphs in this subsection that apply if a collection system pipe or manhole cannot be located at least nine feet away from a water supply pipe.

Table C.1.

Case	Protection Requirement
Parallel pipes within nine feet, where the collection system pipe is above the water supply pipe	Encased in a casing pipe according to paragraph (4) of this subsection
Crossing pipes within nine feet, where the collection system pipe is above the water supply pipe	Encased in a casing pipe according to paragraph (5)(A) of this subsection -or- Constructed using 150 per square inch (psi) pressure class pipe according to paragraph (5)(B) of this subsection
Parallel pipes within nine feet, where the collection system pipe is below the water supply pipe	Constructed using 150 psi pressure class pipe according to paragraph (6)(A) of this subsection -or- Encased in a casing pipe according to paragraph (6)(B) of this subsection
Crossing pipes within nine feet, where the collection system pipe is below the water supply pipe	Constructed using 150 psi pressure class pipe according to paragraph (7)(A) of this subsection -or- Encased in cement-stabilized sand according to paragraph (7)(B) of this subsection -or- Encased in a casing pipe according to paragraph (7)(C) of this subsection
Manhole within nine feet of a water supply pipe	No measurable leakage according to paragraph (8)(A) of this subsection -or- Encased in cement-stabilized sand according to paragraph (8)(B) of this subsection

(4) If a collection system pipe is located above a water supply pipe and runs parallel to the water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must be encased. The casing pipe must be constructed of at least 150 per square inch (psi) pressure class pipe that:
(A) encases the entire length of collection system pipe that is within nine feet of the water supply pipe;
(B) is sealed at both ends with cement grout or a manufactured seal;
(C) is at least two nominal sizes larger than the wastewater collection pipe; and
(D) is supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.
(5) If a collection system pipe crosses above a water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must either be encased in a casing pipe according to subparagraph (A) of this paragraph, or must be constructed using at least 150 psi pressure class pipe according to subparagraph (B) of this paragraph.
(A) A casing pipe for a collection system pipe that crosses above a water supply pipe must be constructed of at least 150 psi pressure class pipe that is:
(i) sealed at both ends with cement grout or a manufactured seal;
(ii) at least two nominal sizes larger than the wastewater collection pipe; and
(iii) supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.
(B) A collection system pipe that crosses above a water supply pipe must be constructed of at least 150 psi pressure class, corrosion-resistant, non-brittle pipe and must use manufacturer-approved adapters. Gasketed joints, compression joints, and other non-bonded joints must be designed to seal at atmospheric pressure.
(6) If a collection system pipe is located below a water supply pipe and runs parallel to the water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must either be constructed using at least 150 psi pressure class pipe according to subparagraph (A) of this paragraph, or must be encased in a casing pipe according to subparagraph (B) of this paragraph.
(A) A collection system pipe that runs parallel to and below a water supply pipe must be constructed of at least 150 psi pressure class, corrosion-resistant, non-brittle pipe that:
(i) is located at least two vertical feet below the water supply pipe;
(ii) is located at least four horizontal feet away from the water supply pipe; and
(iii) includes joints that are designed to seal at atmospheric pressure.
(B) A casing pipe for a collection system pipe that runs parallel below a water supply pipe must be constructed of at least 150 psi pressure class pipe that:
(i) is sealed at both ends with cement grout or a manufactured seal;
(ii) is at least two nominal sizes larger than the wastewater collection pipe; and
(iii) is supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.
(7) If a collection system pipe crosses below a water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must either be constructed using at least 150 psi pressure class pipe according to subparagraph (A) of this paragraph, or must be encased in cement-stabilized sand according to subparagraph (B) of this paragraph, or must be encased in a casing pipe according to subparagraph (C) of this paragraph.
(A) A collection system that crosses below a water supply pipe and is constructed of at least 150 psi pressure class, corrosion-resistant, non-brittle pipe must:
(i) have at least six inches of separation between the outsides of the pipes;
(ii) be centered on the crossing;
(iii) be at least 18 feet long; and
(iv) terminate at joints that are designed to seal at atmospheric pressure.
(B) A collection system pipe that crosses below a water supply pipe and is constructed of any material other than at least 150 psi pressure class, corrosion-resistant, non-brittle pipe must:
(i) have at least two feet of separation between the outsides of the pipes; and
(iii) be encased in cement-stabilized sand backfill that meets the requirements of subparagraph (D) of this paragraph.
(C) A casing pipe for a collection system pipe that crosses below a water supply pipe must be constructed of at least 150 psi pressure class pipe that is:
(i) sealed at both ends with cement grout or a manufactured seal;
(ii) at least two nominal sizes larger than the wastewater collection pipe; and
(iii) supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.
(D) Cement-stabilized sand for encasing collection system pipes must:
(i) include at least 160 pounds of cement for every cubic yard of sand;
(ii) be installed beginning one-quarter pipe diameter below the centerline of the collection system pipe;
(iii) be installed ending one full pipe diameter above the top of the collection system pipe, or 12 inches above the top of the collection system pipe, whichever is greater.
(8) If a nine-foot separation distance between a manhole and a water supply pipe cannot be achieved, the manhole must either:
(A) have no measurable leakage during a leakage test conducted according to the requirements in §217.58 of this title (relating to Testing Requirements for Manholes); or
(B) have all portions of the manhole within nine feet of a water supply pipe encased in at least one foot of cement stabilized sand that meets the requirements of paragraph (7)(D)(i) and (ii) of this subsection.

TCEQ NOTES:

1. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.

2. ALL PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST ALSO BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS.

3. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.

4. WATER TRANSMISSION AND DISTRIBUTION LINES MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE.

5. THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY AWWA FORMULAS.

6. ALL WATER LINES SHALL BE HYDROSTATIC LEAK TESTED IN CONFORMANCE WITH AWWA C600-93 FOR DUCTILE IRON PIPE AND AWWA C605-94 FOR PVC PIPE.

7. ALL WATER LINES SHALL BE DISINFECTED IN CONFORMANCE WITH AWWA C651-92.

TCEQ 290.44 (on the plans):

(e) Location of waterlines. The following rules apply to installations of waterlines, wastewater mains or laterals, and other conveyances/appurtenances identified as potential sources of contamination. Furthermore, all ratings specified shall be defined by ASTM or AWWA standards unless stated otherwise. New mains, service lines, or laterals are those that are installed where no main, service line, or lateral previously existed, or where existing mains, service lines, or laterals are replaced with pipes of different size or material.
(1) When new potable water distribution lines are constructed, they shall be installed no closer than nine feet in all directions to wastewater collection facilities. All separation distances shall be measured from the outside surface of each of the respective pieces.
(2) Potable water distribution lines and wastewater mains or laterals that form parallel utility lines shall be installed in separate trenches.
(3) No physical connection shall be made between a drinking water supply and a sewer line. Any appurtenance shall be designed and constructed so as to prevent any possibility of sewage entering the drinking water system.
(4) Where the nine-foot separation distance cannot be achieved, the following criteria shall apply.
(A) New waterline installation - parallel lines.
(i) Where a new potable waterline parallels an existing, non-pressure or pressure rated wastewater main or lateral and the licensed professional engineer licensed in the State of Texas is able to determine that the existing wastewater main or lateral is not leaking, the new potable waterline shall be located at least two feet above the existing wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the existing wastewater main or lateral. Every effort shall be exerted not to disturb the bedding and backfill of the existing wastewater main or lateral.
(ii) Where a new potable waterline parallels an existing pressure-rated wastewater main or lateral and it cannot be determined by the licensed professional engineer if the existing line is leaking, the existing wastewater main or lateral shall be replaced with at least 150 psi pressure-rated pipe. The new potable waterline shall be located at least two feet above the new wastewater line, measured vertically, and at least four feet away, measured horizontally, from the replaced wastewater main or lateral.
(iii) Where a new potable waterline parallels a new wastewater main, the wastewater main or lateral shall be constructed of at least 150 psi pressure-rated pipe. The new potable waterline shall be located at least two feet above the wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the wastewater main or lateral.
(B) New waterline installation - crossing lines.
(i) Where a new potable waterline crosses above a wastewater main or lateral, the segment of the waterline pipe shall be centered over and must be perpendicular to the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. When crossing an existing wastewater main or lateral and it is disturbed or shows signs of leaking, the wastewater main or lateral shall be replaced for at least nine feet in both directions (18 feet total) with at least 150 psi pressure-rated pipe embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.
(I) The potable waterline shall be at least two feet above an existing, non-pressure rated wastewater main or lateral.
(II) The potable waterline shall be at least six inches above an existing, pressure-rated wastewater main or lateral.
(ii) Where a new potable waterline crosses a new, non-pressure rated wastewater main or lateral, the segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. The potable waterline shall be at least two feet above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end. The materials and method of installation shall conform to one of the following options:
(I) Within nine feet horizontally of either side of the waterline, the wastewater pipe and joints shall be constructed with pipe material having a minimum pressure rating of at least 150 psi. An absolute minimum vertical separation distance of two feet shall be provided. The wastewater main or lateral shall be located below the waterline.
(II) All sections of wastewater main or lateral within nine feet horizontally of the waterline shall be encased in an 18-foot (or longer) section of pipe. Flexible encasing pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The encasing pipe shall be centered on the waterline and shall be at least two nominal pipe diameters larger than the wastewater main or lateral. The space around the carrier pipe shall be supported at five-foot (or less) intervals with spacers or be filled to the springline with washed sand. Each end of the casing shall be sealed with watertight non-shrink cement grout or a manufactured watertight seal. An absolute minimum separation distance of six inches between the encasement pipe and the waterline shall be provided. The wastewater line shall be located below the waterline.
(iii) When a new waterline crosses under a wastewater main or lateral, the waterline shall be encased as described for wastewater mains or laterals in clause (ii) of this subparagraph or constructed of ductile iron or steel pipe with mechanical or welded joints as appropriate. An absolute minimum separation distance of one foot between the waterline and the wastewater main or lateral shall be provided. When a new waterline crosses under a wastewater main, the procedures in §217.53(d) of this title (relating to Pipe Design) must be followed.
(iv) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.
(v) Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.
(5) Waterline and wastewater main manhole or lateral manhole or cleanout separation. The separation distance from a potable waterline to a wastewater main manhole or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant.
(6) Location of fire hydrants. Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater main, wastewater lateral, or wastewater service line regardless of construction.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 1
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

GENERAL NOTES SHEET 2 OF 3

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY: XX	DRAWN BY: XX	CHECKED BY: XX	BY

Sheet 6 of 59

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TRAVIS COUNTY MUD NO. 22 NOTES:

1. CALL TRAVIS COUNTY M.U.D. 22 ENGINEER (512–439–4700) AND DISTRICT MANAGER WTCPUA (512–263–0100) AT LEAST 48 HOURS PRIOR TO TYING INTO EXISTING WATER AND WASTEWATER LINES.
2. CAMERA AND MANDREL TESTING IS REQUIRED FOR GRAVITY WASTEWATER LINES, AT CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL CONTACT WTCPUA AT (512–263–0100) FOR TEMPORARY CONSTRUCTION METER AND CONSTRUCTION WATER.

TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 SUBDIVISION WATER SYSTEM PLAN NOTES

1. AN ALL–WEATHER DRIVING SURFACE (FIRE APPARATUS ACCESS) MUST BE INSTALLED IN LOCATIONS SHOWN ON THE SITE PLAN, PRIOR TO ANY BUILDING CONSTRUCTION BEYOND THE FOUNDATION.
2. VERTICAL CLEARANCE REQUIRED FOR FIRE APPARATUS IS 13 FEET, SIX INCHES FOR FULL 25 FEET WIDTH OF ACCESS DRIVES AND ROUTES FOR INTERNAL CIRCULATION.
3. THE MAXIMUM ALLOWABLE DRIVEWAY, DRIVE AISLE OR FIRE LANE GRADE IS 15 PERCENT.
4. A CERTIFIED OR WITNESSED PRESSURE TEST IS REQUIRED FOR ALL WATER MODELS, REQUIRED FIRE HYDRANT FLOW TESTS OR SPRINKLER SYSTEM DESIGNS.
5. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.
6. FIRE HYDRANTS MUST BE INSTALLED WITH THE FOUR AND ONE–HALF INCH STEAMER OPENING AT LEAST 18 INCHES ABOVE FINISHED GRADE. THE FOUR AND ONE–HALF INCH STEAMER OPENING MUST FACE THE STREET WITH A THREE TO SIX FOOT SETBACK (CLEARANCE) FROM THE CURB LINE OR SHOULDER OF THE STREET.
7. NO OBSTRUCTION WITHIN A THREE–FOOT RADIUS OF ANY FIRE HYDRANT, AND THE FOUR AND ONE–HALF INCH STEAMER OPENING MUST BE TOTALLY UNOBSTRUCTED FROM THE STREET.
8. FIRE HYDRANT LOCATIONS SHALL BE IDENTIFIED BY THE INSTALLATION OF BLUE REFLECTIVE MARKERS, PER FIRE DEPARTMENT SPECIFICATIONS.
9. FIRE HYDRANTS SHALL BE PAINTED SILVER.THE BONNET AND CAPS SHALL BE PAINTED THE DESIGNATED COLOR PER THE GALLONS PER MINUTE (GPM) AS FOLLOWS:

CLASS AA	LIGHT BLUE	1500 OR HIGHER GPM
CLASS A	GREEN	1000–1499 GPM
CLASS B	ORANGE	500–999 GPM
CLASS C	REDLESS	THAN 500 GPM
CLASS D	BLACK	OUT OF SERVICE

CONTACT INFORMATION

FACILITIES OWNER: NAME/ADDRESS/PHONE
WEST TRAVIS COUNTY PUA
13215 BEE CAVE PARKWAY
BUILDING 2, SUITE 110
BEE CAVE, TEXAS 78738
512/263–0100
GENERALMANAGER@WTCPUA.ORG

LAND OWNER: NAME/ADDRESS/PHONE
OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: NAME/PHONE

MAINTENANCE:
PERSON OR FIRM RESPONSIBLE FOR EROSION/ SEDIMENTATION CONTROL CONTRACTOR:
NAME/ ADDRESS/ PHONE

MAINTENANCE:
PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION CONTRACTOR: NAME/ ADDRESS/ PHONE

SPOILS MANAGEMENT AND DISPOSAL NOTES

1. TEMPORARY HOLDING SITES AS NECESSARY TO STOCKPILE EXCAVATED SOILS, EMBEDMENT MATERIAL, AND/OR PIPING AND APPURTENANCES MAY BE LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS.
2. NO PERMANENT SPOILS DISPOSAL SHALL BE ALLOWED ON–SITE, UNLESS APPROVED BY THE OWNER AND GOVERNING AUTHORITY.
3. ALL SPOILS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL DISPOSAL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE; AND SHALL NOTIFY THE OWNER AND/OR ENGINEER AT LEAST FORTY–EIGHT (48) HOURS PRIOR TO DISPOSAL OF ANY SPOILS MATERIAL.

EROSION / SEDIMENTATION CONTROL NOTES

1. SEE SHEET 12

STANDARD TREE PROTECTION NOTES

1. SEE SHEET 12

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTCPUA) NOTES

HOURS OF CONSTRUCTION

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

LIMITS OF CONSTRUCTION

1. THE LIMITS OF CONSTRUCTION SHALL BE BOUNDED BY THE RIGHT OF WAY LINE OR PERMANENT / TEMPORARY CASEMENT LIMITS SHOWN ON THE PLANS. LIMITS OF CONSTRUCTION MAY BE FURTHER RESTRICTED BY PLACEMENT OF SILT FENCE, TREE PROTECTION FENCING, OR OTHER APPURTENANCES AS SHOWN ON THE PLANS.
2. LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED BY THE CONTRACTOR BY INSTALLING SILT FENCE, ORANGE TENSAR FENCING (4 – FOOT ROLL TIED TO 6–FOOT POSTS SET AT 10–FOOT INTERVALS) OR OTHER BARRIERS AS APPROVED BY THE ENGINEER. ALL TEMPORARY BARRIERS SHALL BE REMOVED AT THE END OF THE PROJECT.
3. ANY AREAS OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED BY THE CONTRACTOR SHALL IMMEDIATELY BE RESTORED TO PRECONSTRUCTION CONDITION.

SANITARY FACILITIES

1. PROVISIONS SHALL BE MADE FOR NECESSARY SANITARY CONVENIENCES FOR THE USE OF LABORERS ON THE WORK. THE FACILITIES MUST BE PROPERLY SECLUDED FROM PUBLIC OBSERVATION AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR.

PROTECTION OF BORE PITS

1. INSTALL BARRIER FENCING (TENSAR ORANGE FENCING OR CHAIN LINK FENCING) TO SURROUND THE BORE PITS. BARRIER FENCING SHALL REMAIN IN PLACE AT ALL TIMES WHILE THE BORE PIT IS OPEN. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY AND SAFETY AT THE BORE PITS.

HORIZONTAL CONTROLS

1. ALL LINEWORK SHALL BE STAKED PRIOR TO CONSTRUCTION WITH SEALED CUT SHEETS PROVIDED TO THE WTCPUA INSPECTOR PRIOR TO CONSTRUCTION.

CONSTRUCTION SEQUENCING

1. 48 HOURS PRIOR TO BEGINNING ANY WORK, CALL THE ONE–CALL BOARD OF TEXAS AT 811 OR 1–800–545–6005 FOR UTILITY LOCATIONS AND OBTAIN STREET CUT PERMIT FOR ANY WORK WITHIN CITY, COUNTY, AND/OR STATE RIGHT–OF–WAY.
2. INSTALL TEMPORARY EROSION CONTROLS AND TREE/NATURAL AREA PROTECTION FENCING PRIOR TO PRE– CONSTRUCTION MEETING AND PRIOR TO ANY SITE CLEARING, GRUBBING, EXCAVATION, MATERIAL STOCKPILING, OR OTHER CONSTRUCTION OPERATIONS.
3. SCHEDULE AND CONVENE A PRECONSTRUCTION MEETING INCLUDING BUT NOT LIMITED TO THE OWNER'S REPRESENTATIVE, ENGINEER, WTCPUA REPRESENTATIVE, FIRE DEPARTMENT, CITY, COUNTY, TXDOT REPRESENTATIVE, AND TCEQ REPRESENTATIVE, AS APPLICABLE.
4. INSTALL TRAFFIC CONTROL MEASURES.
5. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO INITIATING CONSTRUCTION.
6. ROUGH CUT WATER QUALITY PONDS AND DIRECT RUNOFF TO PONDS TO ACT AS A SEDIMENT TRAP.
7. REMOVE AND STOCKPILE TOPSOIL IN AREAS AS REQUIRED.
8. ROUGH CUT ROADS/SITE, AS NECESSARY.
9. INSTALL ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE WTCPUA WHEN SWITCHING SERVICE TO THE WTCPUA SYSTEM. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS/FACILITIES TO ENSURE SERVICE IS MAINTAINED DURING SWITCHOVER.
10. COMPLETE ALL UNDERGROUND INSTALLATIONS, INCLUDING INSTALLATION OF SLEEVES.
11. COMPLETE SUBGRADE.
12. COMPLETE 1ST COURSE BASE.
13. COMPLETE FINAL COURSE BASE.
14. LAY PAVEMENT AND/OR COMPLETE ANY PAVEMENT REPAIR.
15. COMPLETE WATER QUALITY PONDS.
16. COMPLETE PERMANENT EROSION CONTROL AND SITE RESTORATION.
17. REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROLS.
18. COMPLETE ANY NECESSARY FINAL DRESS UP OF AREAS DISTURBED BY CONSTRUCTION OPERATIONS.

TRAFFIC CONTROL NOTES (INCLUDE IF APPLICABLE)

1. PLANS SHALL INDICATE RESPONSIBLE AGENT FOR TRAFFIC CONTROL (ENGINEER OR CONTRACTOR).
2. CONTRACTOR SHALL MAINTAIN REASONABLE LOCAL VEHICULAR TRAFFIC THROUGHOUT CONSTRUCTION OPERATIONS.
3. CONTRACTOR SHALL PROVIDE SIGNS, BARRICADES, FLAGGERS, AND OTHER MEASURES AS REQUIRED TO ALLOW FOR VEHICULAR AND PEDESTRIAN TRAFFIC TO PROCEED SAFELY WITH MINIMUM INCONVENIENCE.
4. SIGNS, BARRICADES, FLAGGERS, AND RELATED WORK SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WITH THE REQUIREMENTS OF THE GOVERNING CITY/COUNTY.
5. FOR ANY ACTIVITY WITHIN TXDOT RIGHT–OF–WAY, PROJECT MUST HA', E A TXDOT PERMIT. A COPY OF THE TXDOT PERMIT SHALL BE PROVIDED TO THE WTCPUA PRIOR TO CONSTRUCTION.

SWPPP NOTES

THIS PROJECT IS SUBJECT TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES) GENERAL PERMIT TXR150000 FOR CONSTRUCTION ACTIVITIES. THE GENERAL PERMIT REQUIRES THE PREPARATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH HAS BEEN PROVIDED BY THE OWNER FOR USE BY THE CONTRACTOR. THE OWNER SHALL PROVIDE THE OWNER'S NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) TO THE TCEQ. THE CONTRACTOR'S RESPONSIBILITIES ARE AS FOLLOWS:

1. MAINTAIN A COPY OF THE SWPPP AND A SET OF CONSTRUCTION PLANS WITH THE TEMPORARY EROSION AND SEDIMENT CONTROL PLAN AT THE WORK SITE AT ALL TIMES.
2. FILE A NOTICE OF INTENT (NOI) AND APPLICABLE PAYMENT TO THE TCEQ AT LEAST 2 DAYS PRIOR TO SITE DISTURBANCE.
3. POST A COPY OF THE OWNER'S AND CONTRACTOR'S NOI FORMS AT THE WORK SITE.
4. SIGN THE CERTIFICATION AND OBTAIN A SIGNED CERTIFICATION STATEMENT FROM ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL MEASURES WHICH INDICATES THAT THE CONTRACTOR AND SUBCONTRACTOR UNDERSTANDS THE PERMIT REQUIREMENTS (FORMS ARE IN THE SWPPP)
5. FOLLOW AND COMPLY WITH ALL ASPECTS OF THE TPDES GENERAL PERMIT NO. TXR150000. THIS INCLUDES BUT IS NOT LIMITED TO FIELD INSPECTIONS AND REPORT, MAINTAINING AND REPAIRING EROSION CONTROLS AND UPDATING EROSION CONTROL PLAN SHEETS BASED ON FIELD CHANGES AND MODIFICATIONS.
6. FILE A COPY OF THE CONTRACTOR'S NOTICE OF TERMINATION (NOT) WITH THE TCEQ ONCE THE WORK IS COMPLETED IN ACCORDANCE WITH THE TPDES GENERAL PERMIT NO TXR.150000 AND HAS BEEN ACCEPTED BY THE OWNER.

WTCPUA WATER & WASTEWATER GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE STATE STATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.). COPIES OF O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AUSTIN AREA OFFICE – LA COSTA GREEN BLDG 1033, LA POSADA DR, SUITE 375, AUSTIN, TEXAS 78752–3832, 512– 374–0271.
2. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND TO THE STATE LAW, (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436 ©) AND THE NEED FOR EFFECTIVE PRECAUTIONARY MEASURES WHEN OPERATING IN THE VICINITY OF ELECTRICAL LINES. THE CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY REQUIREMENTS, AND FOR COORDINATION OF ALL WORK WITH THE APPROPRIATE ELECTRIC UTILITY COMPANY.
3. THE CONTRACTOR SHALL CONTACT THE ONE–CALL BOARD OF TEXAS AT 811 OR 1–800–545–6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. THE LOCATION AND TYPE OF UTILITIES AND UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE NOT GUARANTEED TO BE ACCURATE OR ALL– INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. IN ADDITIONAL TO NORMAL PRECAUTIONS WHEN EXCAVATING, USE EXTRA CAUTION WHEN EXCAVATING WITHIN 25 FEET OF ANY UTILITIES SHOWN ON THE PLANS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO WATER, GAS, ELECTRICAL, TELEPHONE, CABLE TELEVISION, AND STREET AND DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER AND WTCPUA INSPECTOR WITHIN TWENTY–FOUR (24) HOURS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOIL MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR AT LEAST FORTY–EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL. NO SPOILS ARE TO REMAIN OVERNIGHT IN THE FLOODPLAIN.
6. NO BLASTING OR BURNING WILL BE ALLOWED.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, AT HIS EXPENSE, ALL UTILITIES, PAVEMENT, CURB, FENCES OR ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE CONSTRUCTION PLANS.
8. WHENEVER EXISTING UTILITIES, INDICATED OR NOT ON PLANS, PRESENT OBSTRUCTIONS TO GRADE AND/OR ALIGNMENT OF PROPOSED PIPE, CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER WHO WILL DETERMINE IF EXISTING IMPROVEMENTS ARE TO BE RELOCATED OR IF THE GRADE AND/OR ALIGNMENT OF PROPOSED PIPE IS TO BE CHANGED.
9. DUST PREVENTION SHALL BE PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE. DUST CONTROL SHALL INCLUDE SPRAYING OF WATER ON ALL DISTURBED AREAS, SPOIL PILES, OR HAUL MATERIALS ASSOCIATED WITH THE PROJECT OR OTHER METHODS APPROVED BY THE WTCPUA.
10. CLEANUP – UPON COMPLETION AND BEFORE MAKING APPLICATION FOR ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL CLEAN ALL STREETS AND ALL GROUND OCCUPIED BY HIM IN CONNECTION WITH THE WORK OF ALL RUBBISH, EXCESS MATERIALS, EXCESS EXCAVATED MATERIALS, TEMPORARY STRUCTURES AND EQUIPMENT. ALL PARTS OF THE WORK SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE WTCPUA AND OTHER GOVERNMENTAL BODIES HAVING JURISDICTION PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MINIMIZE DISRUPTION OF DELIVERIES, PARKING, AND OTHER ACTIVITIES.
12. DEWATERING, IF NECESSARY, SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT.
13. THE MINIMUM DEPTH OF COVER FROM TOP OF PIPE TO FINISHED GRADE FOR ALL WATER LINES SHALL BE FOUR FEET. INSTALL LINES TO AVOID HIGH POINTS.
14. CONCRETE SHALL BE CLASS 'A' WITH A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 3,000 PSI, UNLESS OTHERWISE NOTED. '
15. REINFORCING STEEL SHALL BE ASTM A 615M, GRADE 60 UNLESS OTHERWISE NOTED.
16. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE WTCPUA MUST RELY ON THE ADEQUACY OF THE DESIGN ENGINEER. APPROVAL OF THESE PLANS BY THE WTCPUA DOES NOT RELEASE THE DESIGN ENGINEER OF THESE RESPONSIBILITIES.

WEST TRAVIS COUNTY PUA WATER AND WASTEWATER UTILITY NOTES

1. WEST TRAVIS COUNTY PUA IS THE WATER AND / OR WASTEWATER SERVICE PROVIDER FOR THIS PROJECT. A PRE–CONSTRUCTION MEETING WITH THE WTCPUA SHALL BE HELD PRIOR TO COMMENCEMENT OF CONSTRUCTION TO SCHEDULE INSPECTION OF INSTALLATION OF WATER/WASTEWATER FACILITIES. WATER FACILITIES WILL BE INSPECTED UP TO, AND INCLUDING, THE WATER METER AND/OR FIRE HYDRANTS. THE CONTACT NUMBER FOR WTCPUA IS (512) 263– 0100.
2. THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND STANDARD DETAILS CURRENT AT THE TIME OF CONSTRUCTION SHALL GOVERN MATERIALS AND METHODS USED TO PERFORM THIS WORK. CITY OF AUSTIN SPECIFICATIONS AND STANDARD DETAILS ARE AVAILABLE AT **HTTPS://LIBRARY.MUNICODE.COM/TX/AUSTIN/CODES/**
3. CONTRACTOR SHALL OBTAIN ALL APPROVALS AND PERMITS, INCLUDING BUT NOT LIMITED TO STREET/DRIVEWAY CUT AND UTILITY CUT PERMITS FROM THE APPROPRIATE GOVERNMENTAL AGENCY BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT–OF–WAY OF A PUBLIC STREET OR ALLEY.
4. THE WTCPUA SHALL BE CONTACTED AT (512) 263–0100 AT LEAST 48 HOURS BEFORE CONNECTING TO THEIR EXISTING WATER AND/OR WASTEWATER FACILITIES.
5. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 811 OR 1–800–545–6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. IN ADVANCE OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
6. NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND/OR WASTEWATER SERVICES.
7. WHERE WATER LINES AND SEWER LINE ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC §217.53(D) (PIPE DESIGN) AND 30 TAC §290.44(E) (WATER DISTRIBUTION). ANY DEVIATION THESE STANDARDS SHALL REQUIRE A VARIANCE APPROVED BY TCEQ BEFORE SUBMITTING PIPING ASSIGNMENTS TO THE WTCPUA.
8. THE CITY OF AUSTIN SPECIFICATION ITEM 509S WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE. CONTRACT DOCUMENTS, WHICH INCLUDE A TRENCH SAFETY PLAN SIGNED AND SEALED BY A TEXAS PROFESSIONAL ENGINEER AND A PAY ITEM FOR TRENCH SAFETY MEASURES, IN COMPLIANCE WITH OSHA, STATE, COUNTY, AND CITY REQUIREMENTS BEFORE BEGINNING WORK ON THE PROJECT.
9. ALL MATERIAL TESTS, INCLUDING SOIL DENSITY TESTS AND RELATED SOIL ANALYSIS, SHALL BE ACCOMPLISHED BY AN INDEPENDENT LABORATORY FUNDED BY THE OWNER IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 1804S.4.
10. CONNECTIONS TO EXISTING WTCPUA WATER LINES SHALL BE MADE BY CUT–IN TEES IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(24). ISOLATION VALVES SHALL BE INSTALLED ON THE ENDS OF THE CUT–IN TEE, AS NECESSARY. A SHUT–OUT VALVE PLAN SHALL BE PROVIDED SHOWING THE LOCATION OF EXISTING GATE VALVES IN THE VICINITY OF THE CONNECTION. THE SHUT–OUT PLAN SHALL IDENTIFY ALL AFFECTED PROPERTY OWNERS. CONTRACTOR SHALL PERFORM ALL WORK AND SHALL FURNISH ALL MATERIALS, INCLUDING DRAINING AND CUTTING INTO EXISTING PIPING AND CONNECTING A NEW PIPELINE OR OTHER EXTENSION INTO THE EXISTING PRESSURE PIPING, FORMING AN ADDITION TO THE POTABLE WATER TRANSMISSION AND DISTRIBUTION NETWORK AND PERFORMING NECESSARY SHUTOFFS. CONTRACTOR SHALL SCHEDULE ALL SUCH CONNECTIONS IN ADVANCE AND SUCH SCHEDULE SHALL BE APPROVED BY THE WTCPUA BEFORE BEGINNING THE WORK. AT LEAST 72 HOURS– NOTICE SHALL BE GIVEN TO THE WTCPUA PRIOR TO MAKING THE CONNECTION, AND A REPRESENTATIVE FROM THE WTCPUA SHALL BE PRESENT WHEN THE CONNECTION IS MADE. PRESSURE TAPS MAY BE APPROVED ON A CASE– BY–CASE BASIS. "SIZE ON SIZE" TAPS WILL NOT BE PERMITTED. WHEN APPROVED, ANY TAPS SHALL BE MADE BY USE OF AND APPROVED FULL CIRCLE, GASKETED CAST IRON OR DUCTILE IRON TAPPING SLEEVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES PRIOR TO MAKING THE PRESSURE TAP AND THE USE OF PRECAST BLOCKS MAY BE USED TO HOLD THE TAP IN ITS CORRECTION POSITION PRIOR TO BLOCKING. THE BLOCKING BEHIND AND UNDER THE TAP SHALL HAVE A MINIMUM OF 24 HOURS CURING TIME BEFORE THE VALVE CAN BE REOPENED FOR SERVICE FROM THAT TAP.
11. THRUST RESTRAINT SHALL BE BY METAL THRUST RESTRAINTS IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(22).
12. FIRE HYDRANTS SHALL BE SET IN ACCORDANCE WITH CITY OF STANDARD SPECIFICATION ITEM 51LS.3 E AND SHALL BE APPROVED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE PARTY PRIOR TO INSTALLATION. FIRE HYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLY WRAP BAG AND TAPED INTO PLACE. THE POLY WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED IN SERVICE. WHERE STORZ ADAPTORS ARE REQUIRED (HAYS COUNTY), FIRE HYDRANTS SHALL BE MANUFACTURED WITH INTEGRAL STORZ ADAPTORS.
13. WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(29) AND/OR TCEQ RULES.
14. TEST PRESSURE FOR 2–HOUR TEST SHALL BE AT 175 PSI AT THE LOWEST POINT IN THE LINE.

NOTE:
PRIOR TO PRESSURE TESTING, CONTRACTOR SHALL VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT BACK TO AND INCLUDING THE VALVE AGAINST WHICH THE PRESSURE TEST SHALL BE PERFORMED, HAS BEEN INSTALLED TO AT LEAST THE SPECIFICATIONS OF THIS PROJECT. FAILURE TO VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT IN THE EXISTING LINE MEETS OR EXCEEDS THE SPECIFICATIONS OF THIS PROJECT MAY RESULT IN SERIOUS DAMAGE TO THE EXISTING WATERLINE.

15. WATER LINES SHALL BE FILLED WITH WATER AND ALL AIR EXPELLED AT LEAST 24 HOURS BEFORE TESTING. ALL SERVICE LATERALS AND DRAIN VALVE LEADS, WITH THE HYDRANT VALVES CLOSED AND NOZZLE CAPS OPEN SHALL BE INCLUDED IN THE TESTS.
16. CONTRACTOR SHALL SUBMIT A DISINFECTION AND FLUSHING PLAN IN ACCORDANCE WITH AWWA STANDARDS TO THE WTCPUA FOR APPROVAL. REQUIRED FLUSHING VOLUMES, FLUSHING SCHEDULE, AND METHOD OF DISPOSAL OF FLUSH WATER SHALL BE IN ACCORDANCE WITH THE APPROVED PLAN.
17. GATE VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO AWWA C509, WITH A MINIMUM RATED WORKING PRESSURE OF 250 PSI.
18. FORCE MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(27) AND/OR TCEQ RULES.
19. GRAVITY SANITARY SEWER MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEMS 510.3(26) AND/OR TCEQ RULES. IN ADDITION, ALL GRAVITY SANITARY SEWER MAINS SHALL BE TELEVISED PRIOR TO ACCEPTANCE BY WTCPUA. DIGITAL FILES (VIA CD–ROM) CLEARLY SHOWING TELEVISED RECORDING SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOLLOWING INSPECTION.
20. LOCATOR 'FINDER' WIRE – ALL NON –METALLIC WATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVE THE PIPE. THE WIRE SHALL BE POLY–INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT EACH ISOLATION VALVE SUCH THAT IT IS ACCESSIBLE FROM THE VALVE BOX.
21. LOCATOR 'FINDER' WIRE – ALL NON–METALLIC WASTEWATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVE THE PIPE. THE WIRE SHALL BE POLY–INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT READILY ACCESSIBLE LOCATIONS THROUGHOUT THE COLLECTION SYSTEM.
22. TEST STATIONS SHALL BE INSTALLED WHERE WATER AND/OR WASTEWATER LINES/APPURTENANCES AND WASTEWATER MANHOLES ARE INSTALLED OFFSITE OR OUTSIDE PAVEMENT.
23. ALL VALVE RISERS SHALL HAVE A 1'–6" SQUARE CONCRETE BOX POURED AROUND THEM AT FINISHED GRADE.
24. ALL MANHOLES SHALL BE LINED WITH A CORROSION RESISTANT LINING APPROVED BY THE WTCPUA.
25. BOLTED AND GASKETED COVERS SHALL BE USED FOR ALL MANHOLES LOCATED IN THE 100–YEAR FLOODPLAIN. WHERE THERE ARE MORE THAN THREE GASKETED MANHOLES IN A ROW, VENTS SHALL BE PROVIDED ON EVERY THIRD MANHOLE.
26. THE DOWNSTREAM END OF ANY FORCE MAIN SHALL BE TERMINATED IN A SANITARY SEWER MANHOLE IN A MANNER TO MINIMIZE TURBULENCE.
27. CONTRACTOR SHALL HAVE NECESSARY EROSION AND SEDIMENTATION CONTROLS IN PLACE PRIOR TO COMMENCING WATER/WASTEWATER FACILITY CONSTRUCTION.
28. RECORD DRAWINGS, AS STIPULATED BY THE WTCPUA, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR VERIFICATION AND FURNISHED TO THE WTCPUA UPON COMPLETION OF THE PROJECT.
29. THE WTCPUA WILL OWN AND OPERATE ALL WATER LINES AND APPURTENANCES UP TO AND INCLUDING THE WATER METER. THESE IMPROVEMENTS WILL BE DEFINED BY A RECORDED EASEMENT OR IN PUBLIC RIGHT–OF–WAY.
30. ANY PORTIONS OF WASTEWATER LINES INCLUDING SERVICES THAT ARE LOCATED OUTSIDE OF A RECORDED EASEMENT OR PUBLIC RIGHT–OF–WAY WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER, OR HIS/HER ASSIGNS.
31. WHERE EXISTING WATER AND/OR WASTEWATER INFRASTRUCTURE IS TO BE ABANDONED, THE ENGINEER SHALL SUBMIT AN ABANDONMENT PLAN FOR APPROVAL BY THE WTCPUA.
32. WATER SERVICES SHALL BE INSTALLED USING HDPE PIPE. COPPER IS NOT ALLOWED. MINIMUM SERVICE TAP SHALL BE 2" DIAMETER.
33. FOR ANY STORM SEWER LINE CROSSING A WATER OR WASTEWATER LINE CLOSER THAN 18", THE STORM SEWER PIPE SHALL BE LAID SUCH THAT NO STORM SEWER JOINTS WILL BE OVER THE WATER PIPE CROSSING.

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

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].
3. PLASTIC PIPE FOR USE IN

Drainage Calculations

Provence Phase 2 - Section 2

#	Area	Coefficient				Tc	Intensity				Flow			
		C2	C10	C25	C100		I2	I10	I25	I100	Q2	Q10	Q25	Q100
DA 01	0.52	0.48	0.55	0.59	0.67	5.00	6.31	9.61	11.79	15.42	1.59	2.76	3.63	5.38
DA 02	0.34	0.54	0.61	0.66	0.74	5.00	6.31	9.61	11.79	15.42	1.16	2.01	2.63	3.87
DA 03	0.19	0.54	0.61	0.65	0.73	5.00	6.31	9.61	11.79	15.42	0.65	1.12	1.46	2.15
DA 04	0.40	0.54	0.61	0.66	0.74	5.00	6.31	9.61	11.79	15.42	1.37	2.36	3.10	4.55
DA 05	0.30	0.54	0.61	0.65	0.73	5.00	6.31	9.61	11.79	15.42	1.02	1.76	2.31	3.39
DA 06	1.57	0.28	0.34	0.37	0.44	5.00	6.31	9.61	11.79	15.42	2.77	5.13	6.85	10.65
DA 07	1.60	0.41	0.48	0.51	0.59	10.37	4.98	7.55	9.26	12.08	3.29	5.77	7.61	11.39
DA 08	1.31	0.45	0.52	0.55	0.63	7.76	5.54	8.40	10.31	13.45	3.26	5.68	7.47	11.11
DA 09	1.28	0.46	0.52	0.56	0.64	6.62	5.83	8.86	10.87	14.19	3.40	5.93	7.79	11.58
DA 10	1.45	0.43	0.50	0.54	0.61	6.72	5.80	8.81	10.81	14.12	3.65	6.40	8.43	12.57
DA 11	0.11	0.57	0.64	0.68	0.77	5.00	6.31	9.61	11.79	15.42	0.39	0.68	0.89	1.30
DA 12	0.12	0.54	0.62	0.66	0.74	5.00	6.31	9.61	11.79	15.42	0.41	0.71	0.93	1.37
DA 13	1.51	0.49	0.56	0.60	0.68	6.62	5.83	8.85	10.86	14.18	4.32	7.48	9.82	14.52
DA 14	1.21	0.49	0.56	0.60	0.68	7.29	5.65	8.58	10.53	13.74	3.38	5.85	7.68	11.33
DA 15	1.36	0.49	0.56	0.60	0.68	6.74	5.79	8.80	10.80	14.10	3.90	6.75	8.86	13.09
DA 16	1.33	0.50	0.57	0.61	0.69	7.45	5.61	8.52	10.45	13.64	3.72	6.43	8.43	12.44
DA 17	1.31	0.50	0.57	0.61	0.69	6.72	5.80	8.81	10.81	14.12	3.80	6.57	8.62	12.73
DA 18	1.36	0.49	0.56	0.60	0.68	6.68	5.81	8.83	10.83	14.15	3.89	6.74	8.84	13.06
DA 19	0.13	0.55	0.62	0.66	0.74	5.00	6.31	9.61	11.79	15.42	0.45	0.77	1.01	1.48
DA 20	0.17	0.56	0.63	0.67	0.76	5.00	6.31	9.61	11.79	15.42	0.60	1.03	1.35	1.98
DA 21	0.50	0.50	0.57	0.61	0.69	5.00	6.31	9.61	11.79	15.42	1.57	2.72	3.58	5.29
DA 22	0.81	0.46	0.53	0.56	0.64	5.00	6.31	9.61	11.79	15.42	2.34	4.10	5.39	8.03
DA 23	1.48	0.45	0.51	0.55	0.63	11.24	4.83	7.31	8.97	11.70	3.20	5.57	7.33	10.89
DA 24	0.18	0.55	0.62	0.66	0.74	5.00	6.31	9.61	11.79	15.42	0.62	1.07	1.40	2.06
DA 25	0.19	0.57	0.64	0.69	0.77	5.00	6.31	9.61	11.79	15.42	0.69	1.18	1.54	2.26
DA 26	0.16	0.56	0.63	0.67	0.76	5.00	6.31	9.61	11.79	15.42	0.56	0.97	1.27	1.87
DA 27	0.96	0.49	0.56	0.60	0.67	5.00	6.31	9.61	11.79	15.42	2.95	5.13	6.74	9.98
DA 28	0.40	0.54	0.61	0.66	0.74	5.00	6.31	9.61	11.79	15.42	1.37	2.36	3.09	4.55
DA 29	1.47	0.50	0.57	0.61	0.69	5.00	6.31	9.61	11.79	15.42	4.63	8.03	10.54	15.59
DA 30	1.61	0.50	0.57	0.61	0.69	5.00	6.31	9.61	11.79	15.42	5.05	8.77	11.51	17.02
DA 31	0.30	0.55	0.63	0.67	0.75	5.00	6.31	9.61	11.79	15.42	1.05	1.80	2.36	3.47
DA 32	0.13	0.57	0.64	0.68	0.77	5.00	6.31	9.61	11.79	15.42	0.47	0.80	1.05	1.54
DA 33	0.15	0.57	0.64	0.69	0.77	5.00	6.31	9.61	11.79	15.42	0.54	0.93	1.21	1.78
DA 34	0.75	0.45	0.51	0.55	0.63	5.00	6.31	9.61	11.79	15.42	2.11	3.70	4.87	7.26
DA 35	1.16	0.46	0.53	0.57	0.65	5.00	6.31	9.61	11.79	15.42	3.38	5.91	7.77	11.55
DA 36	0.82	0.45	0.52	0.55	0.63	5.00	6.31	9.61	11.79	15.42	2.33	4.08	5.36	7.99
DA 37	0.40	0.54	0.62	0.66	0.74	5.00	6.31	9.61	11.79	15.42	1.37	2.37	3.10	4.56
DA 38	1.79	0.39	0.46	0.49	0.57	5.70	6.09	9.27	11.37	14.86	4.29	7.61	10.05	15.12
DA 39	0.14	0.55	0.62	0.66	0.74	5.00	6.31	9.61	11.79	15.42	0.48	0.83	1.09	1.60
OFF 1	6.68	0.37	0.43	0.46	0.53	19.01	3.81	5.75	7.08	9.27	9.48	16.63	21.88	32.97
DA B1	0.43	0.43	0.50	0.53	0.61	5.00	6.31	9.61	11.79	15.42	1.17	2.06	2.71	4.05
DA B2	2.99	0.31	0.37	0.40	0.47	10.42	4.98	7.53	9.25	12.06	4.58	8.32	11.08	17.02
DA B3	5.10	0.34	0.40	0.43	0.50	12.66	4.59	6.95	8.53	11.14	7.96	14.20	18.78	28.54
DA B4	0.57	0.47	0.54	0.58	0.66	5.00	6.31	9.61	11.79	15.42	1.70	2.96	3.90	5.79
DA B5	1.79	0.28	0.34	0.37	0.44	17.56	3.96	5.98	7.36	9.62	1.98	3.64	4.87	7.58

Runoff Coefficients
Provence Phase 2 - Section 2

Impervious cover / lot = 50&65-ft Lot 3,000 *sf*

No.	Area	Asphalt		Lots		Grass-Developed		Grass-Undeveloped		Runoff Coefficient			
	Ac.	width	length	area	# lots	area	sub -c	Area	sub-c	Area	C2	C10	C25	C100
DA 01	0.52	14.50	706.00	0.24			0.44	0.28	0.49		0.48	0.55	0.59	0.67
DA 02	0.34	14.50	597.00	0.20			0.44	0.14	0.49		0.54	0.61	0.66	0.74
DA 03	0.19	14.50	329.00	0.11			0.44	0.08	0.49		0.54	0.61	0.65	0.73
DA 04	0.40	14.50	702.00	0.23			0.44	0.17	0.49		0.54	0.61	0.66	0.74
DA 05	0.30	14.50	518.00	0.17			0.44	0.13	0.49		0.54	0.61	0.65	0.73
DA 06	1.57	14.50					0.44	1.57	0.49		0.28	0.34	0.37	0.44
DA 07	1.60	14.50	117.00	0.04	6.00	0.41	0.44	1.15	0.49		0.41	0.48	0.51	0.59
DA 08	1.31	14.50	181.00	0.06	6.00	0.41	0.44	0.84	0.49		0.45	0.52	0.55	0.63
DA 09	1.28	14.50	202.00	0.07	6.00	0.41	0.44	0.80	0.49		0.46	0.52	0.56	0.64
DA 10	1.45	14.50	198.00	0.07	6.00	0.41	0.44	0.97	0.49		0.43	0.50	0.54	0.61
DA 11	0.11	14.50	211.00	0.07			0.44	0.04	0.49		0.57	0.64	0.68	0.77
DA 12	0.12	14.50	211.00	0.07			0.44	0.05	0.49		0.54	0.62	0.66	0.74
DA 13	1.51	14.50	396.00	0.13	8.00	0.55	0.44	0.83	0.49		0.49	0.56	0.60	0.68
DA 14	1.21	14.50	218.00	0.07	7.00	0.48	0.44	0.66	0.49		0.49	0.56	0.60	0.68
DA 15	1.36	14.50	223.00	0.07	8.00	0.55	0.44	0.73	0.49		0.49	0.56	0.60	0.68
DA 16	1.33	14.50	206.00	0.07	8.00	0.55	0.44	0.71	0.49		0.50	0.57	0.61	0.69
DA 17	1.31	14.50	195.00	0.06	8.00	0.55	0.44	0.69	0.49		0.50	0.57	0.61	0.69
DA 18	1.36	14.50	195.00	0.06	8.00	0.55	0.44	0.74	0.49		0.49	0.56	0.60	0.68
DA 19	0.13	14.50	230.00	0.08			0.44	0.05	0.49		0.55	0.62	0.66	0.74
DA 20	0.17	14.50	317.00	0.11			0.44	0.06	0.49		0.56	0.63	0.67	0.76
DA 21	0.50	15.50	678.00	0.24			0.44	0.26	0.49		0.50	0.57	0.61	0.69
DA 22	0.81	15.50	904.00	0.32			0.44	0.49	0.49		0.46	0.53	0.56	0.64
DA 23	1.48	15.50	336.00	0.12	6.00	0.41	0.44	0.95	0.49		0.45	0.51	0.55	0.63
DA 24	0.18	14.50	319.00	0.11			0.44	0.07	0.49		0.55	0.62	0.66	0.74
DA 25	0.19	14.50	370.00	0.12			0.44	0.07	0.49		0.57	0.64	0.69	0.77
DA 26	0.16	14.50	298.00	0.10			0.44	0.06	0.49		0.56	0.63	0.67	0.76
DA 27	0.96	14.50	249.00	0.08	5.00	0.34	0.44	0.53	0.49		0.49	0.56	0.60	0.67
DA 28	0.40	14.50	701.00	0.23			0.44	0.17	0.49		0.54	0.61	0.66	0.74
DA 29	1.47	14.50	423.00	0.14	8.00	0.55	0.44	0.78	0.49		0.50	0.57	0.61	0.69
DA 30	1.61	14.50	607.00	0.20	8.00	0.55	0.44	0.86	0.49		0.50	0.57	0.61	0.69
DA 31	0.30	14.50	548.00	0.18			0.44	0.12	0.49		0.55	0.63	0.67	0.75
DA 32	0.13	14.50	251.00	0.08			0.44	0.05	0.49		0.57	0.64	0.68	0.77
DA 33	0.15	14.50	291.00	0.10			0.44	0.05	0.49		0.57	0.64	0.69	0.77
DA 34	0.75	14.50	184.00	0.06	3.00	0.21	0.44	0.48	0.49		0.45	0.51	0.55	0.63
DA 35	1.16	14.50	330.00	0.11	5.00	0.34	0.44	0.71	0.49		0.46	0.53	0.57	0.65
DA 36	0.82	14.50	283.00	0.09	3.00	0.21	0.44	0.52	0.49		0.45	0.52	0.55	0.63
DA 37	0.40	14.50	704.00	0.23			0.44	0.17	0.49		0.54	0.62	0.66	0.74
DA 38	1.79	14.50	390.00	0.13	4.50	0.31	0.44	1.35	0.49		0.39	0.46	0.49	0.57
DA 39	0.14	14.50	250.00	0.08			0.44	0.06	0.49		0.55	0.62	0.66	0.74
OFF 1	6.68	14.50					1.44	0.30	0.49	6.38	0.37	0.43	0.46	0.53
DA B1	0.43	15.50	405.00	0.14			0.44	0.29	0.49		0.43	0.50	0.53	0.61
DA B2	2.99	15.50	525.00	0.19			0.44	2.80	0.49		0.31	0.37	0.40	0.47
DA B3	5.10	15.50	686.00	0.24			0.44	0.98	0.49	3.88	0.34	0.40	0.43	0.50
DA B4	0.57	15.50	686.00	0.24			0.44	0.33	0.49		0.47	0.54	0.58	0.66
DA B5	1.79	14.50					0.44	1.79	0.49		0.28	0.34	0.37	0.44

Time of Concentration
Provence Phase 2 - Section 2

Overland Flow Manning's n = 0.240
Asphalt Manning's n = 0.016

No.	Overland				Street		Channel/Pipe		Tc
	Dist	Sheet	Shall Conc.	Grade	Dist.	Grade	Dist	Velocity	
DA 01		0.00	0.00	0.030	493.00	0.080		6.00	0.46
DA 02		0.00	0.00	0.030	596.00	0.080		6.00	0.56
DA 03		0.00	0.00	0.030	329.00	0.080		6.00	0.31
DA 04		0.00	0.00	0.030	695.00	0.080		6.00	0.66
DA 05		0.00	0.00	0.030	526.00	0.080		6.00	0.50
DA 06	142.00	20.00	122.00	0.030	457.00	0.080		6.00	3.91
DA 07	436.00	25.00	411.00	0.030	55.00	0.080		6.00	10.37
DA 08	323.00	20.00	303.00	0.030	111.00	0.080		6.00	7.76
DA 09	273.00	20.00	253.00	0.030	121.00	0.080		6.00	6.62
DA 10	275.00	20.00	255.00	0.030	180.00	0.080		6.00	6.72
DA 11	0.00	0.00	0.00	0.030	212.00	0.080		6.00	0.20
DA 12	0.00	0.00	0.00	0.030	212.00	0.080		6.00	0.20
DA 13	270.00	20.00	250.00	0.030	199.00	0.080		6.00	6.62
DA 14	301.00	20.00	281.00	0.030	153.00	0.080		6.00	7.29
DA 15	275.00	20.00	255.00	0.030	205.00	0.080		6.00	6.74
DA 16	308.00	20.00	288.00	0.030	148.00	0.080		6.00	7.45
DA 17	275.00	20.00	255.00	0.030	179.00	0.080		6.00	6.72
DA 18	273.00	20.00	253.00	0.030	184.00	0.080		6.00	6.68
DA 19		0.00	0.00	0.030	232.00	0.080		6.00	0.22
DA 20	19.00	19.00	0.00	0.030	268.00	0.080		6.00	0.88
DA 21		0.00	0.00	0.030	339.00	0.080		6.00	0.32
DA 22	58.00	58.00	0.00	0.030	607.00	0.080		6.00	2.49
DA 23	476.00	25.00	451.00	0.030		0.080		6.00	11.24
DA 24		0.00	0.00	0.030	320.00	0.080		6.00	0.30
DA 25		0.00	0.00	0.030	331.00	0.080		6.00	0.31
DA 26	15.00	15.00	0.00	0.030	240.00	0.080		6.00	0.72
DA 27	146.00	20.00	126.00	0.030	223.00	0.080		6.00	3.78
DA 28		0.00	0.00	0.030	698.00	0.080		6.00	0.66
DA 29	147.00	20.00	127.00	0.030	393.00	0.080		6.00	3.96
DA 30	147.00	20.00	127.00	0.030	410.00	0.080		6.00	3.98
DA 31		0.00	0.00	0.030	494.00	0.080		6.00	0.47
DA 32		0.00	0.00	0.030	247.00	0.080		6.00	0.23
DA 33		0.00	0.00	0.030	256.00	0.080		6.00	0.24
DA 34	146.00	20.00	126.00	0.030	153.00	0.080		6.00	3.71
DA 35	146.00	20.00	126.00	0.030	291.00	0.080		6.00	3.84
DA 36	144.00	20.00	124.00	0.030	194.00	0.080		6.00	3.71
DA 37		0.00	0.00	0.030	707.00	0.080		6.00	0.67
DA 38	195.00	80.00	115.00	0.030	428.00	0.080		6.00	5.70
DA 39		0.00	0.00	0.030	250.00	0.080		6.00	0.24
OFF 1	1121.00	100.00	1,021.00	0.060	0.00	0.080		6.00	19.01
DA B1		0.00	0.00	0.040	296.00	0.080		6.00	0.28
DA B2	478.00	100.00	378.00	0.040	0.00	0.080		6.00	10.42
DA B3	510.00	100.00	410.00	0.040	0.00	0.080	577.00	6.00	12.66
DA B4		0.00	0.00	0.040	0.00	0.080	631.00	6.00	1.75
DA B5	835.00	100.00	735.00	0.040		0.080		6.00	17.56

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL DRAINAGE AREA MAP 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

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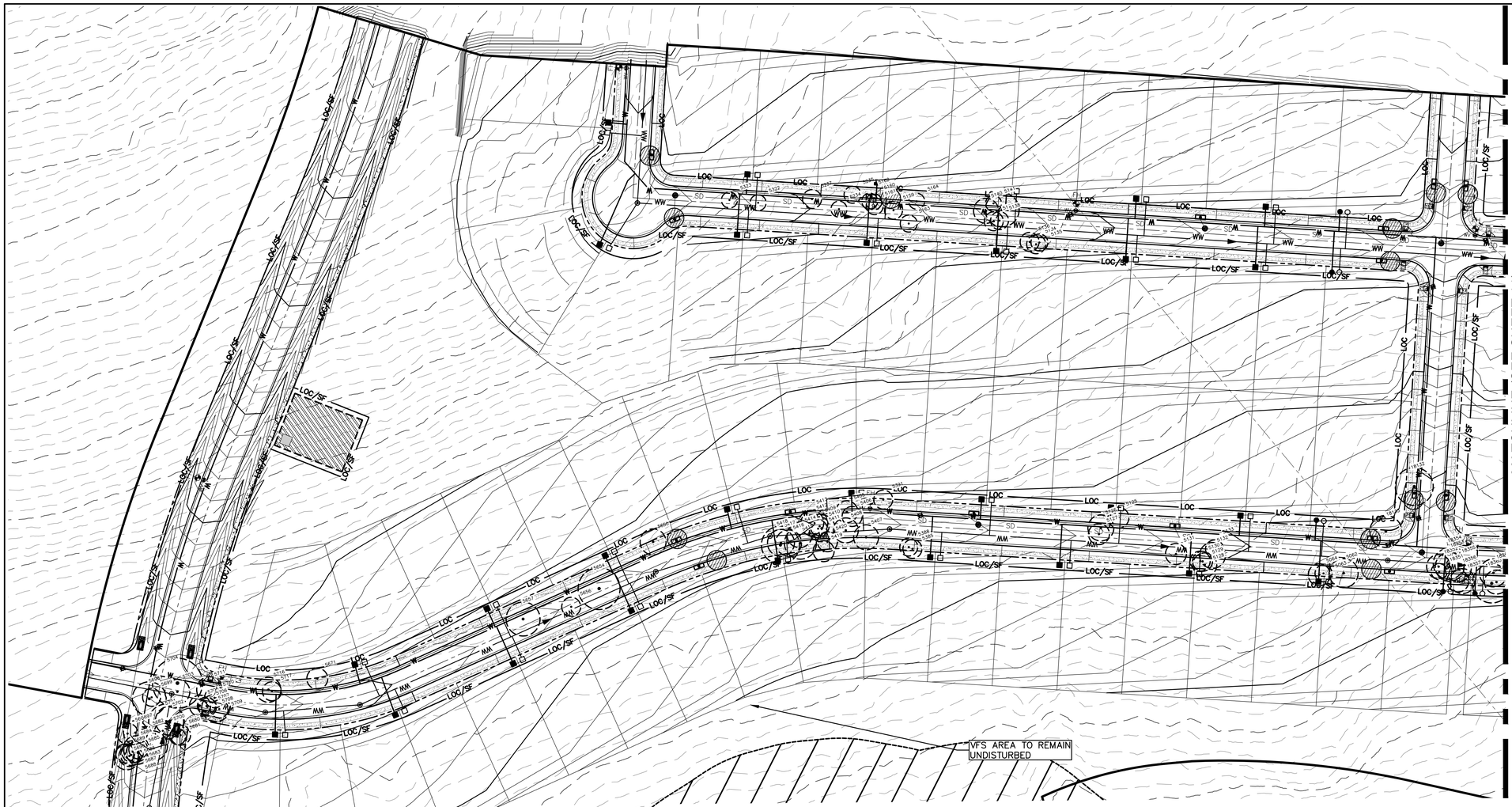

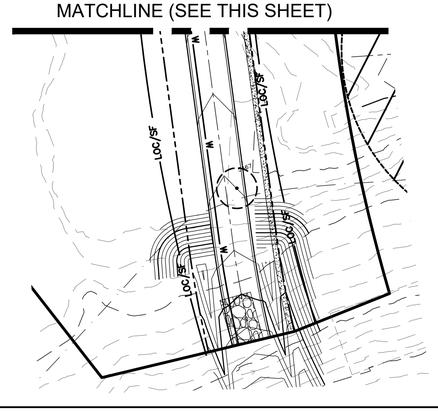

0 60 120 Feet

LEGEND

- PROPERTY LINE
- EXIST CONTOUR (420)
- PROPOSED CONTOUR (420)
- LIMITS OF CONSTRUCTION (LOC)
- SILT FENCE (SF)
- LIMITS OF CONSTRUCTION/SILT FENCE (LOC/SF)
- TREE PROTECTION (T)
- STAGING/SPOILS AREA
- CONSTRUCTION ENTRANCE/EXIT
- CONCRETE WASHOUT
- ROCK BERM
- INLET PROTECTION
- EXISTING TREE (4224)
- EXISTING TREE TO BE REMOVED

EROSION CONTROL NOTES:

1. ALL REQUIRED NOTES AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE BEFORE THE COMMENCEMENT OF CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO THE PROJECT SITE.
3. INSTALL SILT FENCE ACCORDINGLY FOR RUN–ON DIVERSION OR OFFSITE SEDIMENT CONTROL DEPENDING ON UP OR DOWN SLOPE, FACING POST SIDE ON THE DOWN GRADIENT SIDE.
4. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
5. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
6. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY COUNTY INSPECTOR.
7. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
8. CONTRACTOR SHALL MAINTAIN AND UTILIZE DUST CONTROL FOR THE DURATION OF THE PROJECT.
9. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING ONTO THE PUBLIC ROADWAY ON AN ONGOING/REGULAR BASIS.
10. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
11. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
12. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
13. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
14. TEMPORARY ESC'S SHALL REMAIN IN PLACE IN ALL DISTURBED AREAS UNTIL ADEQUATE STABILIZATION HAS BEEN ACHIEVED.
15. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL STORM SEWER INLET BOXES, LINES, PIPES AND CULVERTS BEFORE CONDITIONAL/FINAL ACCEPTANCE CAN BE OBTAINED.
16. TRAVIS COUNTY REQUIRES CERTIFIED SWP3 INSPECTORS TO CONDUCT SWP3 INSPECTIONS AND REPORTING ON ALL PROJECTS WITH ONE ACRE OF DISTURBANCE AND LARGER.
17. A DE–WATERING PLAN FOR THE POND(S) MUST BE APPROVED BY THE COUNTY ENVIRONMENTAL INSPECTOR OF THE TEMPORARY SEDIMENTATION POND IS DE–WATERED AFTER RAINFALL EVENTS. THE DE–WATERING METHOD MUST MINIMIZE THE DISCHARGE OF SUSPENDED SEDIMENTS TO THE GREATEST EXTENT FEASIBLE BY DRAWING WATER FROM THE SURFACE OF THE IMPOUNDMENT.
18. CREEK SETBACK AND VFS ARE TO REMAIN UNDISTURBED, EXCEPT WHERE UTILITIES CROSS.
19. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY UPON INLET INSTALLATION.
20. PERMITTEE SHALL INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY SWP3 REPORT, UPON RECEIVING A FORECAST CALLING FOR A RAIN EVENT FOR AN EXTENDED PERIOD, MODIFICATION OF INLET PROTECTION SHOULD BE MADE TO PREVENT FLOODING OR PONDING OF WATER IF TRAFFIC OR PROPERTY CONCERNS ARISE.
21. MULCH CREATED FROM CLEARING TO BE DOUBLE GROUND AND STOCKPILED ON SITE AND SUED AS TEMPORARY/TRANSITIONAL STABILIZATION MEASURES AS NEEDED/REQUIRED
22. THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE–OUT PROCESS.

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 1 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY: XX	DRAWN BY: XX	CHECKED BY: XX	BY

Sheet 10 of 73

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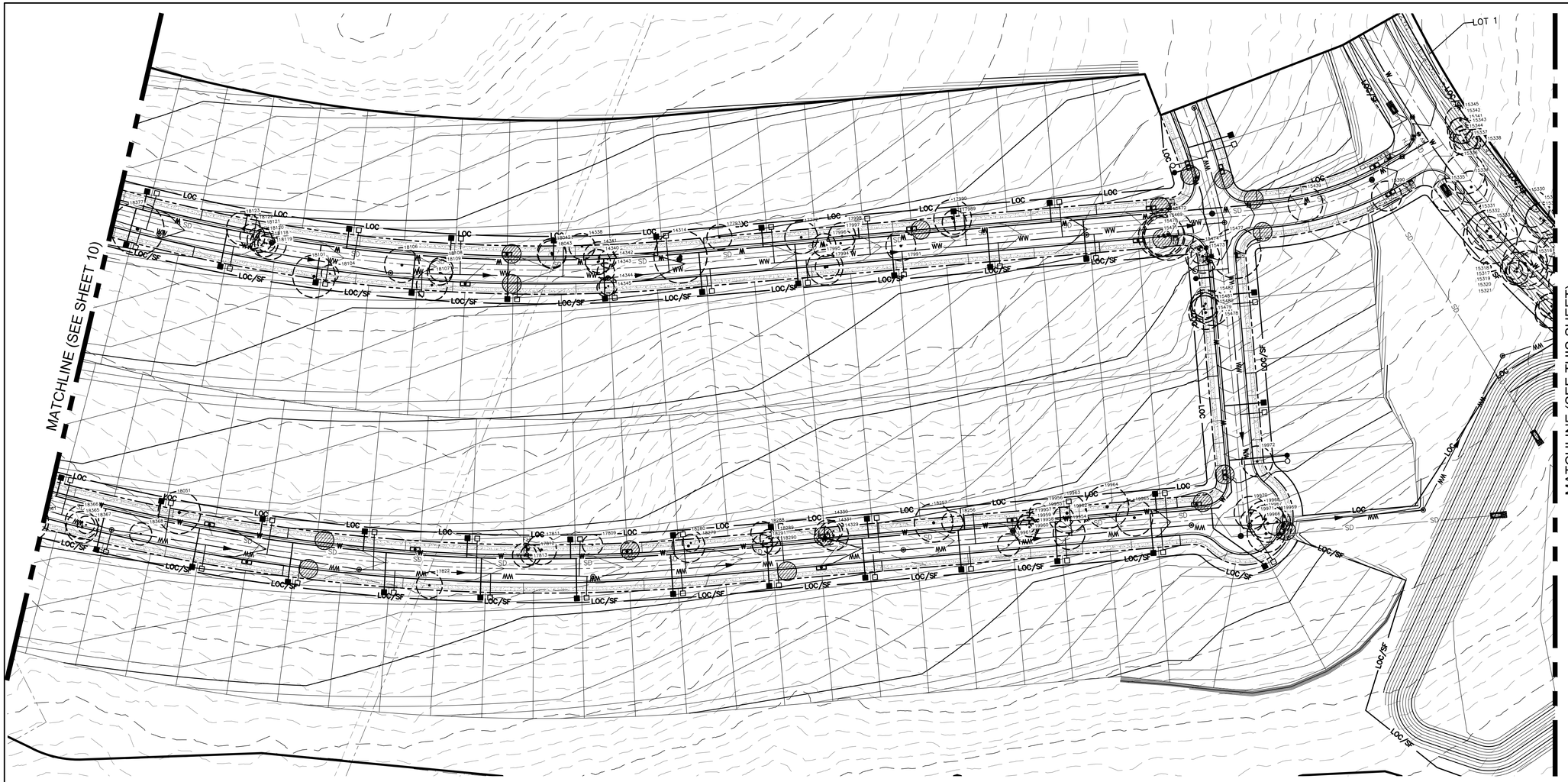
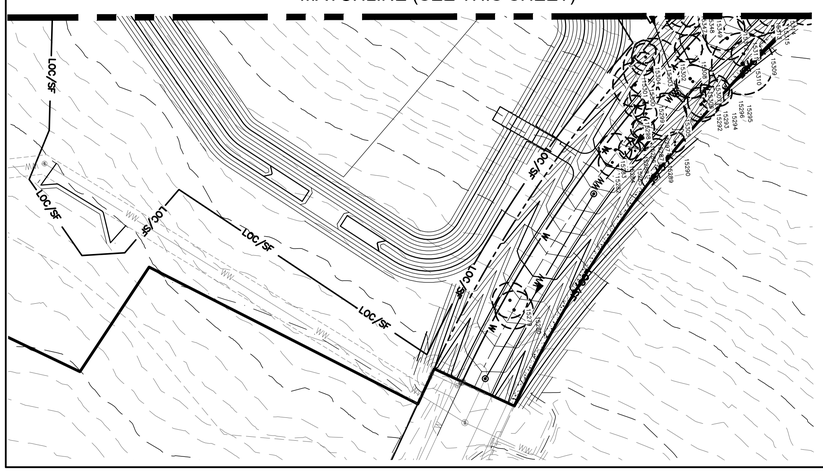


MATCHLINE (SEE THIS SHEET)



EROSION CONTROL NOTES:

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22. THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE–OUT PROCESS.

LEGEND

- PROPERTY LINE
- 420 EXIST CONTOUR
- 420 PROPOSED CONTOUR
- LOC LIMITS OF CONSTRUCTION
- SF SILT FENCE
- LOC/SF LIMITS OF CONSTRUCTION/SILT FENCE
- T TREE PROTECTION
- STAGING/SPOILS AREA
- CONSTRUCTION ENTRANCE/EXIT
- CONCRETE WASHOUT
- ROCK BERM
- INLET PROTECTION
- 4224 EXISTING TREE
- 4224 EXISTING TREE TO BE REMOVED

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY:	DRAWN BY:	CHECKED BY:
			XX	XX	XX

BY

Sheet 11 of 73

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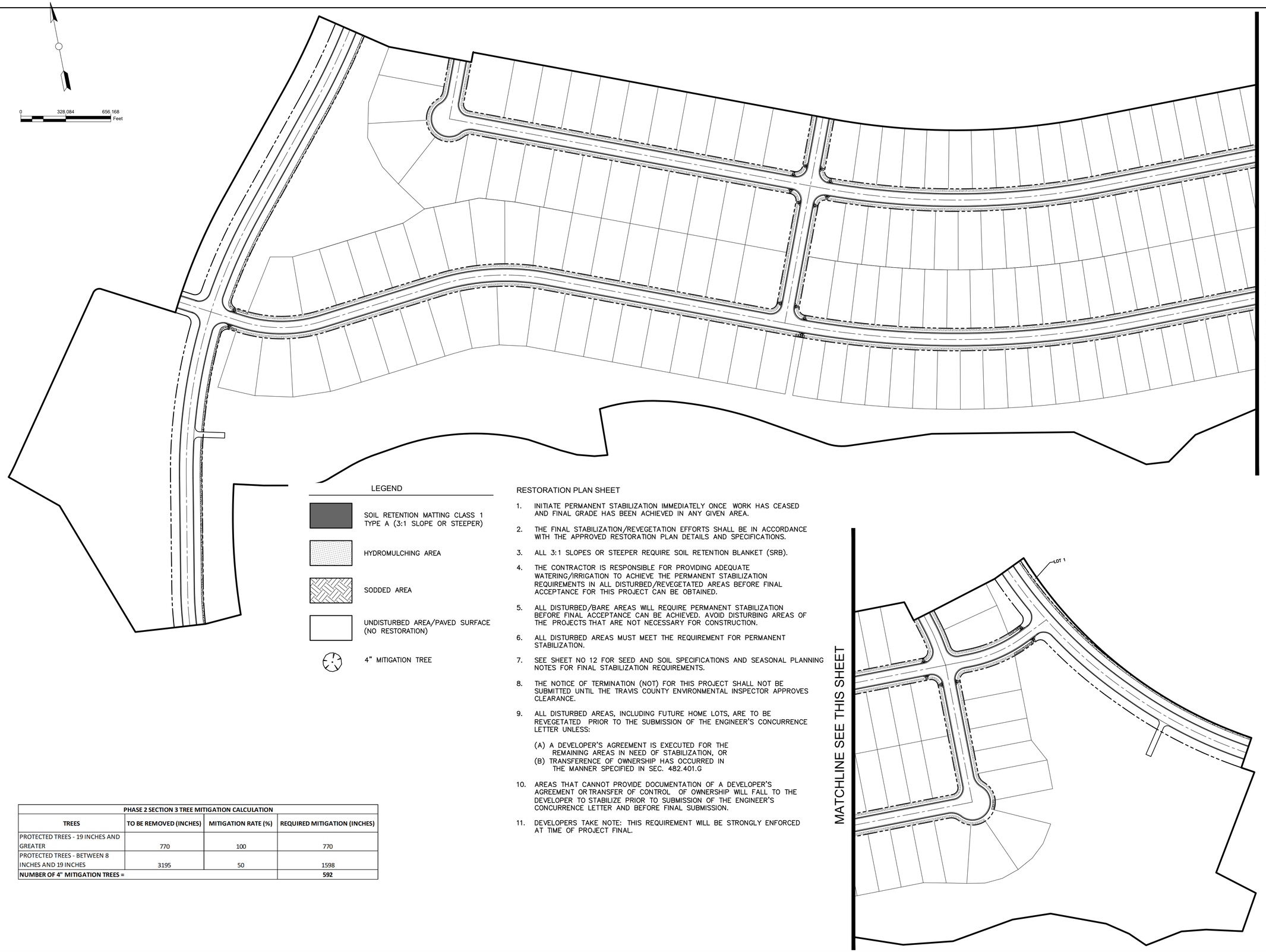

LEGEND

- SOIL RETENTION MATTING CLASS 1 TYPE A (3:1 SLOPE OR STEEPER)
- HYDROMULCHING AREA
- SODDED AREA
- UNDISTURBED AREA/PAVED SURFACE (NO RESTORATION)
- 4" MITIGATION TREE

RESTORATION PLAN SHEET

1. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED IN ANY GIVEN AREA.
2. THE FINAL STABILIZATION/REVEGETATION EFFORTS SHALL BE IN ACCORDANCE WITH THE APPROVED RESTORATION PLAN DETAILS AND SPECIFICATIONS.
3. ALL 3:1 SLOPES OR STEEPER REQUIRE SOIL RETENTION BLANKET (SRB).
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE WATERING/IRRIGATION TO ACHIEVE THE PERMANENT STABILIZATION REQUIREMENTS IN ALL DISTURBED/REVEGETATED AREAS BEFORE FINAL ACCEPTANCE FOR THIS PROJECT CAN BE OBTAINED.
5. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECTS THAT ARE NOT NECESSARY FOR CONSTRUCTION.
6. ALL DISTURBED AREAS MUST MEET THE REQUIREMENT FOR PERMANENT STABILIZATION.
7. SEE SHEET NO 12 FOR SEED AND SOIL SPECIFICATIONS AND SEASONAL PLANNING NOTES FOR FINAL STABILIZATION REQUIREMENTS.
8. THE NOTICE OF TERMINATION (NOT) FOR THIS PROJECT SHALL NOT BE SUBMITTED UNTIL THE TRAVIS COUNTY ENVIRONMENTAL INSPECTOR APPROVES CLEARANCE.
9. ALL DISTURBED AREAS, INCLUDING FUTURE HOME LOTS, ARE TO BE REVEGETATED PRIOR TO THE SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER UNLESS:
   (A) A DEVELOPER'S AGREEMENT IS EXECUTED FOR THE REMAINING AREAS IN NEED OF STABILIZATION, OR
   (B) TRANSFERENCE OF OWNERSHIP HAS OCCURRED IN THE MANNER SPECIFIED IN SEC. 482.401.G
10. AREAS THAT CANNOT PROVIDE DOCUMENTATION OF A DEVELOPER'S AGREEMENT OR TRANSFER OF CONTROL OF OWNERSHIP WILL FALL TO THE DEVELOPER TO STABILIZE PRIOR TO SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER AND BEFORE FINAL SUBMISSION.
11. DEVELOPERS TAKE NOTE: THIS REQUIREMENT WILL BE STRONGLY ENFORCED AT TIME OF PROJECT FINAL.

PHASE 2 SECTION 3 TREE MITIGATION CALCULATION

TREES	TO BE REMOVED (INCHES)	MITIGATION RATE (%)	REQUIRED MITIGATION (INCHES)
PROTECTED TREES - 19 INCHES AND GREATER	770	100	770
PROTECTED TREES - BETWEEN 8 INCHES AND 19 INCHES	3195	50	1598
NUMBER OF 4" MITIGATION TREES =			**592**

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

THIS DOCUMENT IS BEING RELEASED FOR THE PURPOSE OF INTERIM REVIEW ONLY UNDER THE AUTHORITY OF

JOSHUA F. HENKE, P.E. #92601

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 1 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 12 of 73

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PHASE 2 SECTION 2 EXISTING TREES TO BE REMOVED

TAG #	SIZE (INCHES)	TYPE	BOLES		
5062	14.5	LIVE OAK			
5063	8.5	LIVE OAK			
5064	11	LIVE OAK	8	6	
5125	10.5	LIVE OAK			
5126	13	LIVE OAK	9	8	
5127	10.5	LIVE OAK			
5128	12	LIVE OAK			
5129	10	LIVE OAK			
5130	10	LIVE OAK			
5131	10.5	LIVE OAK			
5132	13	LIVE OAK			
5133	9	LIVE OAK			
5134	9.5	LIVE OAK			
5135	8.5	LIVE OAK			
5136	9.5	LIVE OAK			
5137	9.5	LIVE OAK			
5138	9	LIVE OAK			
5139	17	LIVE OAK	9	9	7
5140	12.5	LIVE OAK	9	7	
5141	8	LIVE OAK			
5159	9	LIVE OAK			
5160	8	LIVE OAK			
5161	8.5	HACKBERRY			
5162	8	LIVE OAK			
5163	8.5	LIVE OAK			
5164	8	LIVE OAK			
5234	8	CEDAR ELM			
5235	8.5	LIVE OAK			
5237	9.5	LIVE OAK			
5322	8	LIVE OAK			
5323	8	LIVE OAK			
5385	9.5	LIVE OAK			
5388	9	LIVE OAK			
5391	9.5	LIVE OAK			
5405	11	LIVE OAK			
5406	10	LIVE OAK			
5407	12.5	LIVE OAK	9	6.5	
5408	12.5	LIVE OAK	9.5	6	
5409	13.5	LIVE OAK	10	7	
5410	9.5	LIVE OAK			
5411	9	LIVE OAK			
5412	12.5	LIVE OAK			
5413	13.5	LIVE OAK	10	7	
5414	12.5	LIVE OAK			
5415	16	LIVE OAK			

TAG #	SIZE (INCHES)	TYPE	BOLES		
5416	13	LIVE OAK			
5417	13.5	LIVE OAK			
5418	19	LIVE OAK	13.5	11	
5419	10.5	LIVE OAK			
5420	10	LIVE OAK			
5465	14	LIVE OAK			
5467	16	CEDAR ELM			
5490	14.5	LIVE OAK			
5491	17.5	LIVE OAK			
5492	9	CEDAR ELM			
5650	13	HACKBERRY			
5654	21	LIVE OAK	15	11.5	
5656	9.5	LIVE OAK			
5657	17	LIVE OAK	11.5	11	
5671	10.5	LIVE OAK			
5680	10	LIVE OAK			
5681	8	LIVE OAK			
5682	15	LIVE OAK	10	10	
5683	11.5	LIVE OAK			
5684	13	LIVE OAK	10	6	
5685	9.5	LIVE OAK			
5686	11	LIVE OAK			
5687	10.5	LIVE OAK			
5688	10.5	LIVE OAK			
5689	9.5	LIVE OAK			
5690	12.5	LIVE OAK			
5696	10.5	LIVE OAK			
5697	12	LIVE OAK			
5698	17	LIVE OAK			
5699	9	LIVE OAK			
5700	8	LIVE OAK			
5701	17.5	LIVE OAK	12	10.5	
5702	14.5	LIVE OAK	10.5	8	
5703	12.5	LIVE OAK			
5704	25	LIVE OAK	17	16	
5705	10.5	LIVE OAK			
5706	9	LIVE OAK			
5707	9	LIVE OAK			
5708	14	LIVE OAK	10	8	
5709	9	LIVE OAK			
5710	10	LIVE OAK			
5711	13	LIVE OAK			
5716	12.5	LIVE OAK			
5717	9.5	LIVE OAK			
14314	27.5	LIVE OAK	21.5	12	

TAG #	SIZE (INCHES)	TYPE	BOLES		
14329	9.5	LIVE OAK			
14330	13	LIVE OAK			
14331	15.5	LIVE OAK	12	7	
14338	13.5	LIVE OAK			
14340	13	LIVE OAK			
14341	16	LIVE OAK	11	9.5	
14342	9	LIVE OAK			
14343	9	LIVE OAK			
14344	9.5	LIVE OAK			
14345	9	LIVE OAK			
15279	14	LIVE OAK			
15280	15	LIVE OAK			
15282	11	LIVE OAK			
15283	13	LIVE OAK			
15284	8.5	LIVE OAK			
15285	8	LIVE OAK			
15286	8	LIVE OAK			
15287	8.5	LIVE OAK			
15288	8	LIVE OAK			
15289	9.5	LIVE OAK			
15290	8	LIVE OAK			
15292	13.5	LIVE OAK			
15293	13	LIVE OAK			
15294	9	LIVE OAK			
15295	10.5	LIVE OAK			
15296	11.5	LIVE OAK			
15297	8.5	LIVE OAK			
15298	8.5	LIVE OAK			
15299	12	LIVE OAK			
15300	17.5	LIVE OAK	13.5	8	
15301	9	LIVE OAK			
15302	23.5	LIVE OAK	13	11.5	9.5
15303	11	LIVE OAK			
15304	9	LIVE OAK			
15305	17	LIVE OAK			
15306	13	LIVE OAK			
15307	15.5	LIVE OAK			
15308	11	LIVE OAK			
15309	24.5	LIVE OAK	14	11.5	9.5
15310	10	LIVE OAK			
15311	17	LIVE OAK	11.5	11	
15312	17	LIVE OAK			
15313	16	LIVE OAK			
15314	16.5	LIVE OAK			
15315	10	LIVE OAK			

TAG #	SIZE (INCHES)	TYPE	BOLES		
15316	13	LIVE OAK			
15317	20	LIVE OAK	14	12	
15318	23.5	LIVE OAK	16.5	14	
15319	17	LIVE OAK	11.5	10.5	
15320	12	LIVE OAK			
15321	8.5	LIVE OAK			
15328	19	LIVE OAK	13	11.5	
15329	15	LIVE OAK	11	8	
15330	19.5	LIVE OAK	10.5	9.5	8
15331	28	LIVE OAK	15	13.5	12
15332	20.5	LIVE OAK	14	12.5	
15333	12.5	LIVE OAK			
15334	16.5	LIVE OAK			
15335	17	LIVE OAK			
15336	21	LIVE OAK			
15337	14	CEDAR ELM			
15338	10.5	LIVE OAK			
15341	13.5	LIVE OAK			
15342	13	LIVE OAK			
15343	13	CEDAR ELM			
15344	14.5	LIVE OAK			
15345	15.5	LIVE OAK			
15347	15	LIVE OAK			
15348	18	LIVE OAK	14	8	
15349	13	LIVE OAK			
15390	15.5	LIVE OAK			
15439	18	LIVE OAK			
15469	21	LIVE OAK			
15470	21	LIVE OAK			
15471	21	LIVE OAK	17.5	6.5	
15472	26.5	LIVE OAK	20.5	12	
15473	8.5	LIVE OAK			
15474	17.5	LIVE OAK			
15477	26	LIVE OAK			
15478	18	LIVE OAK			
15479	17.5	LIVE OAK			
15480	14	LIVE OAK			
15481	14	LIVE OAK			
15482	14.5	LIVE OAK			
17772	17	LIVE OAK			
17793	13	LIVE OAK			
17809	10.5	LIVE OAK			
17811	15.5	LIVE OAK			
17812	10.5	LIVE OAK			
17813	12.5	LIVE OAK	8.5	8	

TAG #	SIZE (INCHES)	TYPE	BOLES			
17822	13.5	LIVE OAK	9	8.5		
17989	12.5	LIVE OAK				
17990	19.5	LIVE OAK	15	8.5		
17991	15.5	LIVE OAK				
17994	12.5	LIVE OAK				
17995	18.5	LIVE OAK				
17996	12	LIVE OAK				
17997	14.5	LIVE OAK				
17998	14	LIVE OAK				
18042	15	LIVE OAK				
18043	14.5	LIVE OAK				
18051	22	LIVE OAK	12	11	8.5	
18101	22	LIVE OAK	16.5	11		
18104	9	LIVE OAK				
18106	18	LIVE OAK				
18107	16	LIVE OAK				
18108	12.5	LIVE OAK				
18109	13	LIVE OAK				
18118	16.5	LIVE OAK				
18119	9	LIVE OAK				
18120	14.5	LIVE OAK				
18121	13	LIVE OAK				
18122	13	LIVE OAK				
18123	17.5	LIVE OAK				
18132	19	LIVE OAK	15	8		
18133	16	LIVE OAK				
18256	11	LIVE OAK				
18257	20	LIVE OAK	14	12		
18279	9	LIVE OAK				
18280	17	LIVE OAK	9	8.5	7	
18288	12	LIVE OAK	9	6		
18289	9.5	LIVE OAK				
18290	9.5	LIVE OAK				
18291	10.5	LIVE OAK				
18351	8	LIVE OAK				
18352	12	LIVE OAK				
18353	14.5	LIVE OAK				
18354	15.5	LIVE OAK				
18355	13	LIVE OAK				
18356	11	LIVE OAK				
18357	12.5	LIVE OAK				
18360	19.5	LIVE OAK				
18361	12	LIVE OAK				
18362	14	LIVE OAK				
18365	16.5	LIVE OAK				

TAG #	SIZE (INCHES)	TYPE	BOLES			
18366	17.5	LIVE OAK				
18367	9	LIVE OAK				
18368	11.5	LIVE OAK				
18377	27.5	LIVE OAK	13	11	11	7
19954	16.5	LIVE OAK				
19955	10	LIVE OAK				
19956	9.5	LIVE OAK				
19957	11.5	LIVE OAK				
19958	10	LIVE OAK				
19959	9.5	LIVE OAK				
19960	11.5	LIVE OAK				
19961	11.5	LIVE OAK				
19962	10.5	LIVE OAK				
19963	20.5	LIVE OAK	15	10.5		
19964	22.5	LIVE OAK	15	15		
19965	19	LIVE OAK				
19966	19.5	LIVE OAK				
19967	19.5	LIVE OAK				
19968	19.5	LIVE OAK				
19969	14	LIVE OAK				
19970	17	LIVE OAK				
19971	11.5	LIVE OAK				
19972	16	LIVE OAK				

TAG #	SIZE (INCHES)	TYPE	BOLES			
18366	17.5	LIVE OAK				
18367	9	LIVE OAK				
18368	11.5	LIVE OAK				
18377	27.5	LIVE OAK	13	11	11	7
19954	16.5	LIVE OAK				
19955	10	LIVE OAK				
19956	9.5	LIVE OAK				
19957	11.5	LIVE OAK				
19958	10	LIVE OAK				
19959	9.5	LIVE OAK				
19960	11.5	LIVE OAK				
19961	11.5	LIVE OAK				
19962	10.5	LIVE OAK				
19963	20.5	LIVE OAK	15	10.5		
19964	22.5	LIVE OAK	15	15		
19965	19	LIVE OAK				
19966	19.5	LIVE OAK				
19967	19.5	LIVE OAK				
19968	19.5	LIVE OAK				
19969	14	LIVE OAK				
19970	17	LIVE OAK				
19971	11.5	LIVE OAK				
19972	16	LIVE OAK				

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

THIS DOCUMENT IS BEING RELEASED FOR THE PURPOSE OF INTERIM REVIEW ONLY UNDER THE AUTHORITY OF

JOSHUA F. HENKE, P.E. #92601

IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 13 of 73

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APPENDIX P-1 - EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).

2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE COA ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR A TPDES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF AUSTIN ENVIRONMENTAL INSPECTOR AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE BASIC ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY COA EV PLAN REVIEWERS AS WELL AS COA EV INSPECTORS.

3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.

4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT, 512-974-2278 OR BY EMAIL AT ENVIRONMENTAL.INSPECTIONS@AUSTINTEXAS.GOV, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. COA APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY COA EV INSPECTOR AT THIS TIME.

5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST OR CITY ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED COA STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.

6. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC - IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER - INSPECTOR (CESSWI OR CESSWI - IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION AND EROSION CONTROLS (CISEC OR CISEC - IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (½) INCH OR GREATER RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES OR ONE-THIRD (⅓) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.

7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.

8. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF AUSTIN ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION.

9. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:

   A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE STANDARD SPECIFICATION ITEM NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.

   - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 601S.

   AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF STANDARD SPECIFICATION 601S BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.

   - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

   THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:

TEMPORARY VEGETATIVE STABILIZATION:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: (WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN (SECALE CEREALE) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT UTILIZE ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) OR PERENNIAL RYEGRASS (LOLIUM PERENNE). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.

2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   A. FERTILIZER SHALL BE APPLIED ONLY IF WARRANTED BY A SOIL TEST AND SHALL CONFORM TO ITEM NO. 606S, FERTILIZER. FERTILIZATION SHOULD NOT OCCUR WHEN RAINFALL IS EXPECTED OR DURING SLOW PLANT GROWTH OR DORMANCY. CHEMICAL FERTILIZER MAY NOT BE APPLIED IN THE CRITICAL WATER QUALITY ZONE.

   B. HYDROMULCH SHALL COMPLY WITH TABLE 1, BELOW.

   C. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   D. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATION 604S OR 609S.

   TABLE 1: HYDROMULCHING FOR TEMPORARY VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
100% OR ANY BLEND OF WOOD, CELLULOSE, STRAW, AND/OR COTTON PLANT MATERIAL (EXCEPT NO MULCH SHALL EXCEED 30% PAPER)	70% or greater Wood/Straw 30% or less Paper or Natural Fibers	0—3 months	Moderate slopes; from flat to 3:1	1,500 to 2,000 lbs per acre

PERMANENT VEGETATIVE STABILIZATION:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.

2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   A. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.

   A. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.

   C. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDBED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE CHAPTER 6-4 (WATER CONSERVATION), AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE AUSTIN WATER UTILITY AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.

   D. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   E. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, ITEMS 604S AND 609S.

   TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
Bonded Fiber Matrix (BFM)	80% Organic defibrated fibers			
10% Tackifier	6 months	On slopes up to 2:1 and erosive soil conditions	2,500 to 4,000 lbs per acre (see manufacturers recommendations)	
Fiber Reinforced Matrix (FRM)	65% Organic defibrated fibers 25% Reinforcing Fibers or less 10% Tackifier	Up to 12 months	On slopes up to 1:1 and erosive soil conditions	3,000 to 4,500 lbs per acre (see manufacturers recommendations)

3. DEVELOPER INFORMATION:

   OWNER MASONWOOD HP, LTD.

   PHONE # 512-306-8300

   ADDRESS:
   4301 WESTBANK DR., BLDG A SUITE 110
   AUSTIN, TX 78746

   OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:
   MOODY ENGINEERING INC.

   PHONE # 512-502-8333

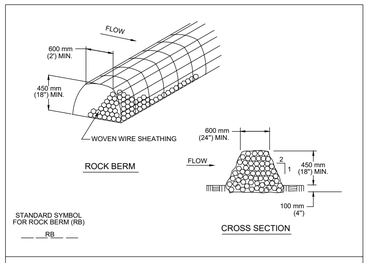
   PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:
   MASONWOOD HP, LTD.

   PHONE # 512-306-8300

   PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:
   MASONWOOD HP, LTD.

   PHONE # 512-306-8300

4. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE DEVELOPMENT SERVICES DEPARTMENT AT 512-974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.



NOTES:
1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM,AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

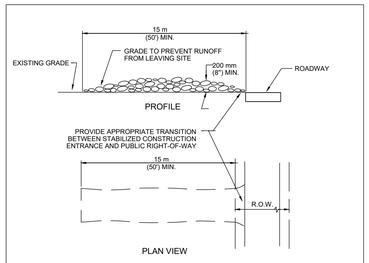
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		ROCK BERM	
RECORD COPY SIGNED BY MORGAN BYARS	8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1

APPENDIX P-2: - CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF AUSTIN STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIP LINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE) , FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY ABORIST;
   C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED;
   B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZED ROOT DAMAGE);
   C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEEN THE FENCE AND THE BUILDING;
   D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITY ARBORIST AT 974-1876 TO DISCUSS ALTERNATIVES.
   E.

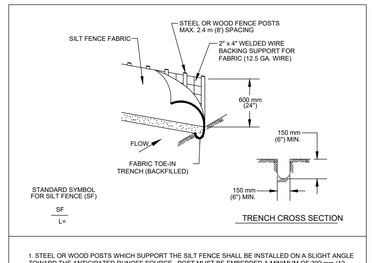
SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE PERMITTED.

7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.).
13. ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.



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

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



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

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

NOTES:

1. MATERIAL ¯ THE FIBRIC MUST CORRESPOND TO THE FOLLWNG REQUIREMENTS:

PROPERTY	ASTM TEST METHOD	REQUIREMENTS
FABRIC WEIGHT	D 3776	±3.0 OUNCES/SQUARE YPAD
ULTRAVIOLET (UV) RADIATION STABILITY	D 4355	70% STRENGTH RETAINED) MIN., AFTER 500 HOURS IN XENON ARC DEVICE
MUUEN BURST STRENGTH	D 3786	±120 POUND PER SQUPRE INCH
WATER FLOW RATE	D 4491	± 275 GALLONS/MINUTE/SQUARE FEET

2. THIS MATERIAL SHOULD HAVE A MAXIMUM EXPECTED USEFULLIFE OF APPROXIMATELY EIGHTEEN (18) MONTHS. THE INLET PROTECTION DEVICES SHOULD BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN OUT AND DISPOSAL OF TRAPPED SEDIMENT WILE MINIMIZING INTERFERENCE WITH CONSTRUCTION ACT IVITIES. THEY SHOU LD ALSO BE CONSTRUCTED SUCH THAT ANY PONDING OF STORM WATER WILL NOT CAUSE EXCESSIVE R O W. FLOODING (I.E. < 4 INCHES OF STANDING WATER) OR DPMAGETO THESTRUCTURE OR ADJACENT AREAS.

3 COVERAGE ¯ THE FABRIC/WIRE SHOULD COMPLETELY COVER THE OPENING OF THE INLET AND DEVICES SHOULD BE INSTALLED WITHOUT PROTRUDING PARTS THAT COULD BE A TRAFFIC, WORKER, OR PEDESTRIAN HAZARD. WHERE SECTIONS OF THE FABRIC OVERLAP, THEY SHALL OVERLAP AT LEASTTHREE (3) INCHES.

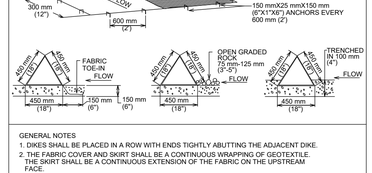
4. THE INLET FILTER SHALL BE ATTACHED IN A WAY THAT THEY CAN EASILY BE REMOVED AND ARE NOT SECURED OR ATTACHED BY THE USE OF SAND BAGS. THE INLET FILTER MUST BE REMOMD UPON COMPLETION OF WORK¯ IF REMOVAL DAMAGES THE CONCREE CURB, THE CURB MUST BE REPAIRED IMMEDIATELY¯

5. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN THE DEPTH REACHES 50 MM (2 INCHES) INCHES OR ONE THIRD THE HEIGHT OF THE INLET THROAT, DISPOSED OF IN A MANNER WHICH WILL NOT CWSE ADDITIONAL SILTATION.

6. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL E AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORMWATER BEGINS TO OVERTOP THE CURB.

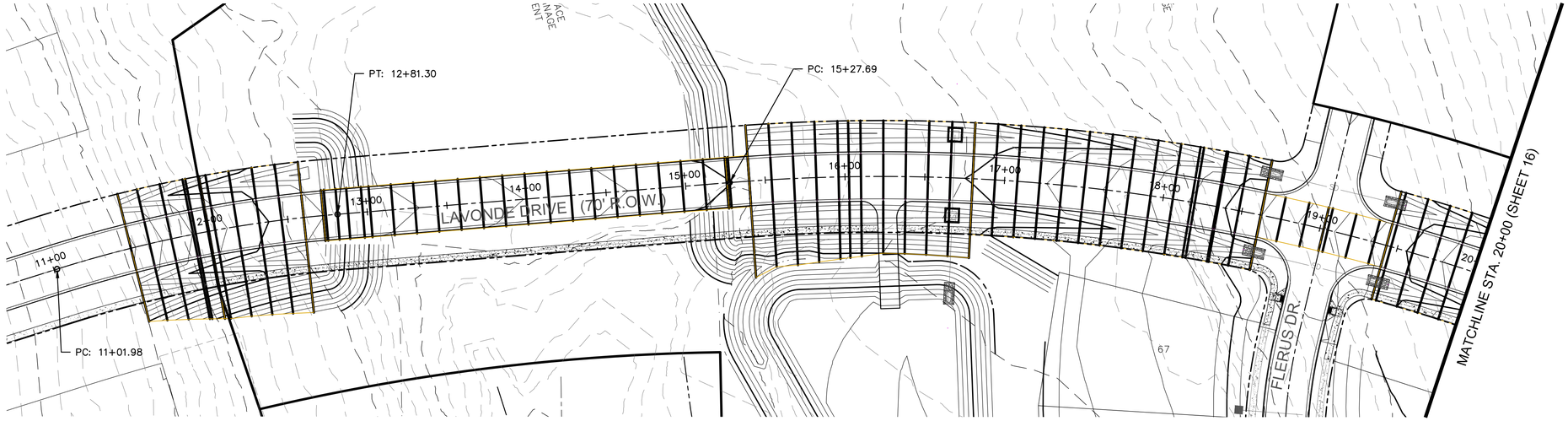
7. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT HAS ACHIEVED STABILIZATION CONDITIONS.

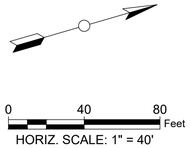
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		FILTER DIKE CURB INLET PROTECTION	
RECORD COPY SIGNED BY MAPI VIGIL	10/30/09 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 628S-2



GENERAL NOTES
1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 75-125 mm (3-5") OPEN GRADED ROCK OR TIED-IN 150 mm (6") WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED IN 100 mm (4").
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 150 mm (6") WIRE STAPLES ON 600 mm (2') CENTERS ON BOTH EDGES AND SKIRT, OR STAKE USING 10M (3/8") DIAMETER RE-BAR WITH TEE ENDS.
5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 150 mm (6") TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
6. THE DIKE STRUCTURE SHALL BE MW40-150 mmX150 mm (6 GA. 6"X6") WIRE MESH, 450 mm (18") ON A SIDE.
7. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6") AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT SITE IS COMPLETLY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN GENERAL NOTE 8 ABOVE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		TRIANGULAR SEDIMENT FILTER DIKE	
RECORD COPY SIGNED BY J. PATRICK MURPHY	3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBIL





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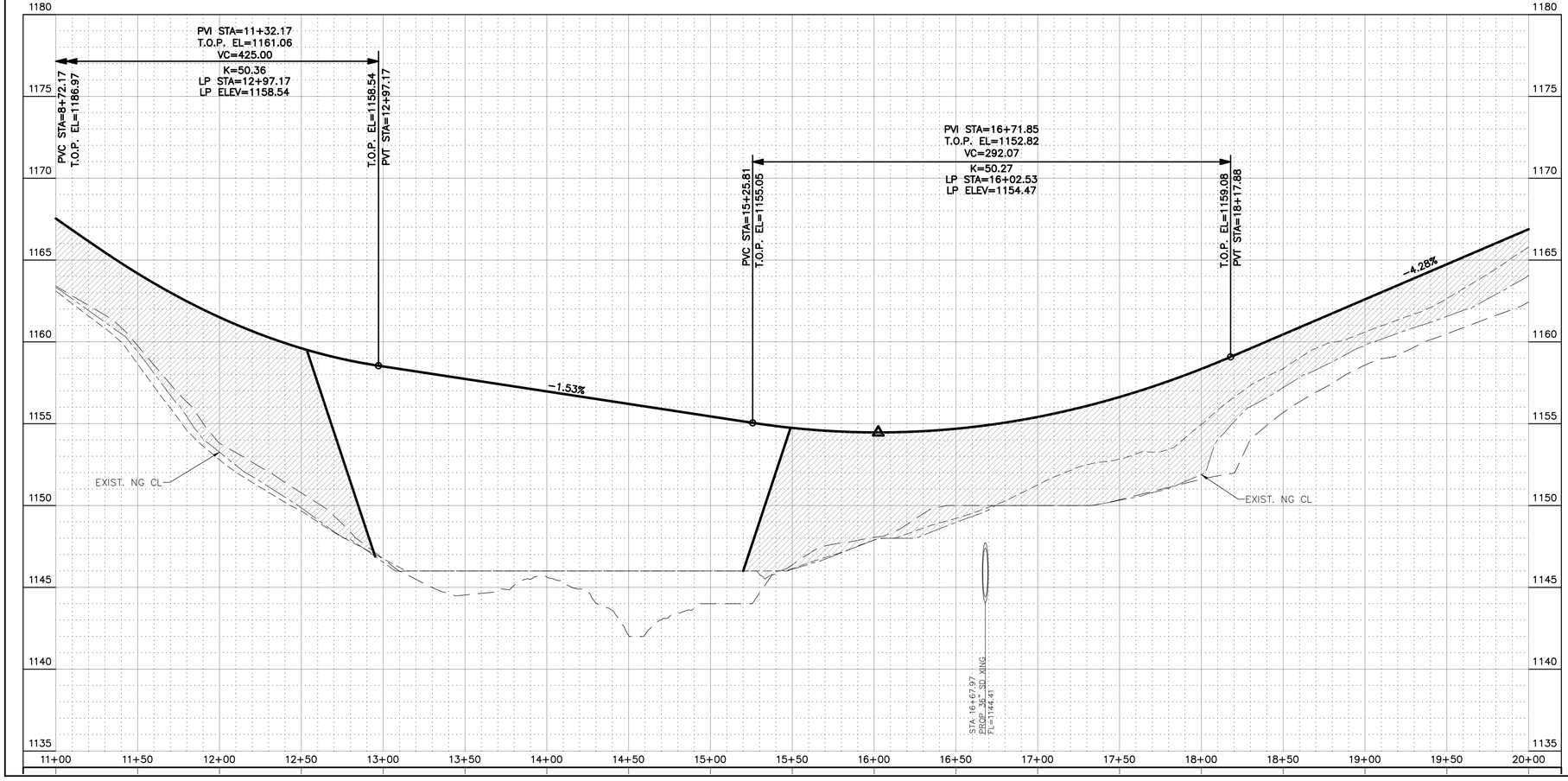

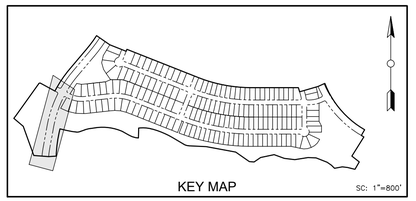

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

LAVONDE DRIVE (WEST) STA 12+00 TO STA 20+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
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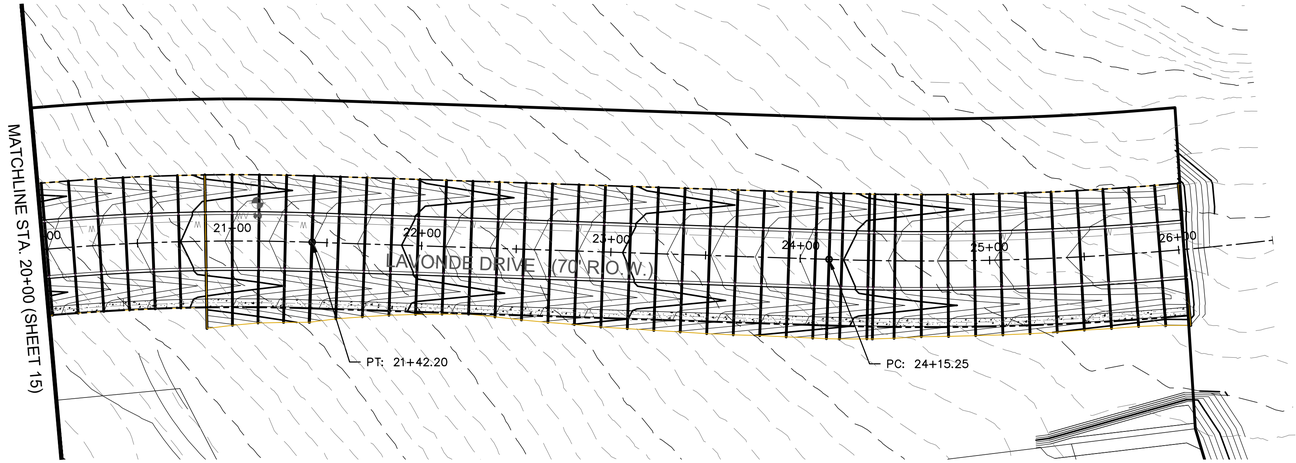

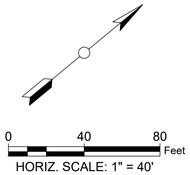

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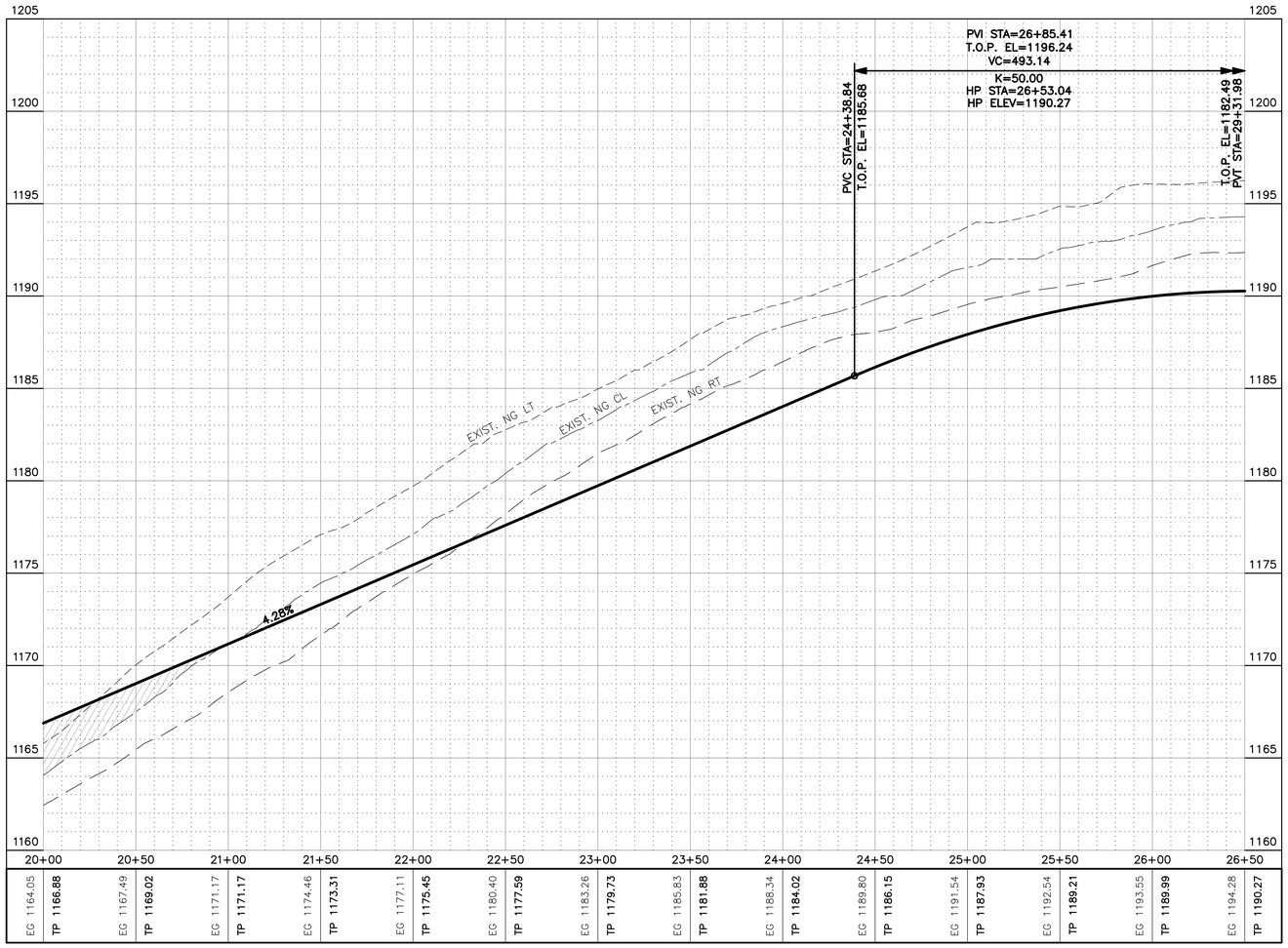

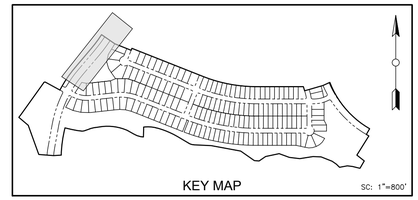

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JOSHUA F. HENKE
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9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

LAVONDE DRIVE (WEST) STA 20+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

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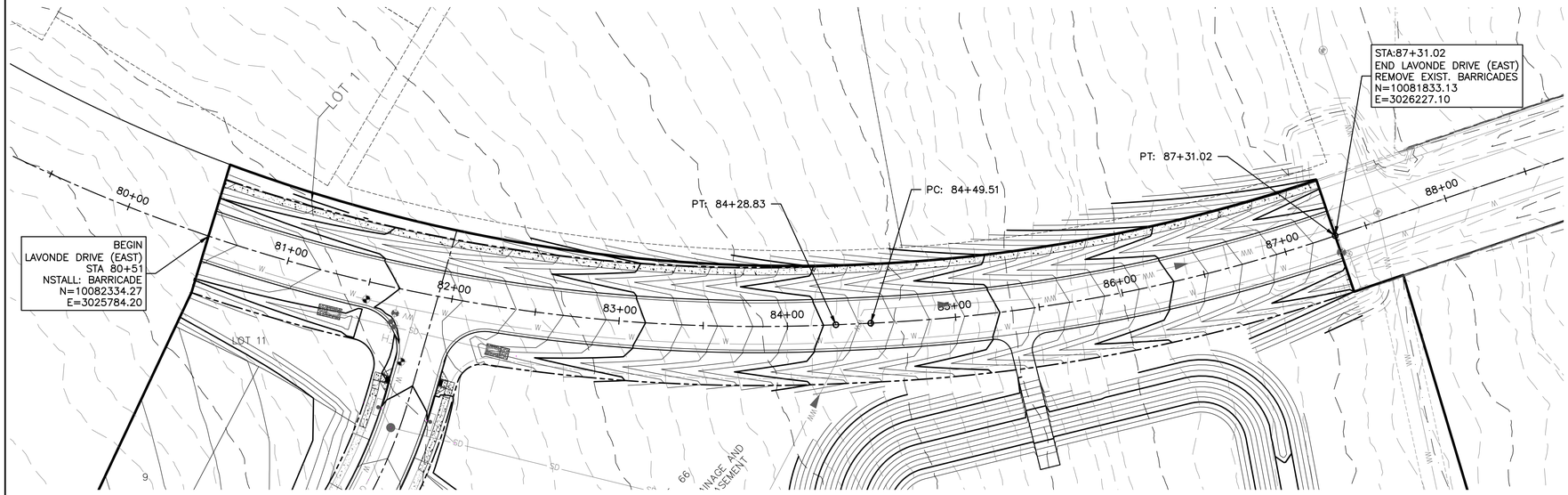

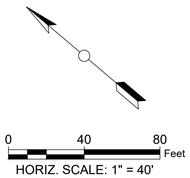

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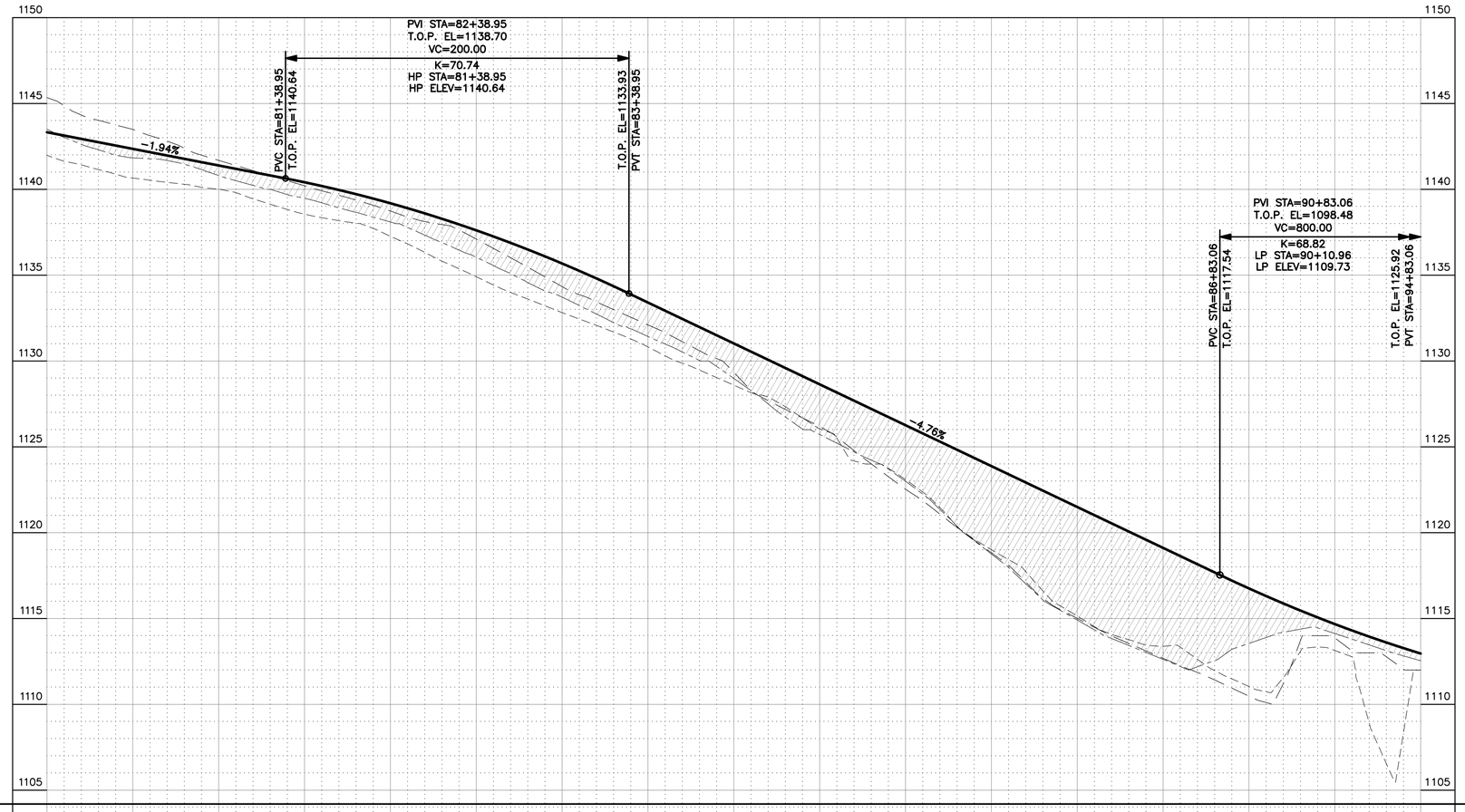

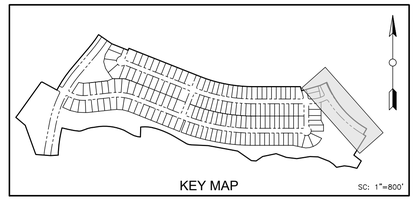

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17100 BLOCK HAMILTON POOL RD.
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LAVONDE DRIVE (EAST) STA 0+00 TO
END (2)

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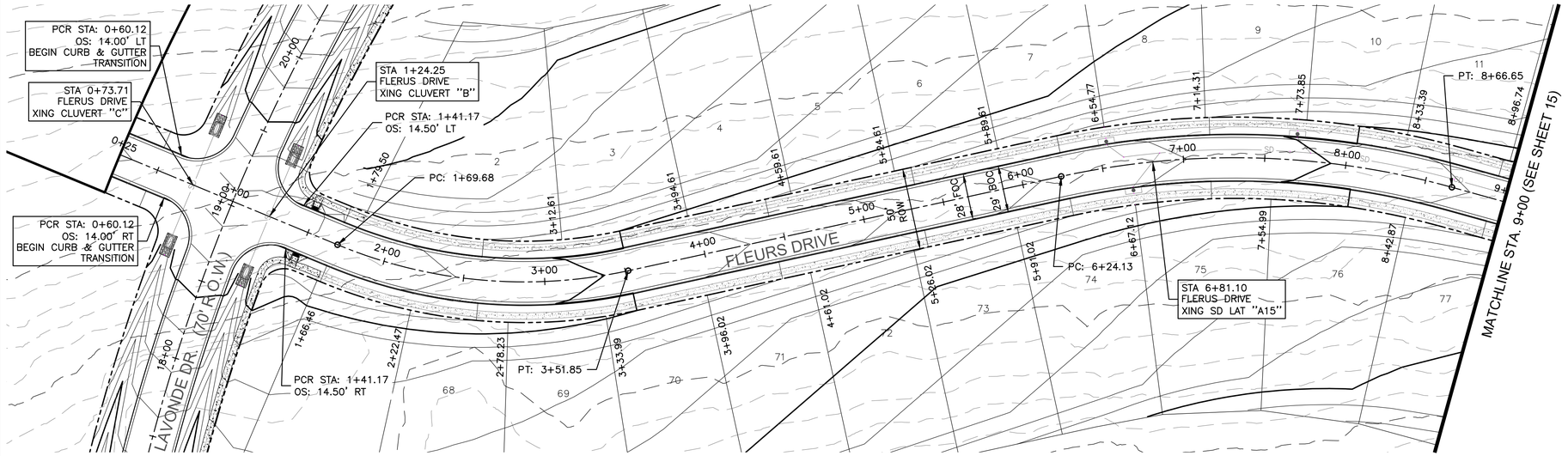

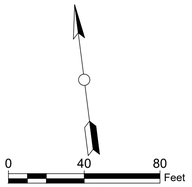

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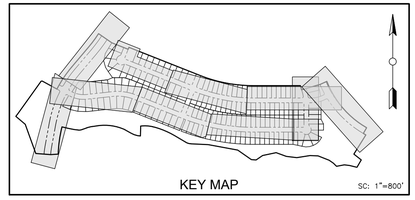
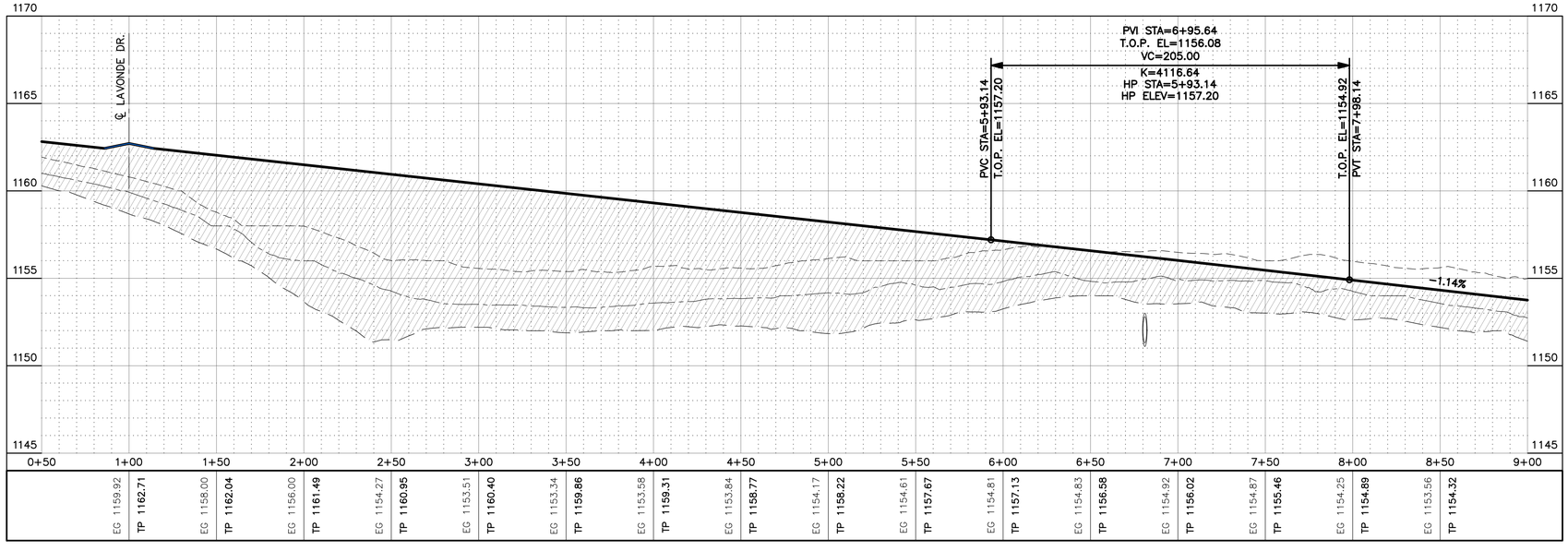


FLERUS DRIVE



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PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
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FLEURS DRIVE STA 1+00 TO STA 9+00

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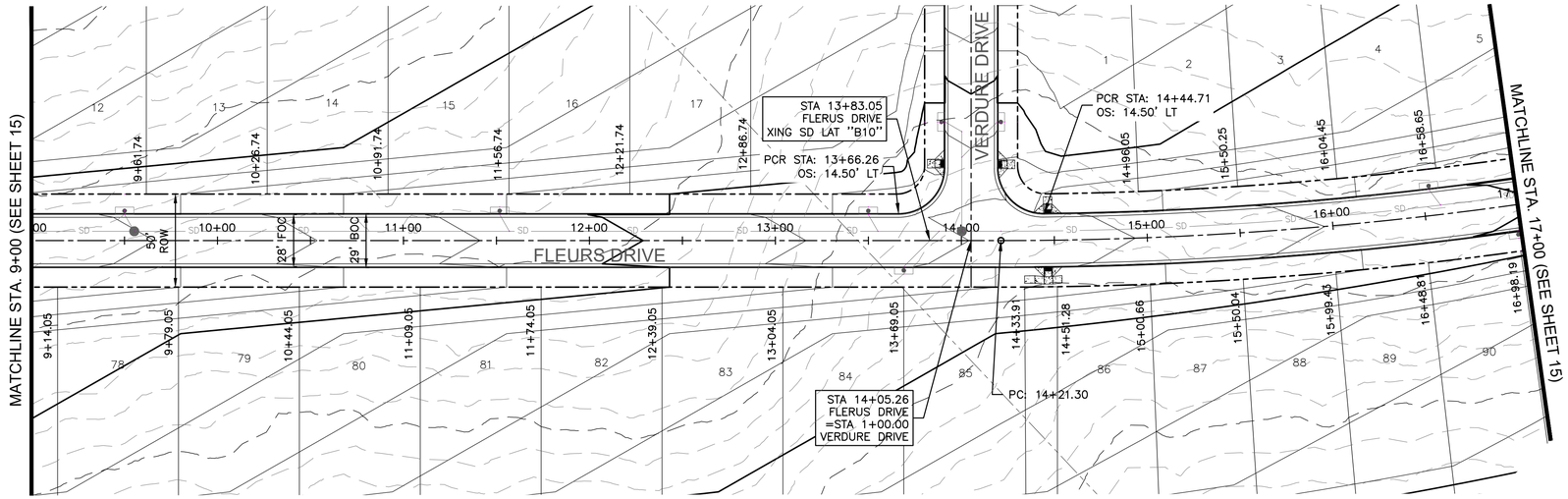

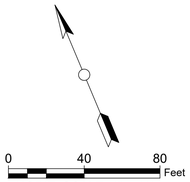

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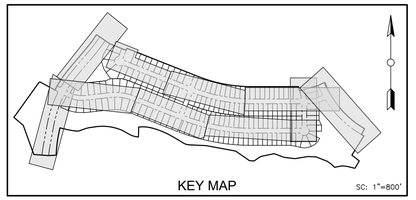

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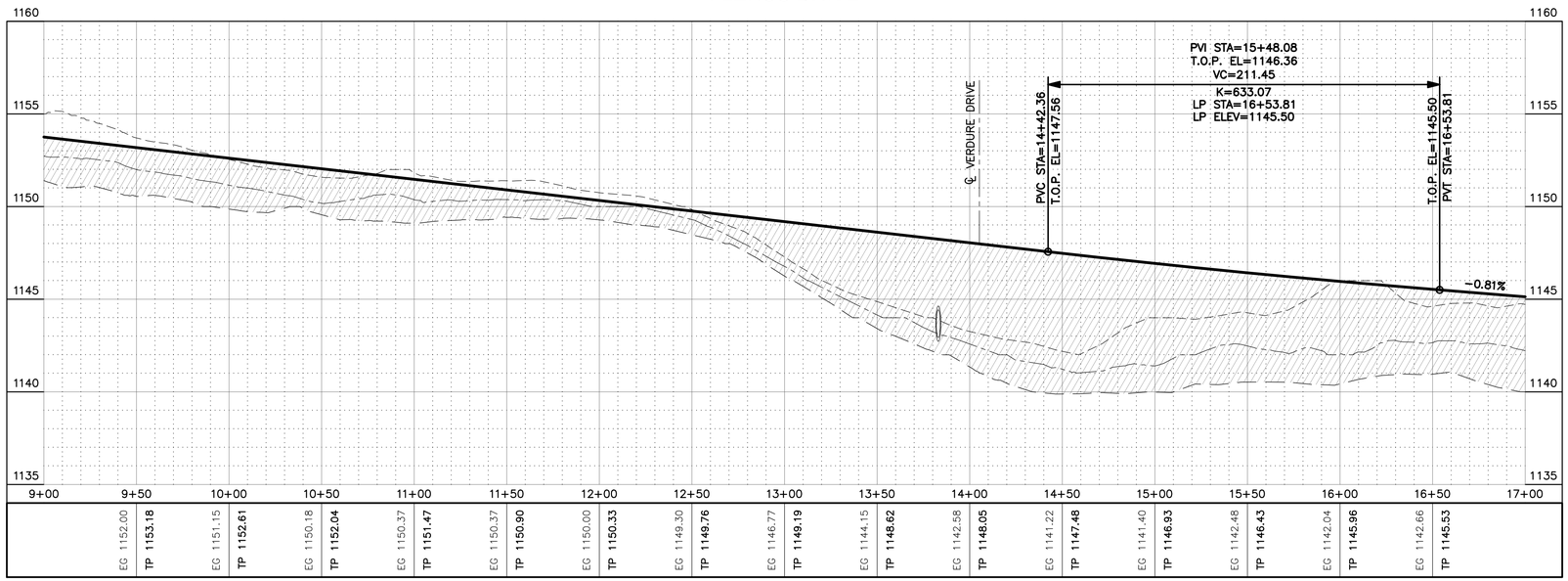

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9/11/2025

PROVENCE, PHASE 2, SECTION 2
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CHECKED BY: XX

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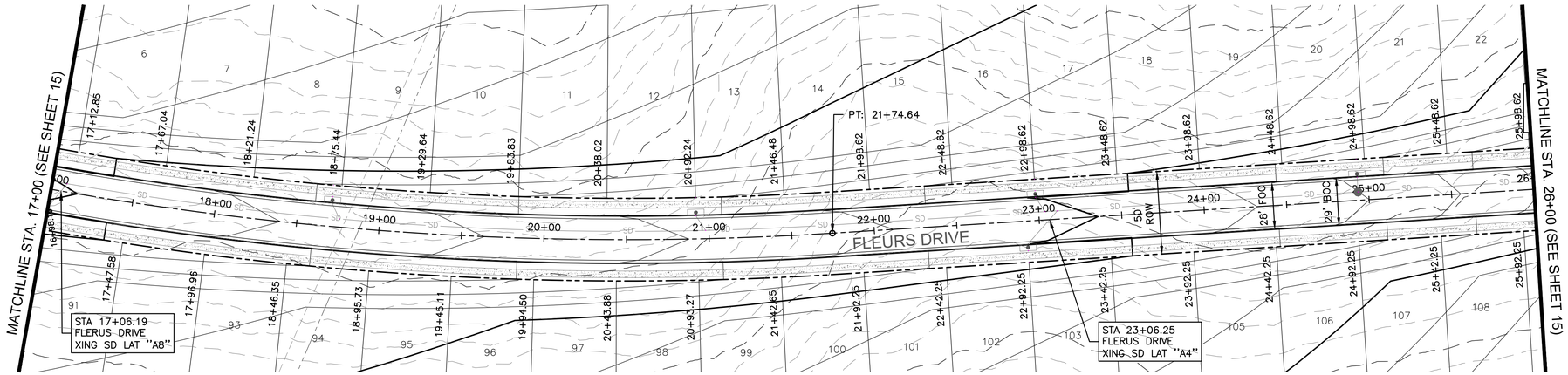

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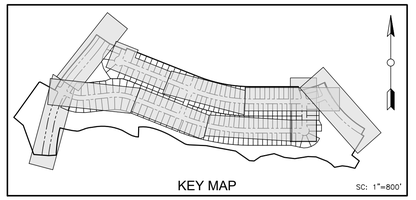
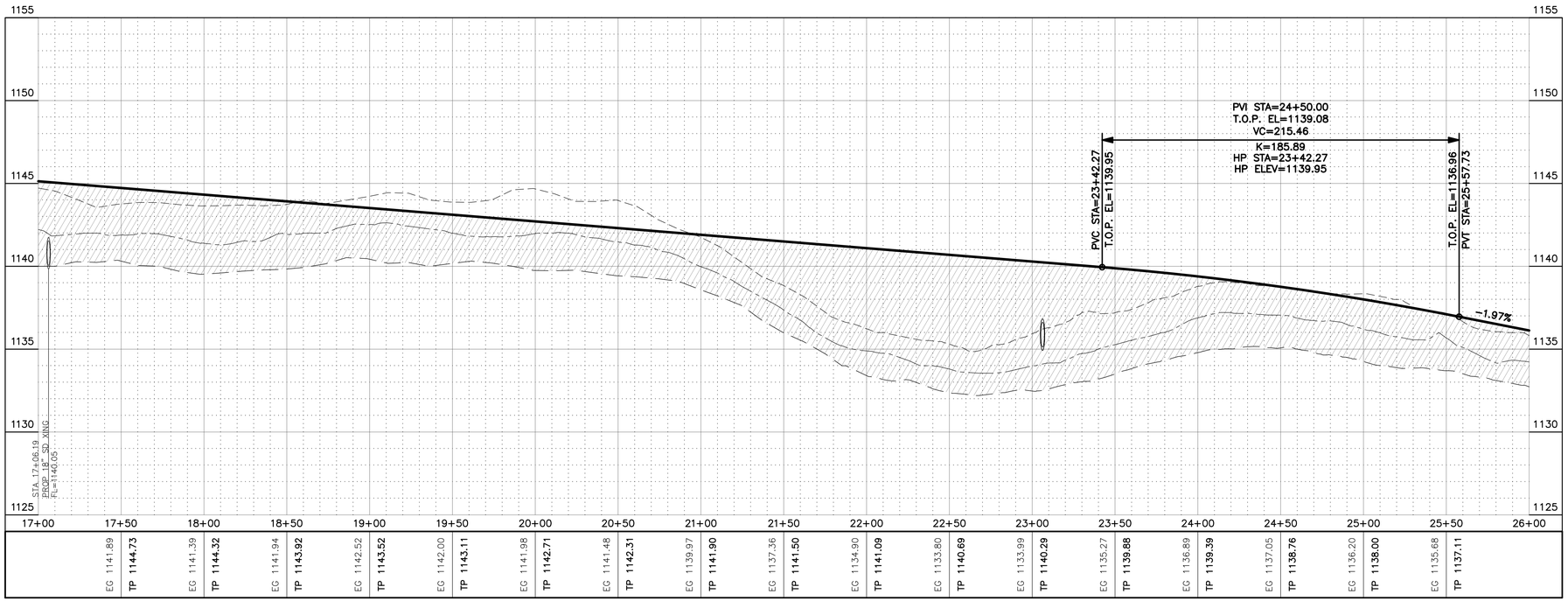


FLERUS DRIVE



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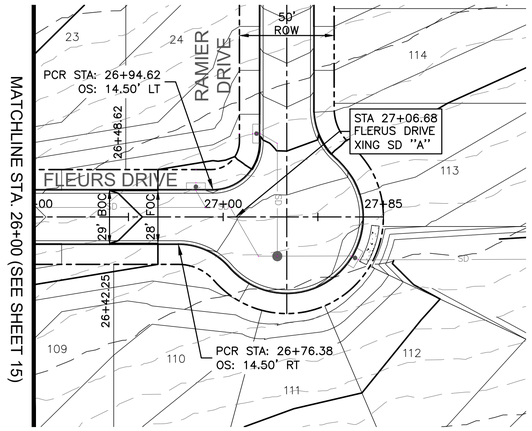

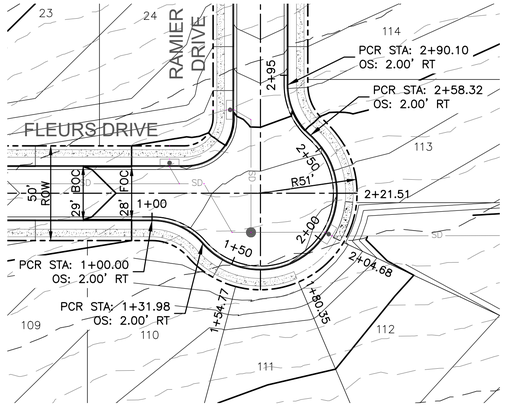

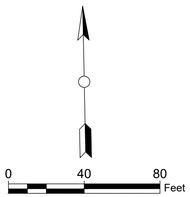

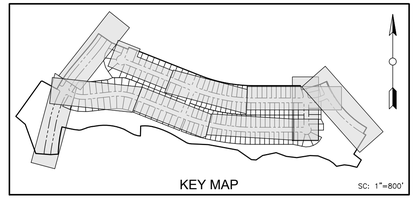

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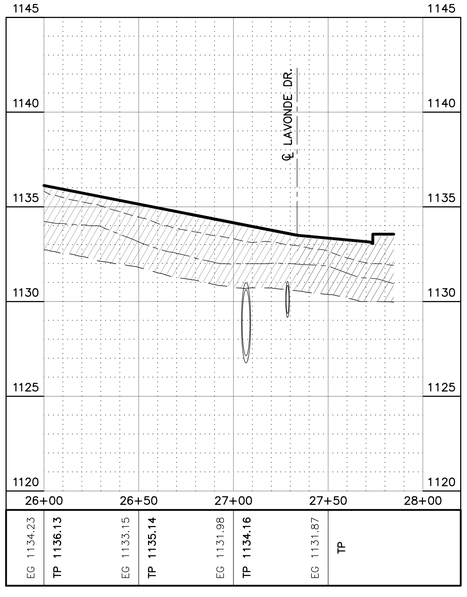
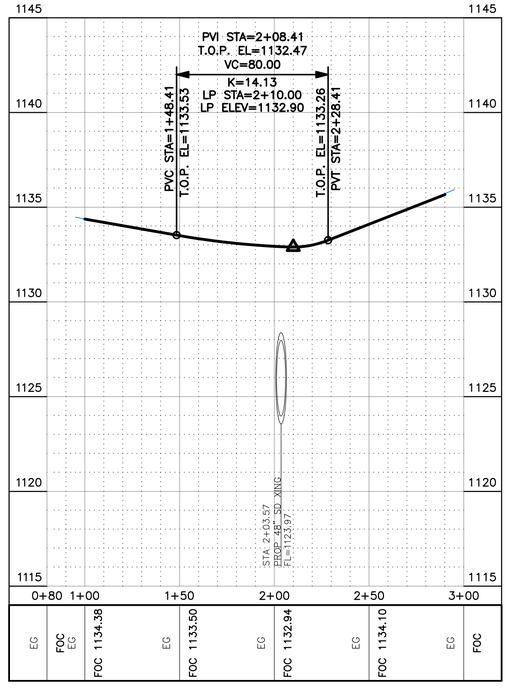


FLERUS & REMIER KNUCKLE



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

FLEURS DRIVE STA 26+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 21 of 73

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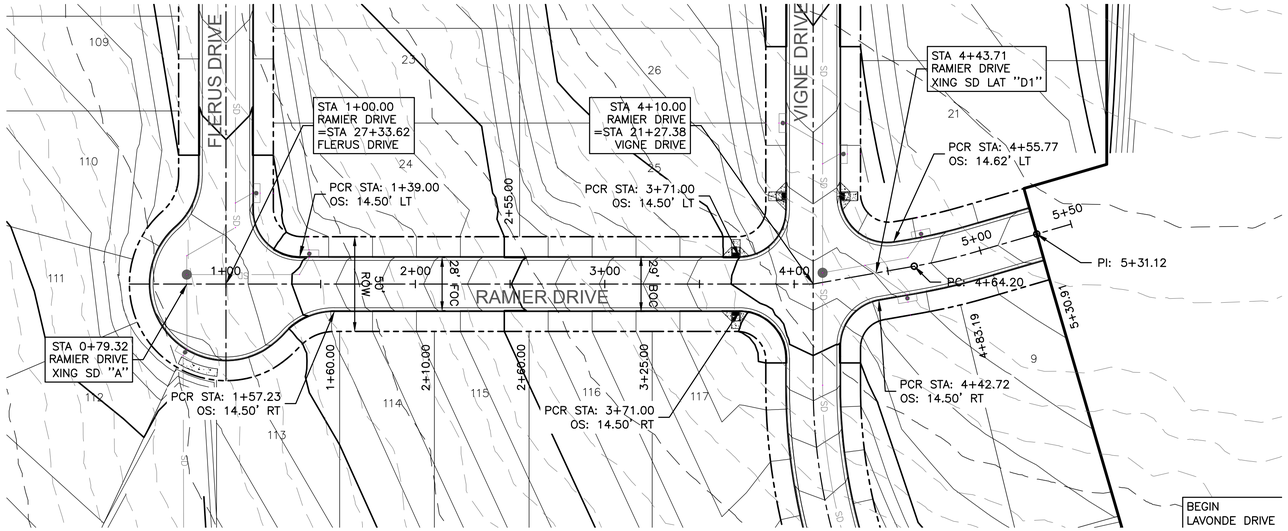
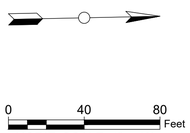
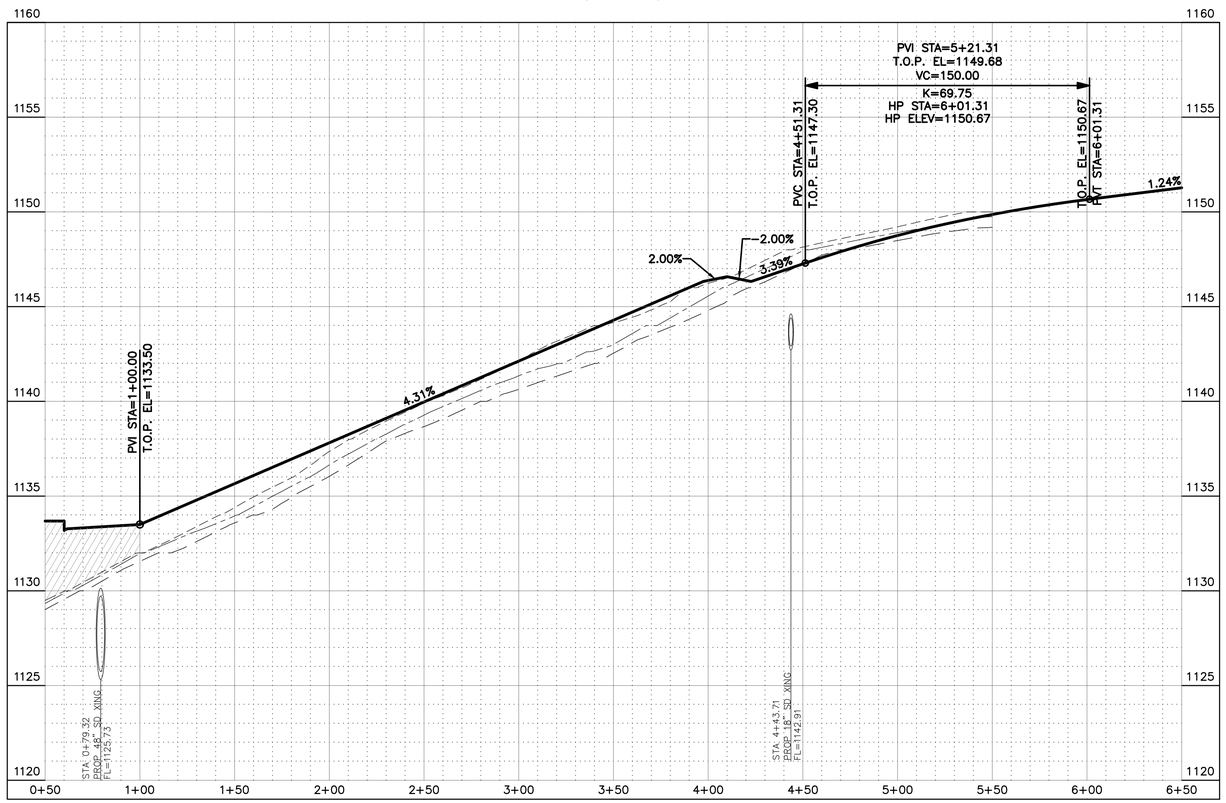
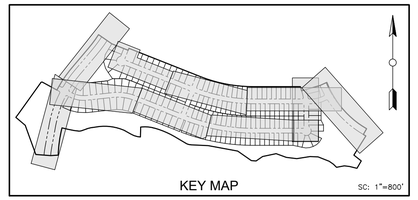




HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

RAMIER DRIVE





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512-502-8333
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STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

RAMIER DRIVE STA 1+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

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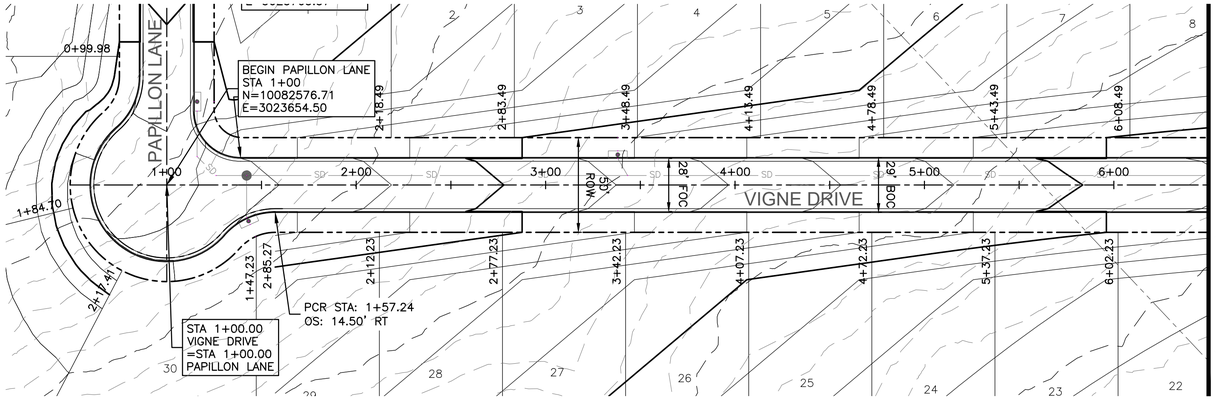
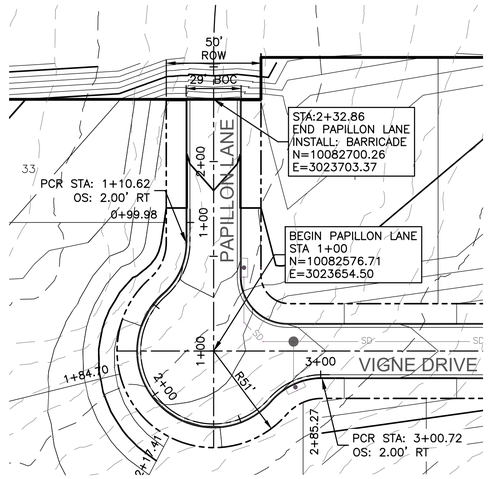
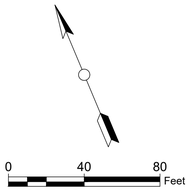
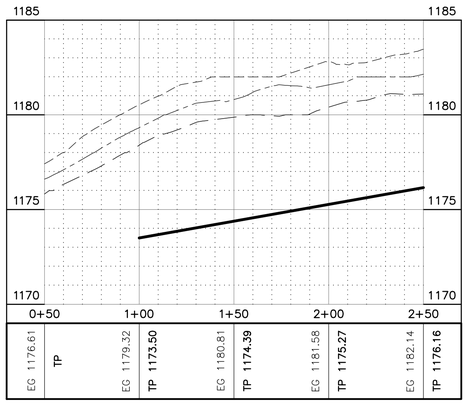
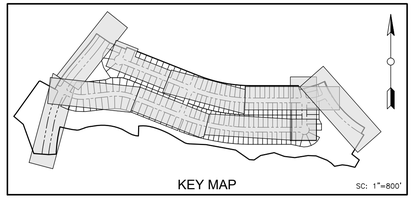




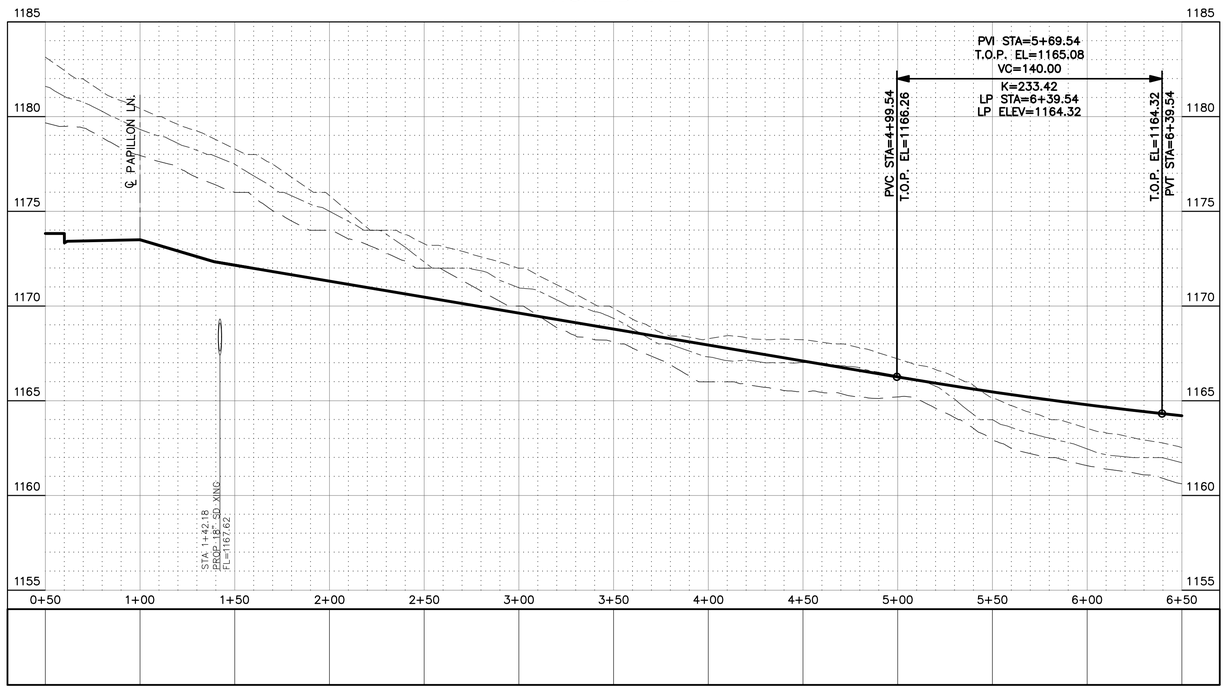


PAPILLON LANE

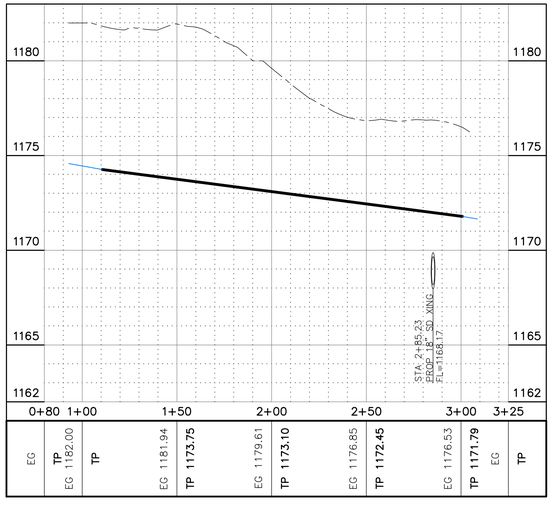




VIGNE DRIVE



PAPILLON & VIGNE KNUCKLE



MOODY ENGINEERING, INC.
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512-502-8333
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STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

VIGNE DRIVE STA 1+00 TO STA 6+50

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

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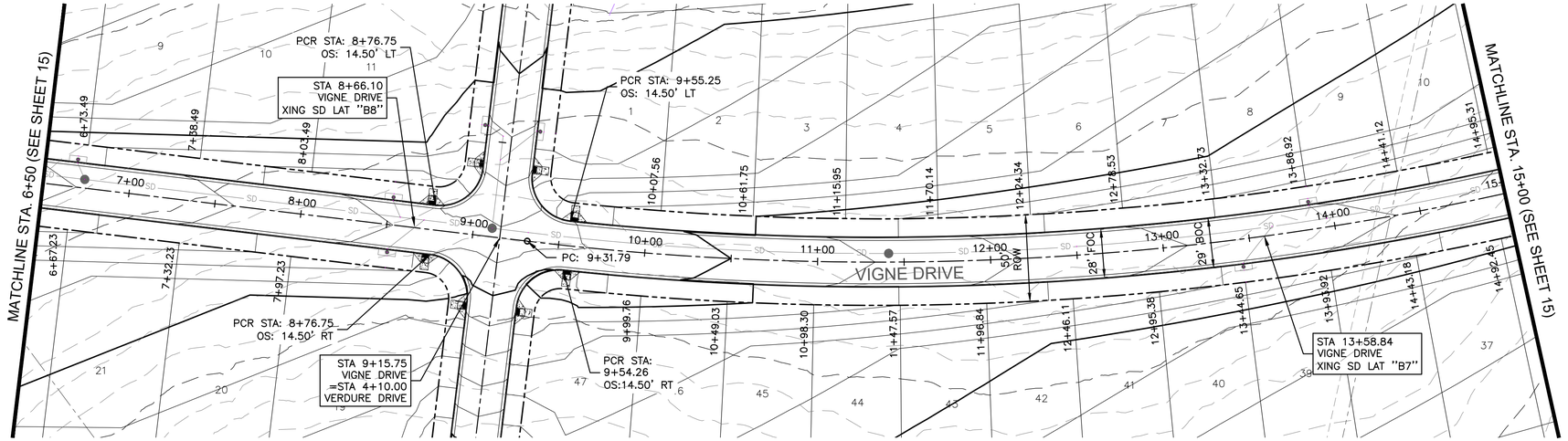

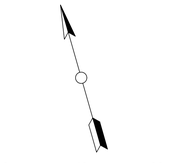

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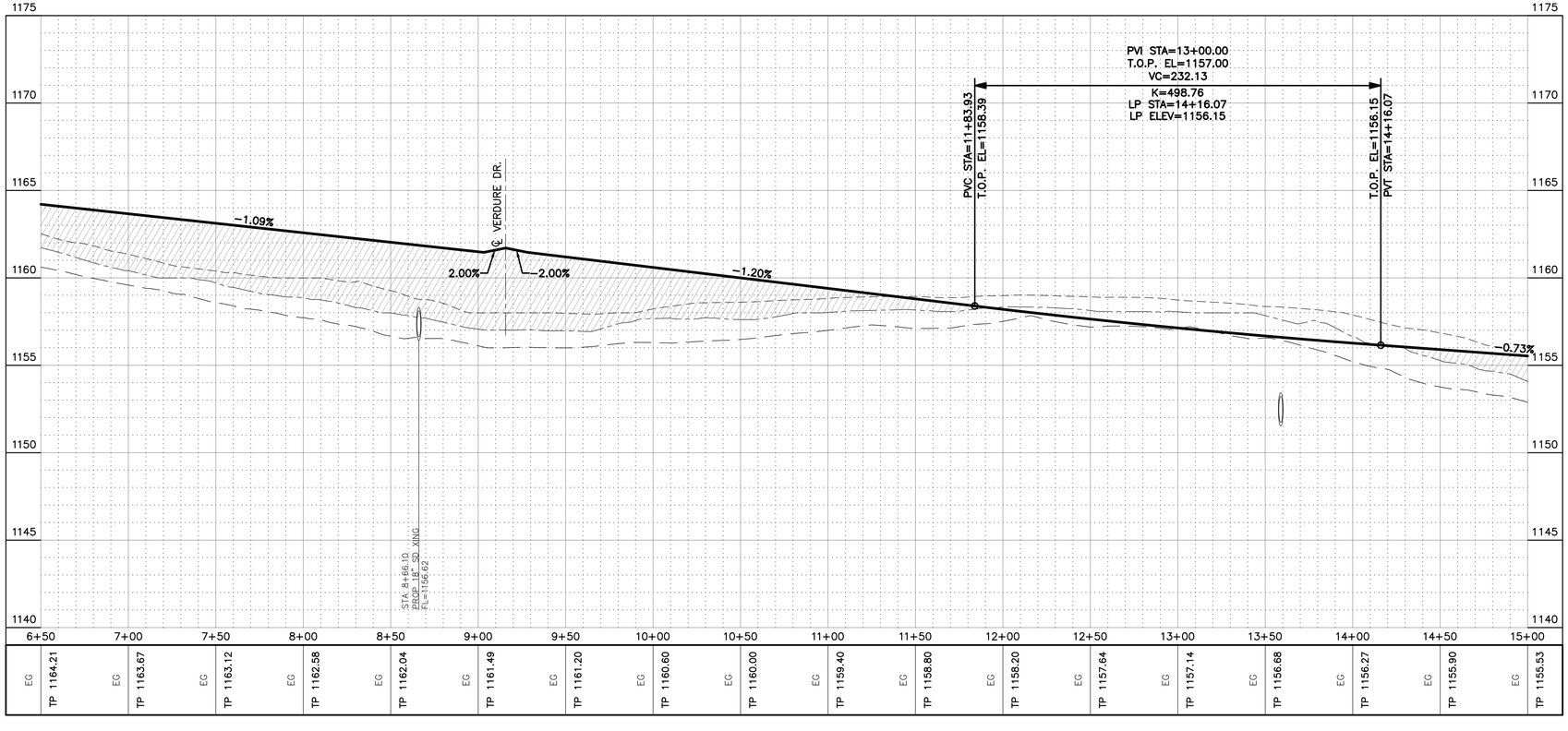

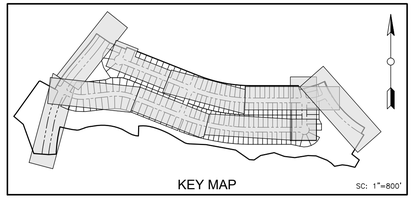

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PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

VIGNE DRIVE STA 6+50 TO STA 15+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 24 of 73

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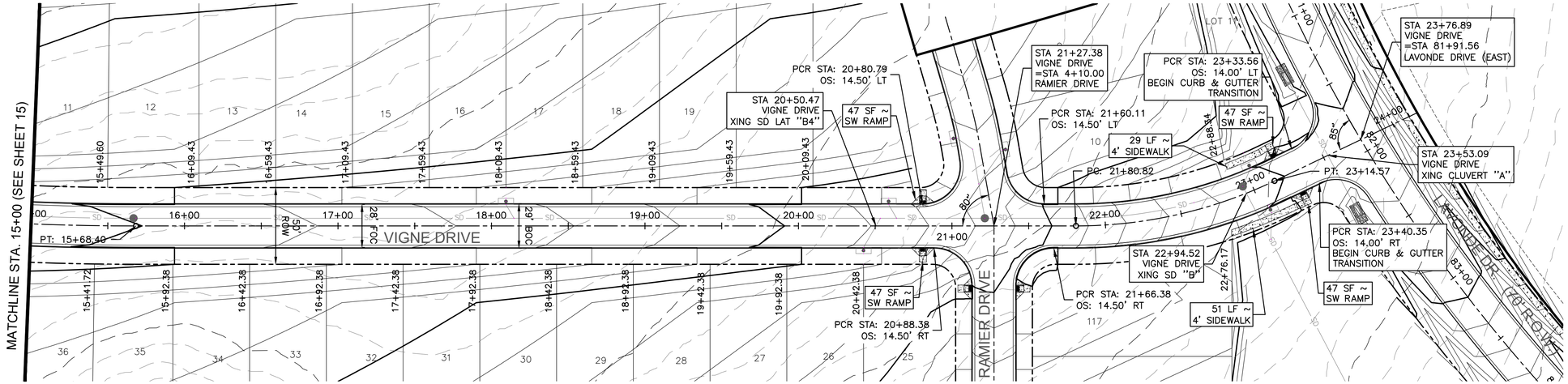

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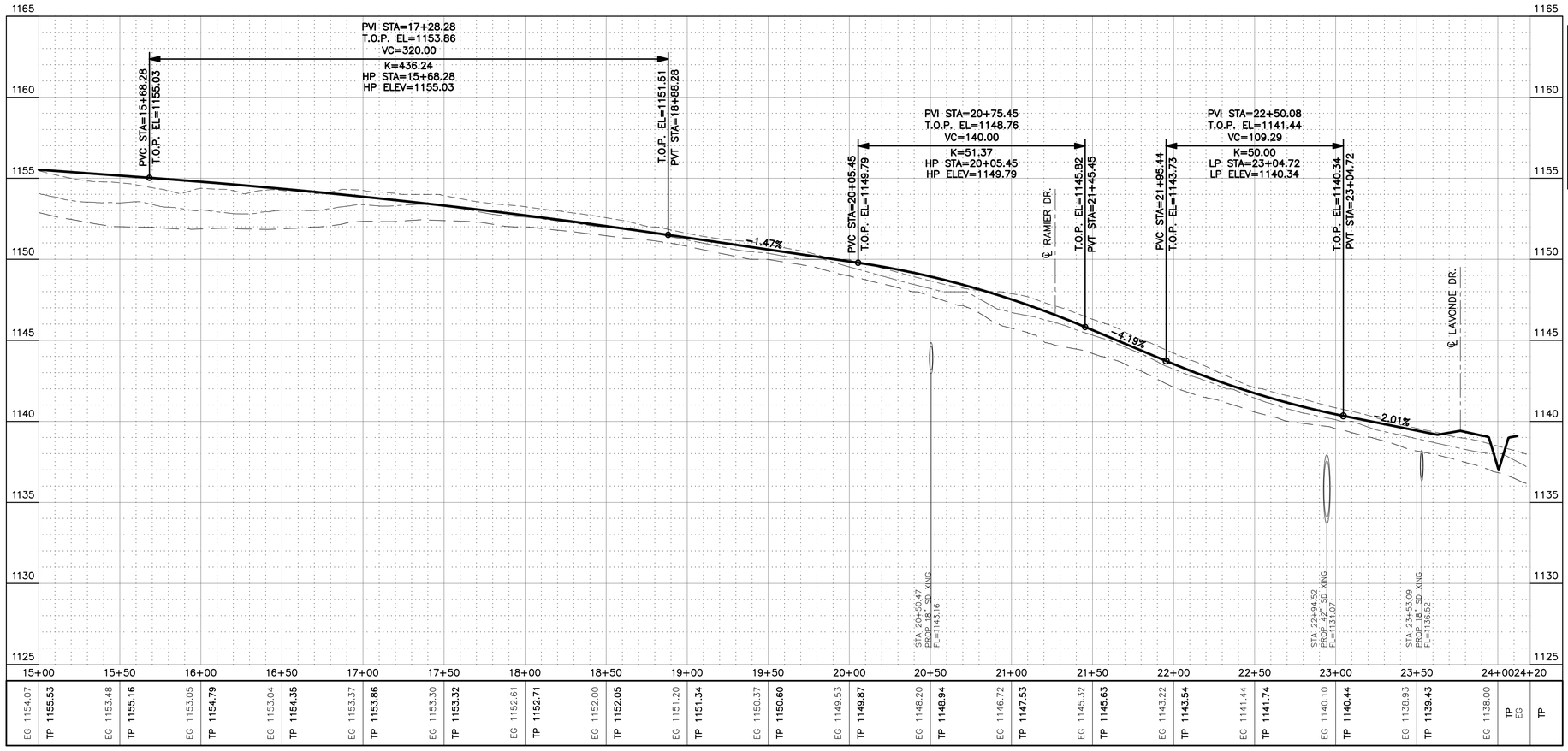

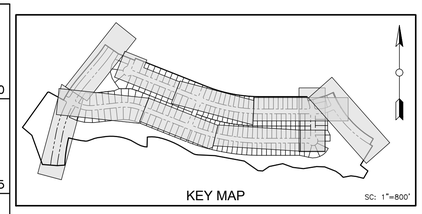

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
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512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

VIGNE DRIVE STA 15+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

Sheet 25 of 73

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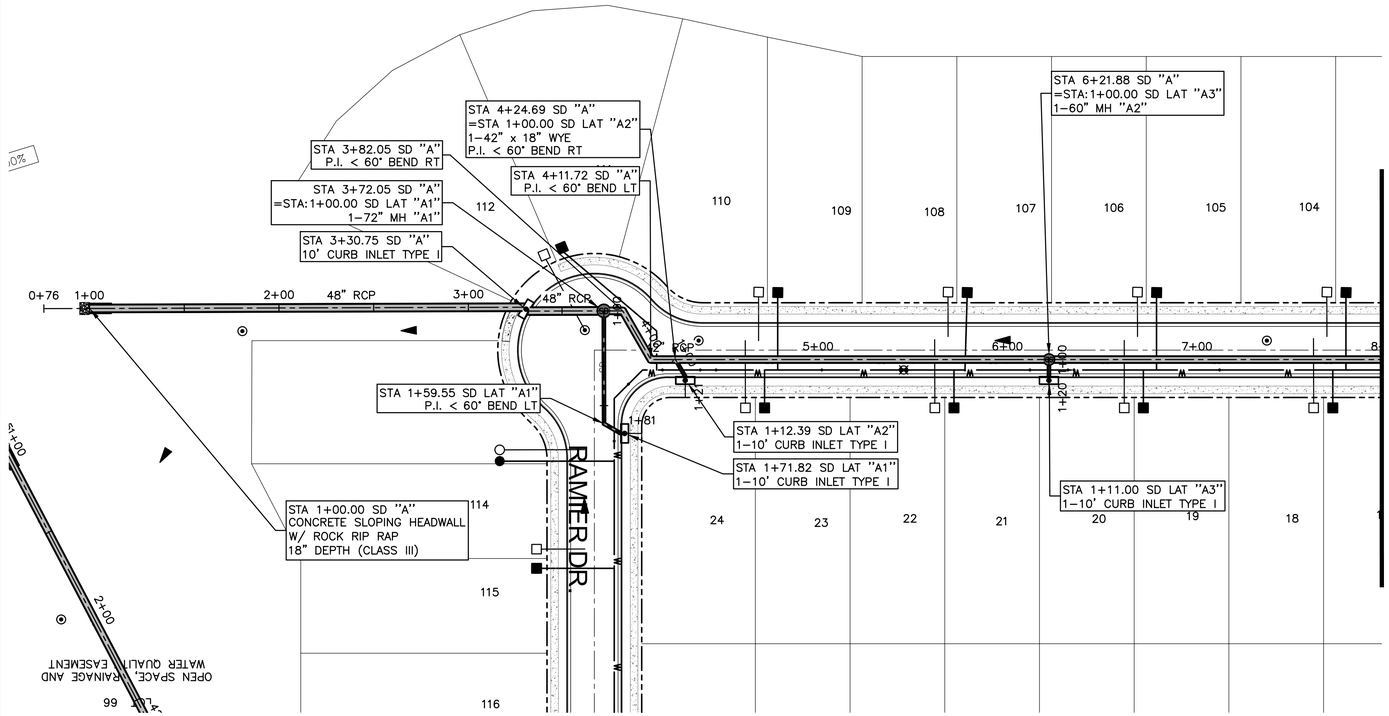
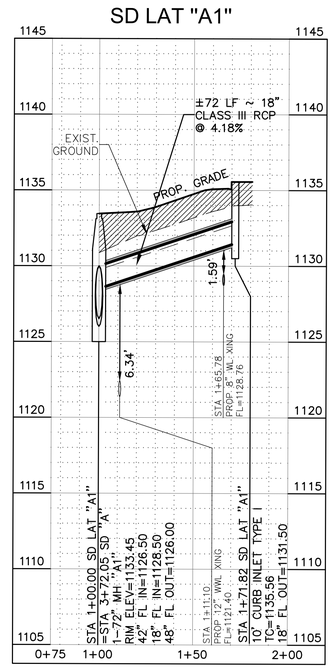
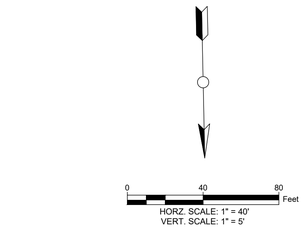
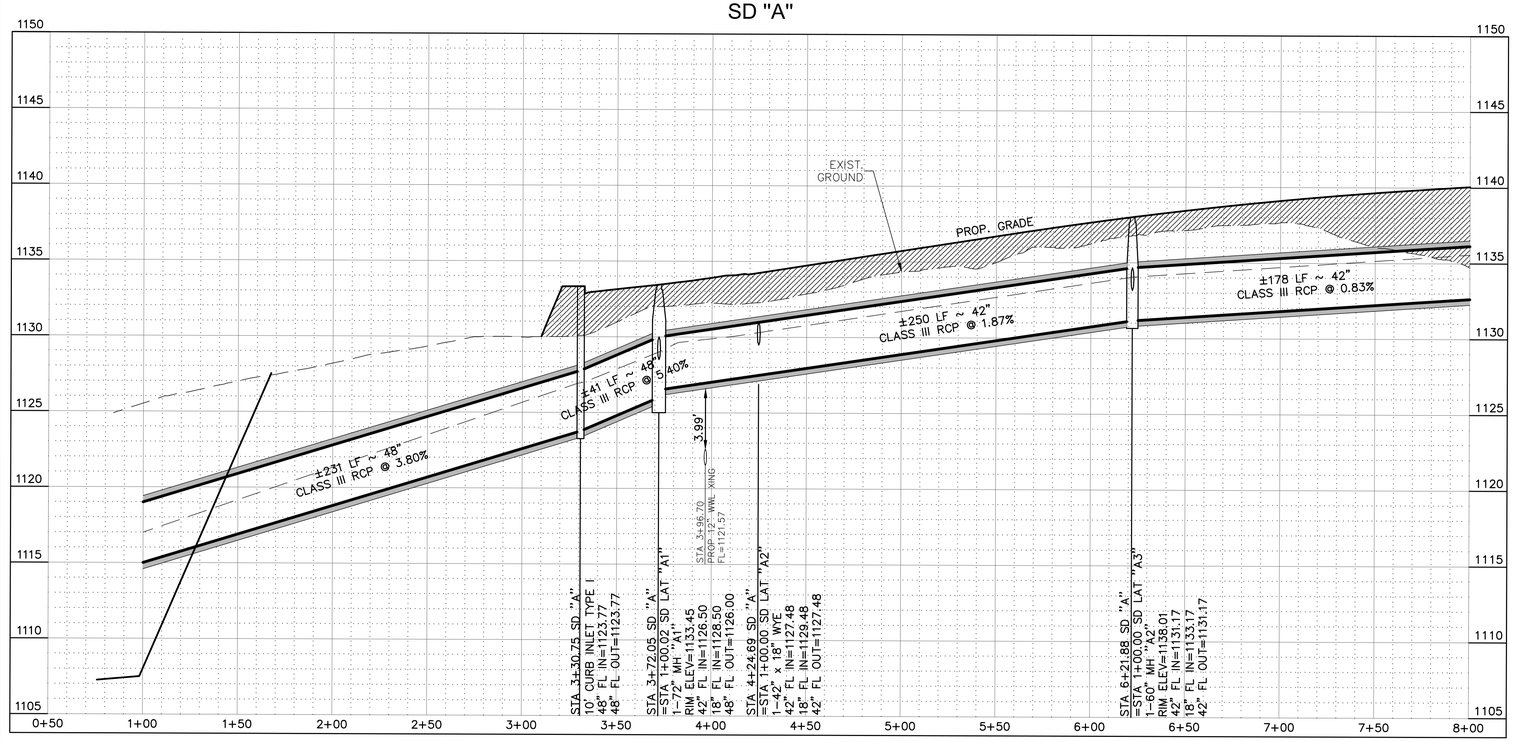


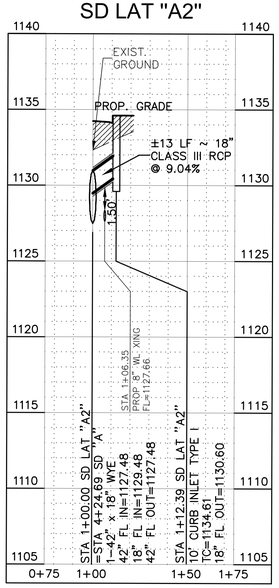


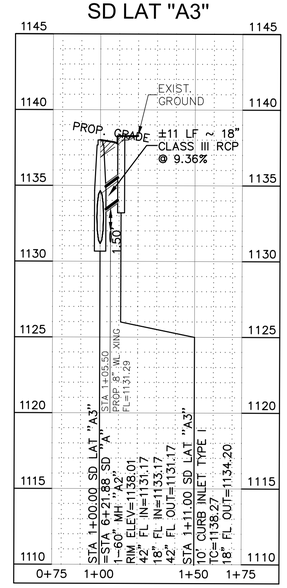


LEGEND

- EXIST CONTOUR MINOR
- EXIST CONTOUR MINOR
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL







MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "A" STA 1+00 TO STA 8+00 / SD LAT "A1" STA 1+00 TO STA 2+00 / SD LAT "A2" STA 1+00 TO STA 1+75 / SD LAT "A3" STA 1+00 TO STA 1+75

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY: XX	DRAWN BY: XX	CHECKED BY: XX	BY

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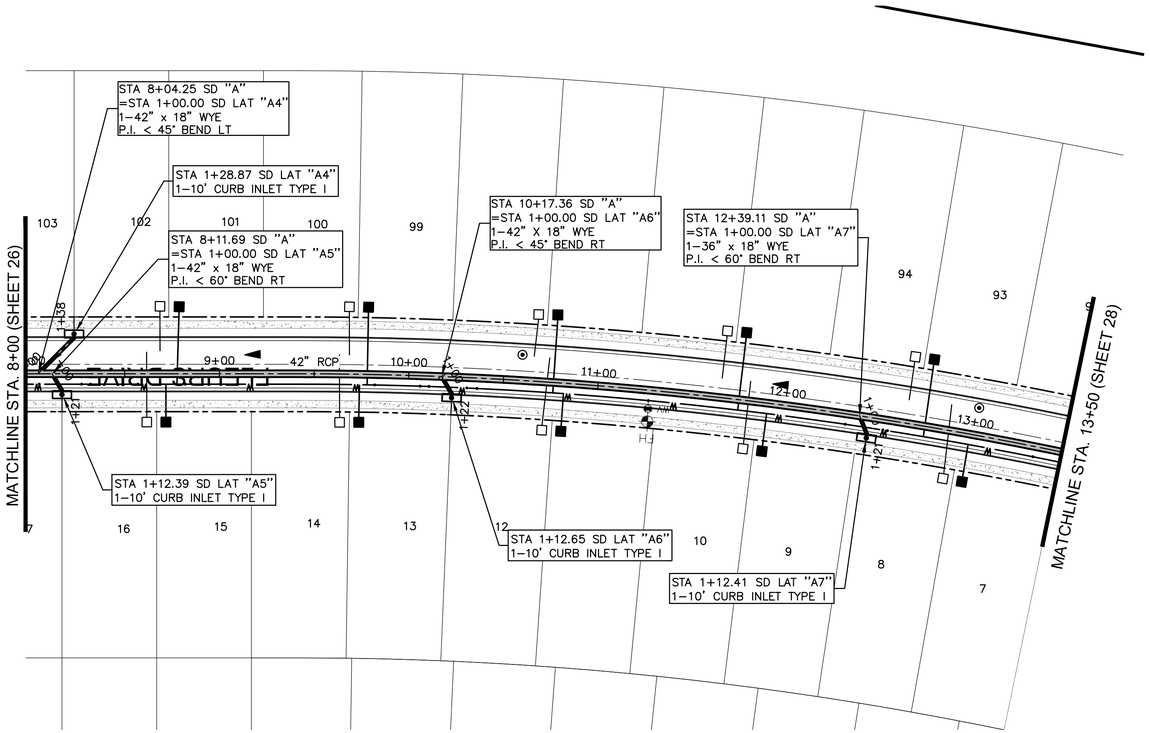

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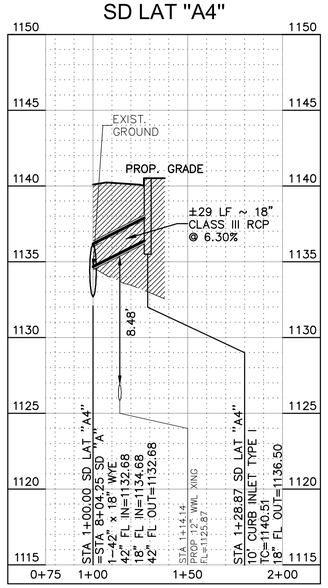

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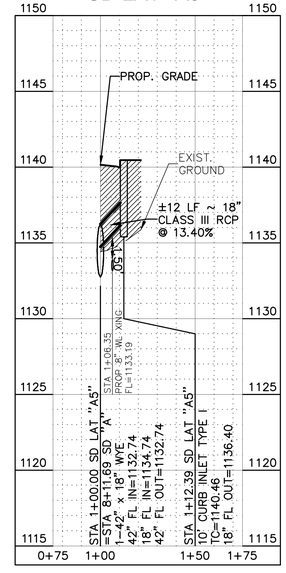
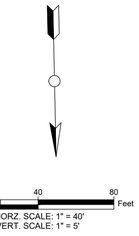
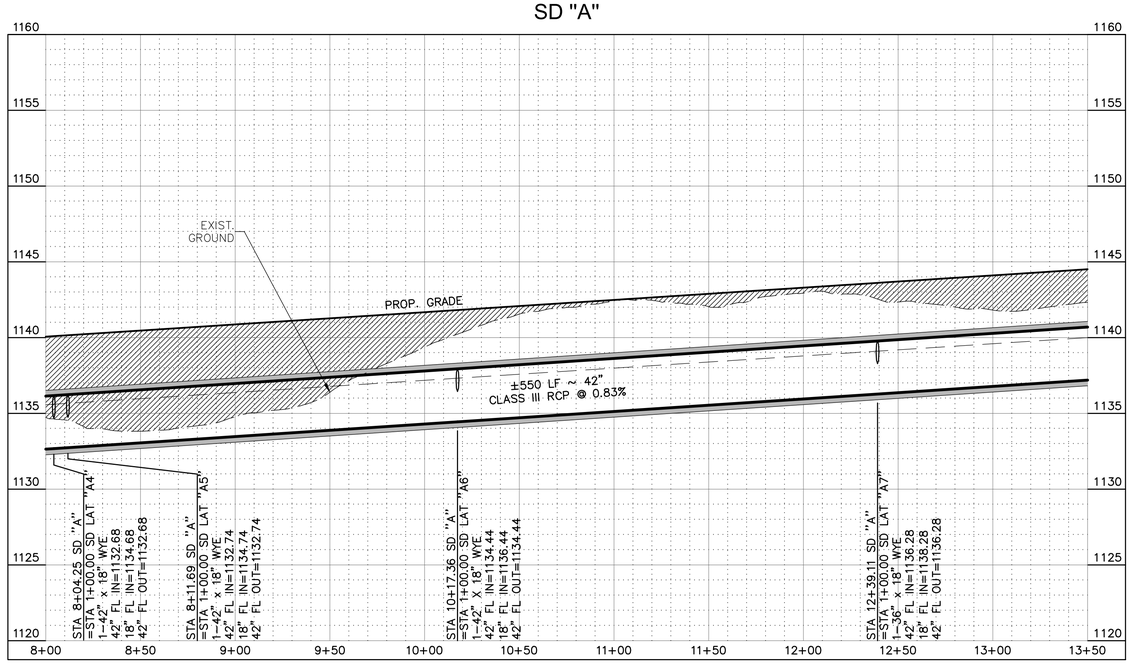




LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

SD "A"



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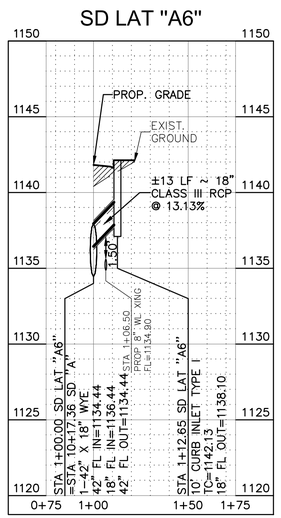

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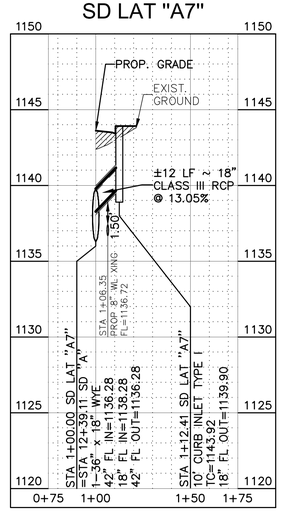

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
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JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "A" STA 8+00 TO STA 13+50

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 27 of 73

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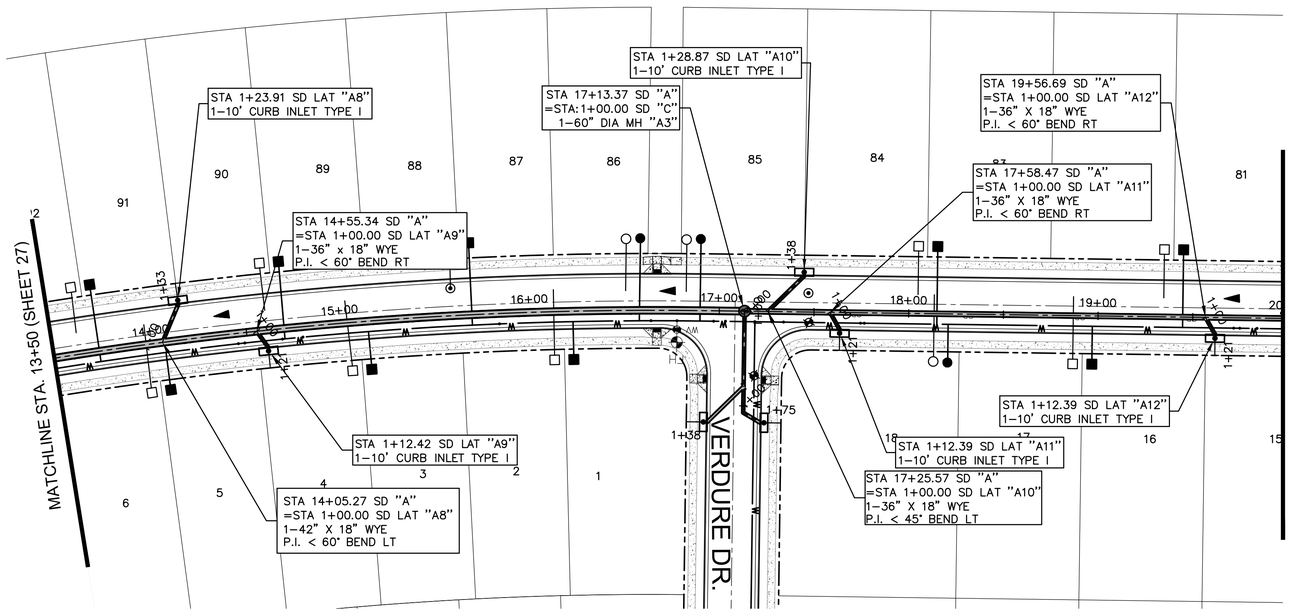
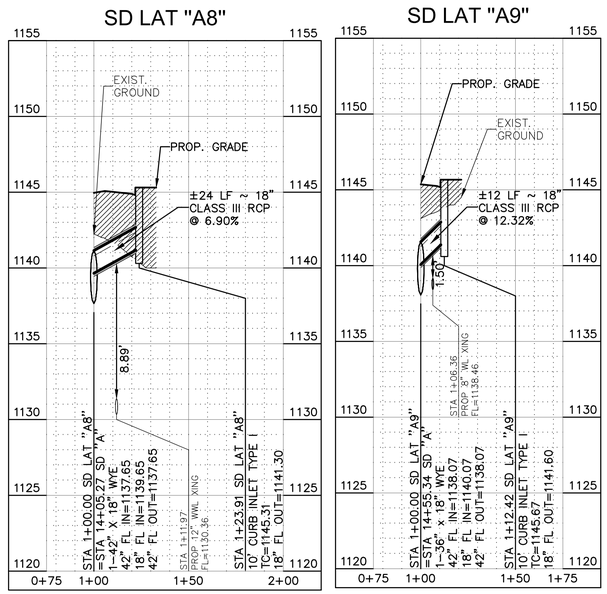
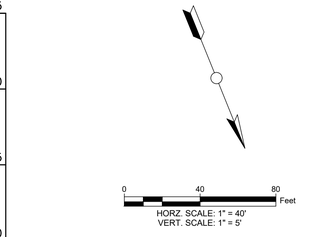
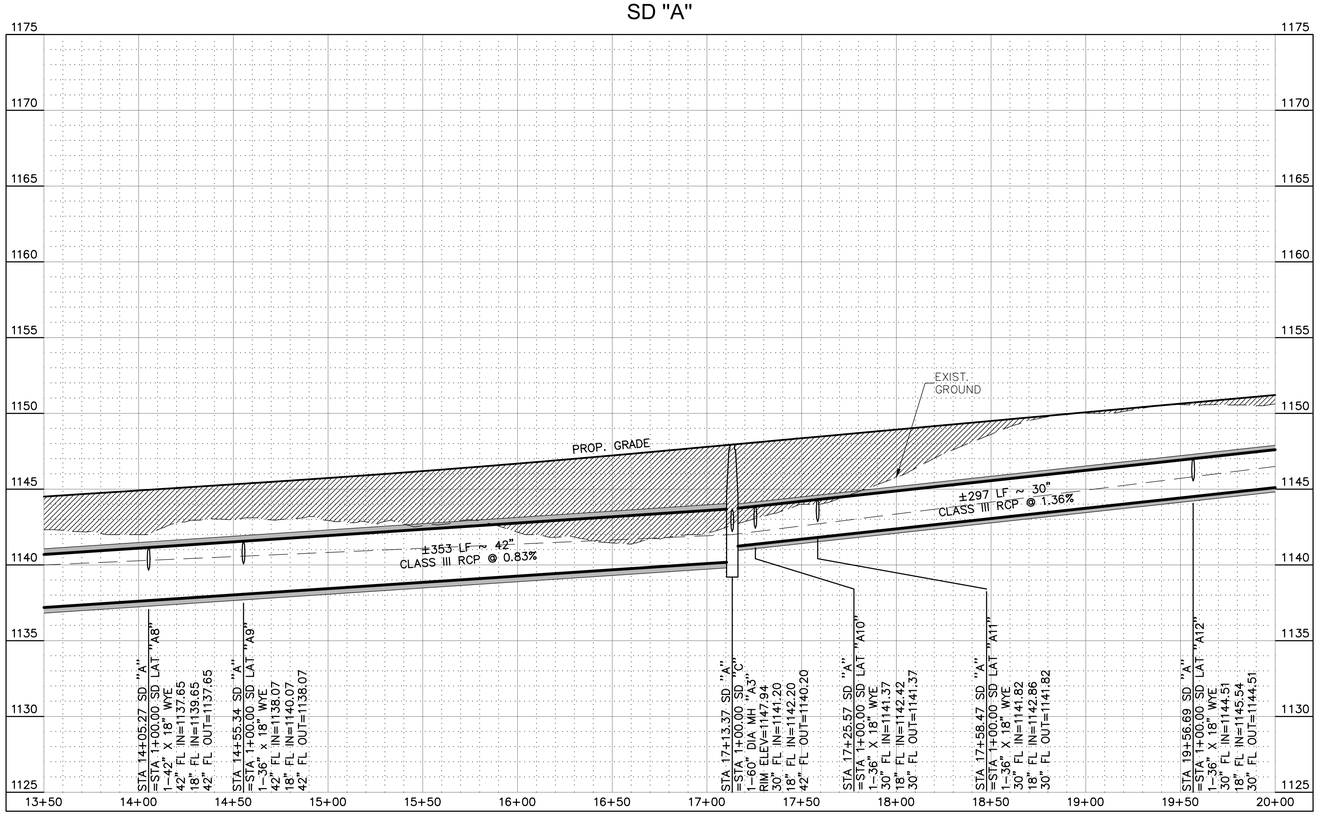


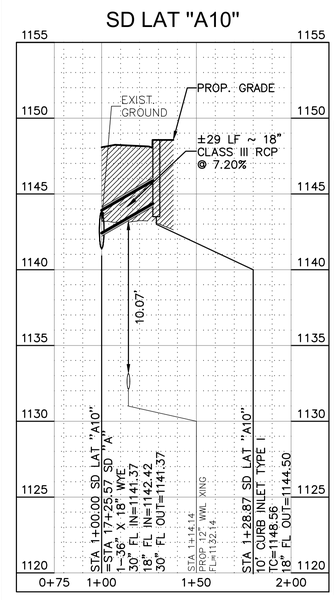




LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MAJOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL





MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "A" STA 13+50 TO STA 20+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 28

73

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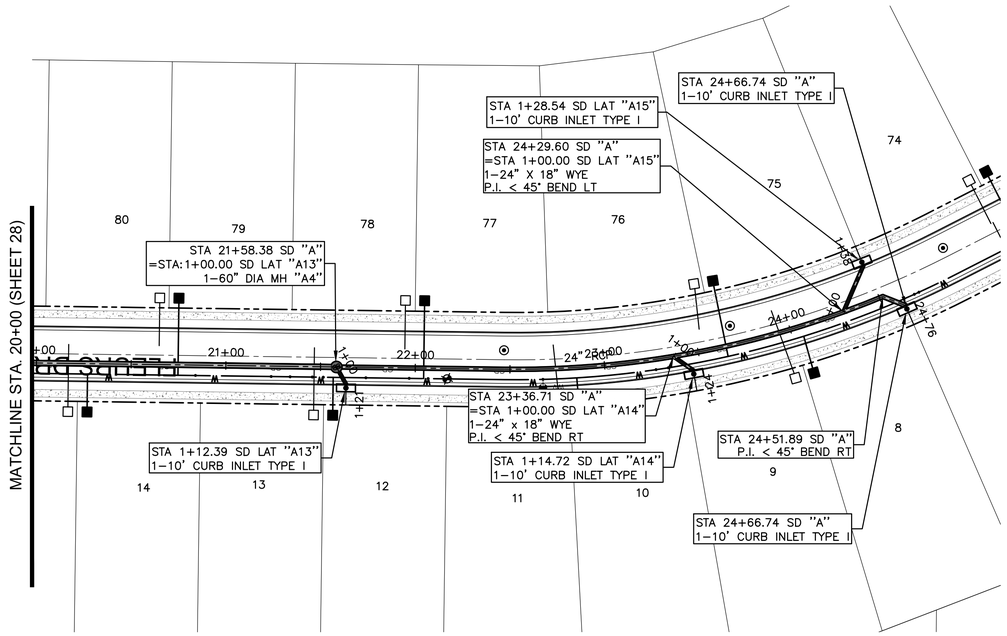

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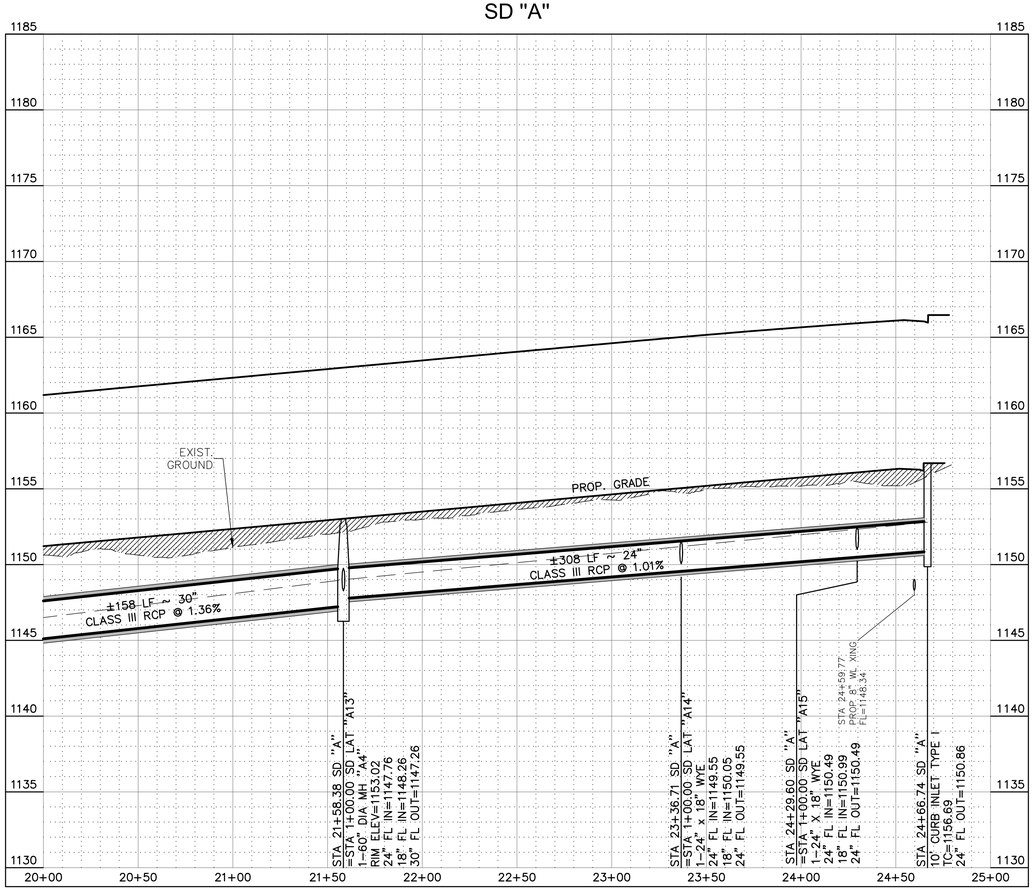

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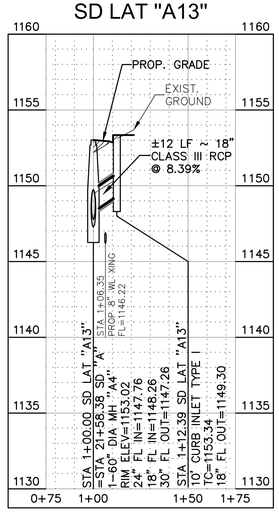

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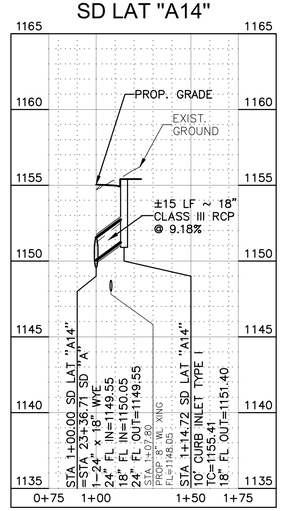

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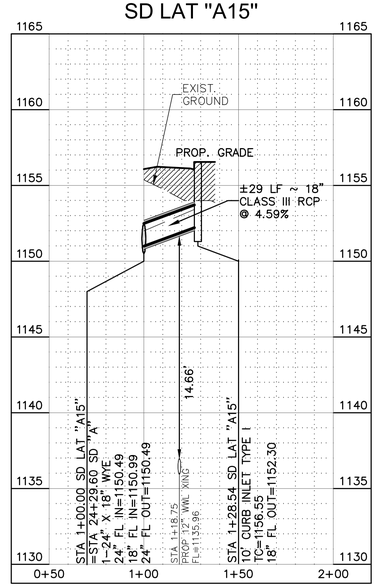

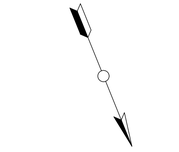

LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
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TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "A" STA 20+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

Sheet 29 of 73

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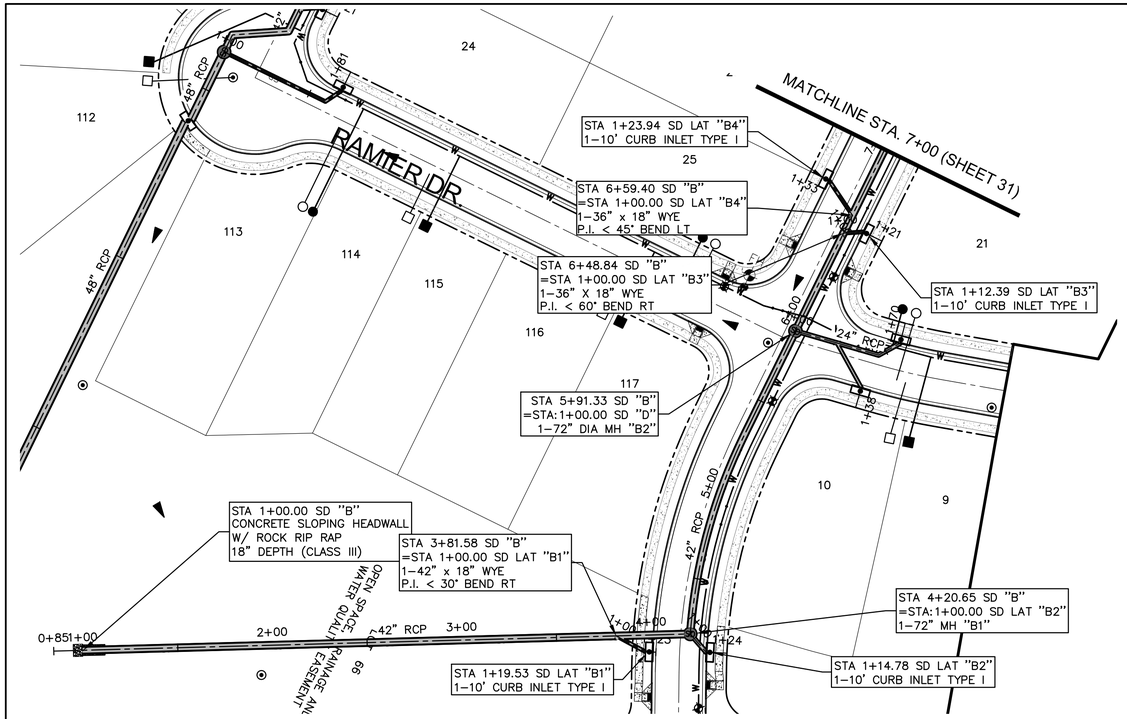

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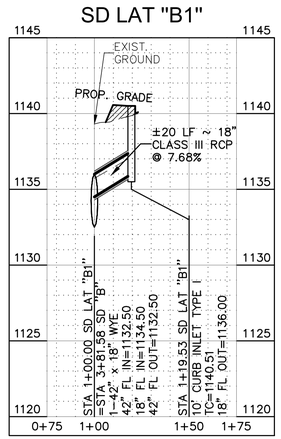

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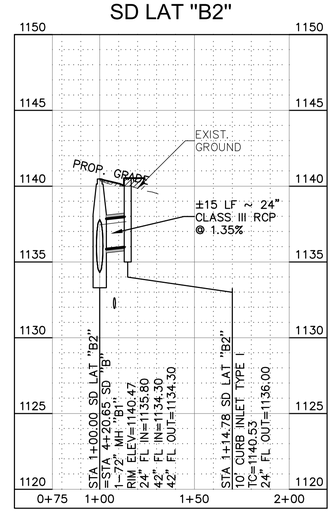

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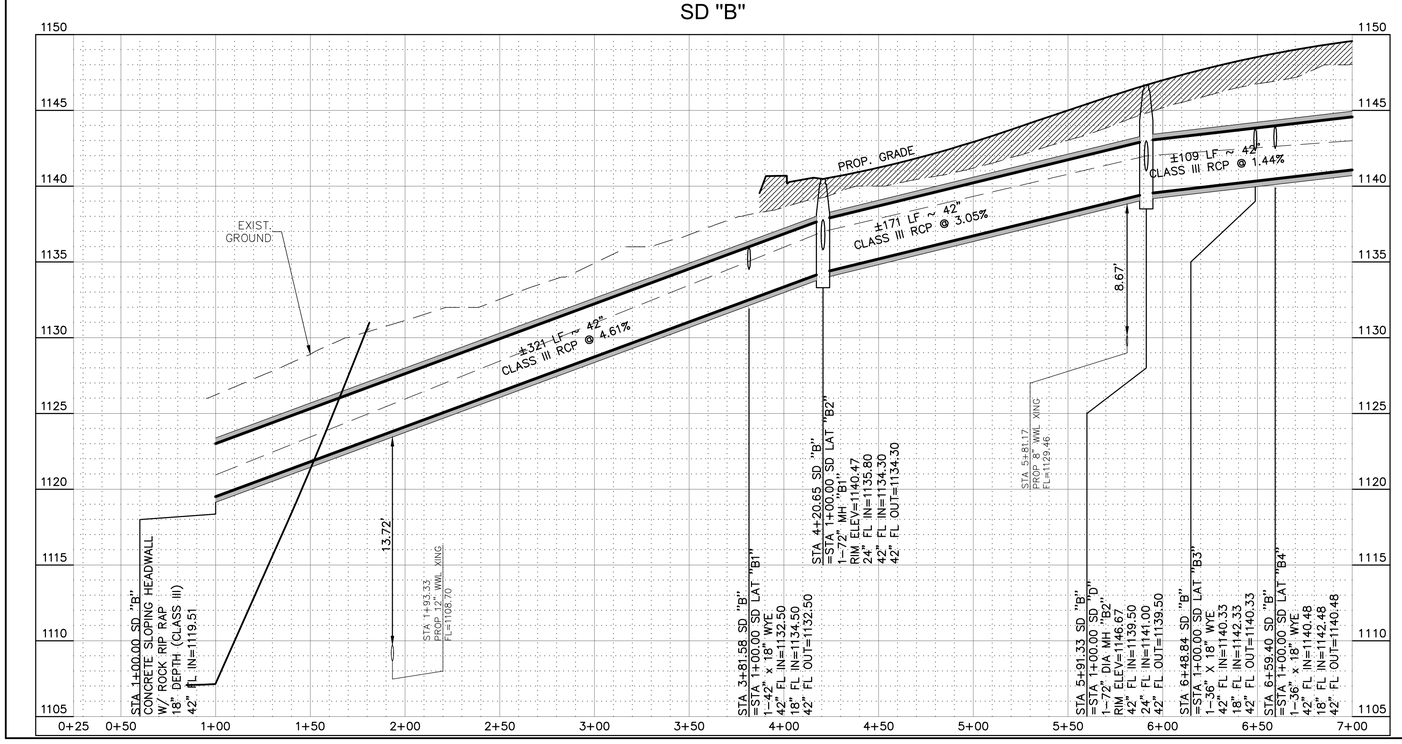

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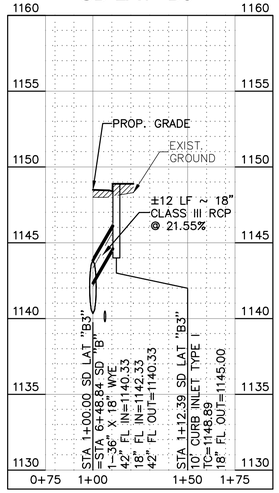

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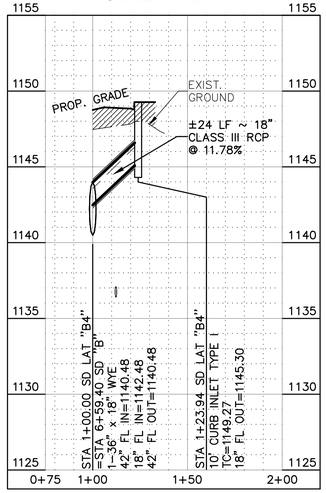

0 40 80 Feet
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 5'

LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "B" STA 1+00 TO 7+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 30 of 73

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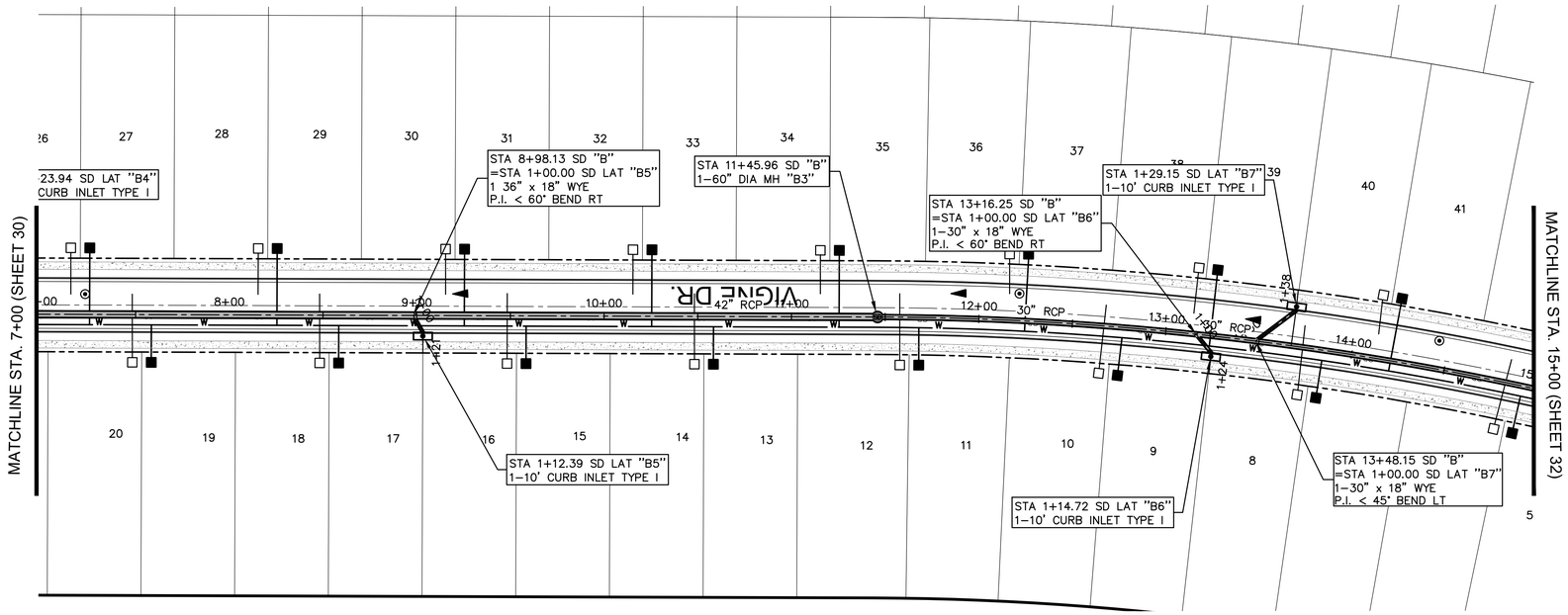
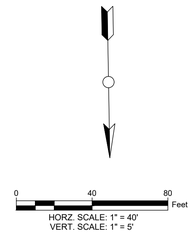
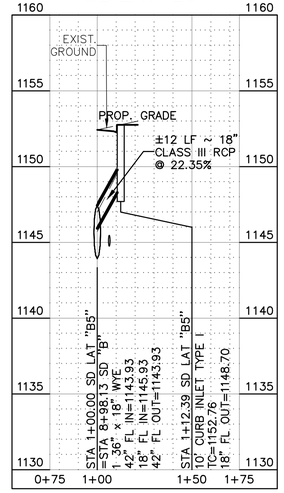




LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD — PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

SD LAT "B5"



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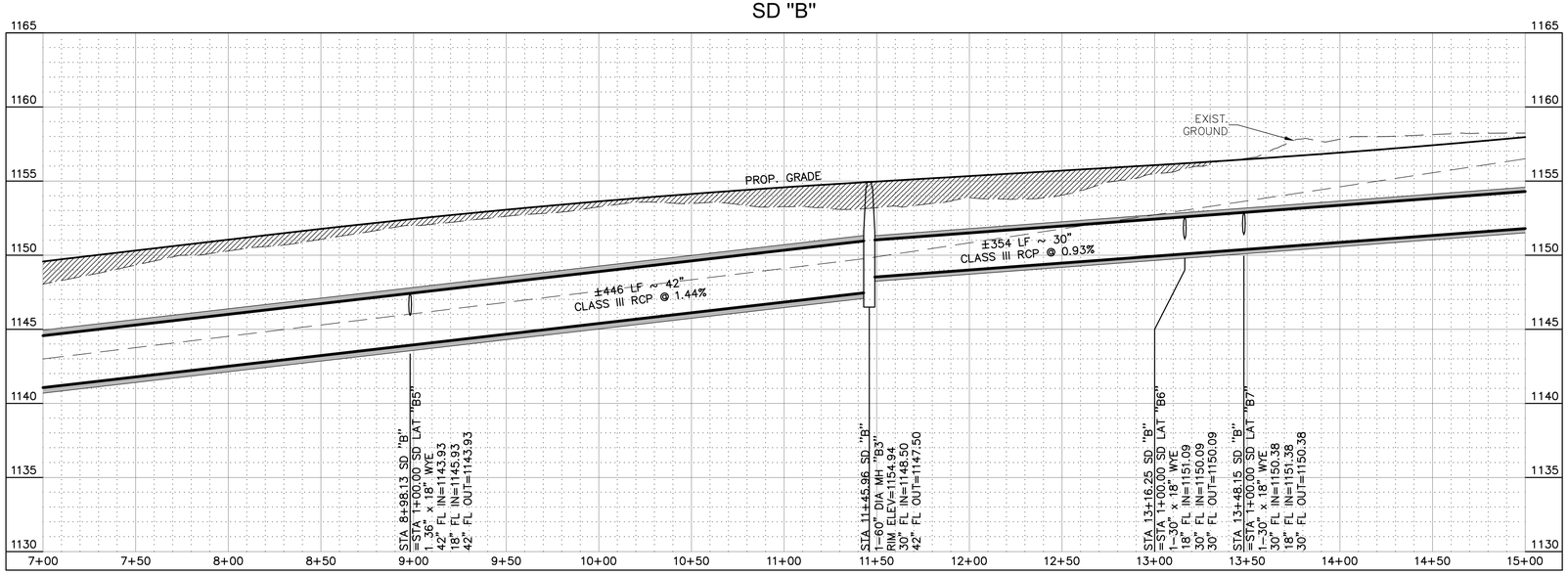

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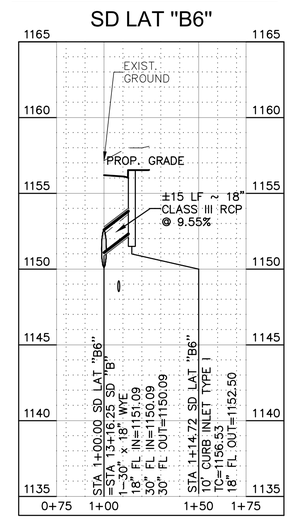

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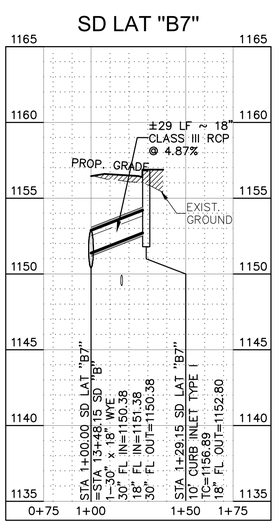

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "B" STA 7+00 TO 15+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 31 of 73

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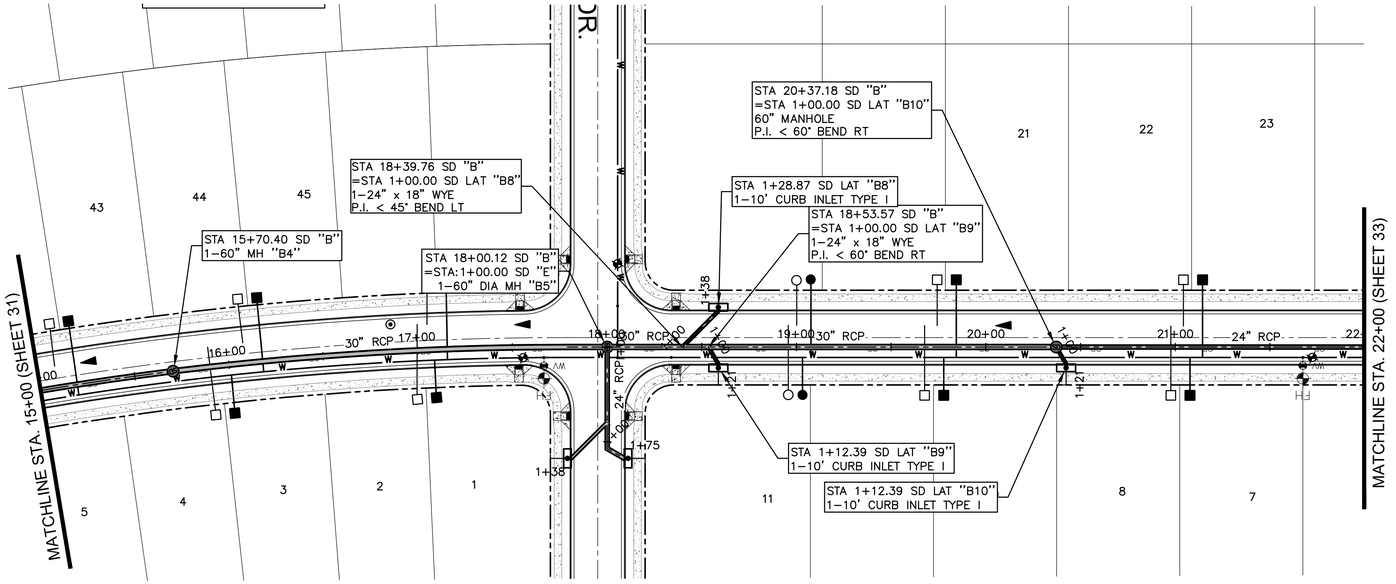

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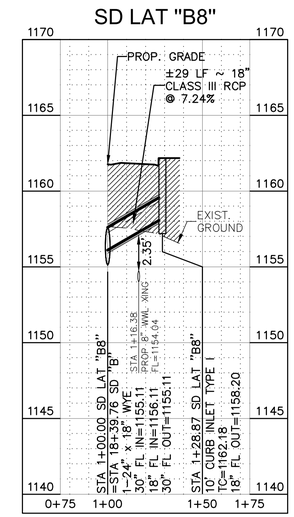

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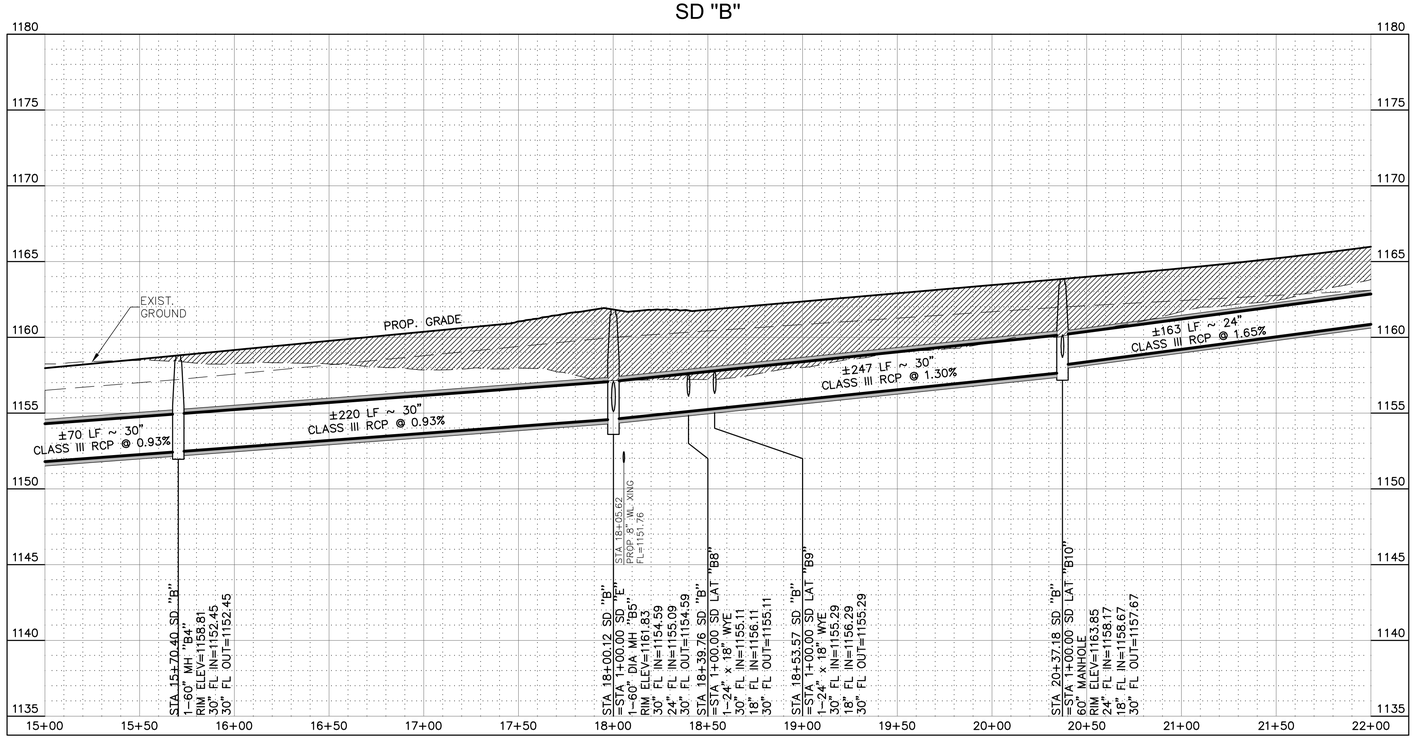

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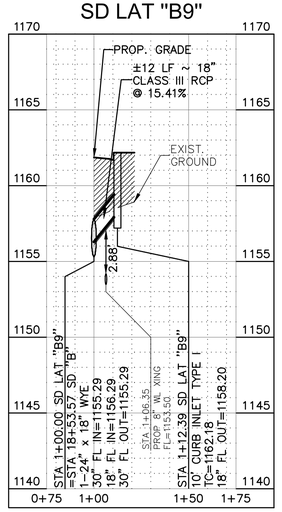

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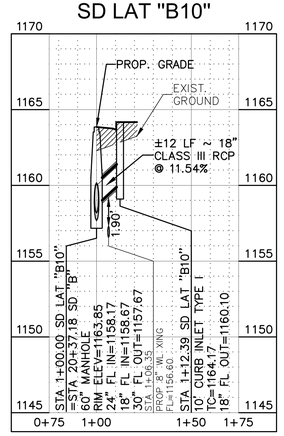

0 40 80 Feet
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 5'

LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "B" STA 15+00 TO 22+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 32 of 73

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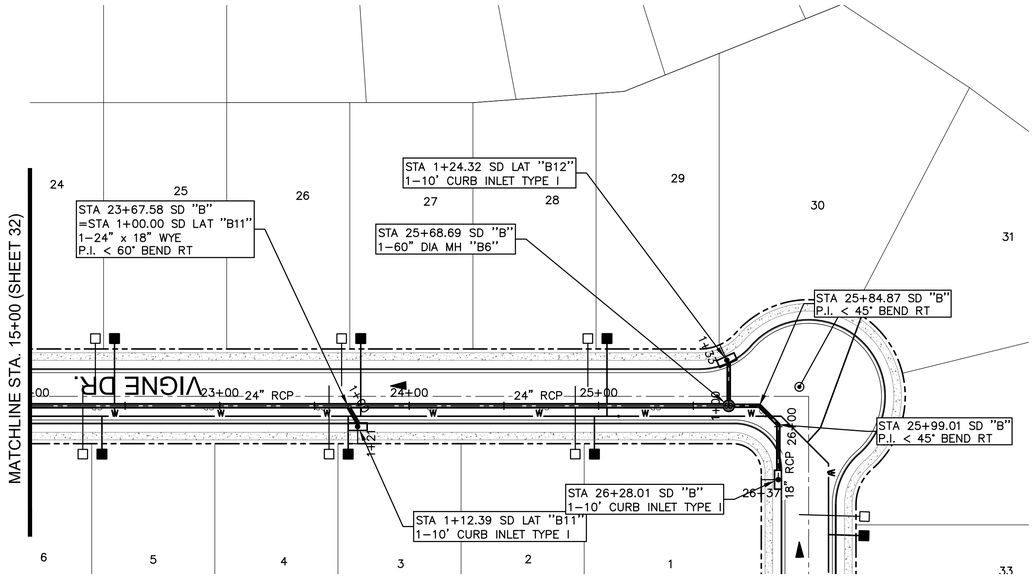
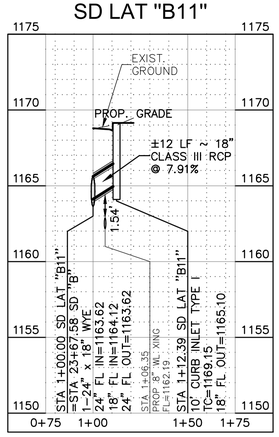
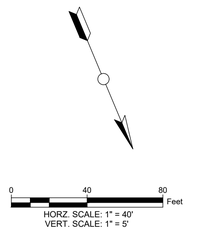


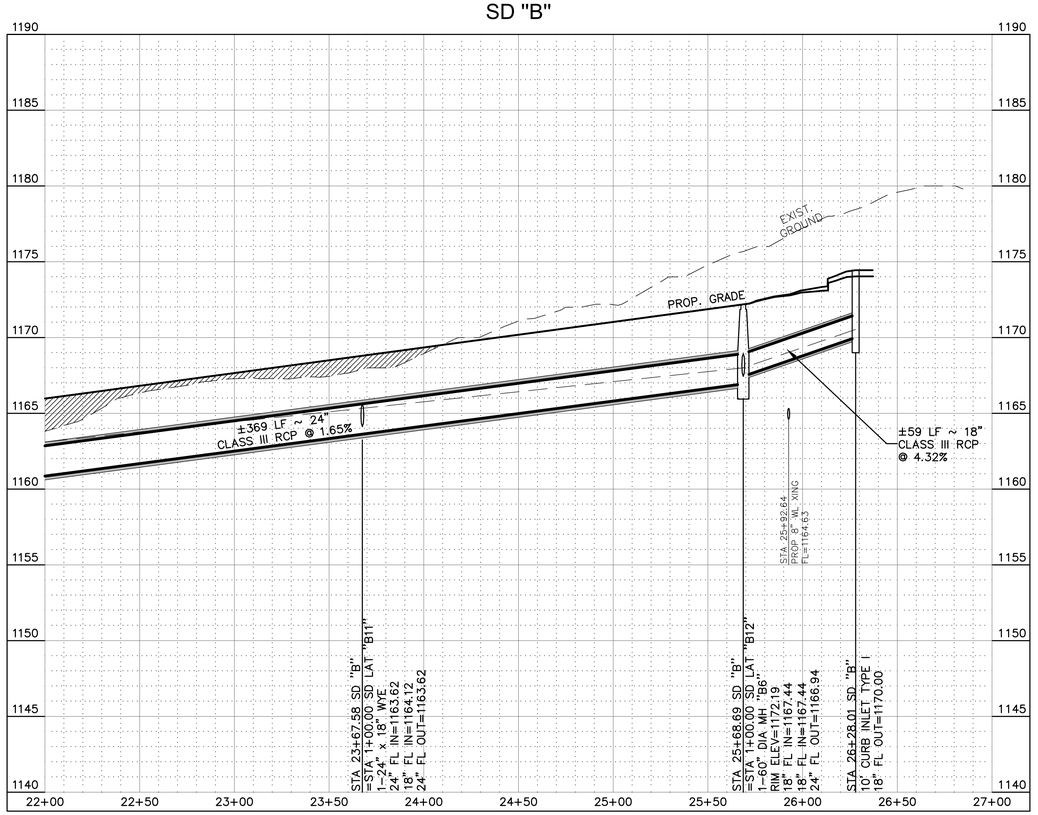




LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

SD "B"



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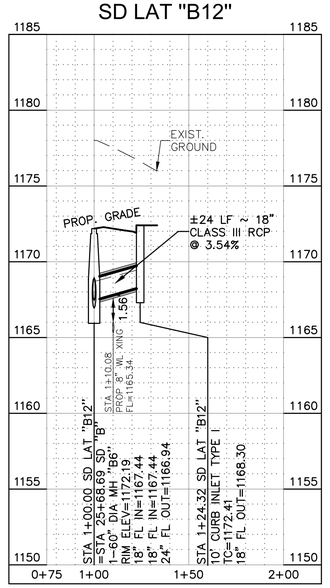

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
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AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
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92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "B" STA 22+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 33 of 73

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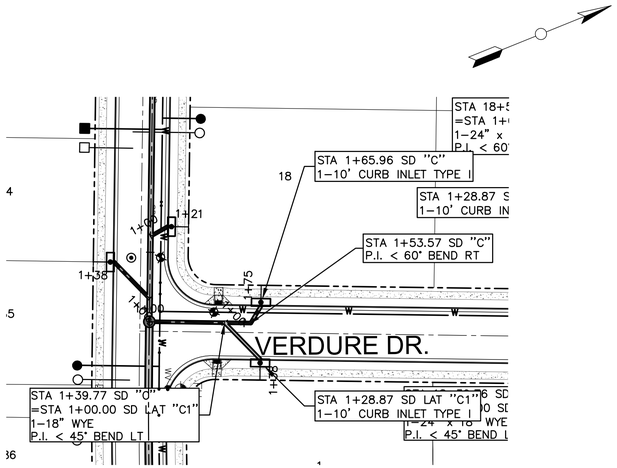
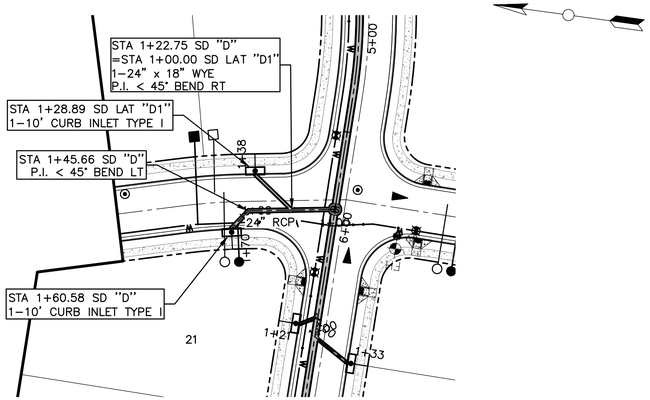
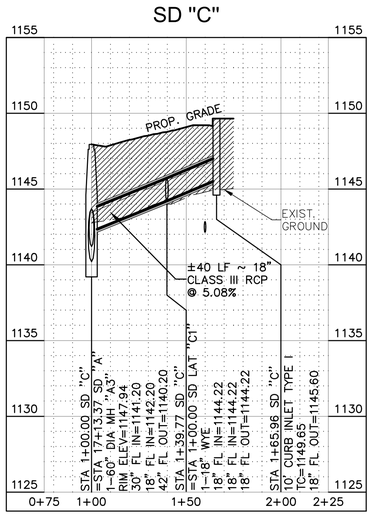


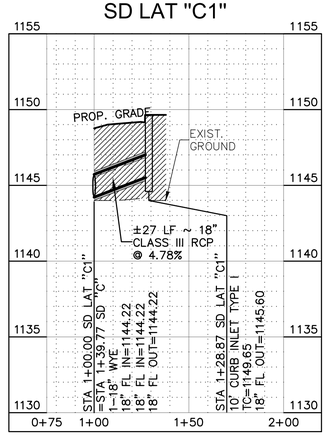


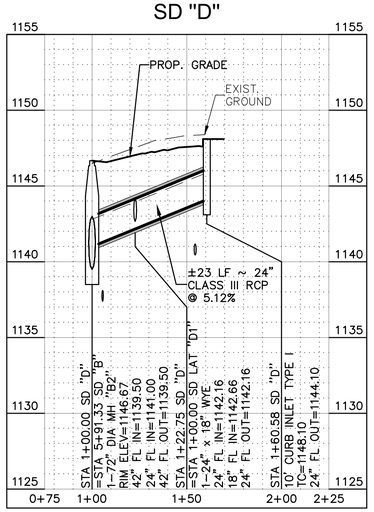
0 40 80 Feet
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 5'

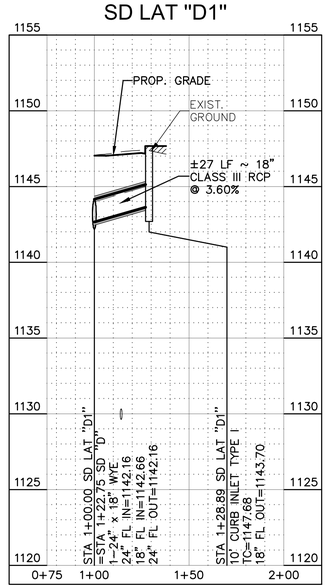
LEGEND

- EXIST CONTOUR MINOR
- EXIST CONTOUR MINOR
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL









MOODY ENGINEERING, INC.

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AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "C" AND SD "D"

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 34 of 73

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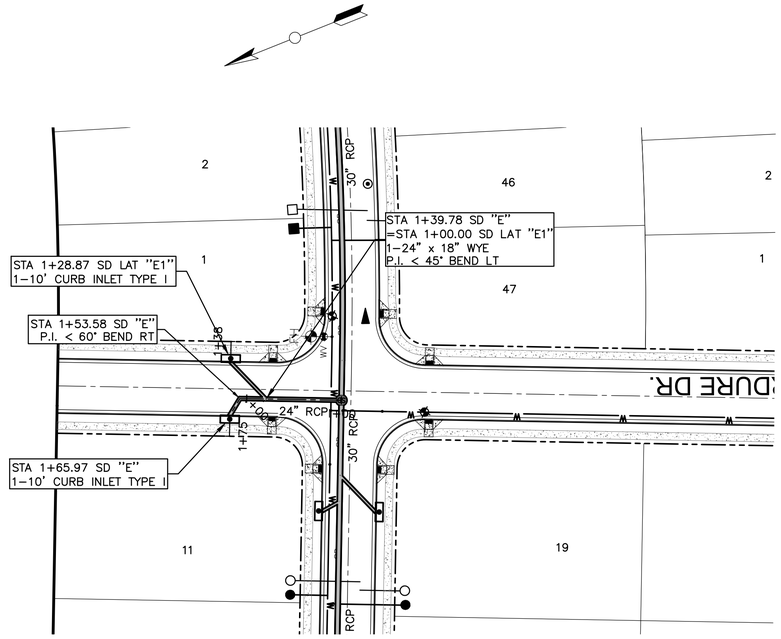
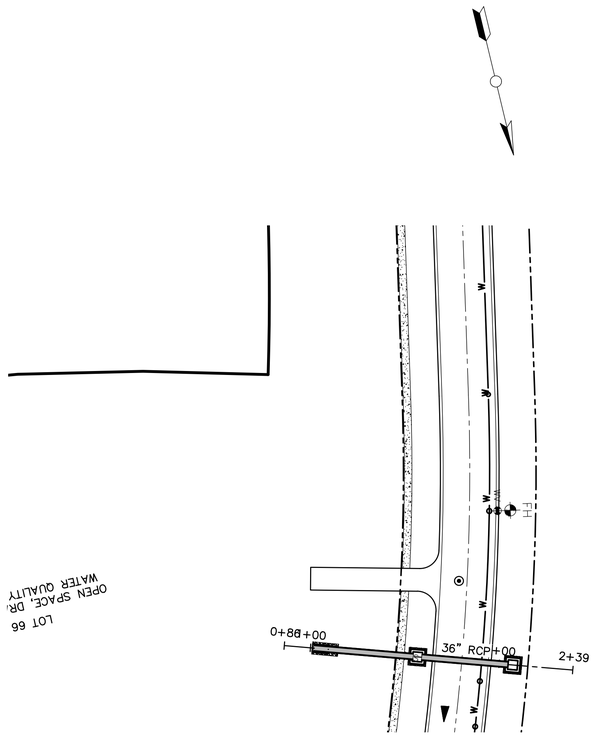
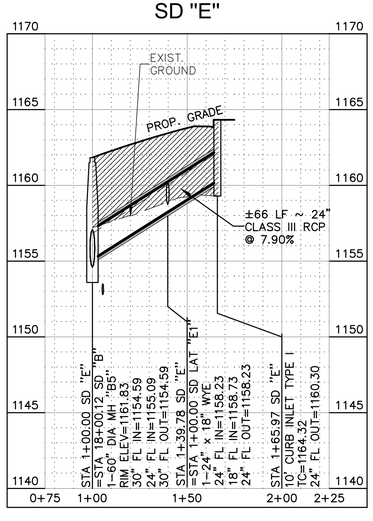


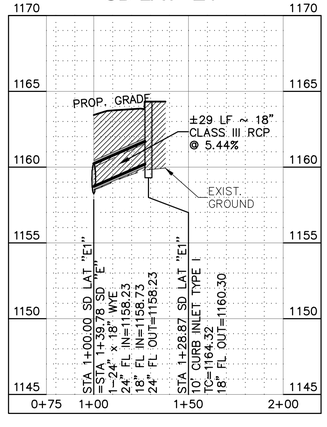


0 40 80 Feet
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 5'

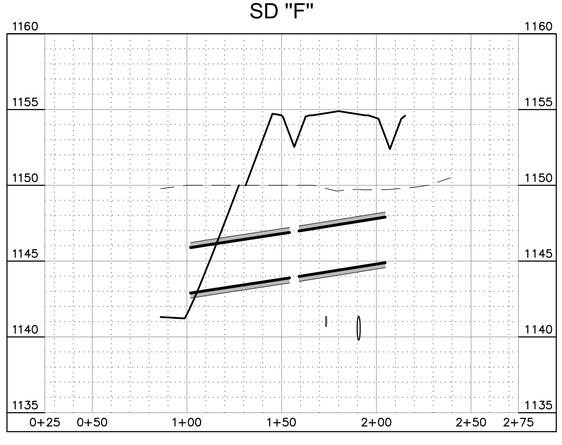
SD "E"



SD LAT "E1"



SD "F"



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9225 BEE CAVES ROAD,
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512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "E" AND SD "F"

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY: XX	DRAWN BY: XX	CHECKED BY: XX	BY

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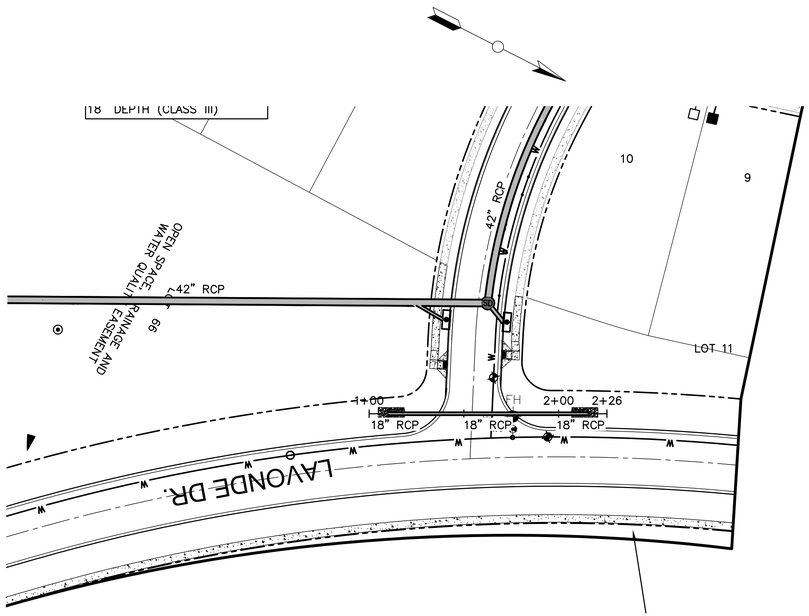
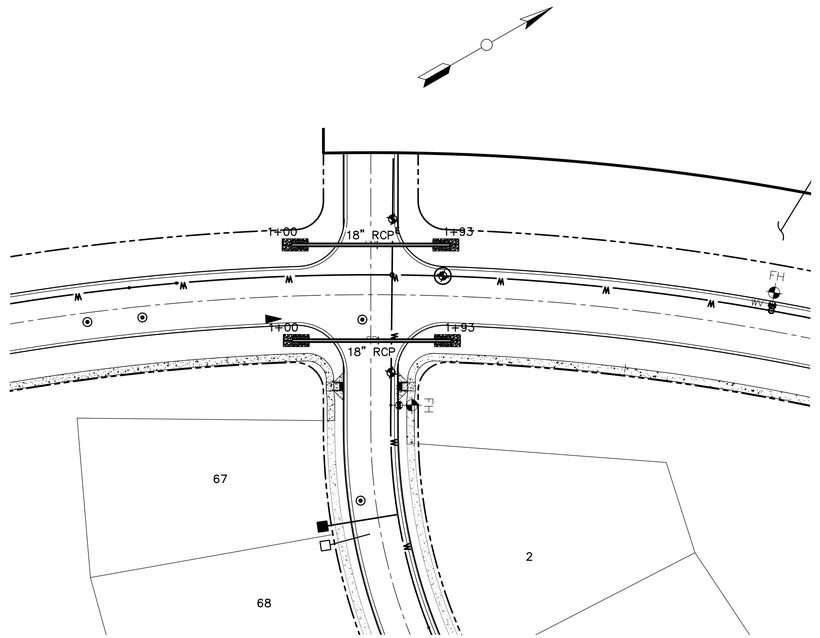
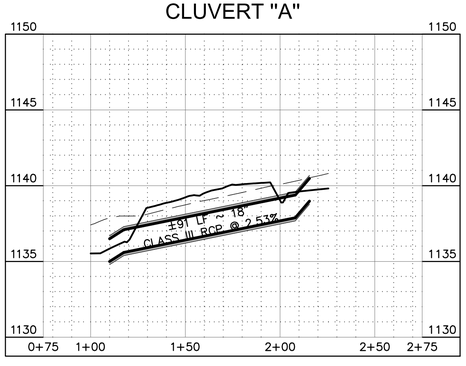


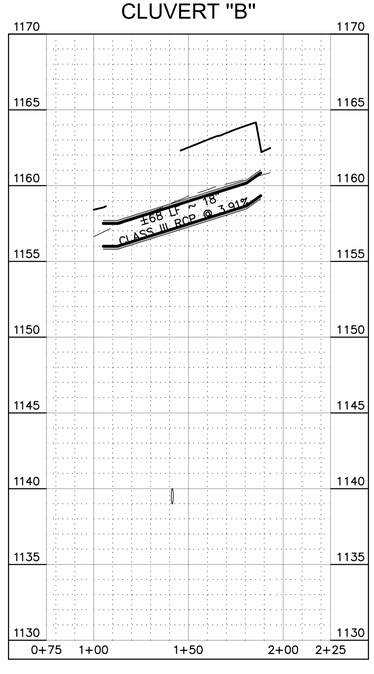


0 40 80 Feet
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 5'

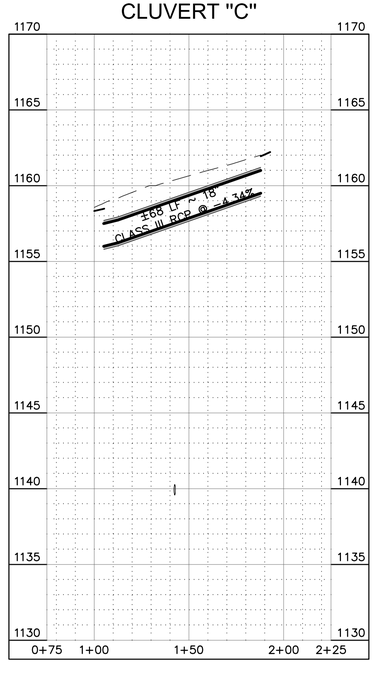
CLUVERT "A"



CLUVERT "B"



CLUVERT "C"



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TBPE FIRM REG. NO. F-18320

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PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

CULVERTS "A" AND "B" AND "C"

NO.	DATE	REVISIONS/CORRECTIONS	BY

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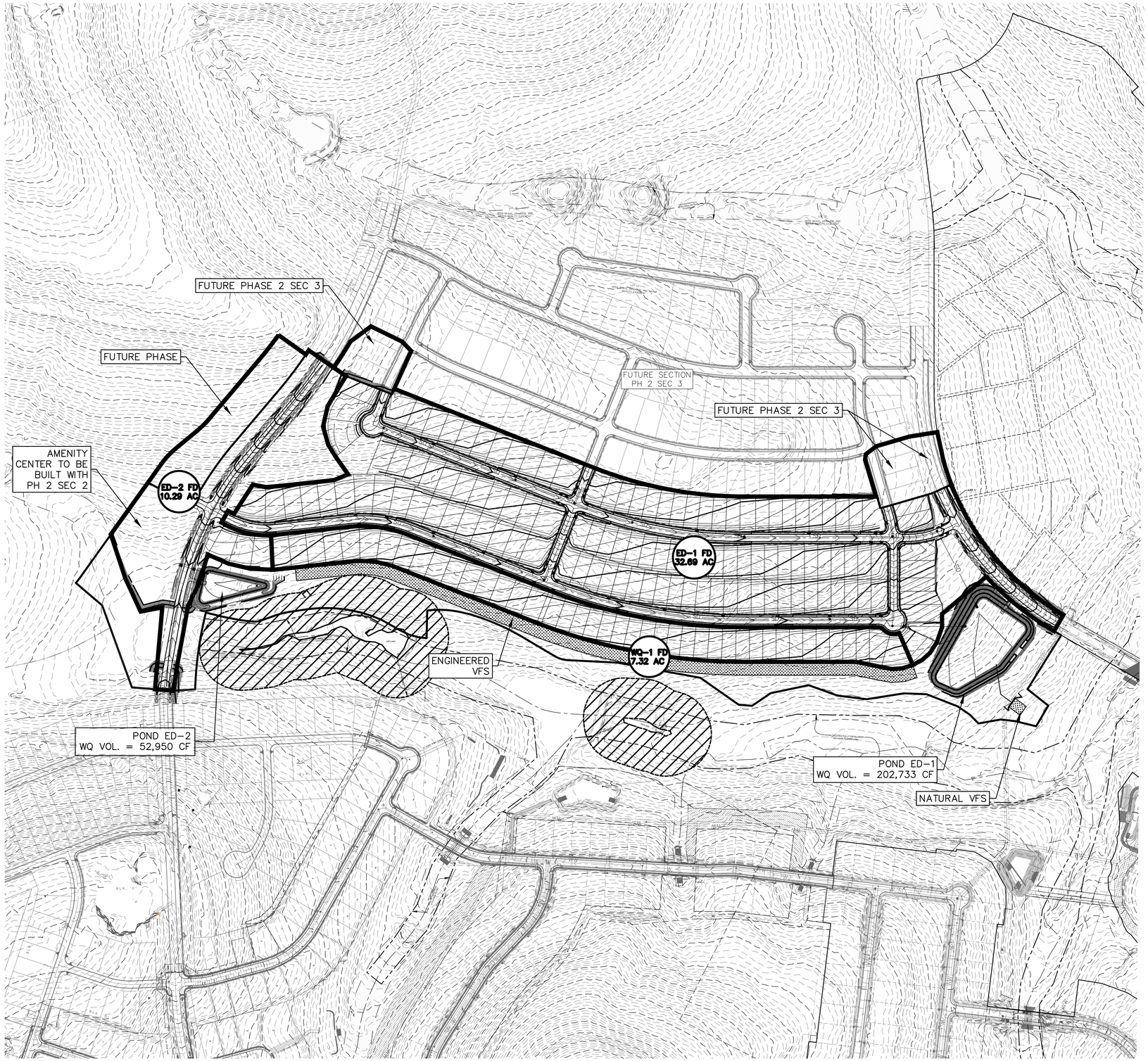
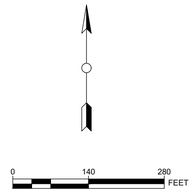
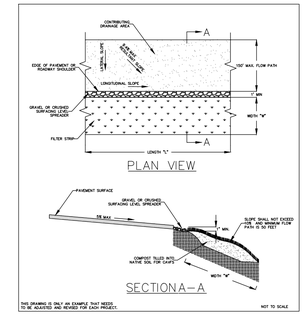




NOTES:

1. IMPERVIOUS COVER ASSUMPTIONS ARE IN COMPLIANCE WITH TCEQ RG-348 APPENDIX A, OEM TABLE 4-1 "IMPERVIOUS COVER ASSUMPTIONS FOR RESIDENTIAL TRACTS".
2. ED-2 FD ACCOUNTS FOR THE AMENITY CENTER SITE AND A SECTION OF A FUTURE PHASE WEST OF LAVONDE DR. ED-2 POND HAS BEEN OVERSIZED TO ACCOUNT FOR ADDITIONAL IMPERVIOUS COVER.
3. ED-1 FD ACCOUNTS FOR PORTION OF PHASE 2 SECTION 3 AND POND HAS BEEN SIZED ACCORDINGLY. ED-1 POND HAS BEEN OVERSIZED TO ACCOUNT FOR ADDITIONAL IMPERVIOUS COVER.



VEGETATIVE FILTER STRIP DETAIL

BMP TREATMENT AREA		
	WATER QUALITY BOUNDARY	TCEQ RG-348 (2017)
	VFS	TCEQ RG-348 (2017)

Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note:
1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet
3. FD Water Quality Plan includes future phases being accounted for in the BMP's

Project: **Provence Phase 2 Section 2 FD**

BMP		ED-1	WQ-1	ED-2	Total	
	Treatment Area	32.69	7.32	10.29	50.30	Acres
Impervious Cover						
	Street/ Parking	5.10	0.00	1.12	6.22	Acres
	Residential Lots	7.22	2.41	0.63	10.26	Acres
	Comm Building	0.00	0.00	1.50	1.50	Acres
	Total IC	12.32	2.41	3.25	17.98	Acres
	IC %	38%	33%	32%	36%	
TSS Treated (L_R)		12,427	2,341	2,791	17559	lbs
Total Required Capture Volume		172,098	N/A	47,732	219,829	cf
Total Provided Capture Volume		**202,102**	**N/A**	**52,950**	**255,052**	**cf**

Required L_M Total Project	15,939	lbs
Provided L_R Total Project	**17,559**	**lbs**

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9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL WATER QUALITY PLAN

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

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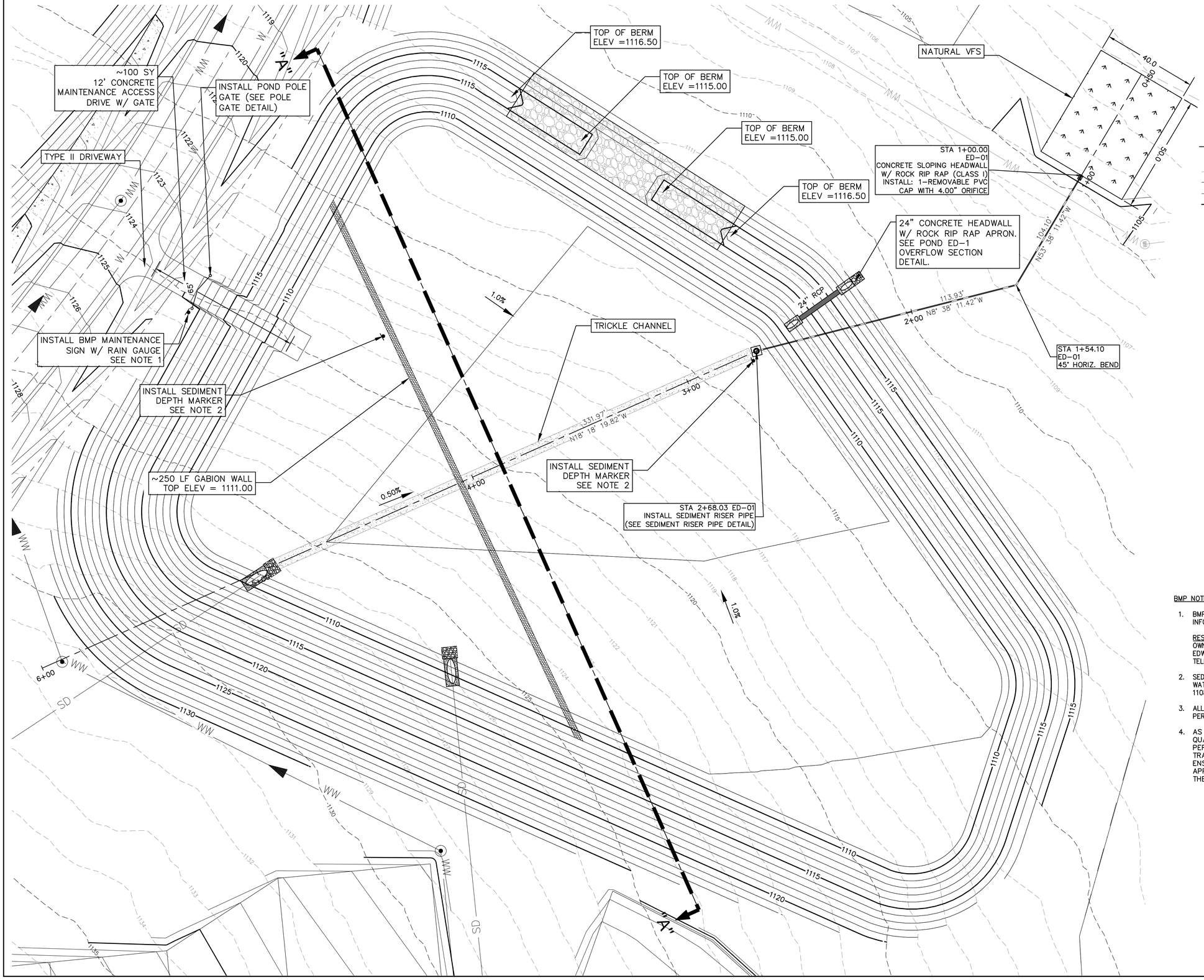

BMP NOTES:

1. BMP MAINTENANCE SIGN TO INCLUDE THE FOLLOWING INFORMATION:

   RESPONSIBLE FOR MAINTENANCE:
   OWNER: MASONWOOD HP. LTD.
   EDWARDS AQUIFER PROGRAM ID:
   TELEPHONE: 512-306-8300

2. SEDIMENT DEPTH MARKER SHALL INDICATE 20% WATER QUALITY VOLUME MARK AT ELEVATION 1108.25.

3. ALL DRY ROCK RIP RAP SHALL BE 591S.3 CLASS III PER THE CITY OF AUSTIN SPECIFICATIONS.

4. AS DEPICTED ON THE PLAN, ALL WATER QUALITY EASEMENT AREAS ARE SUBJECT TO PERIODIC INSPECTION AND MONITORING BY TRAVIS COUNTY FOR THE PURPOSE OF ENSURING WATER QUALITY COMPLIANCE, AS APPLICABLE, ACCORDING TO SEC. 16.014 OF THE TEXAS WATER CODE.

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PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER QUALITY BMP ED-1 SHEET 1 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

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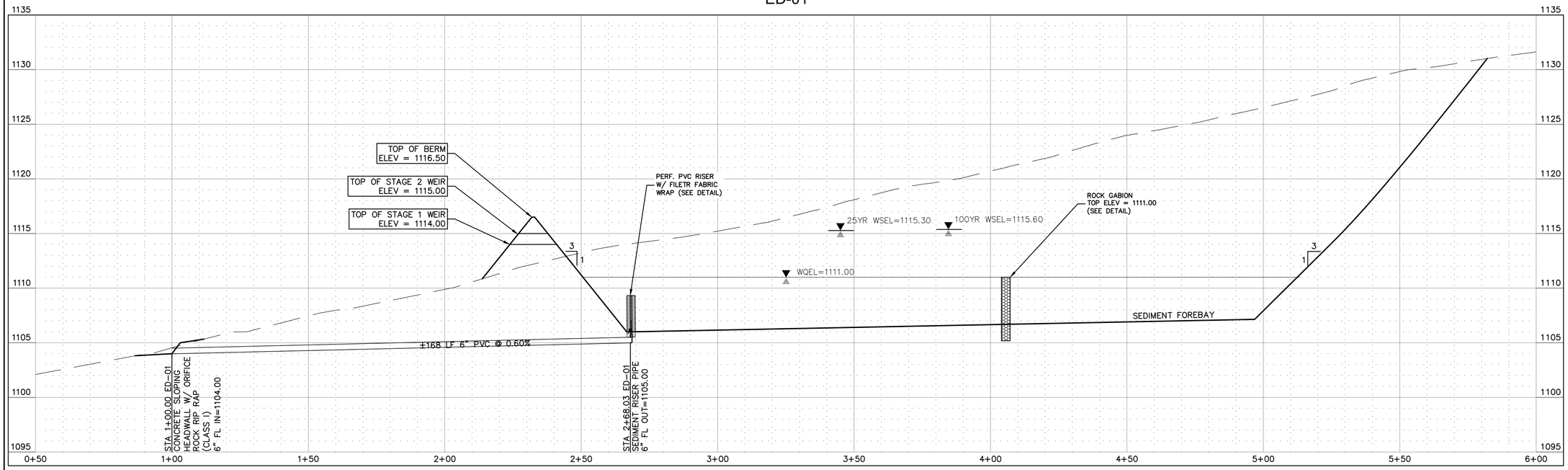
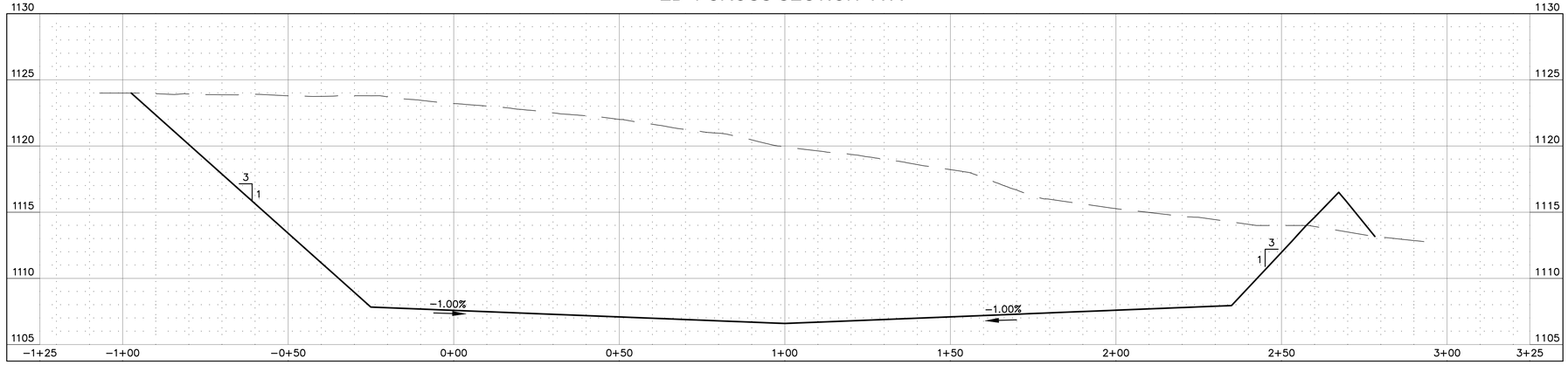
ED-01



EXTENDED DETENTION POND 1 (ED-1) PROFILE

SCALE. HORZ. 1"=20'
VERT. 1"=5'

ED-1 CROSS SECTION "A-A"



EXTENDED DETENTION POND 1 (CROSS SECTION "A-A")

SCALE. HORZ. 1"=20'
VERT. 1"=5'

Pond Drawdown ED-1

48-Hour WQ Volume Drawdown Calculations			
Q = CA(2gH)^0.5			
Water Quality Volume (cf)	202102	Gravity (ft/s^2)	32.2
Time (hr)	48	Avg Head (ft)	7
Time (s)	172800	Coefficient	0.6
Flow Rate (cf/s)	1.112	Orifice Area (ft^2)	0.087
48 hr Volume	192103	Orifice Radius (in)	2.000
		Orifice Radius (ft)	0.167

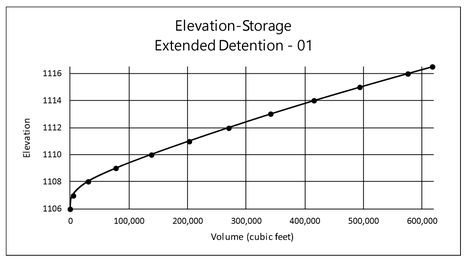
Orifice Diameter = 4 in

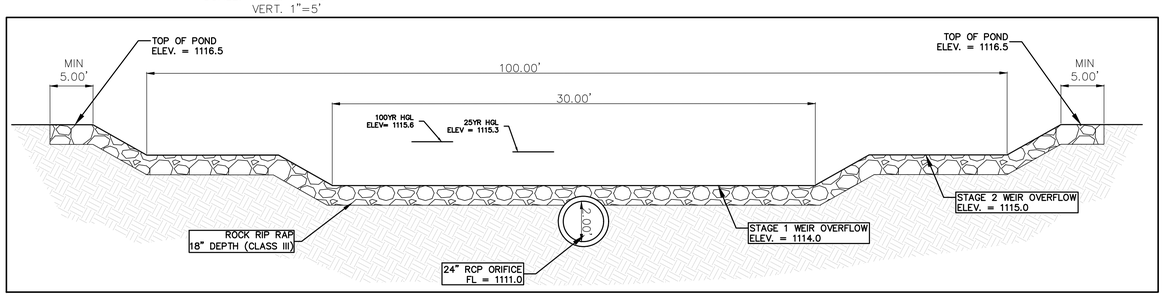
Provence Phase 2 Section 2 ED 01

Elevation	Area
1106	0
1107	12,739
1108	40,871
1109	55,867
1110	63,183
1111	**66,265**
1112	69,403
1113	72,596
1114	76,752
1115	79,736
1116	82,759
1116.5	84,300

Incremental Volume (conic method, ft^3)	Cumulative Volume (conic method, ft^3)	Elevation	
0	0	1106	
4246	4246	1107	
25476	29722	1108	
48174	77896	1109	
59487	137384	1110	
64718	**202102**	**1111**	WQV
67828	269930	1112	
70994	340923	1113	
74664	415588	1114	
78239	493827	1115	
81243	575070	1116	
41764	616834	1116.5	
BMP Volume Required	**166,516**		
BMP Volume Provided	***202,102***		
Total Volume Provided	**616,834**		

$$Volume = \frac{(Elev\,2 - Elev\,1) * (Area\,1 + Area\,2 + \sqrt{Area\,1 * Area\,2})}{3}$$





POND ED-1 OVERFLOW WEIR SECTION VIEW

SCALE: NTS

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AUSTIN, TEXAS 78733
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STATE OF TEXAS
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92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER QUALITY BMP ED-1 SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	CHECKED BY: XX	DESIGNED BY: XX	DRAWN BY: XX	BY

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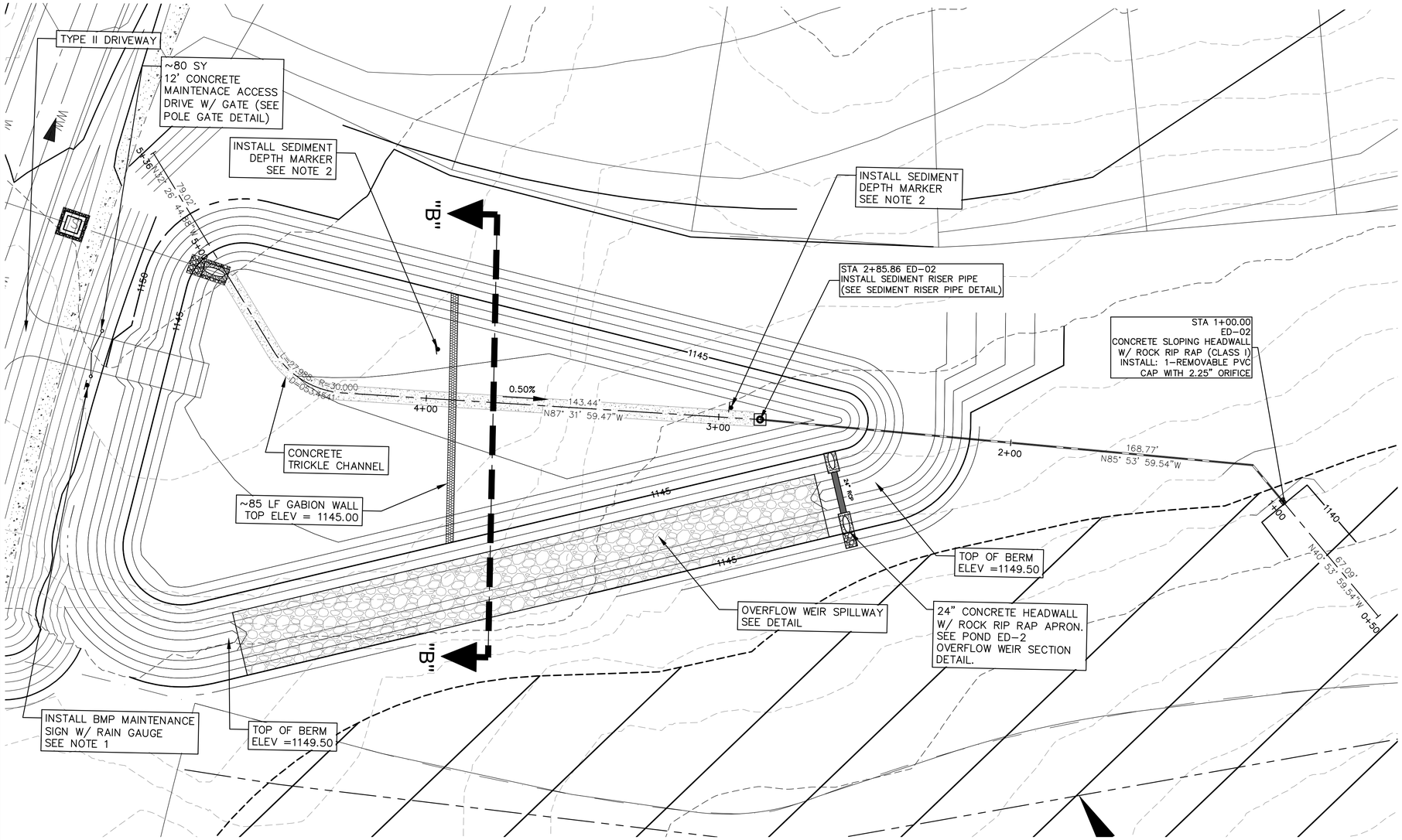


LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR

BMP NOTES:

1. BMP MAINTENANCE SIGN TO INCLUDE THE FOLLOWING INFORMATION:

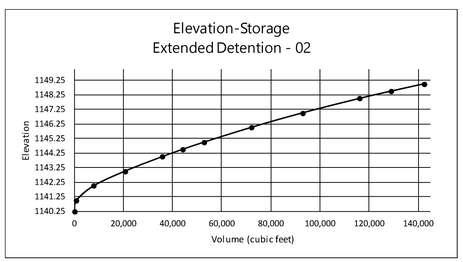
   RESPONSIBLE FOR MAINTENANCE:
   OWNER: MASONWOOD HP. LTD.
   EDWARDS AQUIFER PROGRAM ID:
   TELEPHONE: 512-306-8300

2. SEDIMENT DEPTH MARKER SHALL INDICATE 20% WATER QUALITY VOLUME MARK AT ELEVATION 1142.25.
3. ALL DRY ROCK RIP RAP SHALL BE 591S.3 CLASS III PER THE CITY OF AUSTIN SPECIFICATIONS.
4. AS DEPICTED ON THE PLAN, ALL WATER QUALITY EASEMENT AREAS ARE SUBJECT TO PERIODIC INSPECTION AND MONITORING BY TRAVIS COUNTY FOR THE PURPOSE OF ENSURING WATER QUALITY COMPLIANCE, AS APPLICABLE, ACCORDING TO SEC. 16.014 OF THE TEXAS WATER CODE.

Pond Drawdown ED-2

48-Hour WQ Volume Drawdown Calculations			
Q = CA(2gH)^0.5			
Water Quality Volume (cf)	52950	Gravity (ft/s^2)	32.2
Time (hr)	48	Avg Head (ft)	5
Time (s)	172800	Coefficient	0.6
Flow Rate (cf/s)	0.297	Orifice Area (ft^2)	0.028
48 hr Volume	51371	Orifice Radius (in)	1.125
		Orifice Radius (ft)	0.094

Orifice Diameter = 2.25 in



Provence Phase 2 Section 2 ED 02

Elevation	Area
1140.25	0
1141	3,704
1142	11,004
1143	14,357
1144	16,173
1144.5	17,096
1145	**18,019**
1146	19,921
1147	21,882
1148	24,912
1148.5	26,392
1149	27,167

Incremental Volume (conic method, ft³)	Cumulative Volume (conic method, ft³)	Elevation	
0	0	1140.25	
926	926	1141	
7031	7957	1142	
12643	20600	1143	
15256	35856	1144	
8316	44172	1144.5	
8778	**52950**	**1145**	**WQV**
18962	71912	1146	
20894	92806	1147	
23381	116187	1148	
12824	129011	1148.5	
13389	142400	1149	
BMP Volume Required	**36,008**		
BMP Volume Provided	***52,950***		
Total Volume Provided	**142,400**		

$$Volume = \frac{(Elev\,2 - Elev\,1) * (Area\,1 + Area\,2 + \sqrt{Area\,1 * Area\,2})}{3}$$

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WATER QUALITY BMP ED-2 SHEET 1 OF 2

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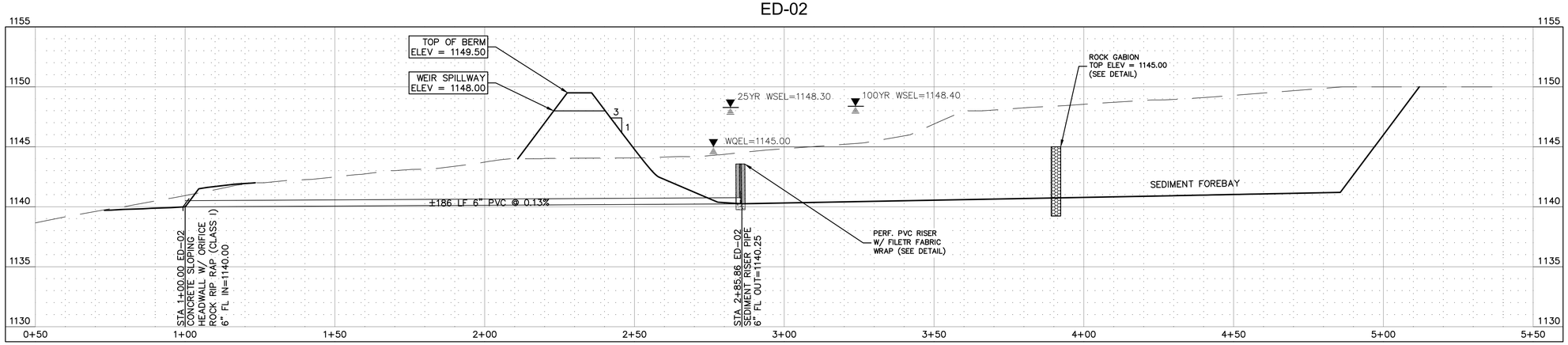
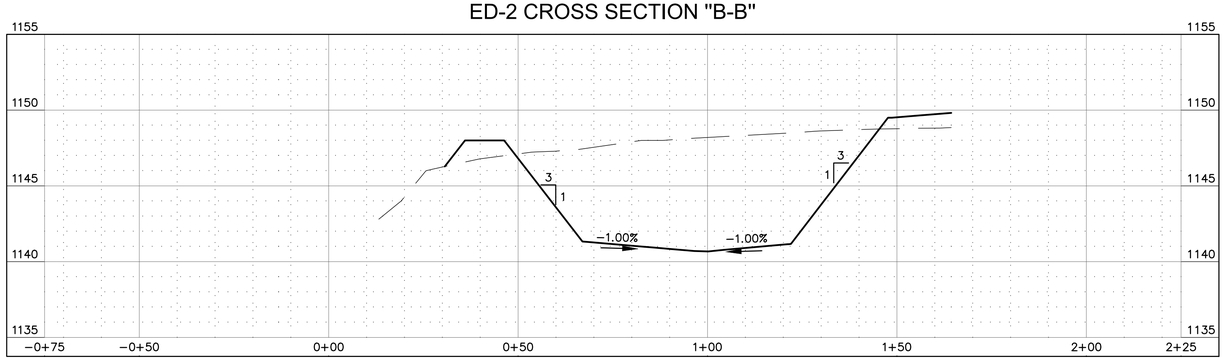
ED-02



EXTENDED DETENTION POND 2 (ED-2) PROFILE

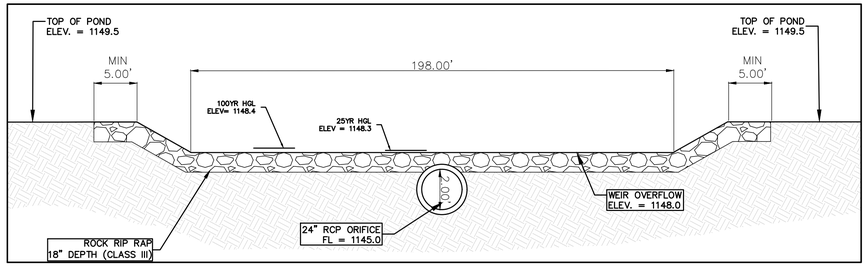
SCALE. HORZ. 1"=20'
VERT. 1"=5'

ED-2 CROSS SECTION "B-B"



EXTENDED DETENTION POND 2 (CROSS SECTION "A-A")

SCALE. HORZ. 1"=20'
VERT. 1"=5'



POND ED-2 OVERFLOW WEIR SECTION VIEW

SCALE: NTS

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WATER QUALITY BMP ED-2 SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

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GENERAL REQUIREMENTS

1. ALL CODES AND STANDARDS REFERENCED FOR THE DESIGN, FABRICATION AND CONSTRUCTION OF ALL CONCRETE STRUCTURES SHALL BE THE LATEST EDITION UNLESS NOTED OTHERWISE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS. IF A CONFLICT OR DISCREPANCY EXISTS BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN UNLESS APPROVED OTHERWISE BY THE ENGINEER.
3. ANY REQUIRED CHANGES TO THE STRUCTURAL DRAWINGS DUE TO THE ACCEPTANCE OR INCLUSION OF ALTERNATES OR SUBSTITUTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
4. THE CONTRACTOR SHALL EXAMINE THE CIVIL AND STRUCTURAL DRAWINGS FOR DIMENSIONAL COORDINATION AND ELEVATION CONTROLS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING FABRICATION OR CONSTRUCTION.
5. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS OR EXISTING STRUCTURES AND UTILITIES TO REMAIN PRIOR TO BEGINNING WORK AND PROTECT SUCH STRUCTURES AND UTILITIES FROM DAMAGE DURING CONSTRUCTION.
6. REVEGETATE ALL DISTURBED AREAS USING CITY OF AUSTIN SPECIFICATION (COA) 604S AND TOP SOIL DEPTHS PER COA SPECIFICATION 601S. (SEE EROSION CONTROL DETAILS AND NOTES SHEET)

SUBGRADE PREPARATION AT CONCRETE RIP RAP

3. PRIOR TO PLACING SUBGRADE MATERIAL, CONSTRUCTION AREAS SHOULD BE STRIPPED OF ALL VEGETATION, LOOSE TOPSOIL, COBBLES, AND BOULDERS.
4. ALL SUBGRADE, IF ON-SITE SOIL, SHOULD BE PROFILED TO DETECT WEAK AREAS, WHICH SHOULD BE REMOVED AND REPLACED WITH SOIL EXHIBITING SIMILAR CLASSIFICATION AND MOISTURE CONTENT.
5. ROOTS OF TREES TO BE REMOVED WITHIN CONSTRUCTION AREAS SHOULD BE GRUBBED TO FULL DEPTHS. ANY VOIDS RESULTING FROM REMOVAL OF TREES AND BOULDERS SHALL BE FILLED WITH ON-SITE SOIL.
6. ALL SUBGRADE SOILS SHALL BE SCARIFIED TO A DEPTH OF 10 INCHES AND RE-COMPACTED TO MINIMUM OF 95% OF THE STANDARD PROCTOR (ASTM D 698) MAXIMUM DRY DENSITY. SOIL MOISTURE CONTENT SHALL BE 3% OF OPTIMUM.
7. ON-SITE SOILS CAN BE USED AS SUBGRADE MATERIAL FOR RIP RAP PROVIDED THAT:
   - A. THEY DO NOT CONTAIN ROCKS LARGER THAN FOUR INCHES IN THEIR GREATEST DIMENSION.
   - B. THEY HAVE PLASTICITY INDEX BETWEEN 5 AND 20.
   - C. THEY ARE FREE OF ORGANIC DEBRIS.
   - D. SUBGRADE MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR (ASTM D 698) MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN 3% OF OPTIMUM MOISTURE CONTENT.
   - E. COMPACTION AND MOISTURE CONTENT OF SUBGRADE SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER.

CAST IN PLACE CONCRETE

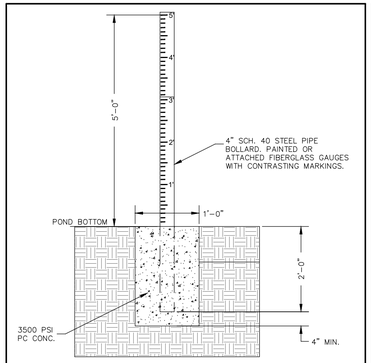
1. CONCRETE MIX DESIGN, ADMIXTURES, FORM WORK DESIGN AND CONSTRUCTION, METHODS FOR TREATMENT OF JOINTS, FINISHING OF FORMED SURFACES, AND QUALITY ASSURANCE SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN, TEXAS STANDARD SPECIFICATIONS.
2. ALL CAST IN PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF AUSTIN, TEXAS STANDARD SPECIFICATIONS CLASS A CONCRETE AS COVERED IN TABLE 4 OF ITEM 403.

CUT SLOPES

1. FOR CUT SLOPES INTO THE NATURAL ON-SITE SOILS/ROCK, PERMANENT SLOPES SHALL BE CUT NO STEEPER THAN 3(H):1(V). AN ON-SITE INSPECTION BY GEOTECHNICAL ENGINEER IS REQUIRED IF STEEPER CUT SLOPES ARE DESIRED.
2. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SAFETY AND HEALTH STANDARDS REQUIRE THE PROTECTION OF WORKERS ADJACENT TO EXCAVATIONS. THE OSHA GUIDELINES AND DIRECTIVES SHOULD BE ADHERED TO BY THE CONTRACTOR DURING CONSTRUCTION TO INSURE A SAFE WORKING ENVIRONMENT.
3. USE MORTORAD ROCK WALL FOR SLOPES NOT 2:1 (HORIZ.:VERT.) CUT OR FOR SLOPES THAT CANNOT BE MAINTAINED.

EMBANKMENT FILL COMPACTION REQUIREMENTS

1. ALL FILL SHOULD BE PLACED ON PREPARED SURFACES IN LIFTS NOT TO EXCEED EIGHT INCHES LOOSE MEASURE, WITH COMPACTED THICKNESS NOT TO EXCEED SIX INCHES, UNLESS STATED OTHERWISE.
2. ALL FILL SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE ASTM D 698 MAXIMUM DRY DENSITY AT A MOISTURE CONTENT RANGING BETWEEN -3 AND +3 PERCENT OF OPTIMUM MOISTURE CONTENT.
3. EARTHEN/ROCK EMBANKMENTS, WHICH MAY CONSIST OF THE ON-SITE SOILS AND/OR PROCESSED ROCK, SHOULD BE CONSTRUCTED AS GENERALLY OUTLINED IN TXDOT ITEM 132 OR CITY OF AUSTIN (COA) ITEM 132.
4. IF ANY IMPORTED FILL IS NEEDED FOR THE POND EMBANKMENTS, IT SHOULD MEET THE REQUIREMENTS OF A TYPE B BORROW MATERIAL AS OUTLINED IN ITEM 132 OF THE TXDOT STANDARD SPECIFICATIONS. IN ADDITION, THE UPPER 2 FEET OF EMBANKMENTS BELOW CLAY LINERS SHOULD NOT CONTAIN ANY ROCKS GREATER THAN 4 INCHES IN THE LARGEST DIMENSION, TO REDUCE THE POSSIBILITY OF CLAY LINER MIGRATION DOWNWARD INTO ROCK FILL OR VOID SPACES BETWEEN LARGE ROCKS.
5. EMBANKMENTS WHICH ARE CONSTRUCTED ON NATURAL SUBGRADE SLOPING STEEPER THAN 5(H):1(V) SHOULD BE "KEYED" INTO THE SUBGRADE AT THE TOE OF THE EMBANKMENT. THE KEYED-IN TOE SHOULD CONSIST OF A 12-FOOT WIDE SECTION WHICH IS EXCAVATED INTO THE SUBGRADE SUCH THAT A HORIZONTAL WORKING SURFACE IS ATTAINED FOR COMPACTION OF THE FIRST EMBANKMENT LIFT. SUCCESSIVE LIFTS SHOULD REMAIN HORIZONTAL AND SHOULD NOT TEND TO FOLLOW THE SLOPE OF THE NATURAL SUBGRADE.



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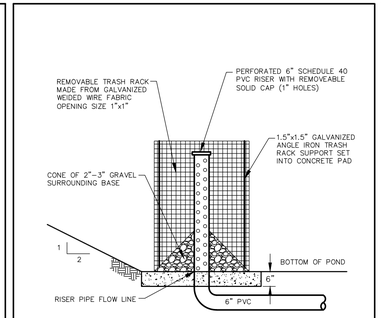
MOODY ENGINEERING, INC. | SEDIMENT DEPTH MARKER



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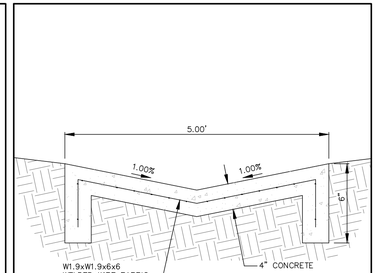
MOODY ENGINEERING, INC. | SEDIMENTATION RISER PIPE SIDE VIEW



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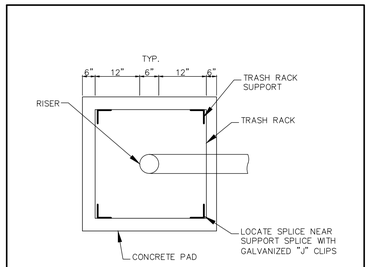
MOODY ENGINEERING, INC. | TRICKLE CHANNEL CROSS SECTION



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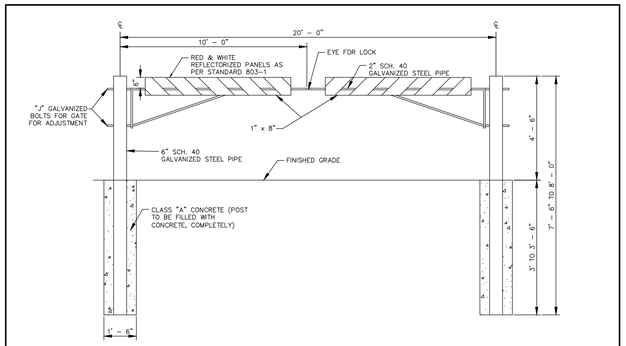
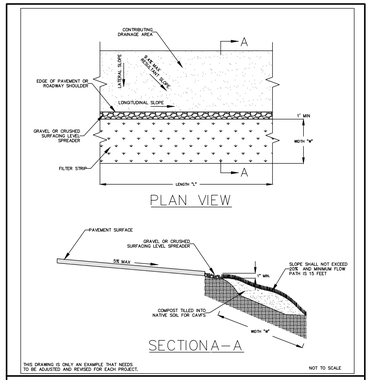
MOODY ENGINEERING, INC. | SEDIMENTATION RISER PIPE TOP VIEW



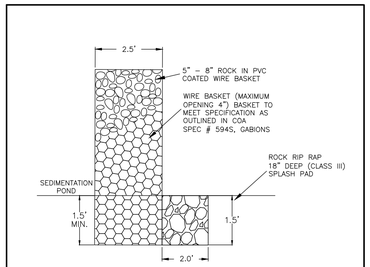
NOTE: MODIFY EXISTING GATE TO ONLY OPEN INWARD OR INSTALL A PERMANENTLY FIXATED GATE LATCH FOR WHEN IN THE OPEN POSITION.

SCALE: N.T.S.

MOODY ENGINEERING, INC. | POLE GATE DETAIL



ENGINEERED VEGETATIVE FILTER STRIP DETAIL



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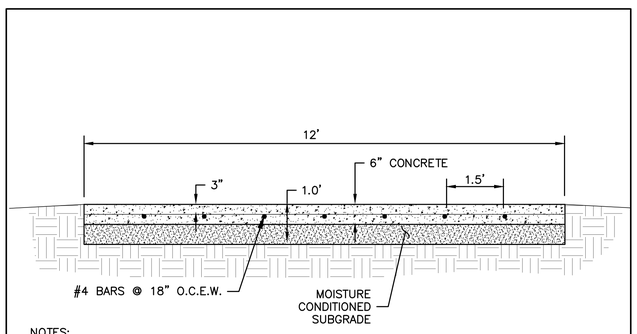
MOODY ENGINEERING, INC. | GABION WALL WITH SPLASH PAD SECTION DETAIL

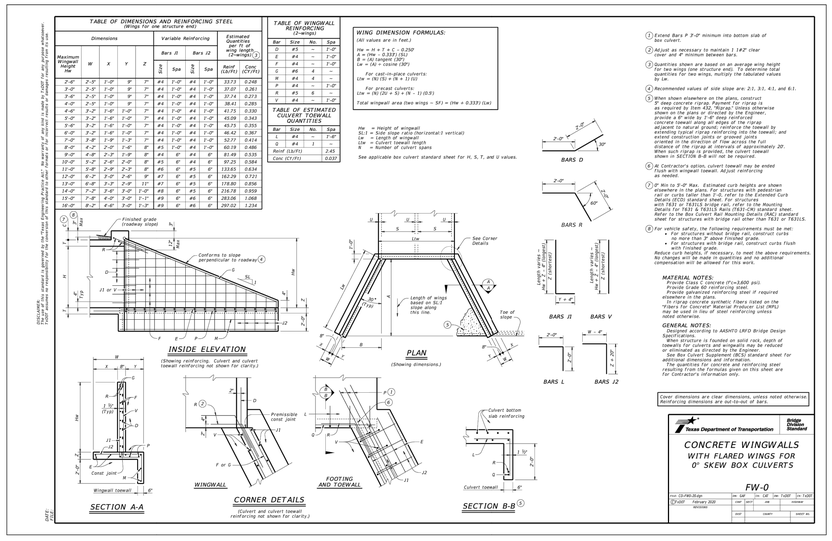


NOTES:

1. CONTROL JOINTS TO BE SPACED NO GREATER THAN 15 FEET.
2. CONCRETE TO BE DESIGNED IN ACCORDANCE WITH THE CITY OF AUSTIN ITEM 360S AND EXHIBIT A MIN. 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI.

CONCRETE ACCESS ROAD CROSS SECTION

SCALE: N.T.S



MOODY ENGINEERING, INC.
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AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS — JOSHUA F. HENKE — 92601 — LICENSED PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER QUALITY BMP NOTES & DETAILS

NO. | DATE | REVISIONS/CORRECTIONS | BY
CHECKED BY: XX | DESIGNED BY: XX | DRAWN BY: XX

Sheet 42 of 73

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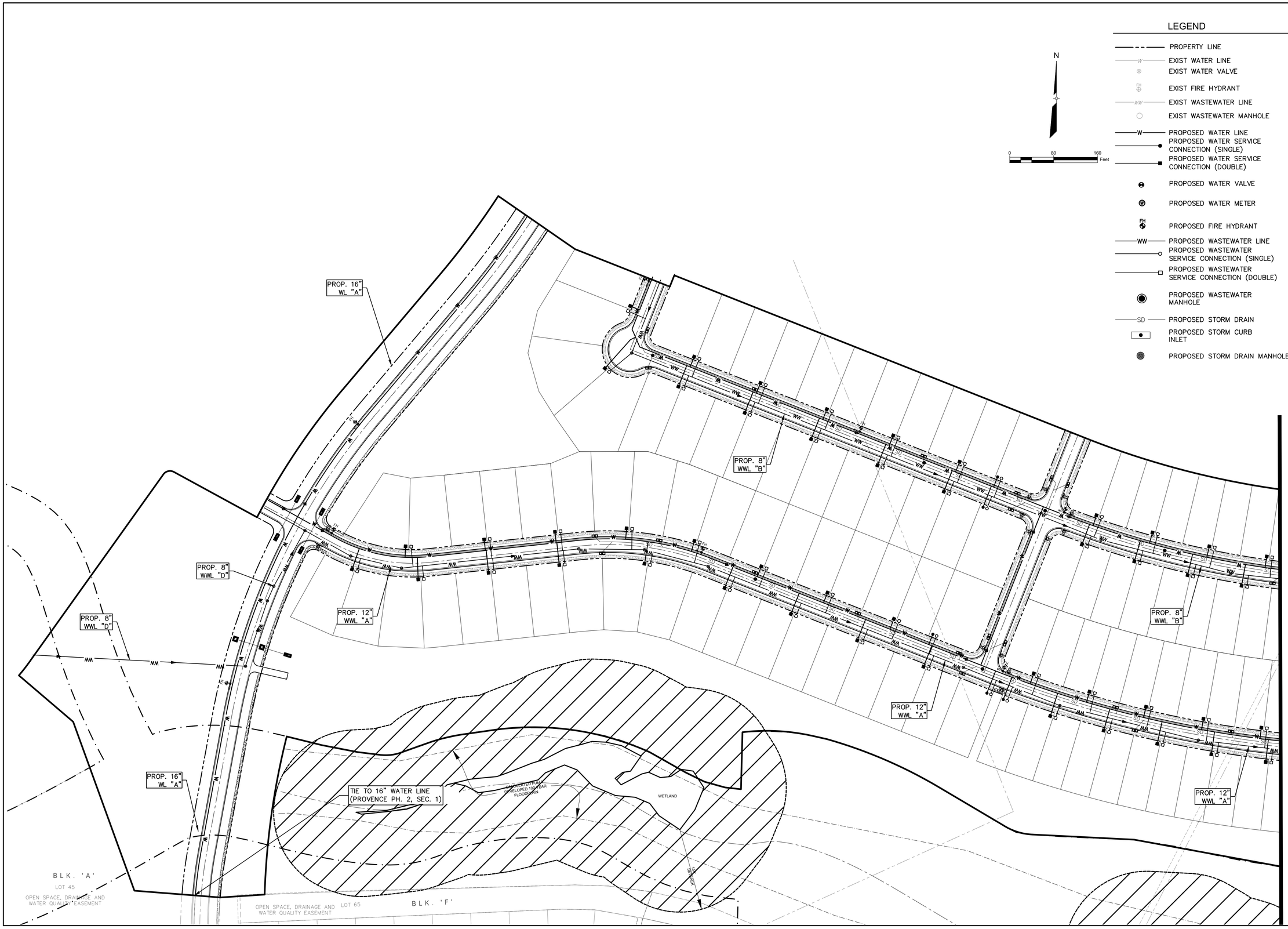

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512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL UTILITY LAYOUT SHEET 1 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY
		CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX	

Sheet 43 of 73

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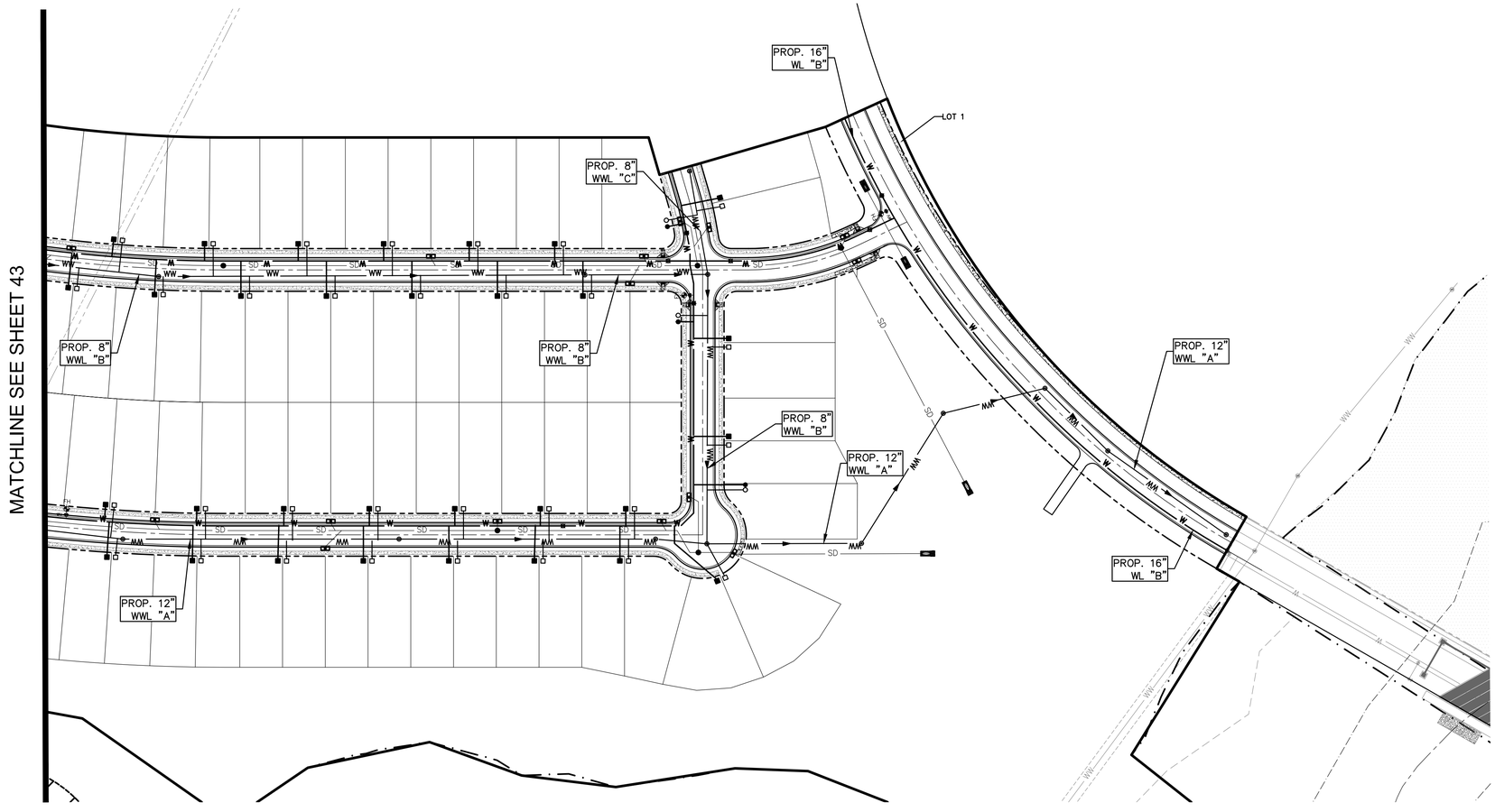

N

0 60 120 Feet

LEGEND

- PROPERTY LINE
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED WATER METER
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

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STATE OF TEXAS
JOSHUA F. HENKE
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9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL UTILITY LAYOUT SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 44 of 73

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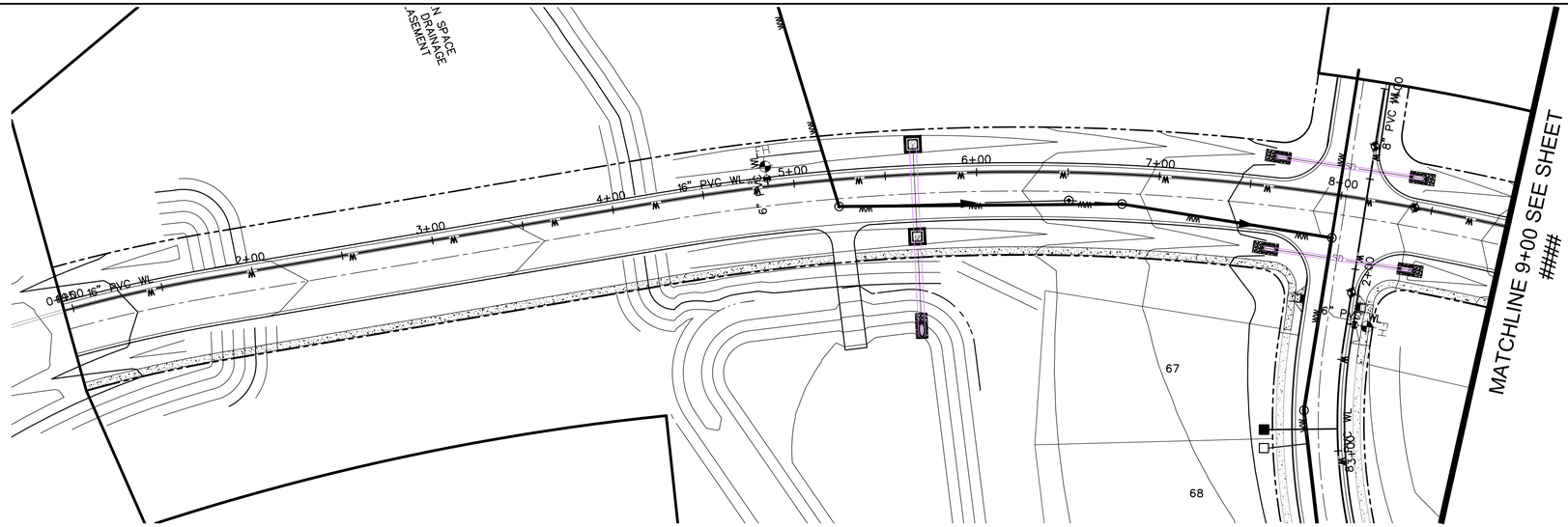
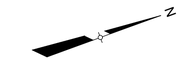
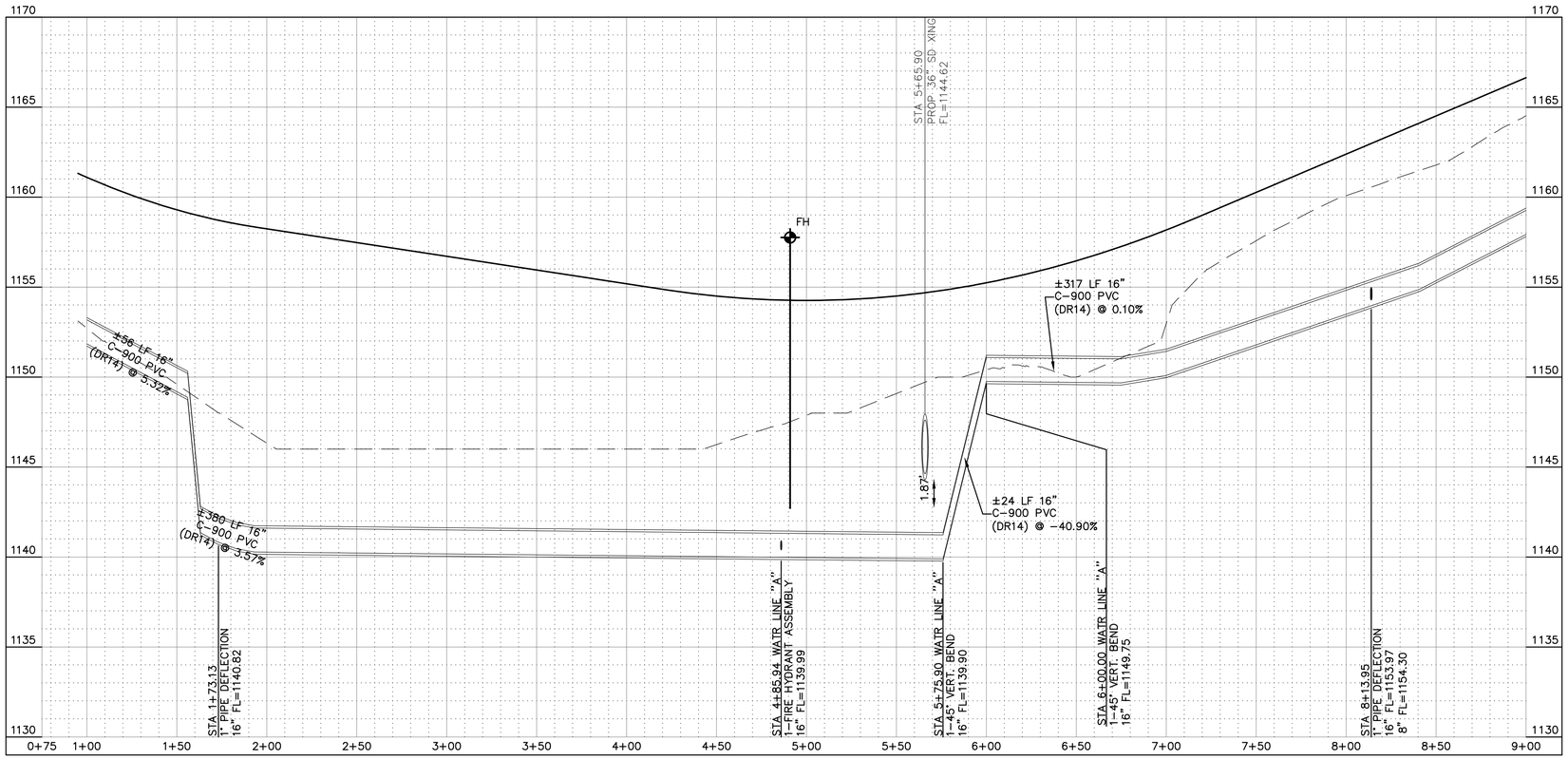




WATR LINE "A"



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BLDG A, SUITE 200
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512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
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9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "A" STA 1+00 TO STA 9+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

Sheet 45 of 73

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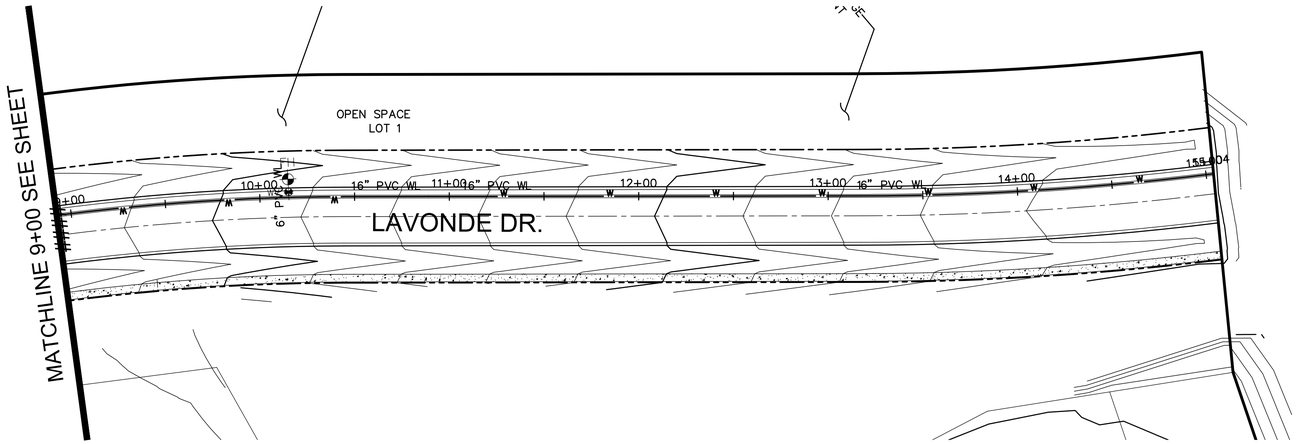
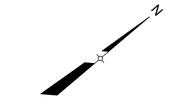
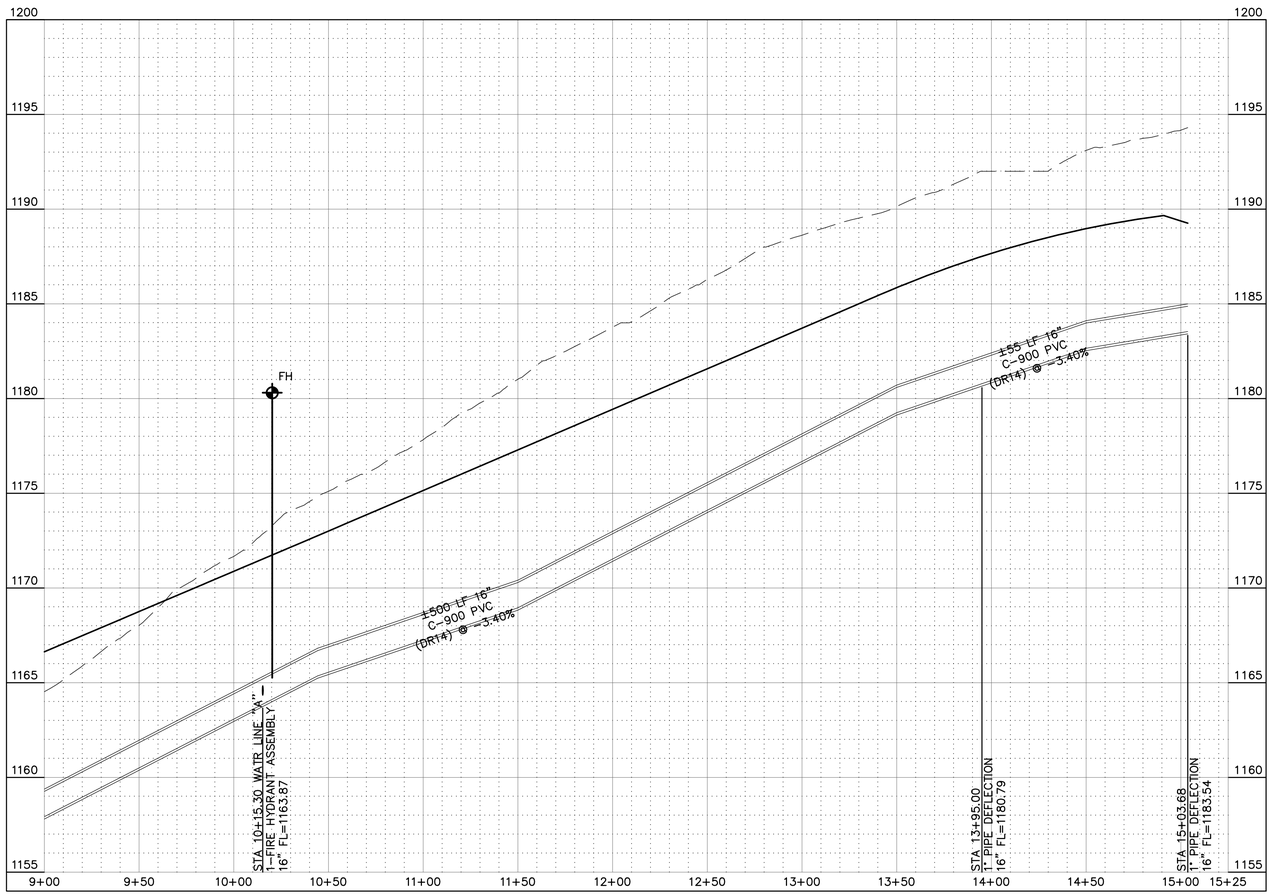




HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

WATR LINE "A"



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PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "A" STA 9+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

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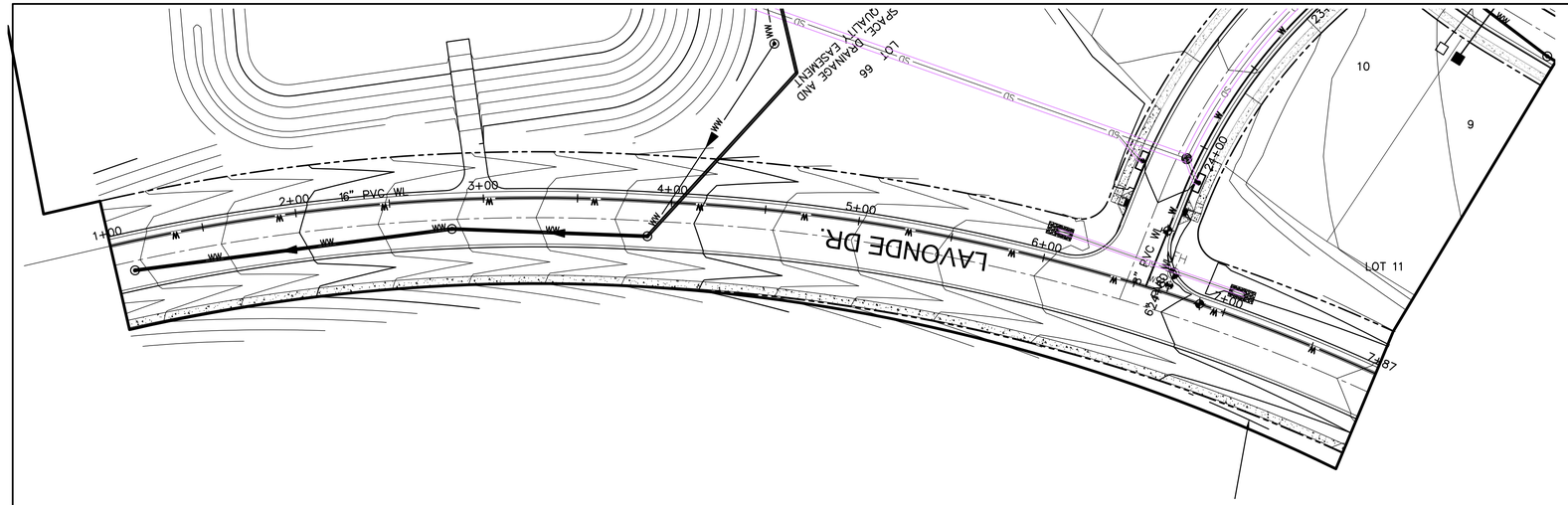

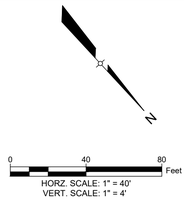

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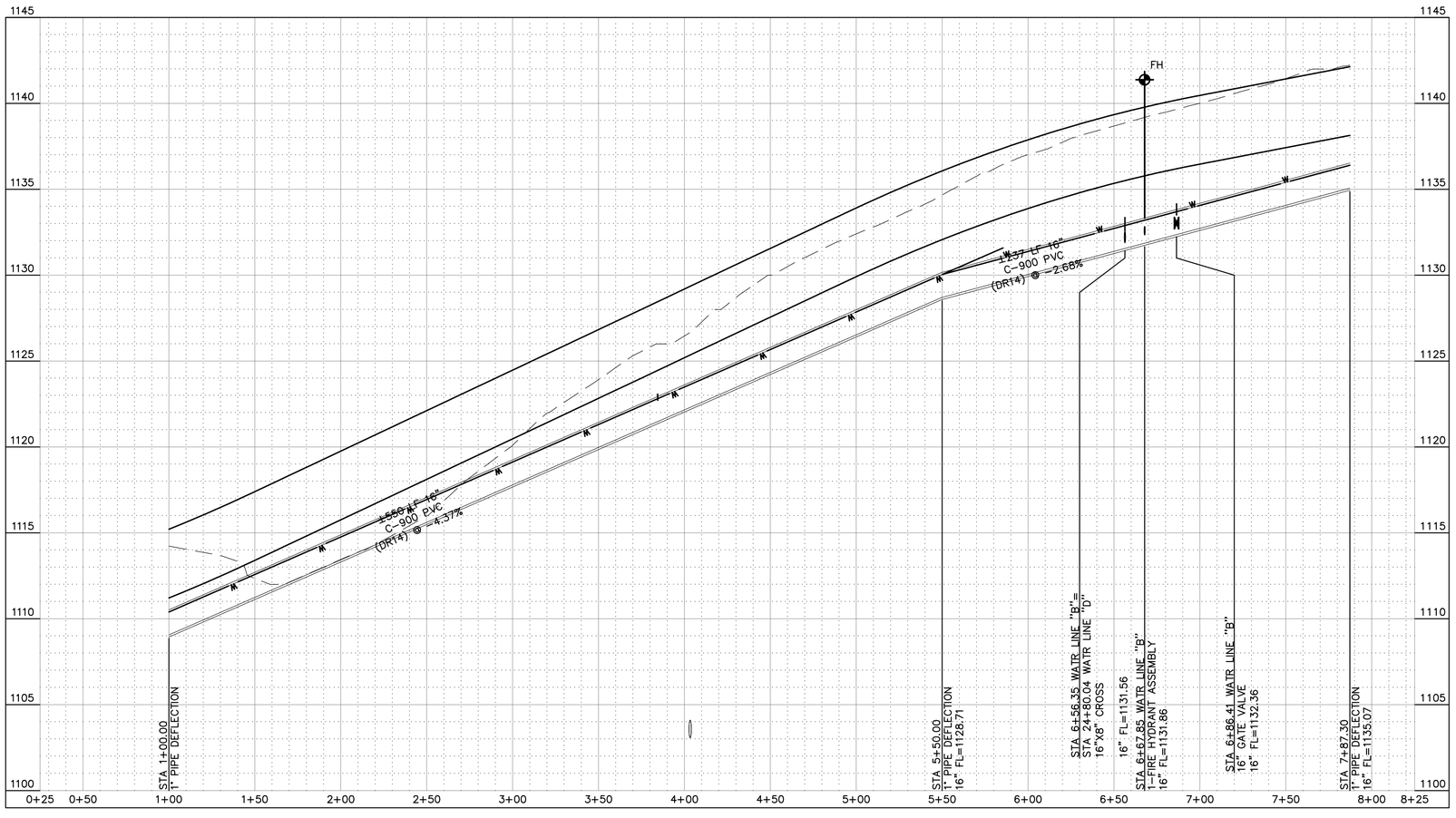

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STATE OF TEXAS
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92601
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9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "B"

NO.	DATE	REVISIONS/CORRECTIONS	BY

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Sheet 47 of 73

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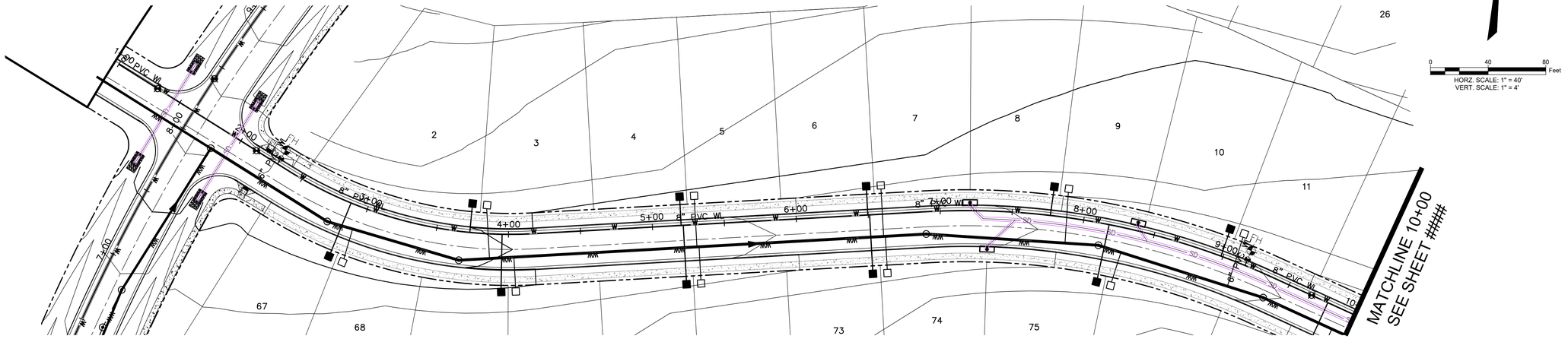

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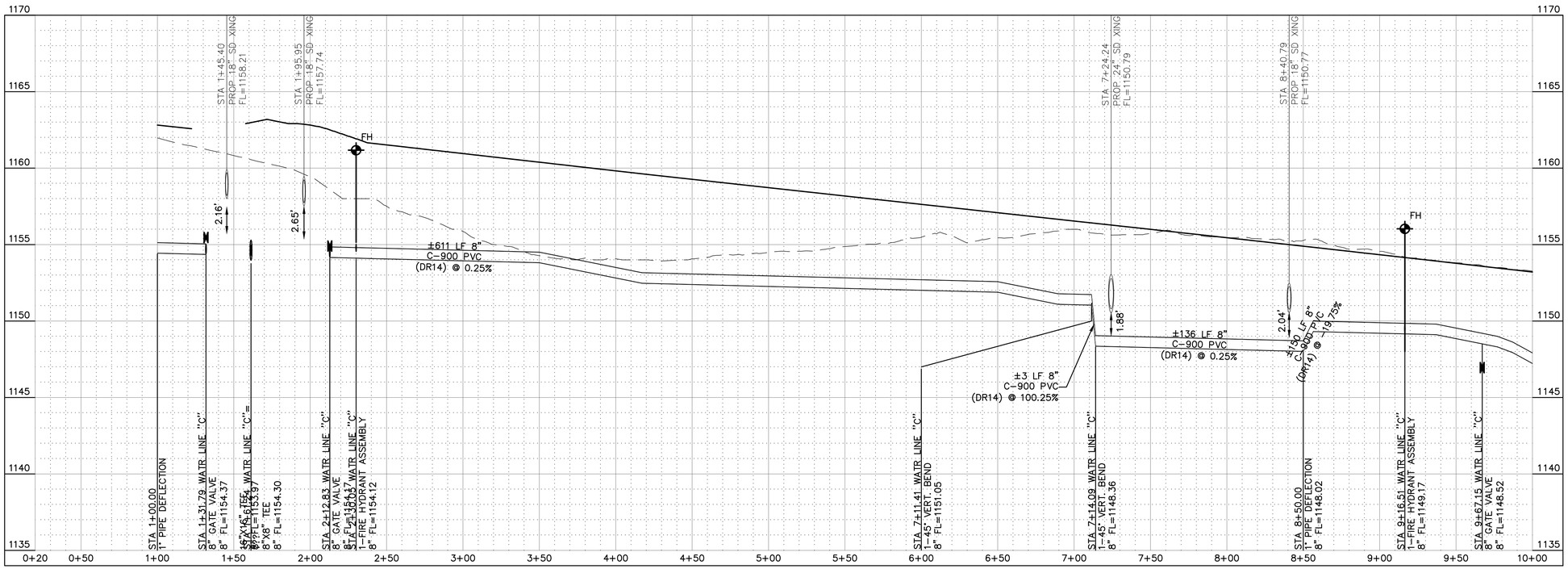

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PROVENCE, PHASE 2, SECTION 2
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TRAVIS COUNTY, TX

WATER LINE "C" STA 1+00 TO STA 10+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

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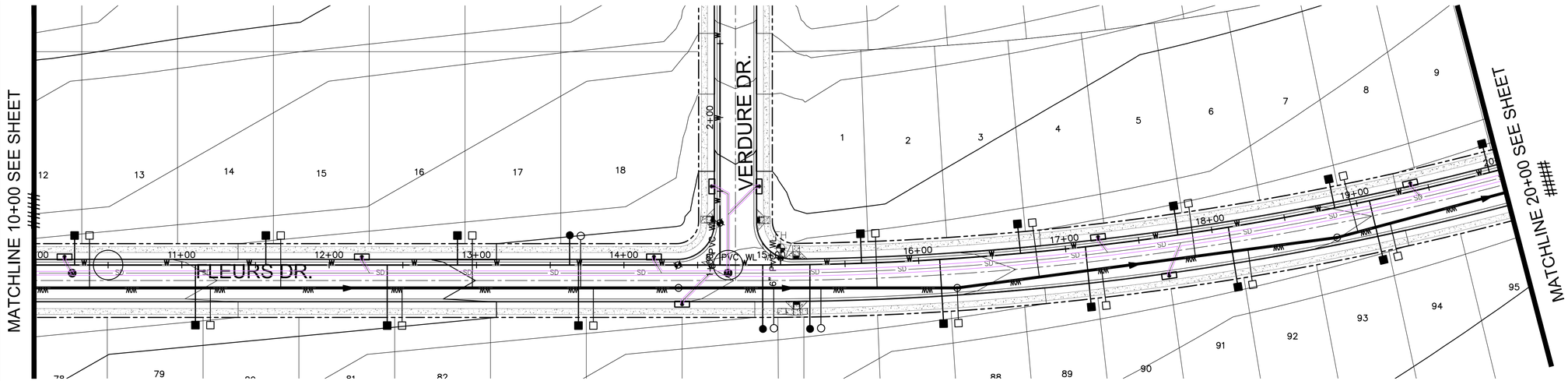

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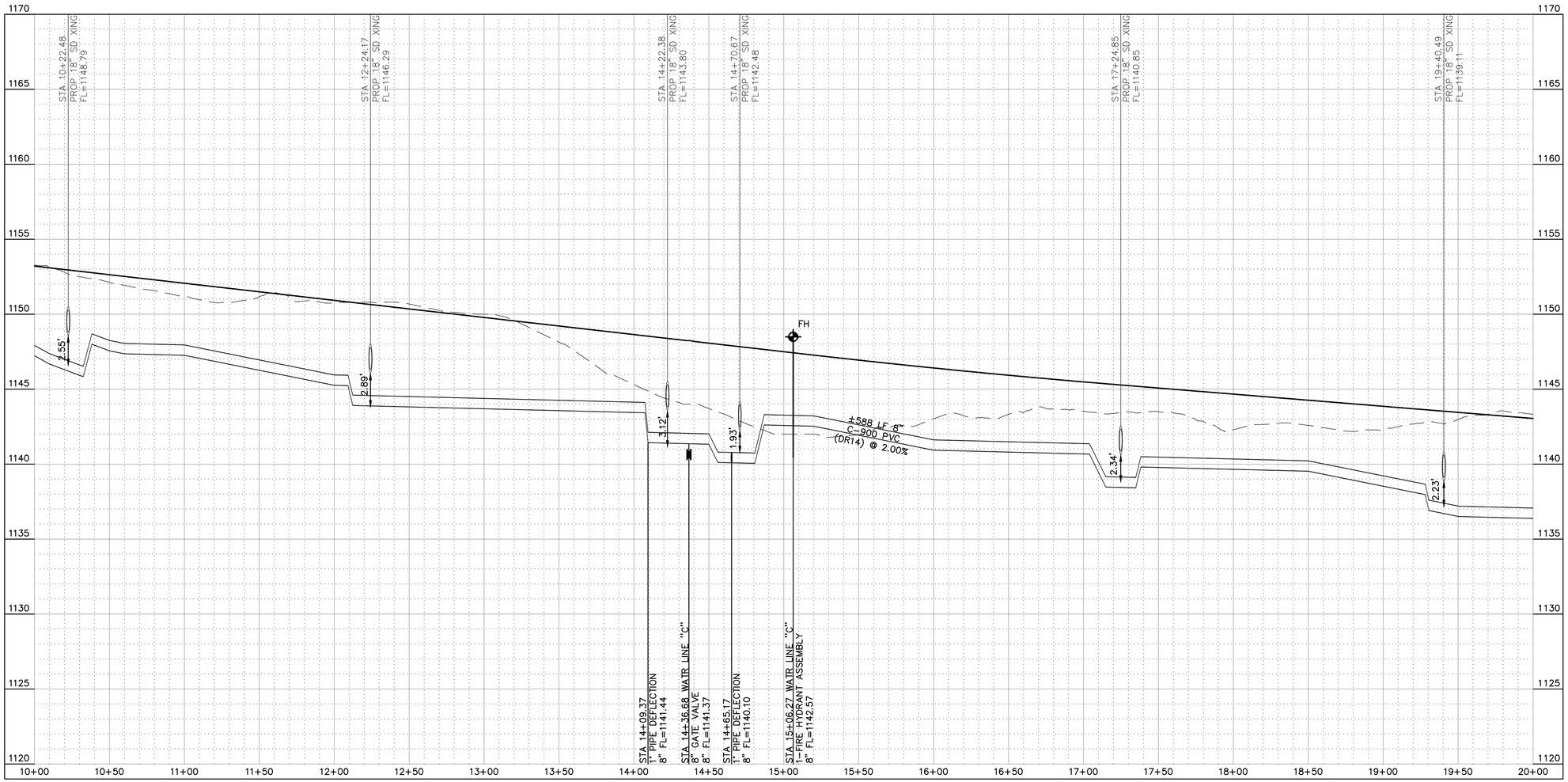
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

WATR LINE "C"



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PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "C" STA 10+00 TO STA 20+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

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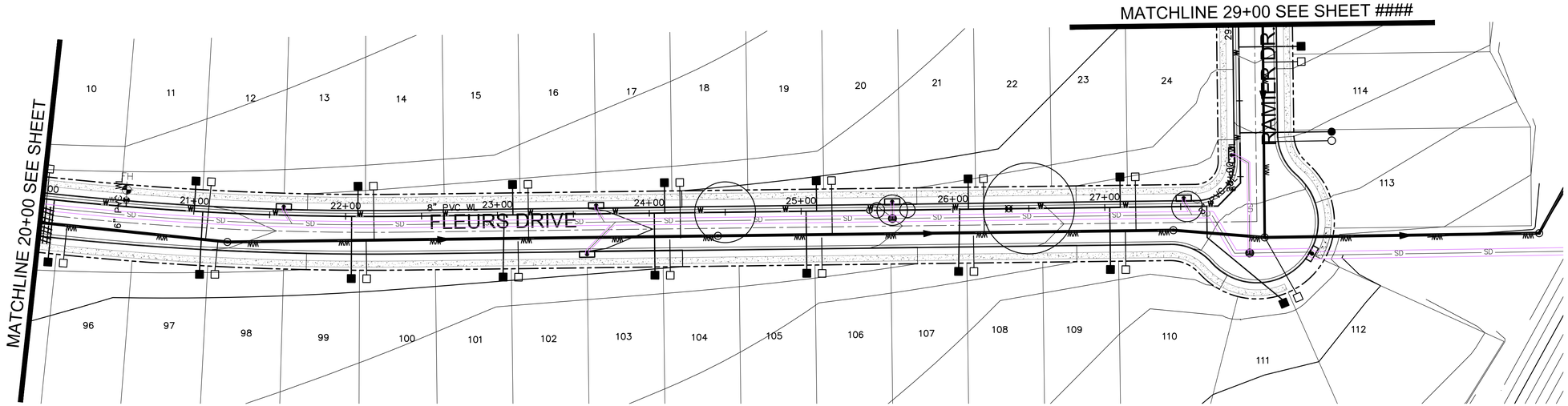

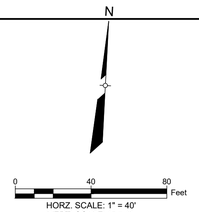

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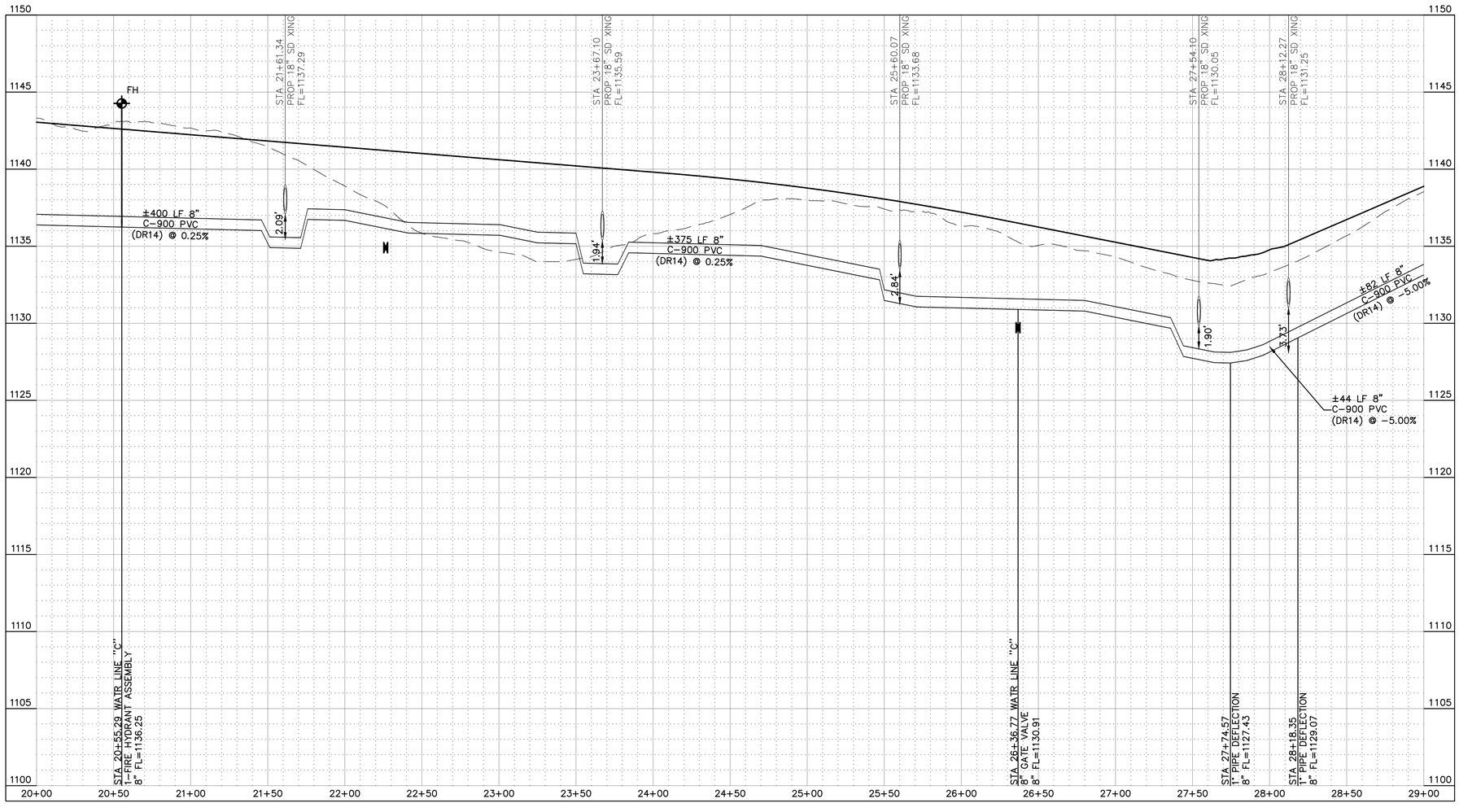

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BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
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9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "C" STA 20+00 TO STA 29+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

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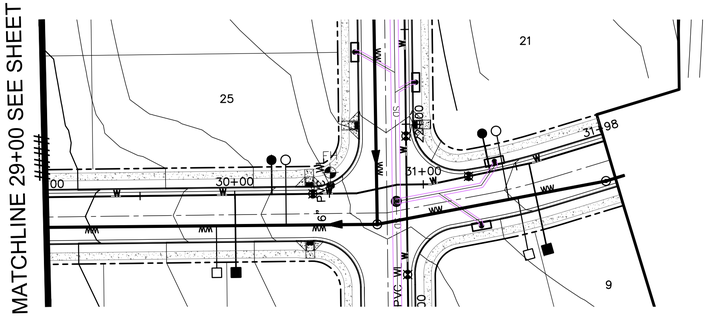

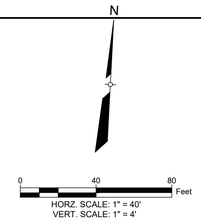

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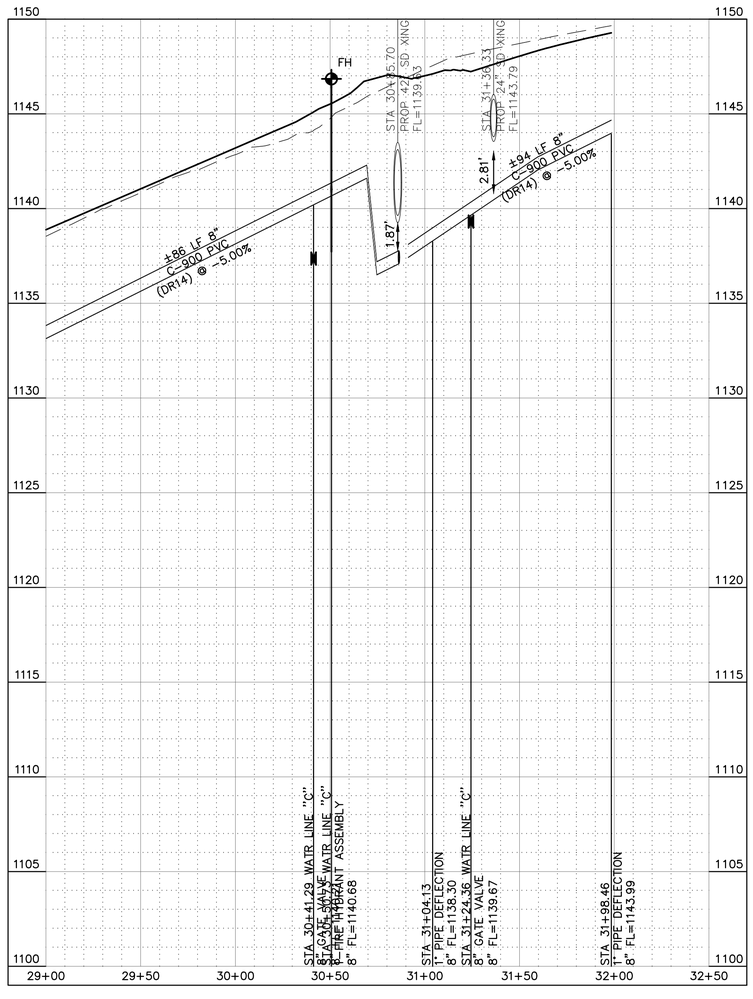

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17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "C" STA 29+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

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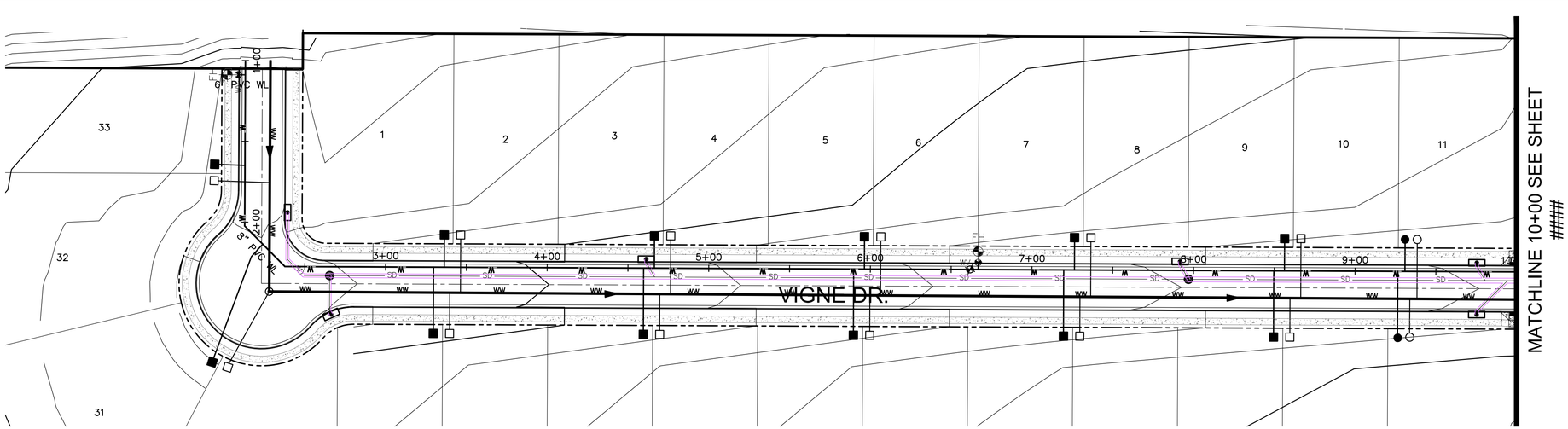

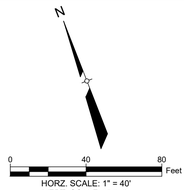

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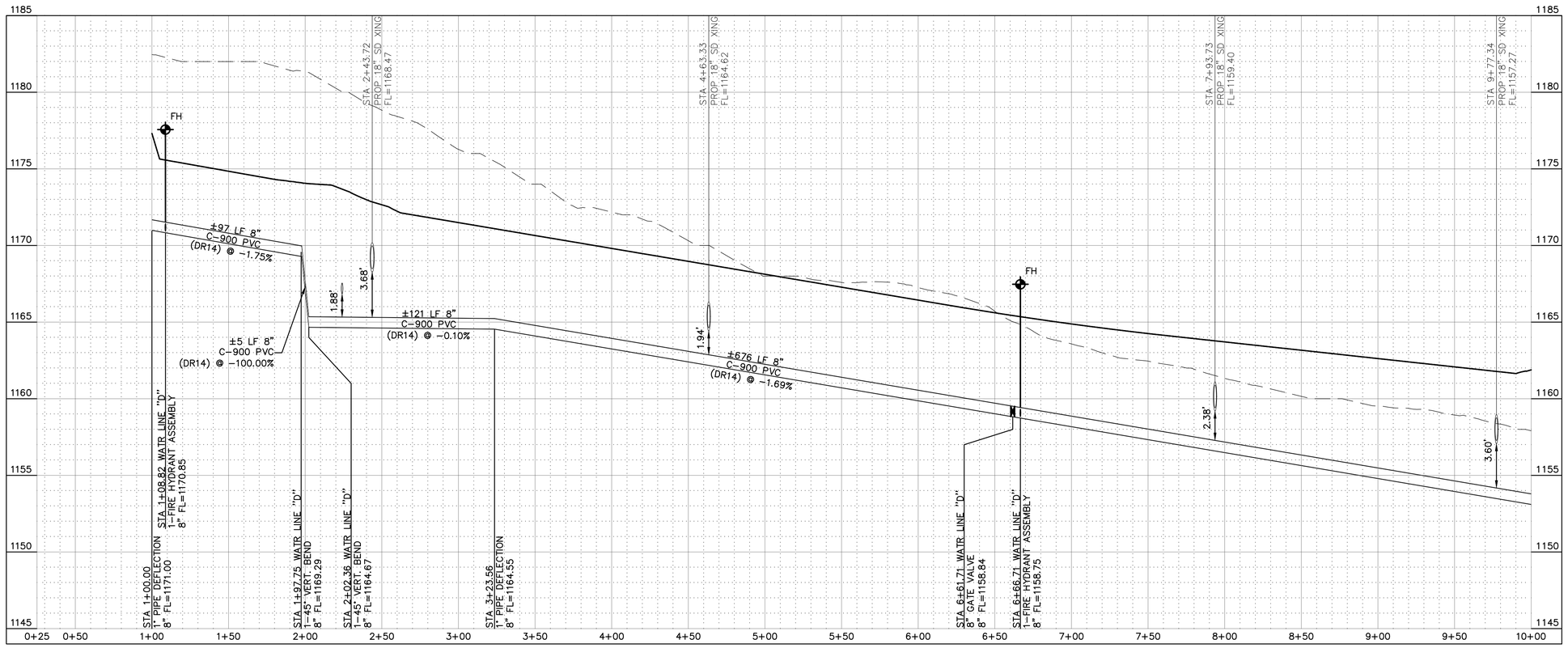

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "D" STA 1+00 TO STA 10+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

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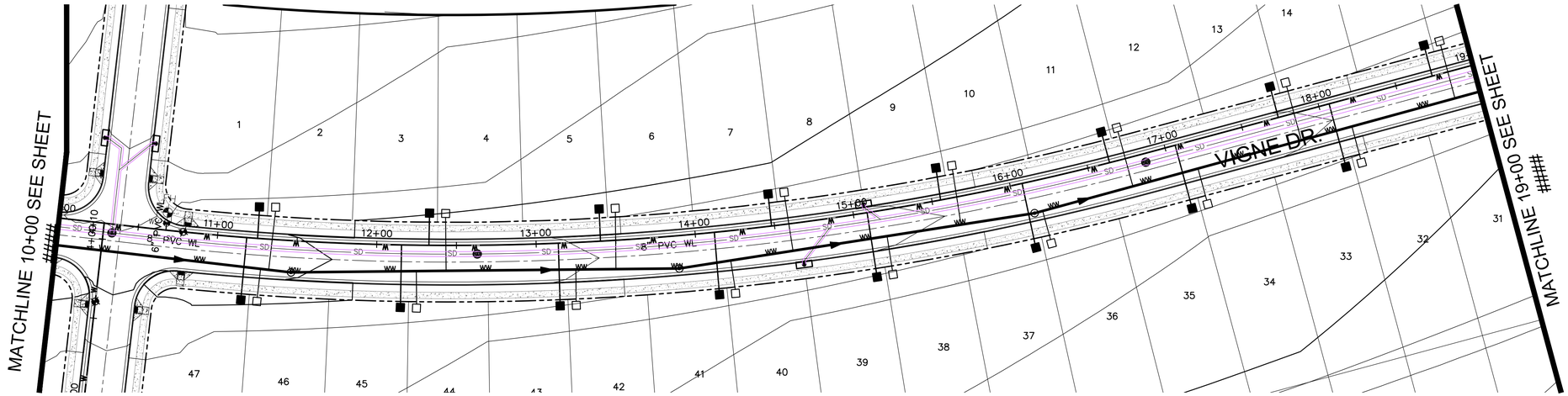

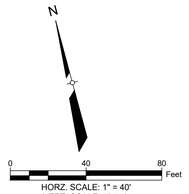

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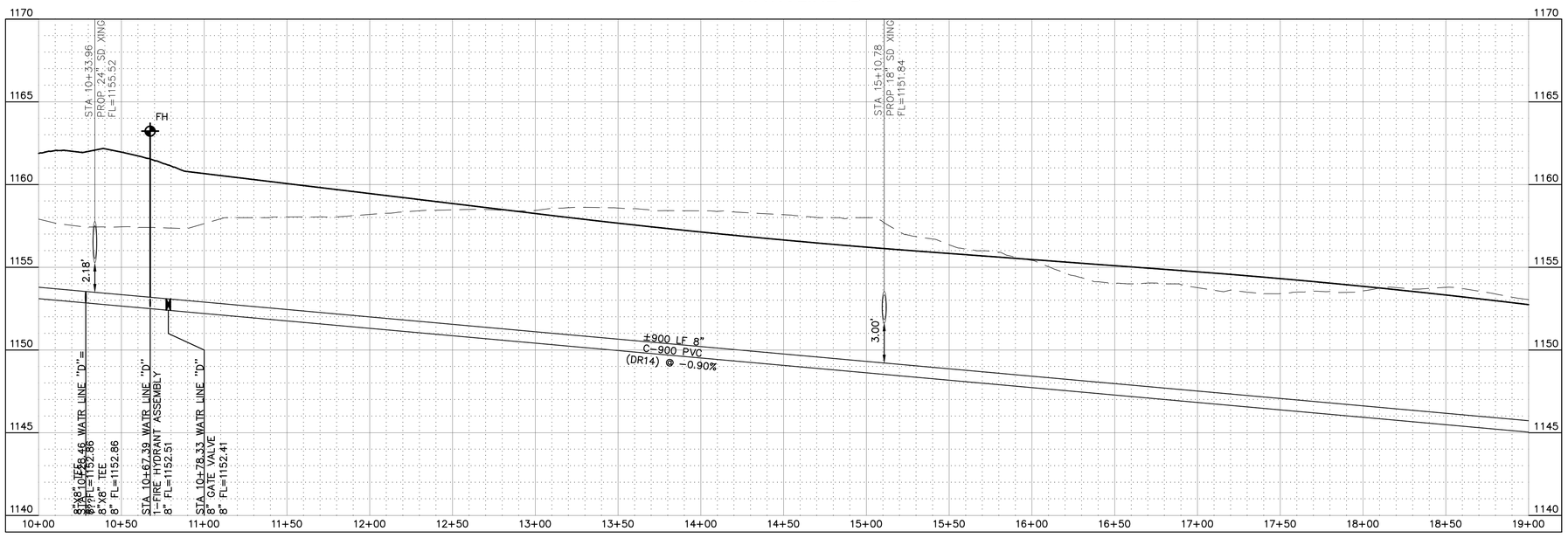

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512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "D" STA 10+00 TO STA 19+00

NO.	DATE	REVISIONS/CORRECTIONS	BY
		CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX	

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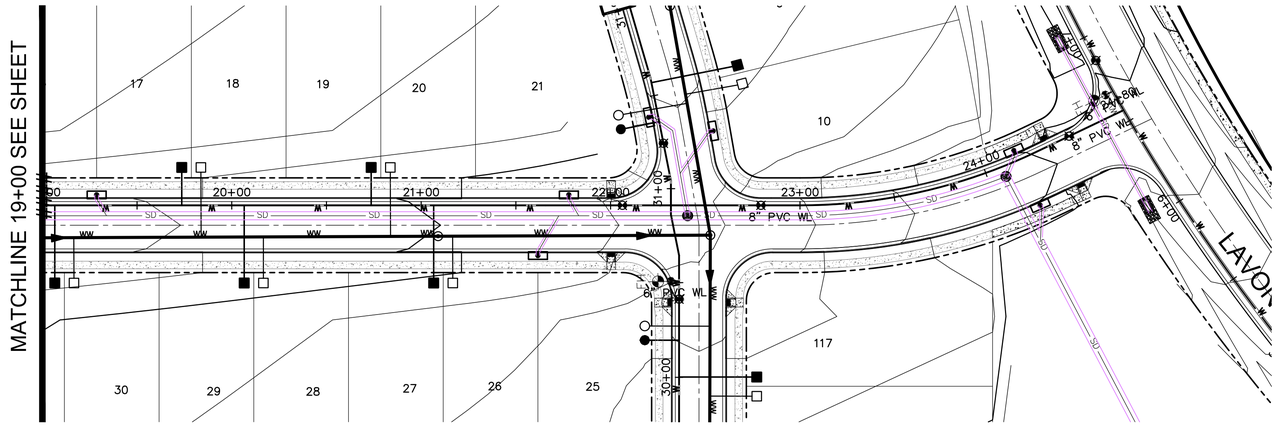
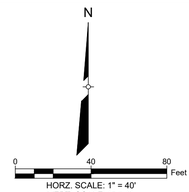
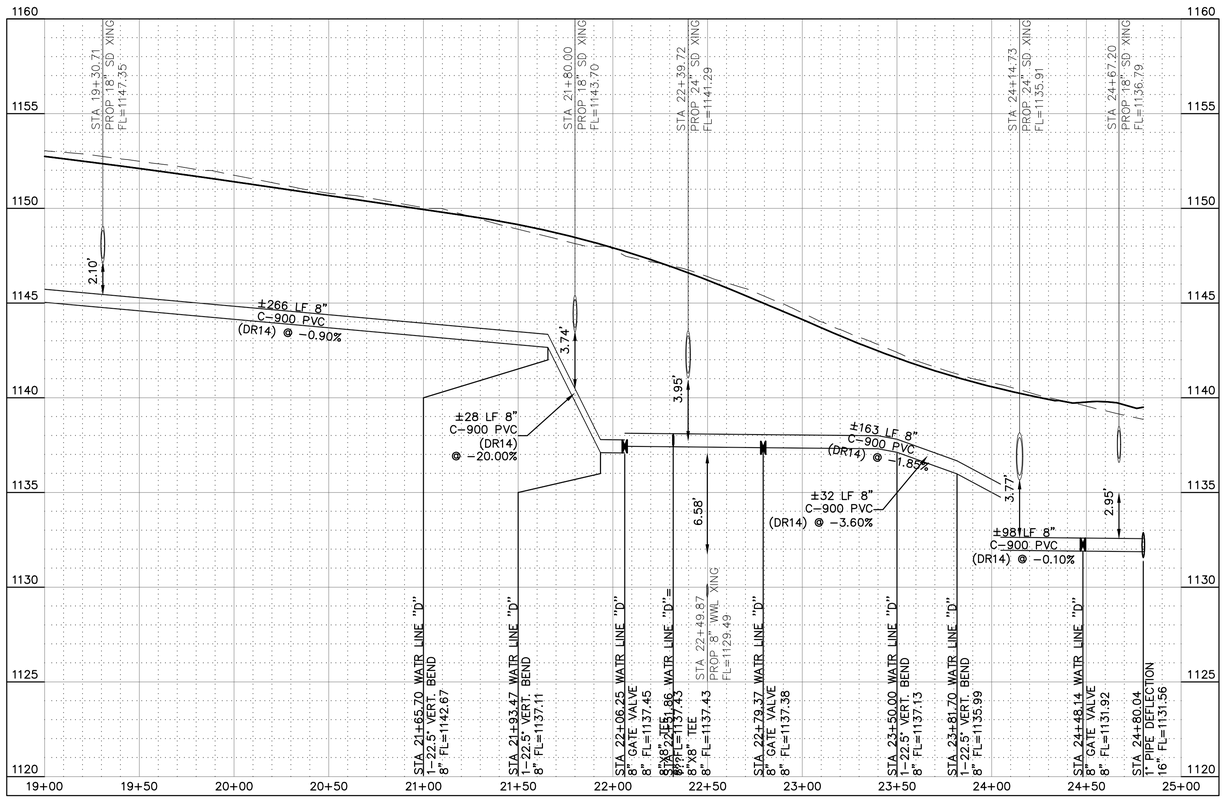




HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

WATR LINE "D"



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9225 BEE CAVES ROAD,
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TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
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9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "D" STA 19+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

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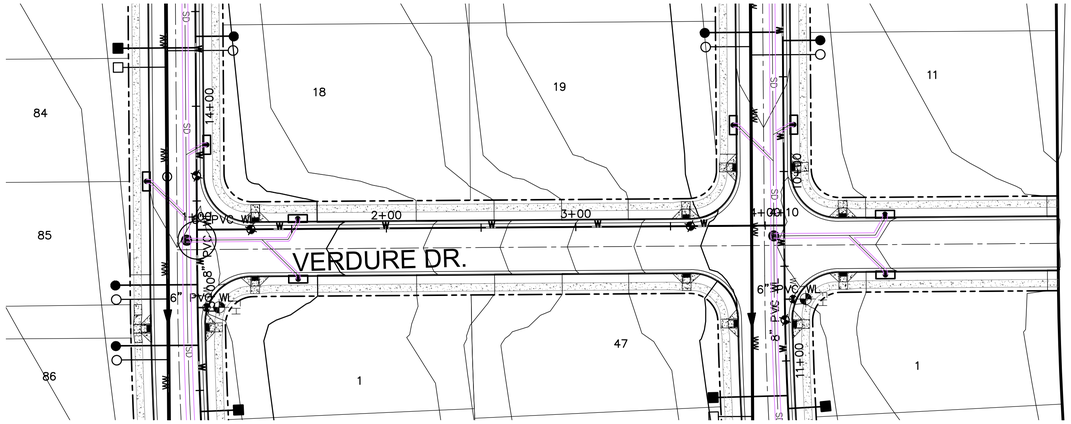

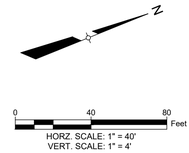

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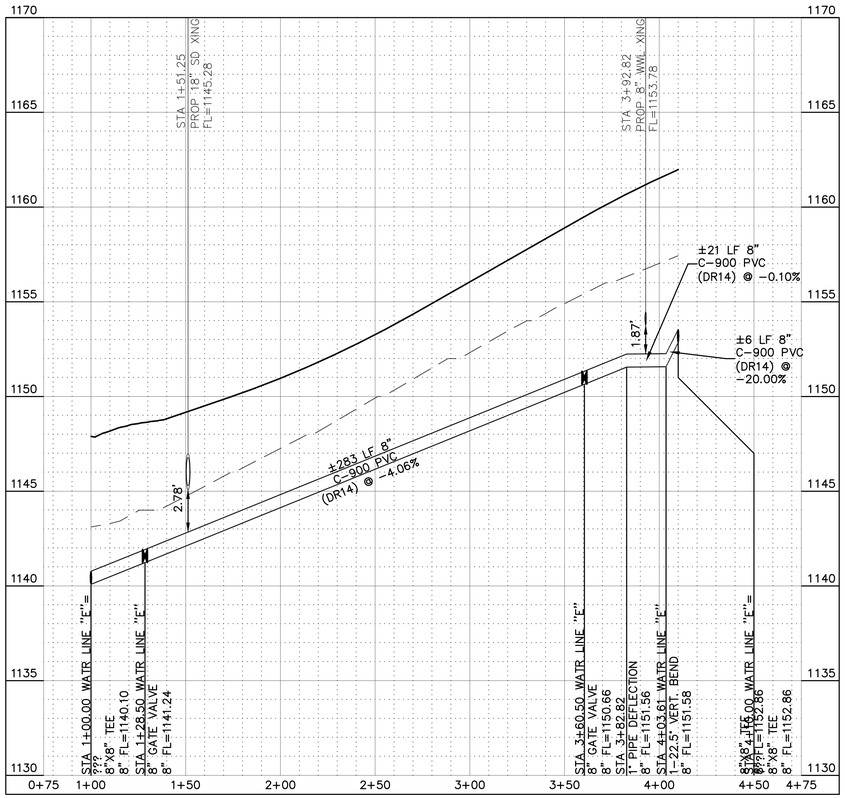

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER LINE "E"

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

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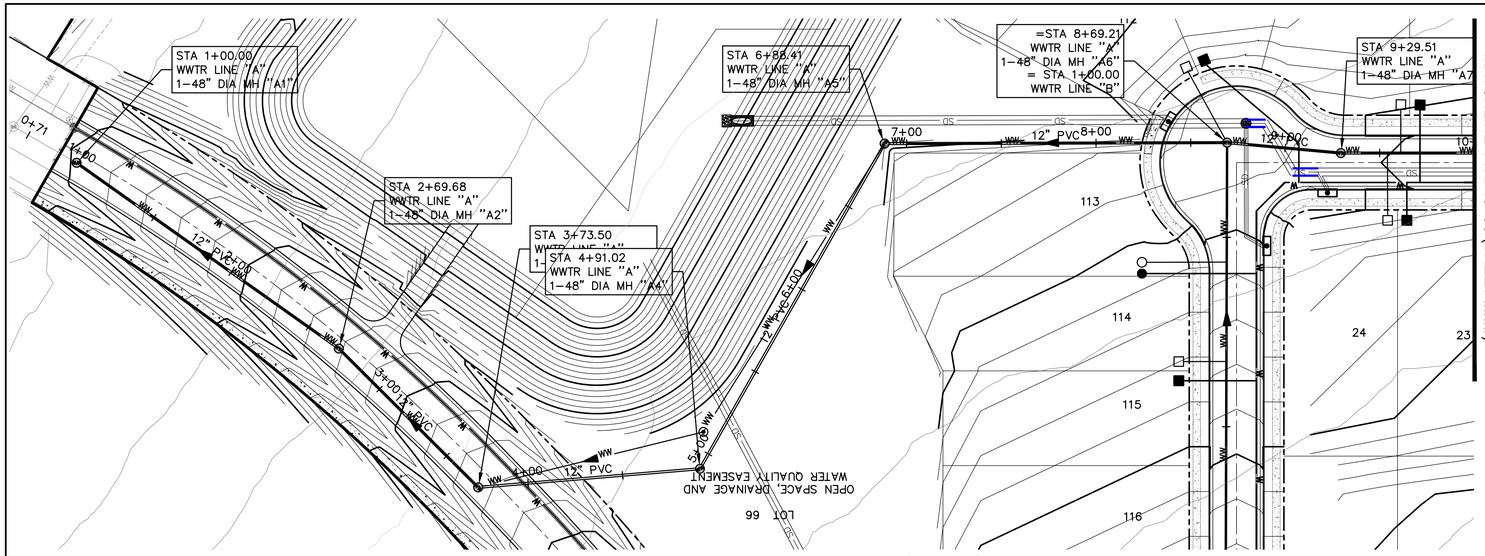
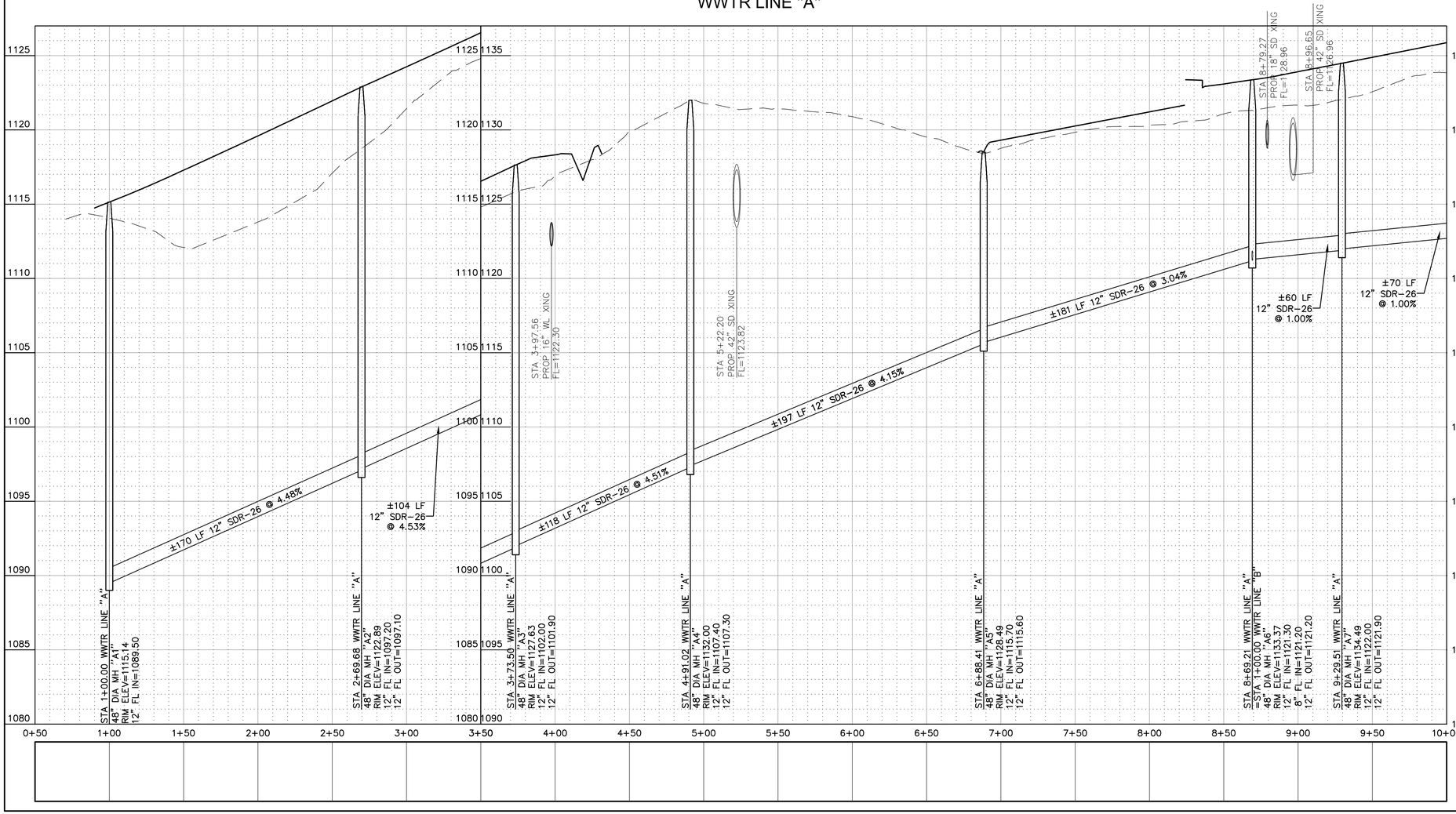
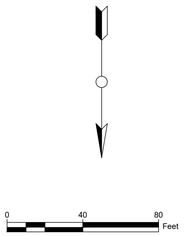


WWTR LINE "A"





LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
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TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "A" STA 1+00 TO STA 10+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

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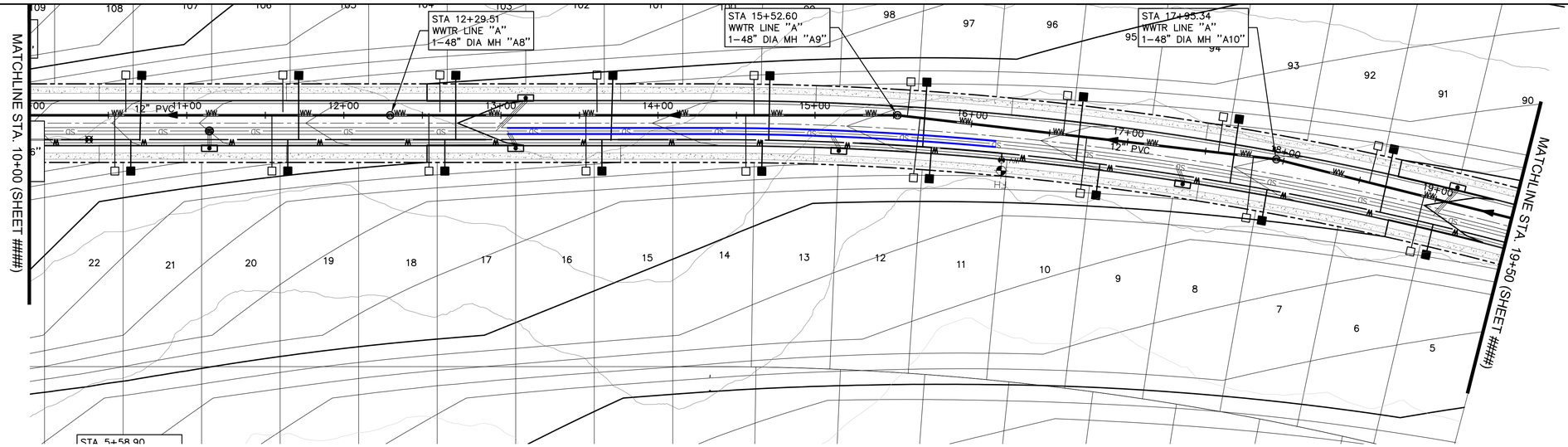
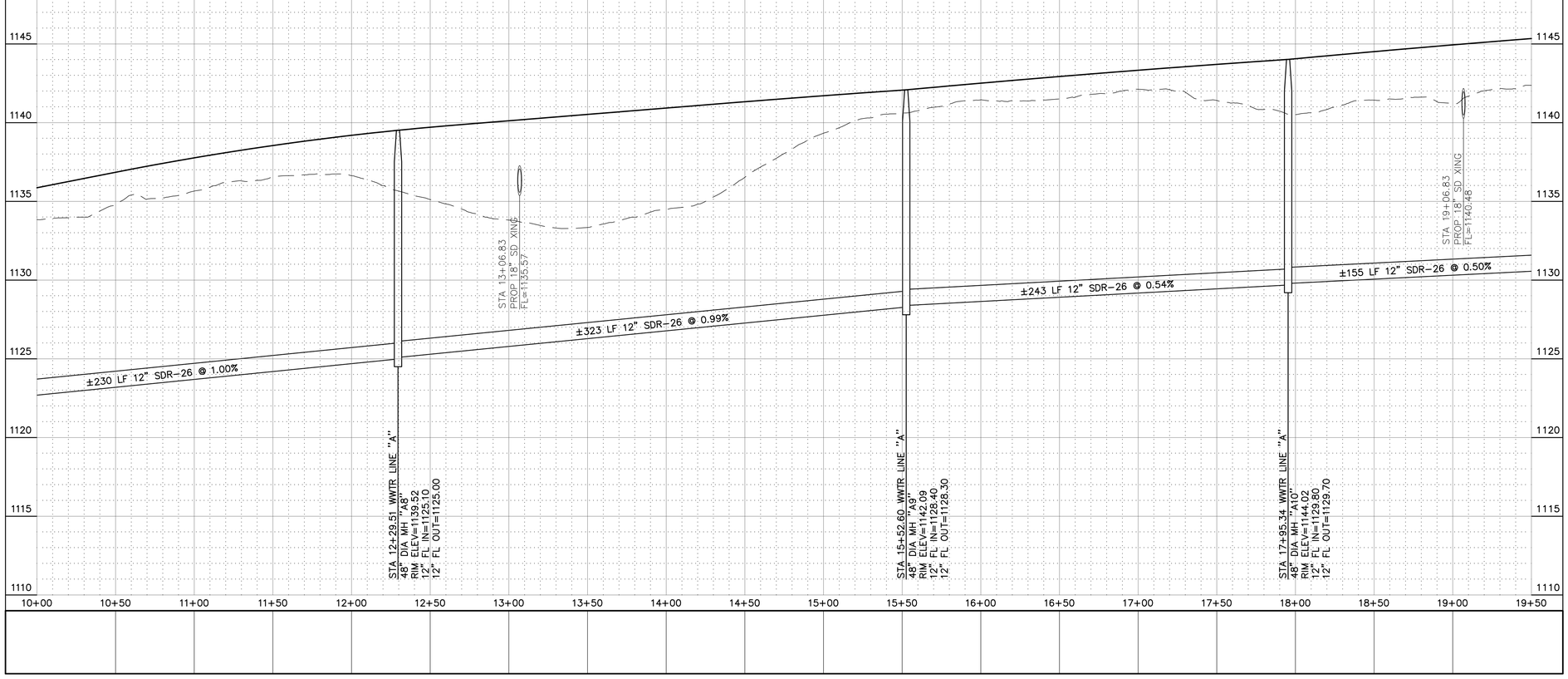
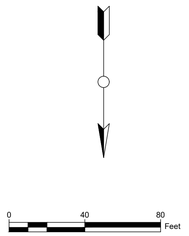


WWTR LINE "A"





LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
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STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "A" STA 11+00 TO STA 20+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

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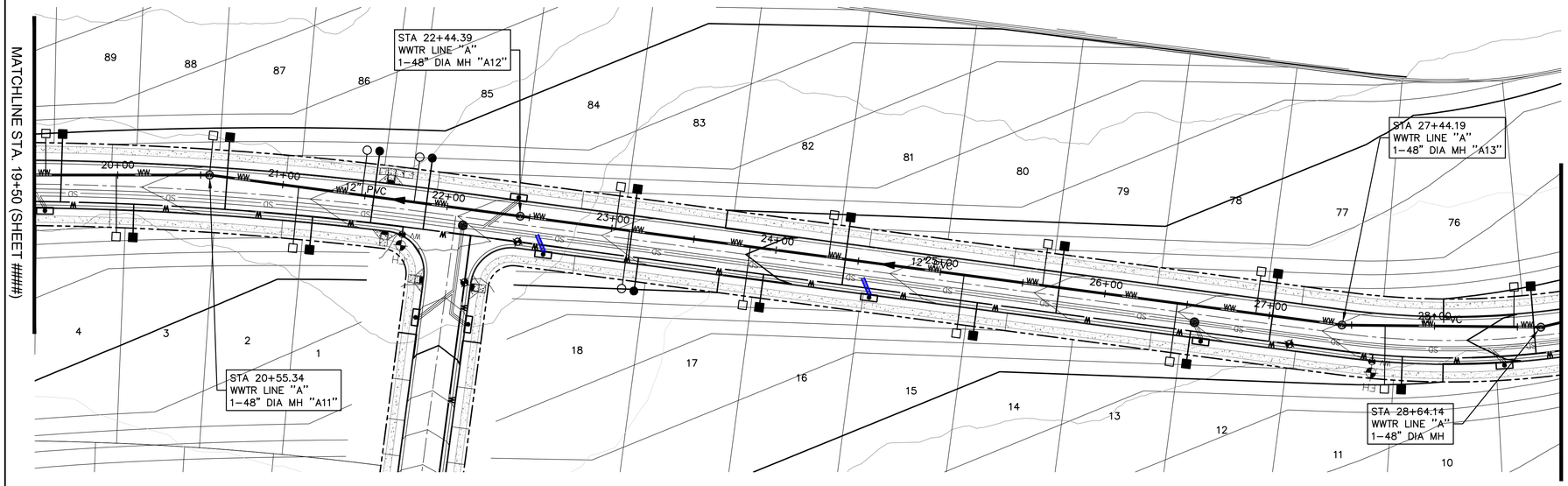

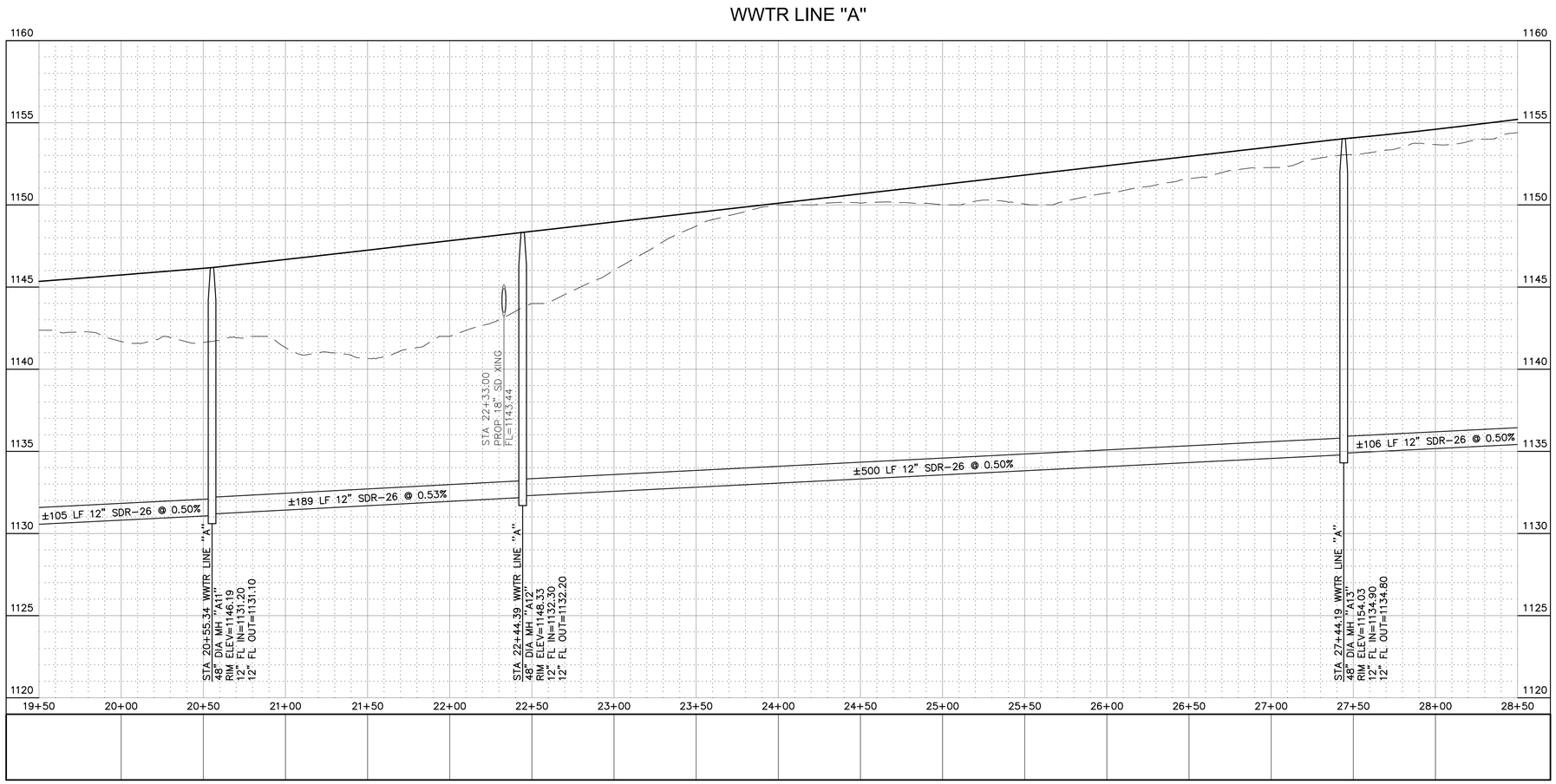

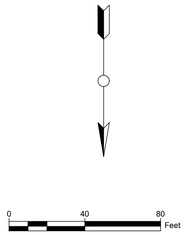

LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "A" STA 20+00 TO STA 28+50

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

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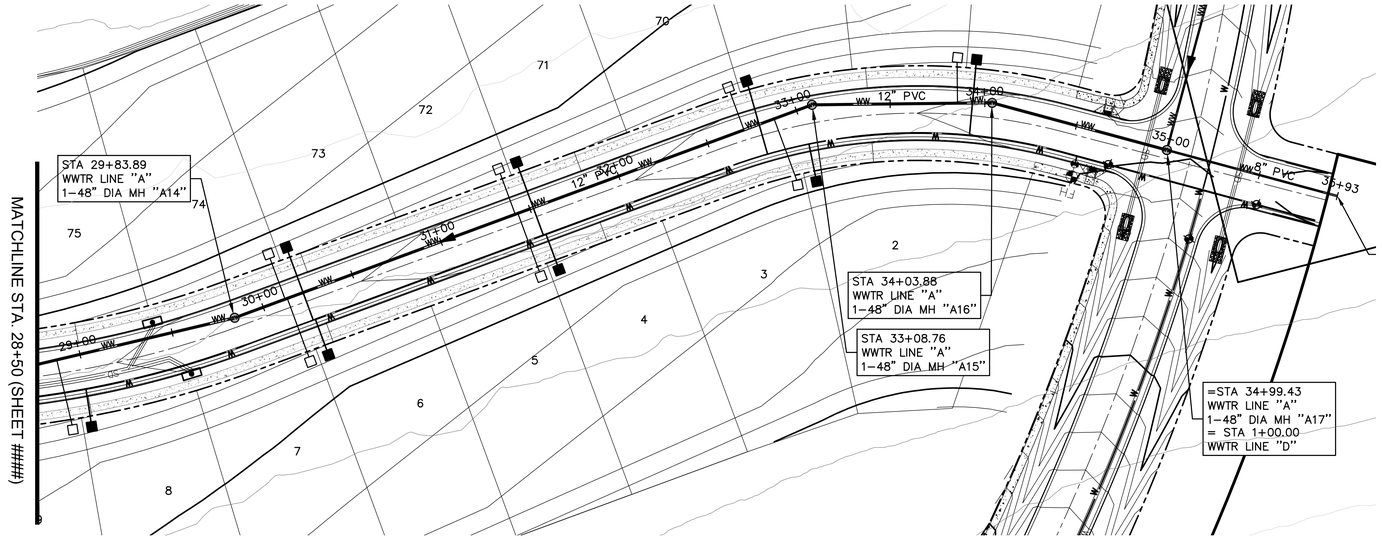
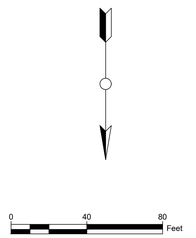




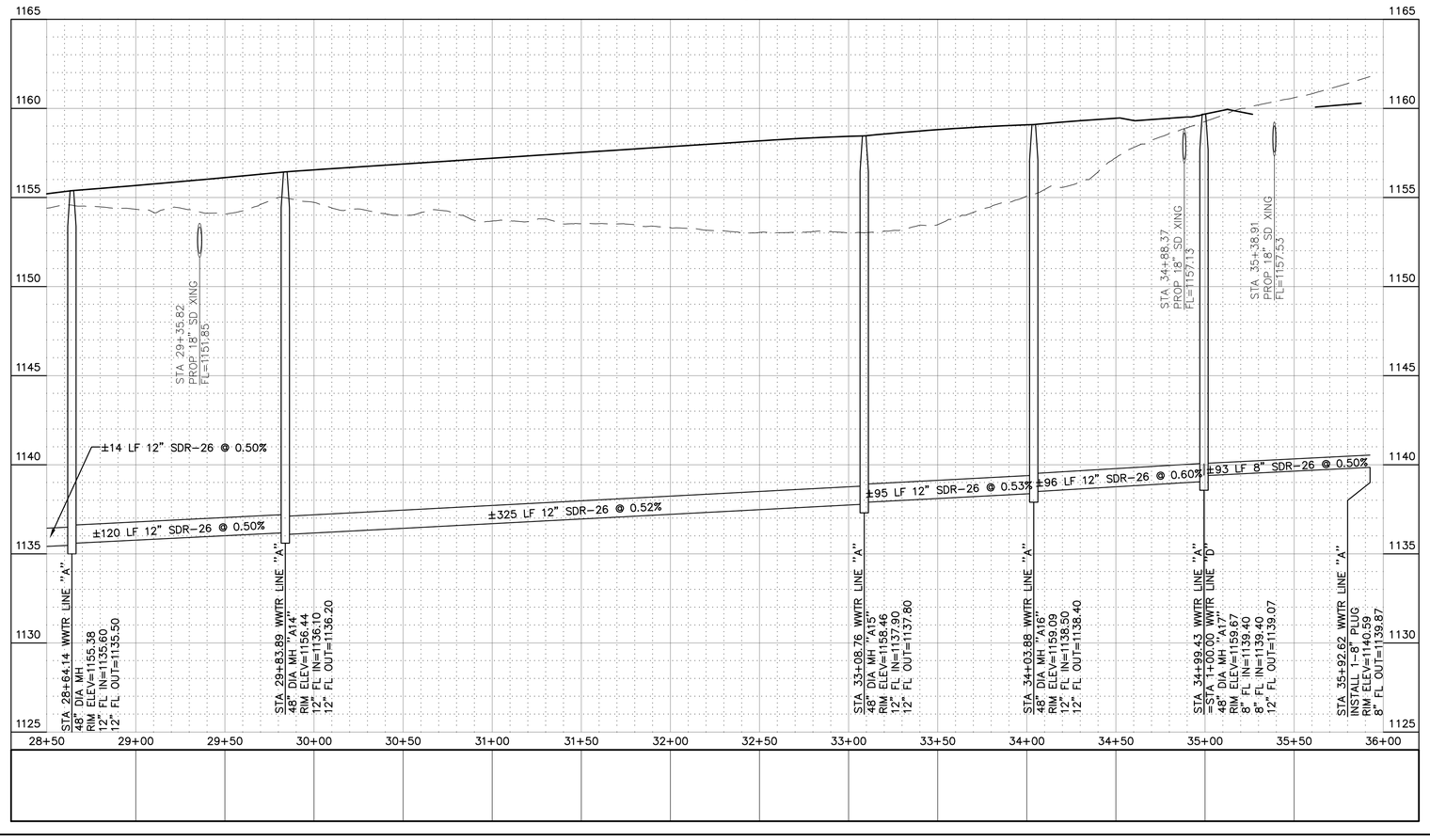
LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

WWTR LINE "A"



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STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "A" STA 28+50 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 59 of 73

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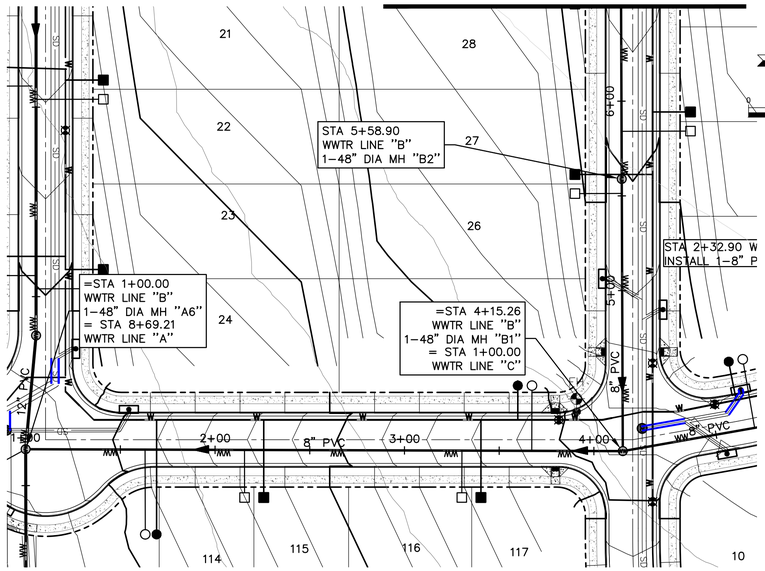

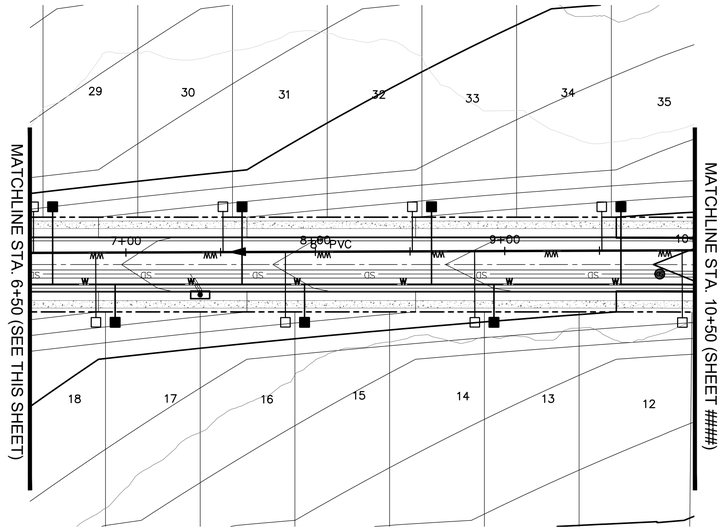

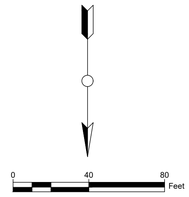

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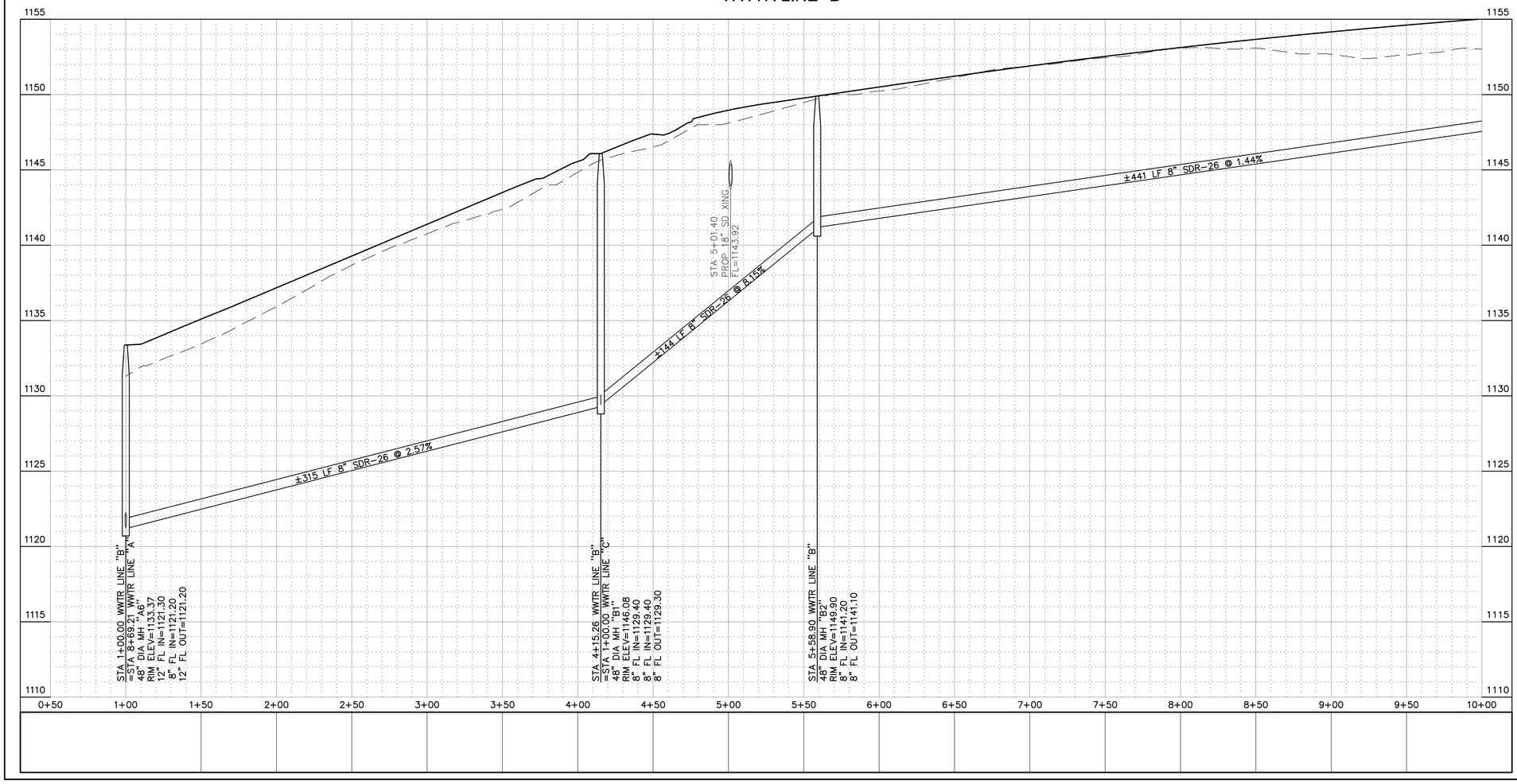

LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

MOODY ENGINEERING, INC.
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STATE OF TEXAS
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9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "B" STA 1+00 TO STA 10+50

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet 60 of 73

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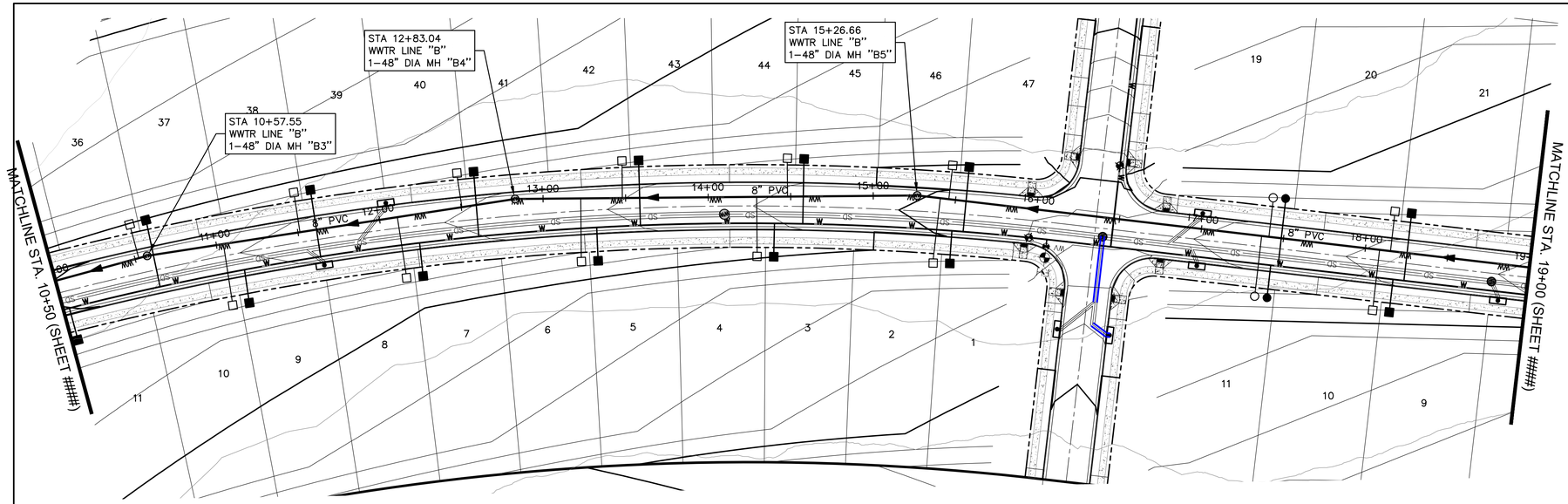
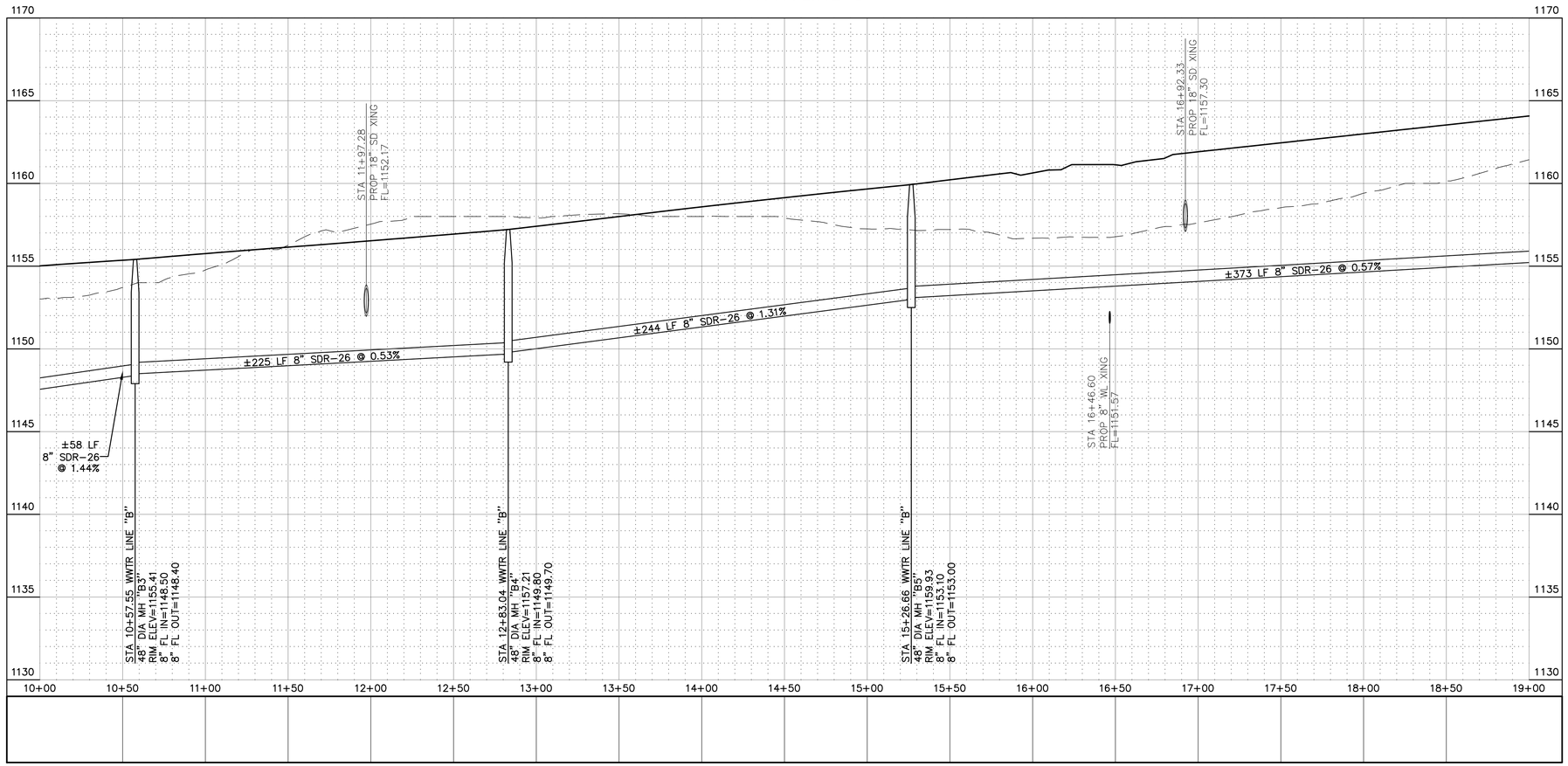
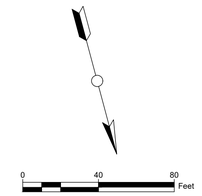


WWTR LINE "B"





LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "B" STA 10+50 TO STA 19+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
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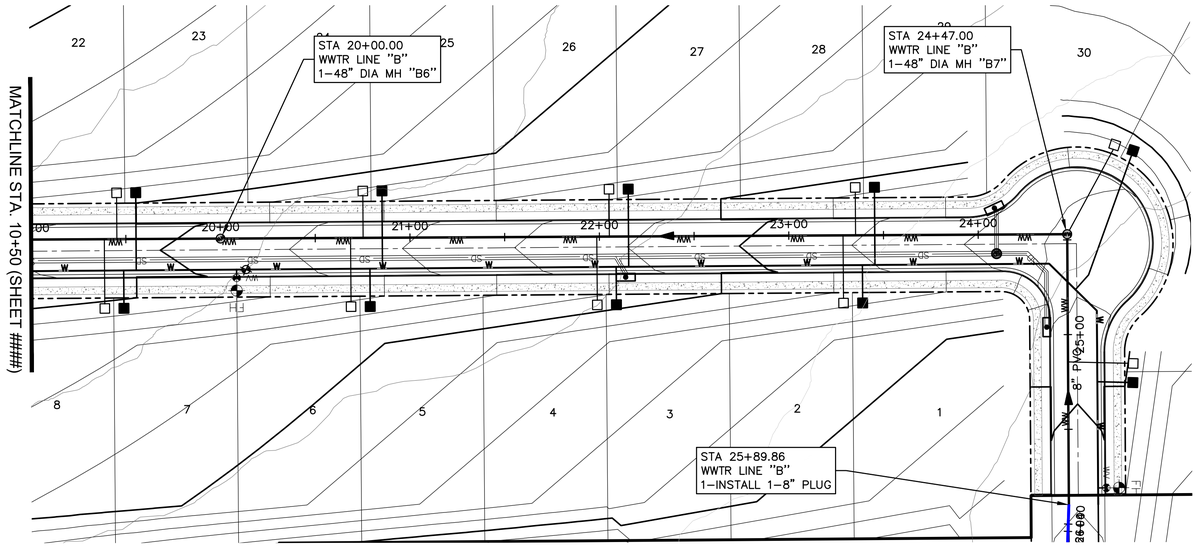

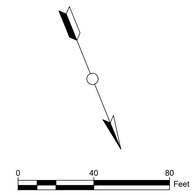

LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
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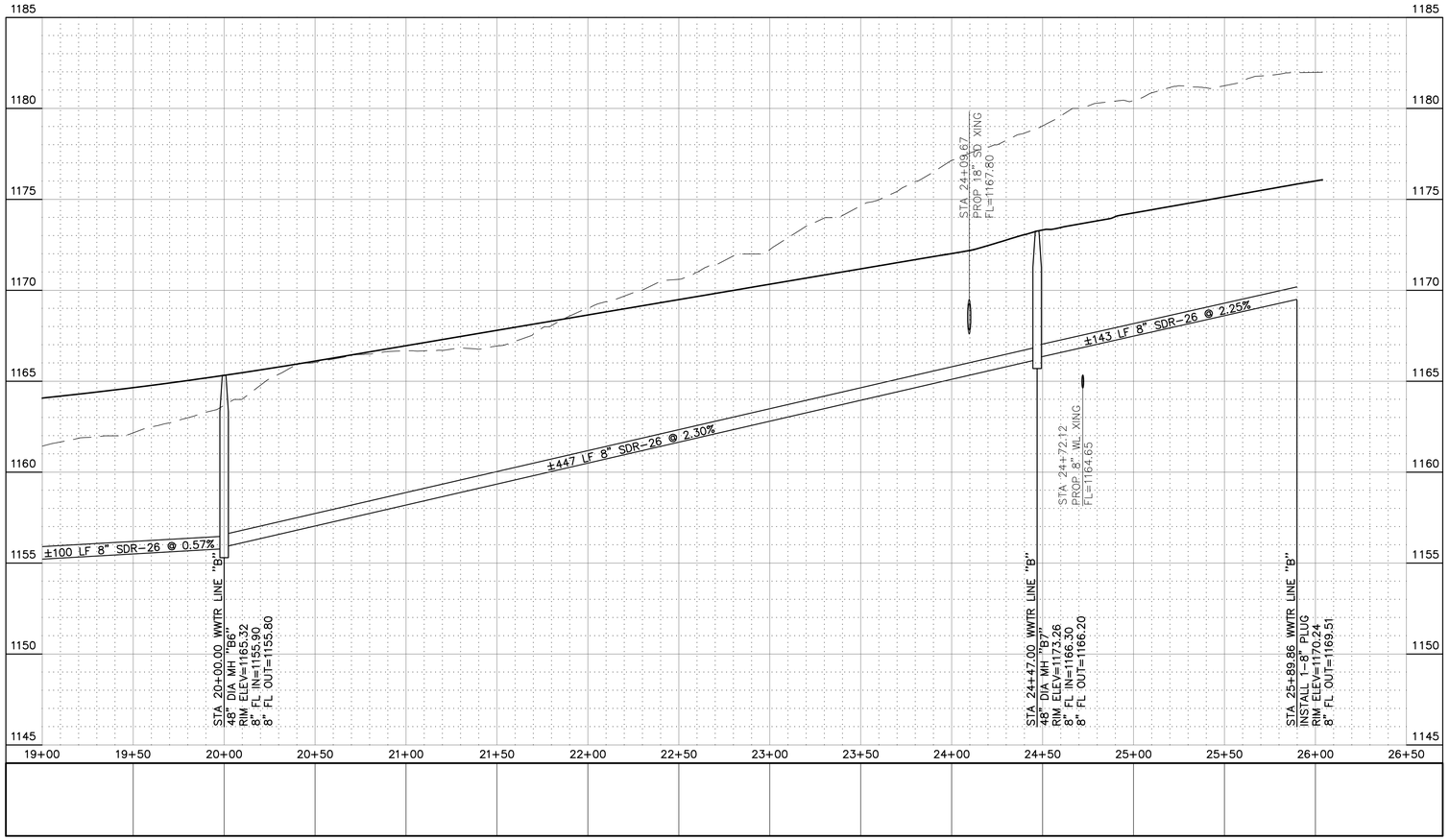
WWTR LINE "B"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "B" STA 19+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet 62 of 73

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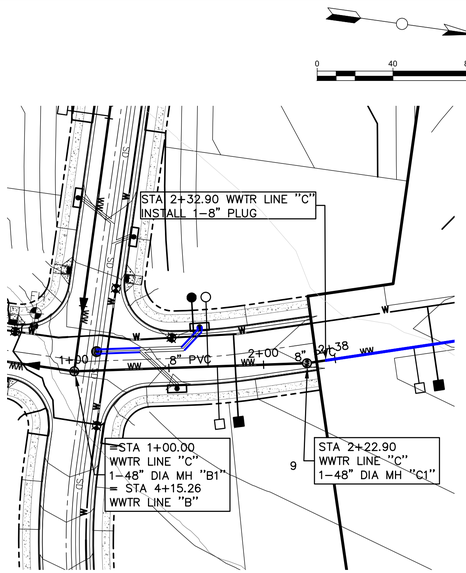

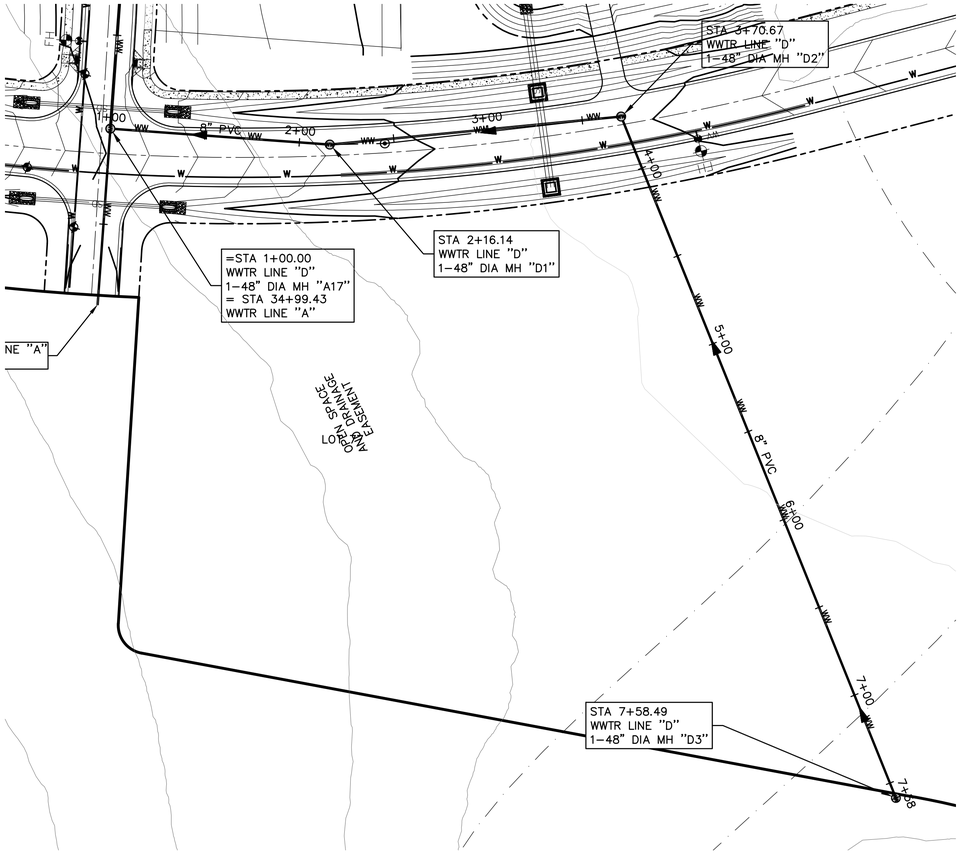

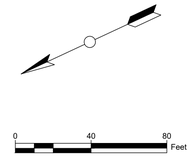

LEGEND

- PROPERTY LINE
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- EXIST WATER LINE
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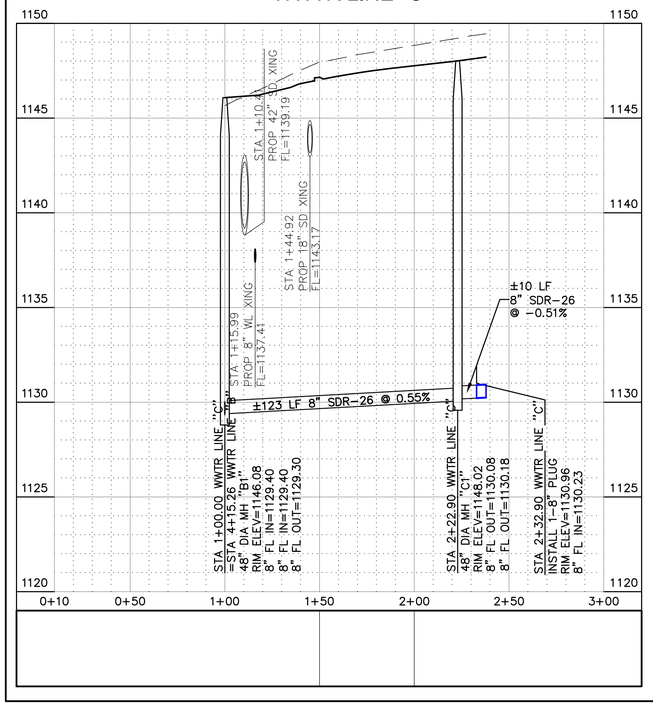
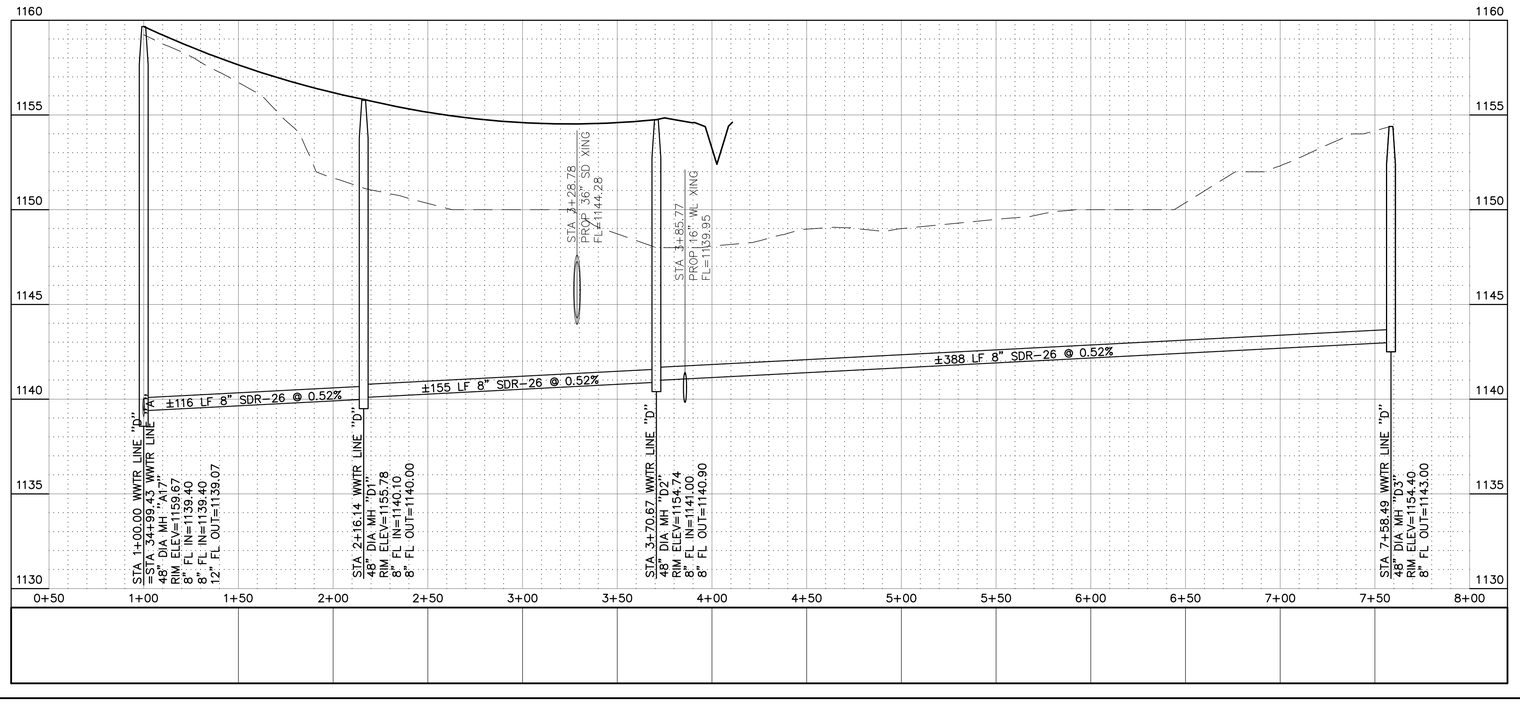
WWTR LINE "C"



WWTR LINE "D"



MOODY ENGINEERING, INC.

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BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "C" & "D"

NO.	DATE	REVISIONS/CORRECTIONS	BY

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Sheet 63 of 73

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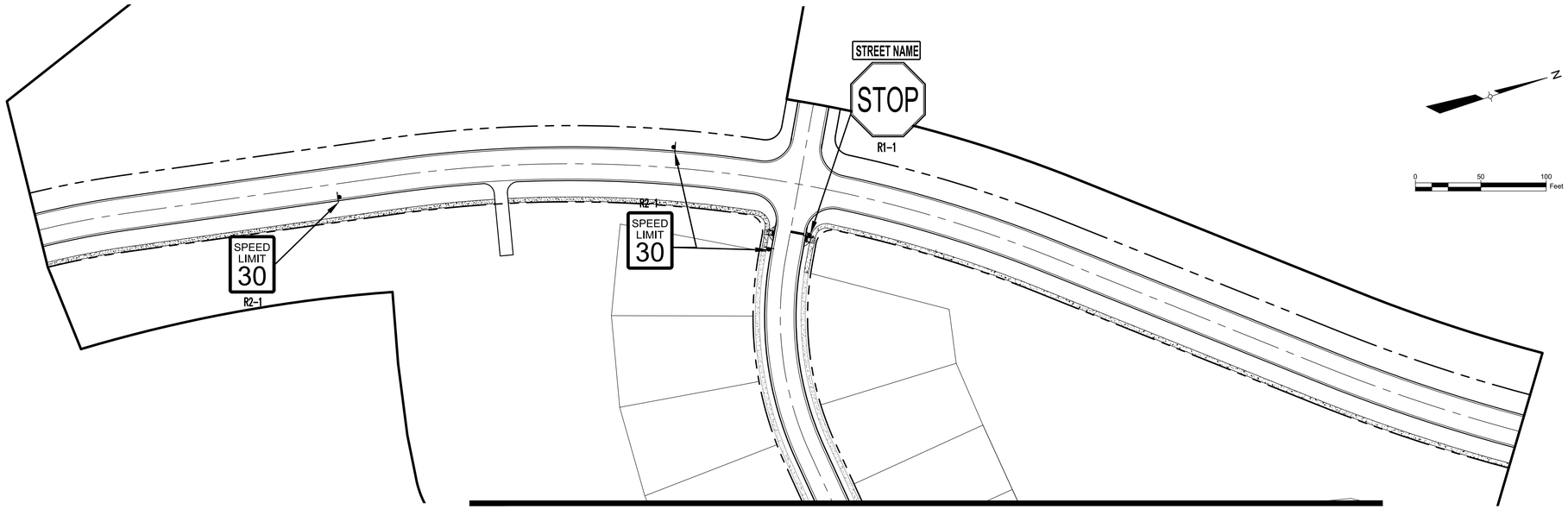

MATCHLINE SEE THIS SHEET

SIGN LEGEND

SYMBOL	TxDOT SPEC. NO. & SIZE
STREET NAME	STREET NAME SIGN 9" X 36" (MIN.) W/ 5" LETTERS, ALL CAPS.
STOP	R1-1 30" X 30"
◇ ◇ ◇	OM-2SR 3 @ 3" X 3" (MOUNTED ON WINGED CHANNEL POST)
SPEED LIMIT 30	R2-1 24" X 30"
SPEED LIMIT 35	R2-1 24" X 30"

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
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JOSHUA F. HENKE
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9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SIGNAGE PLAN SHEET 1 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 64 of 73

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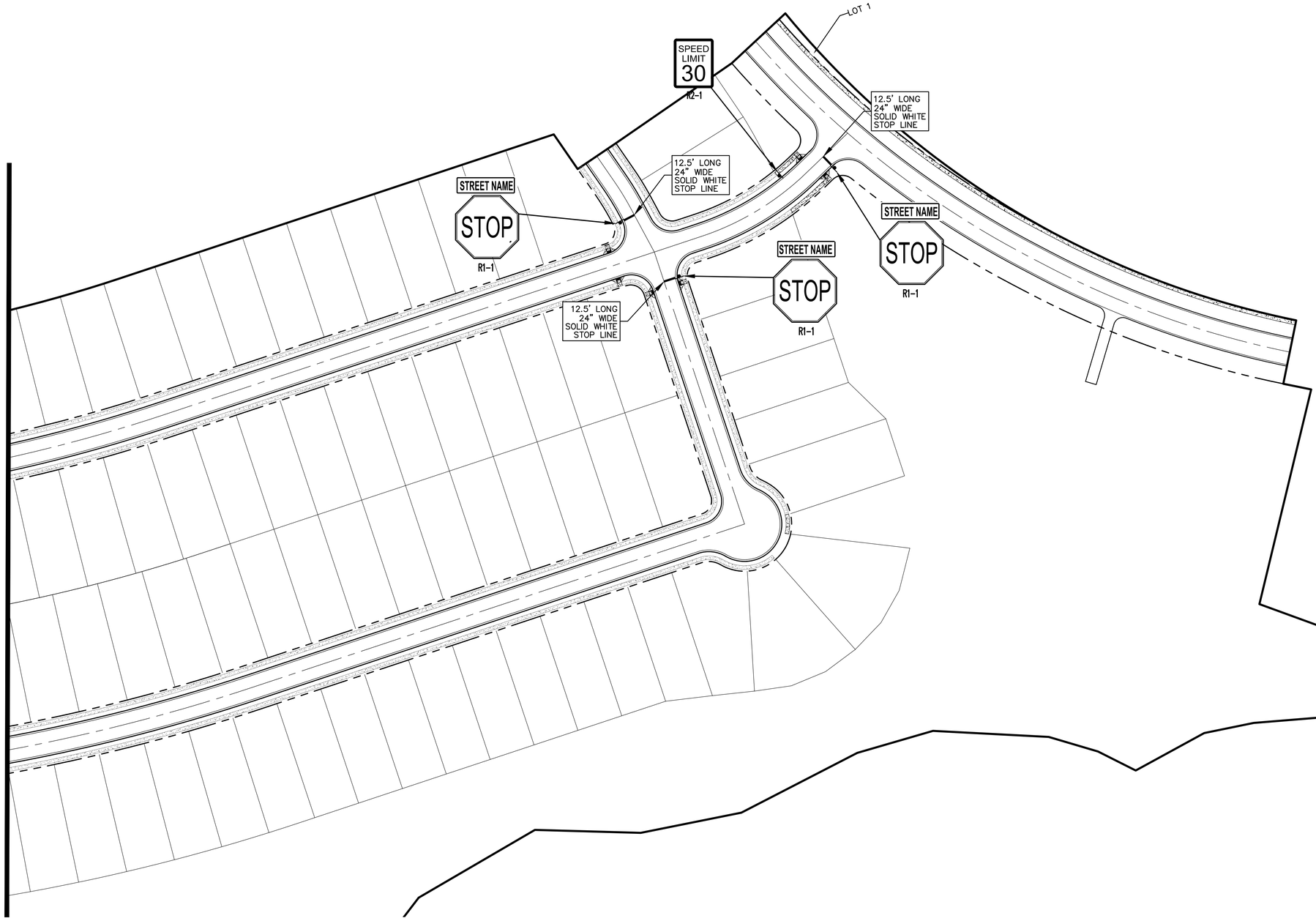

N

0 50 100 Feet

SIGN LEGEND

SYMBOL	TxDOT SPEC. NO. & SIZE
STREET NAME	STREET NAME SIGN 9" X 36" (MIN.) W/ 5" LETTERS, ALL CAPS.
STOP	R1-1 30" X 30"
◇◇◇	OM-2SR 3 @ 3" X 3" (MOUNTED ON WINGED CHANNEL POST)
SPEED LIMIT 30	R2-1 24" X 30"
SPEED LIMIT 35	R2-1 24" X 30"

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PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SIGNAGE PLAN SHEET 2 OF 2 & DETAILS

NO.	DATE	REVISIONS/CORRECTIONS	BY

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Sheet 65 of 73

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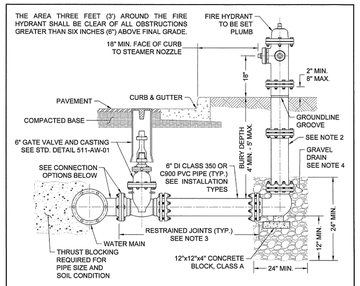
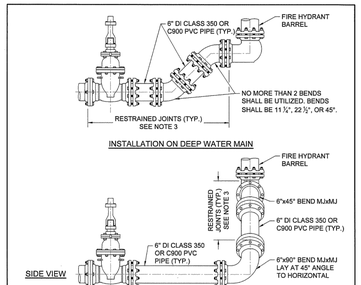
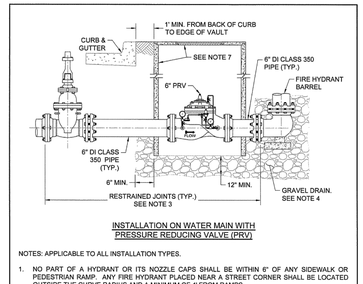


CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-02 1 OF 3



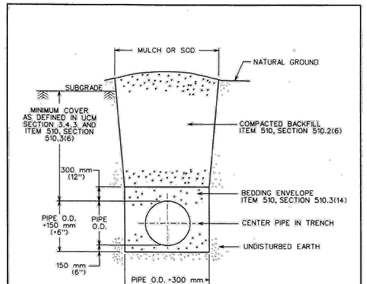
CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-02 2 OF 3



NOTES: APPLICABLE TO ALL INSTALLATION TYPES.

1. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6" OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' - 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 24" IN DIAMETER AND 12" DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 12" ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC PER STD. SPEC. 6205. FOR PRV, GRAVEL SHALL EXTEND UNDER THE PRV VAULT 12" MIN. DEPTH UNDER THE VAULT AND 6" MIN. BEYOND VAULT.
5. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLG x PLG REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
6. WRAP 8 MIL POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
7. FOR HYDRANTS WITH PRV: CLASS III RCP VAULT 60" MIN. I.D. WITH REINFORCED PRECAST CONCRETE LID (AASHTO H-20 LOADING) WITH COA FRAME AND 32" COVER WITH LETTERING MODIFIED FOR WATER.

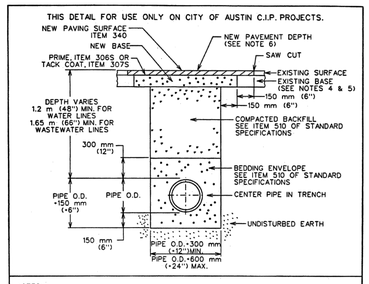
CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-02 3 OF 3



REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

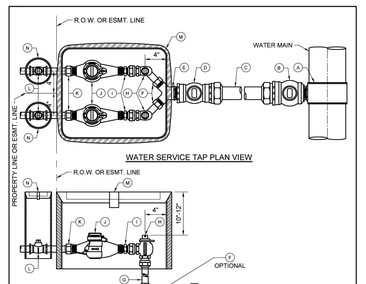
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
3/1/16 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5



NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

CITY OF AUSTIN AUSTIN WATER AND WASTEWATER UTILITY	TYPICAL TRENCH WITH PAVED SURFACE	
Sean Bailey P.E. 5/19/16 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-3



CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 1 OF 2

MATERIALS LIST:

A. 2" SERVICE CLAMP, SPL WW-264
B. 2" CORPORATION STOP, SPL WW-68
C. 2" HDPE WATER SERVICE TUBING, SPL WW-65
D. 2" BALL VALVE, SPL WW-68
E. COPPER FLARE SINGLE SERVICE FITTING, SPL WW-68
COPPER FLARE DOUBLE SERVICE WYE, SPL WW-68
F. 1" SWIVEL NUT x 1" COMPRESSION SET, SPL WW-68 (OPTIONAL - NOT NEEDED IF MOUNTING BALL VALVE VERTICALLY UNDER ANGLE METER STOP)
G. 1" HDPE WATER SERVICE TUBING, SPL WW-65
H. ANGLE METER STOP, SPL WW-68

MATERIALS TO BE INSTALLED BY PLUMBER:

I. BRASS METER BUSHING - SIZE AS NEEDED TO CONNECT ANGLE STOP TO METER
J. WATER METER PURCHASED FROM AUSTIN WATER
K. BRASS WATER METER COUPLING NUT (FOR 1" x SWIVEL COUPLING NUT:
¾" AND ¾" METERS: 8 ½" LONG x ¾" DIA.
1" METERS: 8 ½" LONG x 1" DIA.
L. PROPERTY OWNER'S CUT-OFF VALVE, SPL WW-276
M. METER BOX AND COVER, SPL WW-145A;
FOR DUAL 1" METERS USE TWO SINGLE METER BOXES
N. PROPERTY OWNER'S VALVE BOX AND PO CUTOFF LID
O. TEMPORARY METER SPACER (REQUIRED TO ASSURE METER WILL FIT APPROPRIATELY)
P. 1" WOODEN DOWEL (SHOW ADDRESS ON DOWEL USING WATERPROOF MARKER)

NOTES:

1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL POLYETHYLENE FILM, SPL WW-27D.
2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
3. TOP OF METER BOXES SHOULD BE 4" ABOVE GROUND.
4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS. BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
5. METER BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.
6. BALL VALVE "D" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 36" BELOW FINAL GRADE.
7. METER SIZES TO BE SHOWN ON PLANS.
8. METER BOX CUT OUTS SHALL NOT EXCEED TWO TIMES THE PIPE DIAMETER.
9. INSTALL METALLIC WARNING TAPE, SPL WW-597, MINIMUM 1' ABOVE TUBING FROM SERVICE SADDLE TO BALL VALVE "D".
10. TUBING SHALL BE PLACED IN A STRAIGHT ALIGNMENT AND ALLOWED TO RELAX AND "SNAKE" LOOSELY IN THE TRENCH. TUBING BEHIND CURB AND GUTTER SHALL BE INSTALLED WITH A MINIMUM 12" DEPTH OF COVER.
11. 1" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 3'. 2" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 5'. BRASS FITTINGS SHALL NOT BE CONNECTED TO A BENT SECTION OF TUBING.
12. INSERT STIFFENERS FOR HDPE TUBING (PER SPL WW-65B) TO BE INSTALLED INSIDE TUBING AT ALL COMPRESSION FITTINGS.
13. FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED SOLID PURPLE (PER SPL WW-65A. ALL APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL METER BOX COVERS SHALL BE PURPLE AND HAVE **"RECLAIMED WATER"** CAST INTO THEM, SPL WW-145A.

CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 2 OF 2

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 1 OF 4

NOTES:

1. DURING SUBDIVISION CONSTRUCTION, UTILITY CONTRACTOR INSTALLS WASTEWATER TEE CONNECTION TO MAIN, 6" STUB, HORIZONTAL WYE FOR DOUBLE SERVICES, 6" SERVICE BRANCH WITH TWO-WAY CLEANOUT(S) AND RISER, FRAME, AND COVER. CLEANOUT(S) TO BE PLUGGED AT PROPERTY LINE OR EASEMENT LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% MIN. TO 45° MAX. DEPTH OF SERVICE AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4'. OTHERWISE THE INSTALLED DEPTH WILL BE 4' MIN. AND 6' MAX. AT PROPERTY LINE. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, SEE SHEET 3 OF 4.
2. PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATION 510.3 (14). MATERIALS SHALL BE AS SPECIFIED IN 510.2 (2)(A) AND (3)(B). BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (25). SERVICE LINES IN THESE AREAS SHALL HAVE A MIN. COVER BELOW FINAL STREET GRADE OF 42".
3. PLUMBER SHALL REMOVE PLUG AND CONNECT TO TWO-WAY CLEANOUT. NO CONNECTION TO CLEANOUT STACK IS ALLOWED.

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 2 OF 4

DEEP SERVICE CONNECTION

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 3 OF 4

INSTALLATION IN LINED PIPE:

1. MARK LOCATION OF TAP.
2. BREAK & REMOVE HOST PIPE SO THAT OPENING IS AT LEAST 2" BUT NO MORE THAN 3" WIDER THAN DIAMETER OF THE SERVICE ADAPTOR.
3. DO NOT DAMAGE LINER.
4. CORE HOLE THROUGH LINER USING ADAPTOR MANUFACTURER RECOMMENDED BIT.
5. INSTALL SERVICE ADAPTOR.
6. HOLES CUT IN HOST PIPE SHALL BE PACKED WITH NON-SHRINK GROUT (ASTM C1107 GRADE). SEE DETAIL "B"

NOTES:

1. USE ONLY TO TAP EXISTING LINED PIPE.
2. SEE APPROPRIATE STD. FOR SERVICE LINE INFORMATION.
3. THE EDGE OF THE CORE HOLE MUST BE AT LEAST 3" FROM THE ENDS OF THE PIPE, ANY OTHER CORE SERVICE CONNECTIONS, AND ANY FITTINGS.
4. FOR DEEP SERVICE APPLICATIONS SEE SHEET 3 OF 4, EXCEPT SUBSTITUTE A CORED HOLE, AND SERVICE ADAPTOR FOR THE TEE OR WYE.
5. SERVICE CONNECTIONS TO MANHOLES MUST BE MADE USING A PIPE-TO-MANHOLE CONNECTOR WHICH LIMITS THE PIPE SLOPE INTO THE MANHOLE TO 12% MAX.

6" WASTEWATER CONNECTION TO EXISTING LINED MAIN

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 4 OF 4

NOTES:

1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, [SCH. 80 FOR LENGTHS OVER 10'.]
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE "RECLAIMED WATER" CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 1 OF 4

NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:
C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE 1 ½" 2 PICK BAR SLOTS REQUIRED

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 2 OF 4

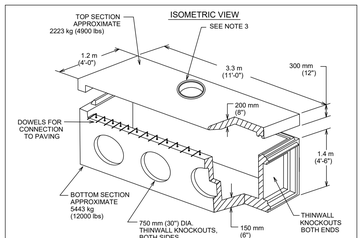
NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18° BELOW SUB-GRADE. THE INSIDE "LIP" OF COLLAR TO BE PAINTED FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE: FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE. NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEPTH, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 4065.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 3 OF 4

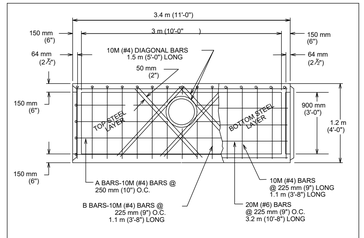
NOTES (CONT):

8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT RE

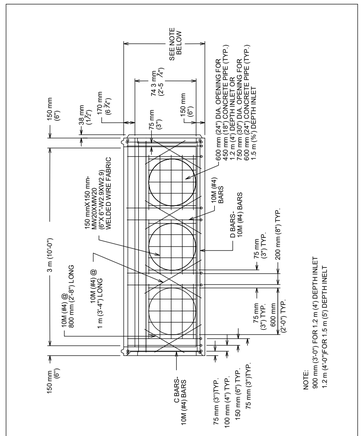


NOTES:
1. ALL CONCRETE SHALL BE CLASS "A" AS PER ITEM 403S.
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. MANHOLE FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 5035-1.
4. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
5. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, PIPES AND MANHOLE FRAME, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
6. PAYMENT FOR INLET AT THE CONTRACT PRICE SHALL INCLUDE THE TRANSITION CURB, IN ACCORDANCE WITH CITY OF AUSTIN STANDARD INLET DESIGN.
7. INVERT OF INLET SHALL BE SLOPED 1:20 WITH FILL CONCRETE BY CONTRACTOR, SHAPED AS "V" SECTION
8. THE INLET AS DESIGNED EXCEEDS THE REQUIREMENTS OF ASTM C478.
9. THIS STANDARD COMPLIES WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS ITEM NO. 506S.
10. FOR INLET CONNECTION VARIATIONS FOR MAKING A 6 m (20'-0") CURB INLET FROM STANDARD 3 m (10'-0") INLETS, SEE DALWORTH CURB INLET CONNECTION DETAIL SHEET DQ-86-103.

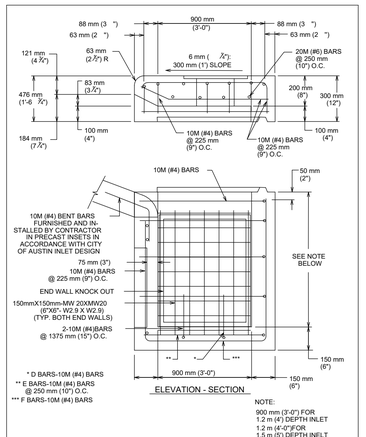
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER	12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 1 OF 5



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER	12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 2 OF 5

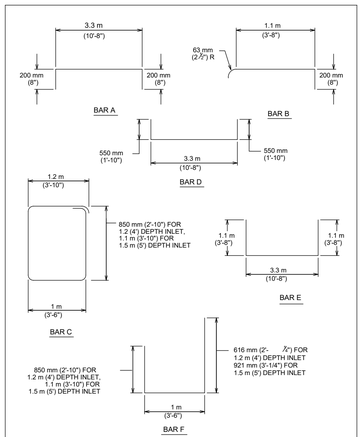


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER	12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 3 OF 5

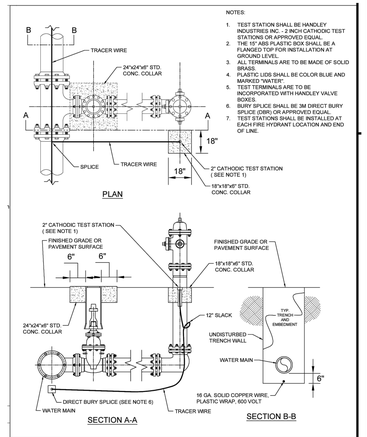


NOTE:
900 mm (3'-0") FOR 1.2 m (4') DEPTH INLET
1.2 m (4'-0")FOR 1.5 m (5') DEPTH INLET

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER	12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 4 OF 5

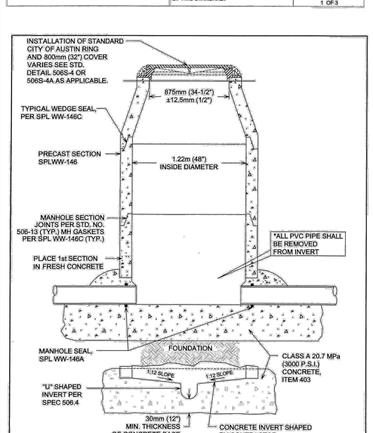


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER	12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 5 OF 5



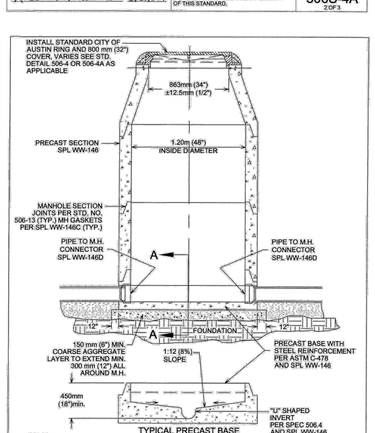
NOTES:
1. TEST STATION SHALL BE HANDLEY INDUSTRIES INC. - 2 INCH CATHODIC TEST STATIONS OR APPROVED EQUAL.
2. THE 15" ABS PLASTIC BOX SHALL BE A FLANGED TOP FOR INSTALLATION AT GRADE LEVEL.
3. ALL TERMINALS ARE TO BE MADE OF SOLID BRASS.
4. PLASTIC LIDS SHALL BE COLOR BLUE AND MARKED "WATER".
5. TEST TERMINALS ARE TO BE INCORPORATED WITH HANDLEY VALVE BOXES.
6. BURY SPLICE SHALL BE 3M DIRECT BURY SPLICE KIT OR APPROVED EQUAL.
7. TEST STATIONS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION AND END OF LINE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		WTCPUA CONSTRUCTION STANDARDS AND DETAILS	
RECORD COPY SIGNED BY BILL GARDNER	12/09/08 ADOPTED	TRACER WIRE INSTALLATION AND TEST STATION LOCATION	STANDARD NO. 508S-4 5 OF 5



NOTE:
1. HDPE RINGS ONLY IN PAVED AREAS

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE HEIGHT ADJUSTMENT (HDPE RINGS)	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4A 1 OF 3

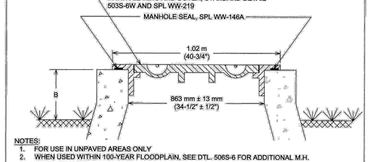


CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE HEIGHT ADJUSTMENT (HDPE RINGS)	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4A 2 OF 3

INSTALLATION INSTRUCTIONS
HDPE MANHOLE ADJUSTMENT RINGS
(FOR NEW CONSTRUCTION AND REHABILITATION)

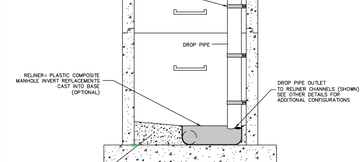
1. REMOVE EXISTING CASTING AND RINGS OR COVER PLATE TO EXPOSE CONCRETE. MANHOLE SURFACE MUST BE CLEAN AND LEVEL ±6 mm (1/4"). NOTE: IF TOP OF CONCRETE STRUCTURE IS IN VERY POOR CONDITION OR IRREGULAR, THE FIRST RING CAN BE PRESSED FULLY INTO A HEAVY BED OF MORTAR ALLOWING IT AND SUBSEQUENT RINGS TO BE POSITIONED WITHOUT WOBBLE OR POINT-LOADING.
2. POSITION STRAIGHT AND LEVEL TO DETERMINE HEIGHT ADJUSTMENT REQUIRED. CONFIRM BEFORE PLACING RINGS.
3. COMBINE VARIOUS RING HEIGHTS, IN BOTH FLAT AND SLOPE, TO REACH DESIRED ADJUSTMENT. PLACE RINGS WITH INNER POCKET OPENING UP (OUTER EDGE OPENING WITH HOLES DOWN). THE INTERLOCKING LIP (MALE TONGUE) EXTENDS DOWN INTO THE STRUCTURE OF LOWER RING. MULTIPLE SLOPE RINGS CAN BE ADDED AND ROTATED TO ACHIEVE DESIRED GRADE MATCH WITHIN 6 mm (1/4"). NOTE: SLOPE RINGS ARE TAPERED TO PROVIDE 2% GRADE COMPENSATION. IF REQUIRED, HDPE SHIMS (MAX. 6 mm (1/2") PER RING MAY BE USED TO MATCH GRADE EXACTLY.
4. DRY STACK RINGS WITHOUT SEALANT TO ACHIEVE DESIRED VERTICAL AND SLOPE ADJUSTMENT. IF SLOPE RINGS ARE USED, MARK INNER FACE OF STOCK WITH PAINT OR MARKER TO MAINTAIN ALIGNMENT WHEN RE-STACKING.
5. REMOVE THE RINGS AND PLACE NEARBY IN UPSIDE-DOWN ORDER (THIS ALLOWS FOR EASY RE-ASSEMBLY IN THE CORRECT ORDER). APPLY A CONTINUOUS BEAD OF APPROVED RUBBER BUTYL SEALANT (SPL WW-703) TO THE FLAT SURFACE OF THE FIRST RING ON THE SIDE OF THE MALE TONGUE THAT WILL REST AGAINST THE CONE OPENING (MALE TONGUE DOWN). APPLY SEALANT TO AFFECT A SEAL BETWEEN THE INTERLOCKING LIP AND THE CONCRETE SURFACE IT RESTS ON.
6. APPLY 13 mm (1/2") CONTINUOUS BEAD OF APPROVED BUTYL RUBBER SEALANT (SPL WW-703) TO THE NEXT RING. THE SEALANT MUST BE APPLIED DIRECTLY INTO THE INTERLOCKING LIP (MALE TONGUE) AND THE BOTTOM OF THE RING, FAVORING THE SIDE OF THE LIP TO ASSURE A SEAL. PLACE THIS RING WITH THE INTERLOCKING LIP (MALE TONGUE) FACING DOWN ON TOP OF THE LOWER RING PREVIOUSLY INSTALLED. PRESS THE RING IN PLACE TO SET AND DISPERSE SEALANT. REMEMBER TO RE-ASSEMBLE THE RINGS USING ALIGNMENT MARKS TO POSITION SLOPE RING(S) CORRECTLY.
7. REPEAT #6 ON ALL PRE-ASSEMBLED RINGS TO REACH DESIRED HEIGHT AND SLOPE ADJUSTMENT.
8. APPLY 13 mm (1/2") CONTINUOUS BEAD OF APPROVED BUTYL RUBBER SEALANT (SPL WW-703), TO THE TOP OF THE UPPER RING.
9. POSITION CASTING ON RING(S). PRESS THE CASTING FRAME IN PLACE TO SET AND DISPERSE SEALANT.
10. BACKFILL TO RESTORE TO STD. DETAIL 1100S-1.
11. RING MANUFACTURER MUST BE LISTED ON SPL WW-703.
12. FOR USE IN PAVED AREAS ONLY.

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE HEIGHT ADJUSTMENT (HDPE RINGS)	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4A 3 OF 3

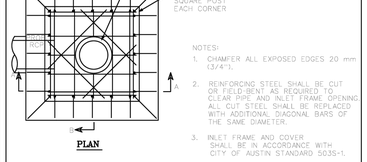


NOTES:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY		PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 1 OF 3



CITY OF AUSTIN AUSTIN WATER UTILITY		PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 2 OF 3



CITY OF AUSTIN AUSTIN WATER UTILITY		PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 3 OF 3

NOTES:
1. FOR EXISTING WW LINES ONLY.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B
3. FIRST RISER SECTION SHALL BE PLACED PLUMB & LEVEL PRIOR TO SETTING ANY ADDITIONAL SECTIONS.

CITY OF AUSTIN AUSTIN WATER UTILITY		PRECAST MANHOLE ON CAST IN PLACE BASE	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-9

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MH FOUNDATION SHALL MEET OR EXCEED STD. SPEC. 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY		WASTEWATER MANHOLE ON PRECAST BASE	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD	STANDARD NO. 506S-10

NOTES:
1. NON-SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION.
2. SUB-GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S-1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HDPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4 1 OF 2

NOTES:
1. FOR USE IN UNPAVED AREAS ONLY
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAN. =50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAN.

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
Kathi K Flowers 8/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4 2 OF 2

Drop Bowl U.S. Pat. # 6074130
Drop Bowl Canada Pat. #2269565
Reliner U.S. Pat. # 5553973
Reliner Canada Pat. #2176074

RELINER / DURAN, INC.
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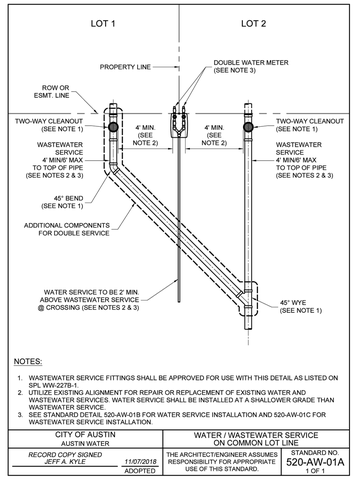
DESCRIPTION	DATE	SCALE
INSIDE DROP MANHOLE DETAIL	12/28/16	NONE
	DRAWING NUMBER	AP-NEW

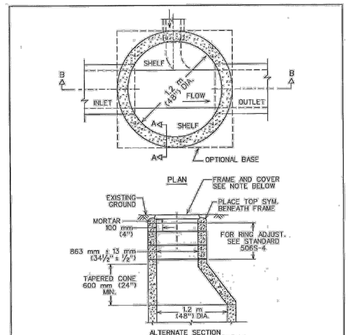
300 mm (12")
1.5 m (5'-0")
300 mm (12")
280 mm (11")
150 mm (6")
1.52 m (5'-0")
150 mm (6")
*4 EACH POST ALL SIDES (TYP.)
1830 mm (6')
1830 mm (6')
1830 mm (6')



NOTES:

1. WASTEWATER SERVICE FITTINGS SHALL BE APPROVED FOR USE WITH THIS DETAIL AS LISTED ON SPL WW-227B-1.
2. UTILIZE EXISTING ALIGNMENT FOR REPAIR OR REPLACEMENT OF EXISTING WATER AND WASTEWATER SERVICES. WATER SERVICE SHALL BE INSTALLED AT A SHALLOWER GRADE THAN WASTEWATER SERVICE.
3. SEE STANDARD DETAIL 520-AW-01B FOR WATER SERVICE INSTALLATION AND 520-AW-01C FOR WASTEWATER SERVICE INSTALLATION

CITY OF AUSTIN AUSTIN WATER	WATER / WASTEWATER SERVICE ON COMMON LOT LINE	
RECORD COPY SIGNED JEFF A. KYLE 11-07-2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01A 1 OF 1

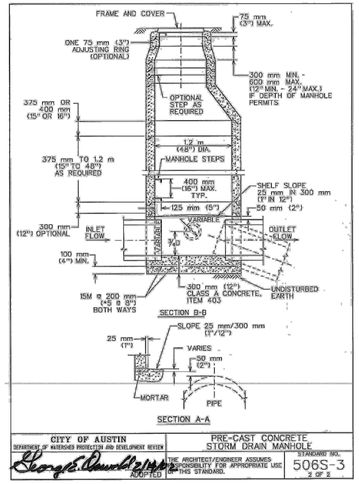


NOTE:
USE 800 mm (32") FRAME AND COVER.

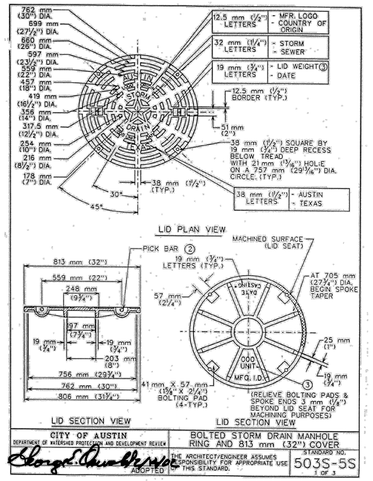
MINIMUM MANHOLE DIA.	MINIMUM PIPE SIZE
1.2 m (4')	450 TO 600 mm (18 TO 24")
1.5 m (5')	750 mm TO 1.1 m (30 TO 42")
1.8 m (6')	1.2 TO 1.4 m (48 TO 54")
2.1 m (7')	1.5 TO 1.7 m (60 TO 66")

SIZE TO BE USED IS DEPENDENT ON DRAIN ANGLES.

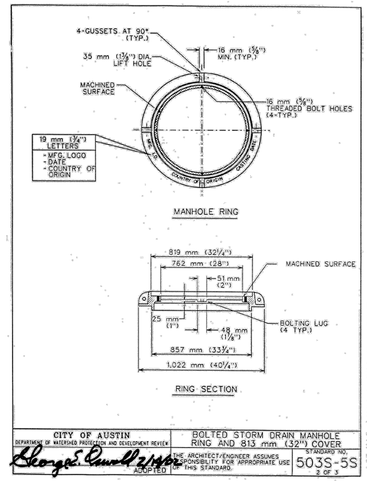
CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-3 1 OF 2



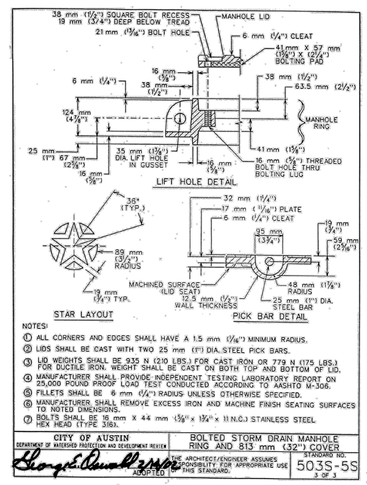
CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-3 2 OF 2



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5S 1 OF 3

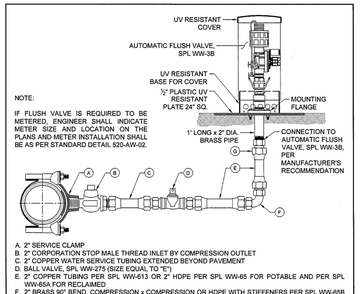


CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5S 2 OF 3



NOTES:
① ALL CORNERS AND EDGES SHALL HAVE A 1.5 mm (1/16") MINIMUM RADIUS.
② LIDS SHALL BE CAST WITH TWO 25 mm (1") DIA. STEEL PICK BARS.
③ LID WEIGHTS SHALL BE 935 N (210 LBS.) FOR CAST IRON OR 779 N (175 LBS.) FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
④ MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 25,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M-306.
⑤ FILLETS SHALL BE 6 mm (¼") RADIUS UNLESS OTHERWISE SPECIFIED.
⑥ MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
⑦ BOLTS SHALL BE 16 mm X 44 mm (⅝" X 1¾" - 11 N.C.) STAINLESS STEEL HEX HEAD (TYPE 316).

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5S 3 OF 3



NOTE:
IF FLUSH VALVE IS REQUIRED TO BE METERED, ENGINEER SHALL INDICATE METER SIZE AND LOCATION ON THE PLANS AND METER INSTALLATION SHALL BE AS PER STANDARD DETAIL 520-AW-02.

A. 2" SERVICE CLAMP
B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET
C. 2" COPPER WATER SERVICE TUBING EXTENDED BEYOND PAVEMENT
D. BALL VALVE, SPL WW-275 (SIZE EQUAL TO "E")
E. 2" COPPER TUBING PER SPL WW-613 OR 2" HDPE PER SPL WW-65 FOR POTABLE AND PER SPL WW-65A FOR RECLAIMED
F. 2" BRASS 90° BEND, COMPRESSION x COMPRESSION OR HDPE WITH STIFFENERS PER SPL WW-65B AT ALL CONNECTIONS
G. 2" BRASS COUPLING, COMPRESSION x FIP

NOTES:
1. AUTOMATIC FLUSH VALVE MAY ALSO BE USED ON TAPPED PLUGS AND CAPS.
2. THE CONTRACTOR SHALL PROVIDE THE FLUSH VALVE ACCESS KEY TO AUSTIN WATER UPON FLUSH VALVE ACCEPTANCE.
3. VALVE "D" SHALL NOT BE LOCATED MORE THAN 36" BELOW FLUSH VALVE OR MORE THAN 24" HORIZONTALLY FROM FLUSH VALVE. VALVE "D" SHALL NOT BE LOCATED IN A SIDEWALK OR DRIVEWAY.
4. METER BOX (IF REQUIRED) AND FLUSH VALVE SHALL NOT BE LOCATED IN A SIDEWALK, DRIVEWAY, PEDESTRIAN WAY OR TRAFFIC WAY. TEMPORARY FLUSH VALVES SHALL BE LOCATED AS SHOWN ON APPROVED PLANS.
5. A DRAINAGE WAY, CONTAINED WITHIN THE R.O.W. OR AN EASEMENT, SHALL BE PROVIDED FROM FLUSH VALVE TO STORM SEWER SYSTEM OR PUBLIC DRAINAGE WAY.
6. DESIGN ENGINEER SHALL PROVIDE CALCULATIONS WITH PLANS AT THE TIME OF REVIEW INCLUDING FREQUENCY AND FLUSH RATE REQUIRED TO CIRCULATE WATER IN DEAD END MAIN EVERY 72 HOURS.

CITY OF AUSTIN AUSTIN WATER	AUTOMATIC FLUSH VALVE	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-05 1 OF 1

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE DETAIL	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-11

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 1 OF 4

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 2 OF 4

TABLE OF QUANTITIES
FOR 18" OUTLET PIPE
REINFORCING STEEL QUANTITIES

BARS	SIZE	SPACING	NUMBER	LENGTH	WEIGHT
A	4	230mm (9")+	15	2 m (7'-0")	73
B	4	250 mm (10")	4	3.25 m (10'-8")	29
C	4	460 mm (18")	7	760 mm (2'-6")	12
D	6	150 mm (6")	5	3.25 m (10'-8")	80
E	4	300 mm (12")	6	760 mm (2'-6")	10
F	4	250 mm (10")	3	4 m (13'-0")	35
G	4	300 mm (12")	11	1.25 m (4'-3")	31
H	6	-	1	4.25 m (14'-0")	20
J	4	300 mm (12")	7	3.25 m (10'-8")	50
K	4	230 mm (9")+	30	800 mm (2'-7 1/2")	52
L	4	300 mm (12")+	6	1.3 m (4'-4")	17
M	4	-	4	500 mm (1'-8") AVG	4
TOTAL STEEL, LB.					413
TOTAL CONCRETE, C.Y.					4.06

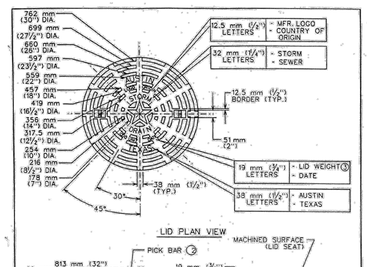
• EXCEPT AS SHOWN ON PLAN

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 3 OF 4

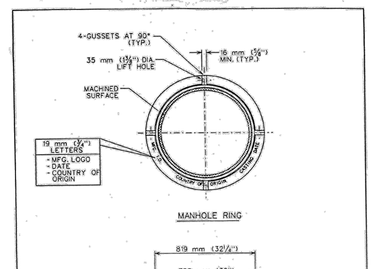
NOTES:
1. ALL CONCRETE SHALL BE CLASS "A"
2. ALL REINFORCING STEEL SHALL BE GRADE 60
3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
4. VERTICAL STEEL MAY BE SPLICED (380 mm or 15" MIN. LAP) IN THE LOWER ONE-HALF OF ALL INLET WALLS.S. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, PIPES AND MANHOLE FRAME, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
5. QUANTITIES SHOWN HEREON ARE FOR THE CONTRACTOR'S INFORMATION ONLY. PAYMENT WILL BE MADE FOR EACH INLET OF THE TYPE SPECIFIED, COMPLETE IN PLACE INCLUDING MANHOLE FRAME AND OVER.
6. CHAMFER ALL EXPOSED EDGES 20 mm (3/4 ").
7. MANHOLE FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 503S-1.
8. THE CONTRACTOR MAY PROPOSE ALTERNATE PROCEDURES FOR THE CONSTRUCTION OF INLETS, INCLUDING PRECAST UNITS. PLANS FOR SUCH PROPOSED ALTERNATES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE CONSTRUCTION.
9. ALL INLET WALLS SHALL BE FORMED EXCEPT WHERE THE NATURE OF THE SURROUNDING MATERIAL IS SUCH THAT IT CAN BE TRIMMED TO A SMOOTH VERTICAL FACE. WHEN INLET WALLS ARE PLACED TO NEAT EXCAVATION LINES THE WALL THICKNESS SHALL NOT EXCEED 10 INCHES.
10. PAYMENT FOR INLET AT THE CONTRACT PRICE SHALL INCLUDE THE TRANSITION CURB.
11. INVERT OF INLET SHALL BE SLOPED 1/20 WITH FILL CONCRETE, SHAPED AS "W" SECTION
12. NO SPLICING OF REINFORCING STEEL SHALL BE PERMITTED UNLESS OTHERWISE NOTED ON THE PLANS OR PERMITTED IN WRITING BY THE ENGINEER.

REFERENCES:
FOR EXPANSION JOINT DOWEL AND DOWEL LOCATION DETAILS SEE STD. 430S-3, "CURB EXPANSION JOINT DOWEL DETAIL".
FOR 18" MANHOLE FRAME AND COVER DETAILS SEE STD. 503S-1, "18" COVER AND FRAME".

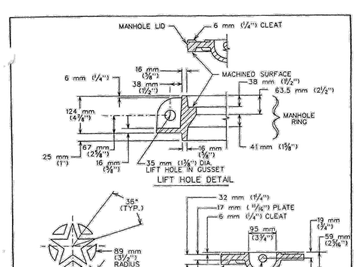
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET	
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-3 4 OF 4



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-4S 1 OF 3

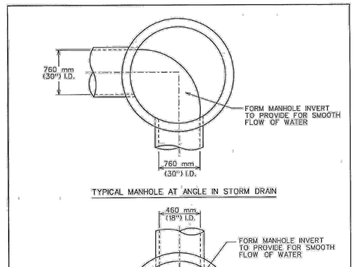


CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-4S 2 OF 3



NOTES:
① ALL CORNERS AND EDGES SHALL HAVE A 1.5 mm (1/16") MINIMUM RADIUS.
② LIDS SHALL BE CAST WITH TWO 25 mm (1") DIA STEEL PICK BARS.
③ LID WEIGHTS SHALL BE 935 N (210 LBS.) FOR CAST IRON OR 779 N (175 LBS.) FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
④ MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 25,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M-306.
⑤ FILLETS SHALL BE 6 mm (¼") RADIUS UNLESS OTHERWISE SPECIFIED.
⑥ MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-4S 3 OF 3



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	MANHOLE INVERT PLAN	
George E. Dunkle 12/1/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-1

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

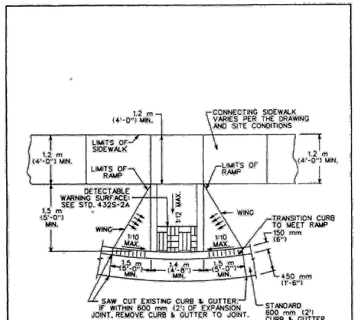
GENERAL DETAILS SHEET 3

NO.	DATE	REVISIONS/CORRECTIONS	BY

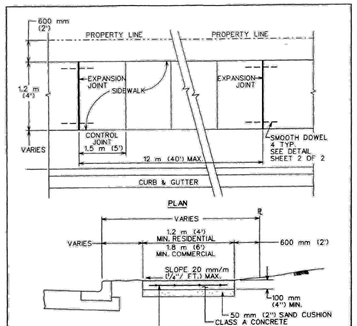
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

P:\Active Projects\2018-227 Provence\22-Phase_2_Sec_2\CAD\Construction Sheets\22_details_01.dwg 9/11/2025 4:18 PM

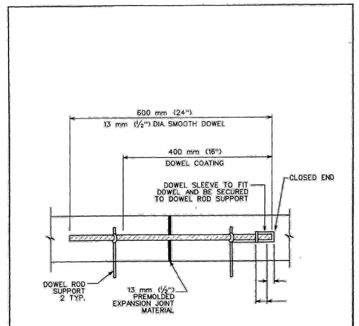
Sheet 68 of 73



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE 1 SIDEWALK CURB RAMP	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-5

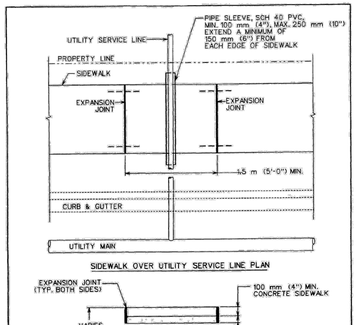


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 1 OF 3



DOWEL DETAIL

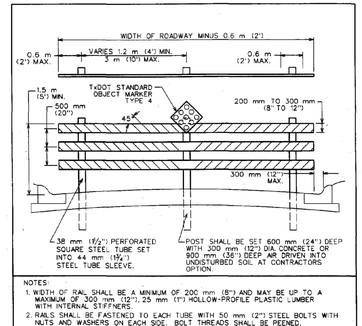
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 2 OF 3



SECTION OF SIDEWALK OVER UTILITY SERVICE LINES

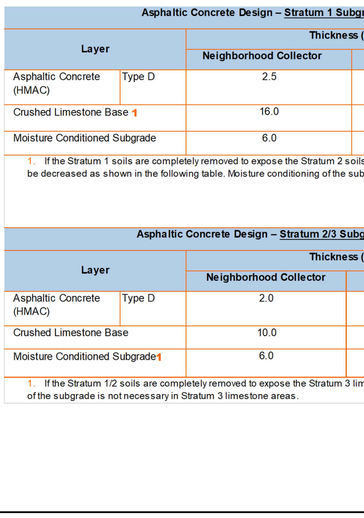
NOTES:
1. THIS STANDARD APPLIES TO THE INSTALLATION OF NEW UTILITIES OR UTILITIES BEING REPLACED BY A NEW LINE.
2. NO JOINTS IN UTILITY SERVICE PIPE TO BE LOCATED INSIDE PVC PIPE SLEEVE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 3 OF 3

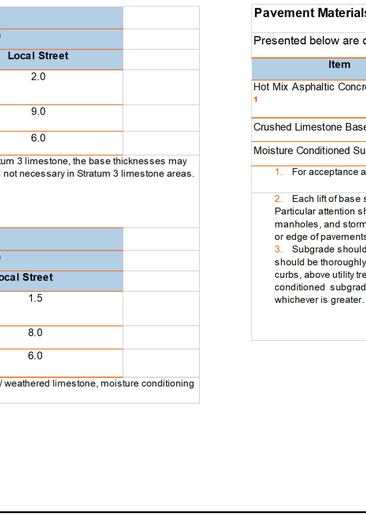


NOTES:
1. WIDTH OF RAIL SHALL BE A MINIMUM OF 200 mm (8") AND MAY BE UP TO A MAXIMUM OF 300 mm (12"). 25 mm (1") HOLLOW-PROFILE PLASTIC LUMBER WITH INTERNAL STIFFENER.
2. RAILS SHALL BE FASTENED TO EACH TUBE WITH 50 mm (2") STEEL BOLTS WITH NUTS AND WASHERS ON EACH SIDE. BOLT THREADS SHALL BE PEENED.
3. THE RAIL SHALL HAVE 150 mm (6") WIDE REFLECTORIZED RED STRIPES OF TAPE PLACED ON 45 DEGREE SLOPES, DOWN AND TOWARD THE CENTER OF THE BARRICADE.
4. BARRICADES MAY BE CONSTRUCTED IN SECTIONS OR MAY BE CONTINUOUS ACROSS ROADWAY WIDTH. SPLICES ON CONTINUOUS RAIL BARRICADES SHALL BE AT POSTS AND SHALL HAVE A 600 mm (2') SPLICE BLOCK ON BACK SIDE OF THE SAME MATERIAL AS RAIL.
5. 450 mm (18") DIAMOND REFLECTORIZED RED PANEL OR 450 mm (18") DIAMOND RED OR BLACK PANEL WITH NINE 75 mm (3") DIAMETER RED REFLECTORS SYMMETRICALLY PLACED AT CENTER POSTS, A MINIMUM OF 1.2 m (4') ABOVE GROUND SHALL BE USED FOR END OF ROAD MARKERS AS PER TEXAS MANUAL on UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) SECTION 3C.04.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET-END BARRICADE	
Bill Gardner 7/2/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 803S-1



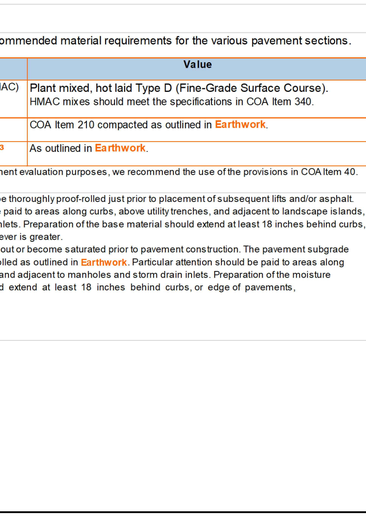
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 1 OF 4



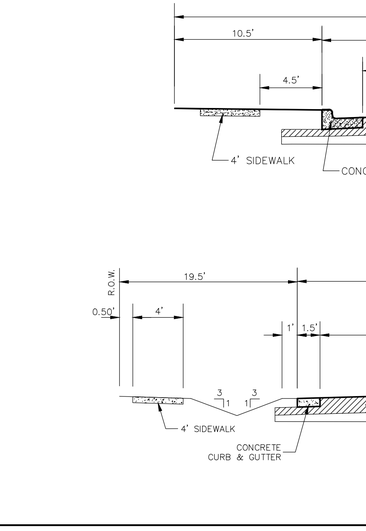
A. BASE PLATE DETAIL

B. CAP SECTION

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 2 OF 4

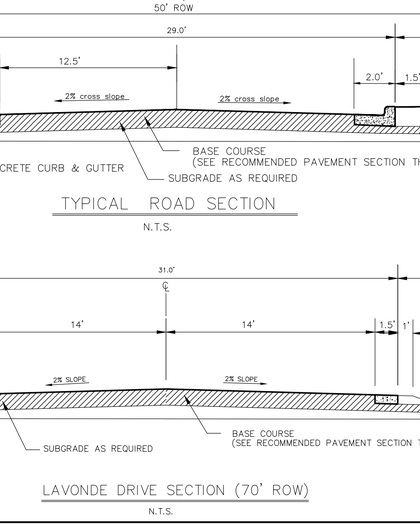


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 3 OF 4



WALL MOUNTING DETAIL

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 4 OF 4



MOODY ENGINEERING, INC. 9225 BEE CAVES ROAD BLDG A, SUITE 200 AUSTIN, TEXAS 78733 (512) 502-8333 TBPE FIRM REG. NO. F-18320	CURB AND GUTTER SECTIONS

Asphaltic Concrete Design – Stratum 1 Subgrade

Layer		Thickness (inches)	
		Neighborhood Collector	Local Street
Asphaltic Concrete (HMAC)	Type D	2.5	2.0
Crushed Limestone Base 1		16.0	9.0
Moisture Conditioned Subgrade		6.0	6.0

1. If the Stratum 1 soils are completely removed to expose the Stratum 2 soils or Stratum 3 limestone, the base thicknesses may be decreased as shown in the following table. Moisture conditioning of the subgrade is not necessary in Stratum 3 limestone areas.

Asphaltic Concrete Design – Stratum 2/3 Subgrade

Layer		Thickness (inches)	
		Neighborhood Collector	Local Street
Asphaltic Concrete (HMAC)	Type D	2.0	1.5
Crushed Limestone Base		10.0	8.0
Moisture Conditioned Subgrade 1		6.0	6.0

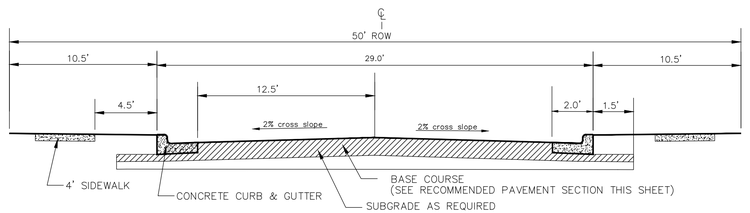
1. If the Stratum 1/2 soils are completely removed to expose the Stratum 3 limestone / weathered limestone, moisture conditioning of the subgrade is not necessary in Stratum 3 limestone areas.

Pavement Materials

Presented below are our recommended material requirements for the various pavement sections.

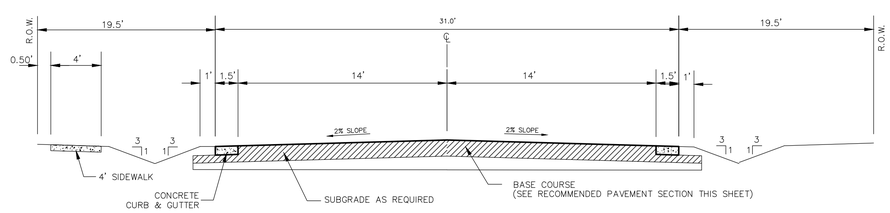
Item	Value
Hot Mix Asphaltic Concrete (HMAC) 1	Plant mixed, hot laid Type D (Fine-Grade Surface Course). HMAC mixes should meet the specifications in COA Item 340.
Crushed Limestone Base 2	COA Item 210 compacted as outlined in Earthwork.
Moisture Conditioned Subgrade 3	As outlined in Earthwork.

1. For acceptance and payment evaluation purposes, we recommend the use of the provisions in COA Item 40.
2. Each lift of base should be thoroughly proof-rolled just prior to placement of subsequent lifts and/or asphalt. Particular attention should be paid to areas along curbs, above utility trenches, and adjacent to landscape islands, manholes, and storm drain inlets. Preparation of the base material should extend at least 18 inches behind curbs, or edge of pavements, whichever is greater.
3. Subgrade should not dry out or become saturated prior to pavement construction. The pavement subgrade should be thoroughly proof-rolled as outlined in Earthwork. Particular attention should be paid to areas along curbs, above utility trenches, and adjacent to manholes and storm drain inlets. Preparation of the moisture conditioned subgrade should extend at least 18 inches behind curbs, or edge of pavements, whichever is greater.



TYPICAL ROAD SECTION

N.T.S.



LAVONDE DRIVE SECTION (70' ROW)

N.T.S.

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TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

GENERAL DETAILS SHEET 4

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LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 2
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TRAVIS COUNTY, TX

TXDOT DETAILS CONCRETE HEADWALLS (FW-0)
SHEET 1

NO.	DATE	REVISIONS/CORRECTIONS	BY

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Sheet 70 of 73

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TABLE OF DIMENSIONS AND REINFORCING STEEL
(Wings for one structure end)

Maximum Wingwall Height Hw	Dimensions W	X	Y	Z	Variable Reinforcing Bars J1 Size	J1 Spa	Bars J2 Size	J2 Spa	Estimated Quantities per ft of wing length (2-wings) ③ Reinf (Lb/Ft)	Conc (CY/Ft)
2'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	33.73	0.248
3'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.07	0.261
3'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.74	0.273
4'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	38.41	0.285
4'-6"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	41.75	0.330
5'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.09	0.343
5'-6"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.75	0.355
6'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	46.42	0.367
7'-0"	3'-8"	1'-0"	1'-3"	7"	#4	1'-0"	#4	1'-0"	52.77	0.414
8'-0"	4'-2"	2'-0"	1'-6"	8"	#5	1'-0"	#4	1'-0"	60.19	0.486
9'-0"	4'-8"	2'-3"	1'-9"	8"	#4	6"	#4	6"	81.49	0.535
10'-0"	5'-2"	2'-6"	2'-0"	8"	#5	6"	#4	6"	97.25	0.584
11'-0"	5'-8"	2'-9"	2'-3"	8"	#6	6"	#5	6"	133.65	0.634
12'-0"	6'-2"	3'-0"	2'-6"	9"	#7	6"	#5	6"	162.29	0.721
13'-0"	6'-8"	3'-3"	2'-9"	11"	#7	6"	#5	6"	178.80	0.856
14'-0"	7'-2"	3'-6"	3'-0"	1'-0"	#8	6"	#5	6"	216.78	0.959
15'-0"	7'-8"	4'-0"	3'-0"	1'-1"	#9	6"	#6	6"	283.06	1.068
16'-0"	8'-2"	4'-6"	3'-0"	1'-3"	#9	6"	#6	6"	297.02	1.234

TABLE OF WINGWALL REINFORCING
(2-wings)

Bar	Size	No.	Spa
D	#5	~	1'-0"
E	#4	~	1'-0"
F	#4	~	1'-0"
G	#6	4	~
H	#4	4	~
P	#4	~	1'-0"
R	#5	6	~
V	#4	~	1'-0"

TABLE OF ESTIMATED CULVERT TOEWALL QUANTITIES

Bar	Size	No.	Spa
L	#4	~	1'-0"
Q	#4	1	~
Reinf (Lb/Ft)			2.45
Conc (CY/Ft)			0.037

WING DIMENSION FORMULAS:
(All values are in feet.)

Hw = H + T + C - 0.250
Ltw = (Hw - 0.333') (SL)
A = (A) tangent (30°)
Lw = (A) + cosine (30°)

For cast-in-place culverts:
Ltw = (N) (S) + (N + 1) (U)

For precast culverts:
Ltw = (N) (2U + S) + (N - 1) (0.5')

Total wingwall area (two wings - SF) = (Hw + 0.333') (Lw)

Hw = Height of wingwall
SL:1 = Side slope ratio (horizontal:1 vertical)
Lw = Length of wingwall
Ltw = Culvert toewall length
N = Number of culvert spans

See applicable box culvert standard sheet for H, S, T, and U values.

① Extend Bars P 3'-0" minimum into bottom slab of box culvert.

② Adjust as necessary to maintain 1 1/4" clear cover and 4" minimum between bars.

③ Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings, multiply the tabulated values by Lw.

④ Recommended values of side slope are: 2:1, 3:1, 4:1, and 6:1.

⑤ When shown elsewhere on the plans, construct 5" deep concrete riprap. Payment for riprap is as required by Item 432, "Riprap". Unless otherwise shown on the plans or directed by the Engineer, provide a 6" wide by 1'-0" deep reinforced concrete toewall along all edges of the riprap adjacent to natural ground; reinforce the toewall by extending typical riprap reinforcing into the toewall; and extend construction joints or grooved joints oriented in the direction of flow across the full distance of the riprap at intervals of approximately 20'. When such riprap is provided, the culvert toewall shown in SECTION B-B will not be required.

⑥ At Contractor's option, culvert toewall may be ended flush with wingwall toewall. Adjust reinforcing as needed.

⑦ 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 1'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631S bridge rail, refer to the Mounting Details for T631 & T631S Rails (T631-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631S.

⑧ For vehicle safety, the following requirements must be met:
- For structures without bridge rail, construct curbs no more than 3" above finished grade.
- For structures with bridge rail, construct curbs flush with finished grade.

Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

MATERIAL NOTES:
Provide Class C concrete (f'c=3,600 psi).
Provide Grade 60 reinforcing steel.
Provide galvanized reinforcing steel if required elsewhere in the plans.
In riprap concrete synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing unless noted otherwise.

GENERAL NOTES:
Designed according to AASHTO LRFD Bridge Design Specifications.
When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced or eliminated at the option of the engineer.
See Culvert Supplement (CS) standard sheet for additional dimensions and information.
The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.

INSIDE ELEVATION
(Showing reinforcing. Culvert and culvert toewall reinforcing not shown for clarity.)

PLAN
(Showing dimensions.)

BARS J1 **BARS V**

BARS D

BARS R

BARS L **BARS J2**

SECTION A-A

WINGWALL

FOOTING AND TOEWALL

CORNER DETAILS
(Culvert and culvert toewall reinforcing not shown for clarity.)

SECTION B-B ⑤

Texas Department of Transportation — Bridge Division Standard

CONCRETE WINGWALLS WITH FLARED WINGS FOR 0° SKEW BOX CULVERTS

FW-0

FILE: fw-0(0)-20.dgn	DN: GAF	CK: CAT	DW: TxDOT	CK: TxDOT
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	DIST	COUNTY		SHEET NO.

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MULTIPLE UNIT PLACEMENT

SECTION B-B

DETAIL "A" (13)

WINGWALL CONNECTION

(Also applies to safety end treatment.)

SECTION THRU TOP SLABS LESS THAN 8"

SECTION THRU CURB

QUANTITIES PER FOOT OF CURB (10)	
Reinforcing Steel	4.12 Lb
Concrete	0.037 CY

BARS C (#4)
(Spa = 1'-0" Max)

BARS K (#4)
(Spa = 1'-0" Max)
(Length = 4'-2")

1. 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail, or curbs taller than 1'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.
2. For curbs less than 1'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, Bars K may be omitted.
3. Extend curb, wingwall, or safety end treatment reinforcing into concrete closure. Bend or trim, as necessary, any reinforcing that does not fit into closure area.
4. Provide a 2'-0" Min cast-in-place concrete closure. Break back boxes in the field or cast boxes short. Provide bands of reinforcing in the closure that are the same size and spacing as in the precast box section. Provide #4 longitudinal reinforcement spaced at 12 inches Max within the closure. Except where shown otherwise, construct the cast-in-place closure flush with the inside and outside faces of the precast box section.
5. For multiple unit placements, adjust the length of the closure for the interior walls as necessary. Provide a 3'-0" Min cast-in-place closure in the top slab, bottom slab, and exterior wall. See Section B-B detail when interior walls are cast full length.
6. Extend precast box reinforcing a minimum of 1'-0" into concrete closure (Typ).
7. Place bands of reinforcing matching the inside and outside face reinforcing in the gaps of the top and bottom slabs. Place a band matching the outside face reinforcing of the wall in the gaps of the walls (placed in the outside face only). Tack weld the bands to the exposed reinforcing at each point of contact.
8. For vehicle safety, the following requirements must be met:
   - For structures without bridge rail, construct curbs no more than 3" above finished grade.
   - For structures with bridge rail, construct curbs flush with finished grade.

   Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
9. Cement stabilized backfill between boxes is considered part of the box culvert for payment.
10. All curb concrete and reinforcing is considered part of the box culvert for payment.
11. Any additional concrete and reinforcing required for the closures will be considered subsidiary to the box culvert for payment.
12. 1'-0" typical. 2'-3" when the Box Culvert Rail Mounting Details (RAC) standard sheet is referred to elsewhere in the plans.
13. For multiple unit placement with overlay, with 1 to 2 course surface treatment, or with the top slab as the final riding surface, provide wall closure as shown in Detail "A".
14. This dimension may be increased with approval of the Engineer to allow the precast boxes to be tunneled or jacked in accordance with Item 476, "Jacking, Boring, or Tunneling Pipe or Box". No payment will be made for any additional material in the gap between adjacent boxes.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel.
Provide ASTM A1064 welded wire reinforcement.
Provide Class C concrete (f'c = 3,600 psi) for the closures.
Provide cement stabilized backfill meeting the requirements of Item 400, "Excavation and Backfill for Structures."
Any additional concrete required for the closures will be considered subsidiary to the box culvert.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.
Refer to the Single Box Culverts Precast (SCP) standard sheets for details and notes not shown.
Chamfer the bottom edge of the top slab closure 3 inches at culvert closure ends.

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bars dimensions are out-to-out of bars.

HL93 LOADING

ANGLE DETAIL

SECTION A-A

PLAN OF SKEWED ENDS

(Showing multi-box placement.)

Texas Department of Transportation — Bridge Division Standard

BOX CULVERTS
PRECAST
MISCELLANEOUS DETAILS

SCP-MD

FILE: scpmdts-20.dgn	DN: TxDOT	CK: LRE	DW: BBW/TxDOT	CK: GAI
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STATE OF TEXAS
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LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

TXDOT DETAILS BOX CULVERTS (SCP-MD) SHEET 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

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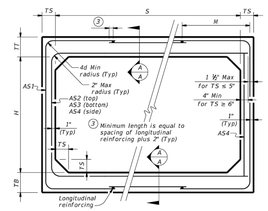
BOX DATA

SECTION DIMENSIONS						REINFORCING (sq. in. / ft.) ②							①
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)	Fill Height (ft.)	H (Min) (in.)	AS1	AS2	AS3	AS4	AS5	AS7	AS8	Lift Weight (tons)
5	2	8	7	6	< 2	-	0.19	0.27	0.18	0.14	0.19	0.19	0.17	6.0
5	2	6	6	6	2 < 3	44	0.22	0.20	0.16	0.14	–	–	–	5.1
5	2	6	6	6	3 – 5	44	0.16	0.14	0.14	0.14	–	–	–	5.1
5	2	6	6	6	10	36	0.15	0.14	0.14	0.14	–	–	–	5.1
5	2	6	6	6	15	36	0.20	0.18	0.18	0.14	–	–	–	5.1
5	2	6	6	6	20	36	0.26	0.23	0.24	0.14	–	–	–	5.1
5	2	6	6	6	25	36	0.33	0.29	0.29	0.14	–	–	–	5.1
5	2	6	6	6	30	36	0.39	0.34	0.35	0.14	–	–	–	5.1
5	3	8	7	6	< 2	-	0.19	0.31	0.21	0.14	0.19	0.19	0.17	6.6
5	3	6	6	6	2 < 3	45	0.18	0.24	0.19	0.14	–	–	–	5.7
5	3	6	6	6	3 – 5	36	0.14	0.17	0.16	0.14	–	–	–	5.7
5	3	6	6	6	10	36	0.14	0.16	0.17	0.14	–	–	–	5.7
5	3	6	6	6	15	35	0.16	0.21	0.22	0.14	–	–	–	5.7
5	3	6	6	6	20	35	0.21	0.27	0.28	0.14	–	–	–	5.7
5	3	6	6	6	25	35	0.26	0.34	0.34	0.14	–	–	–	5.7
5	3	6	6	6	30	35	0.31	0.41	0.41	0.14	–	–	–	5.7
5	4	8	7	6	< 2	-	0.19	0.33	0.24	0.14	0.19	0.19	0.17	7.2
5	4	6	6	6	2 < 3	45	0.16	0.27	0.22	0.14	–	–	–	6.3
5	4	6	6	6	3 – 5	45	0.14	0.19	0.18	0.14	–	–	–	6.3
5	4	6	6	6	10	36	0.14	0.18	0.18	0.14	–	–	–	6.3
5	4	6	6	6	15	35	0.14	0.23	0.24	0.14	–	–	–	6.3
5	4	6	6	6	20	35	0.17	0.30	0.31	0.14	–	–	–	6.3
5	4	6	6	6	25	35	0.21	0.37	0.38	0.14	–	–	–	6.3
5	4	6	6	6	30	35	0.25	0.44	0.45	0.14	–	–	–	6.3
5	5	8	7	6	< 2	-	0.19	0.35	0.26	0.14	0.19	0.19	0.17	7.8
5	5	6	6	6	2 < 3	45	0.14	0.29	0.24	0.14	–	–	–	6.9
5	5	6	6	6	3 – 5	45	0.14	0.21	0.20	0.14	–	–	–	6.9
5	5	6	6	6	10	45	0.14	0.19	0.20	0.14	–	–	–	6.9
5	5	6	6	6	15	36	0.14	0.24	0.25	0.14	–	–	–	6.9
5	5	6	6	6	20	35	0.15	0.31	0.32	0.14	–	–	–	6.9
5	5	6	6	6	25	35	0.18	0.38	0.39	0.14	–	–	–	6.9
5	5	6	6	6	30	35	0.21	0.46	0.47	0.14	–	–	–	6.9

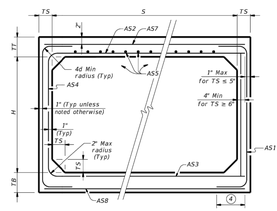
① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



CORNER OPTION "A" CORNER OPTION "B"

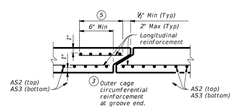
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)



SECTION A-A

(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:
Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)".

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST 5'-0" SPAN

SCP-5

FILE:	sc605ss-20.dgn	☐m TxDOT	☐c: TxDOT	☐w: TxDOT	☐c: TxDOT
☐ TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
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9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

TXDOT DETAILS SINGLE BOX CULVERTS (SCP-5) SHEET 3

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 72 of 73

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BOX DATA

SECTION DIMENSIONS							REINFORCING (sq. in. / ft.) (2)							(1) LIFT Weight (tons)
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)	Fill Height (ft.)	H (Min) (in.)	AS1	AS2	AS3	AS4	AS5	AS7	AS8	
6	2	8	7	7	< 2	-	0.23	0.27	0.19	0.17	0.19	0.19	0.17	7.2
6	2	7	7	7	2 < 3	43	0.25	0.21	0.17	0.17	–	–	–	6.8
6	2	7	7	7	3 – 5	43	0.20	0.17	0.17	0.17	–	–	–	6.8
6	2	7	7	7	10	39	0.20	0.17	0.17	0.17	–	–	–	6.8
6	2	7	7	7	15	39	0.26	0.20	0.20	0.17	–	–	–	6.8
6	2	7	7	7	20	39	0.34	0.26	0.26	0.17	–	–	–	6.8
6	2	7	7	7	25	39	0.43	0.32	0.32	0.17	–	–	–	6.8
6	2	7	7	7	30	39	0.52	0.38	0.39	0.17	–	–	–	6.8
6	3	8	7	7	< 2	-	0.20	0.31	0.22	0.17	0.19	0.19	0.17	7.9
6	3	7	7	7	2 < 3	43	0.21	0.24	0.19	0.17	–	–	–	7.5
6	3	7	7	7	3 – 5	39	0.17	0.18	0.17	0.17	–	–	–	7.5
6	3	7	7	7	10	39	0.17	0.18	0.19	0.17	–	–	–	7.5
6	3	7	7	7	15	38	0.22	0.24	0.24	0.17	–	–	–	7.5
6	3	7	7	7	20	38	0.28	0.31	0.31	0.17	–	–	–	7.5
6	3	7	7	7	25	38	0.35	0.38	0.39	0.17	–	–	–	7.5
6	3	7	7	7	30	38	0.42	0.46	0.46	0.17	–	–	–	7.5
6	4	8	7	7	< 2	-	0.19	0.34	0.25	0.17	0.19	0.19	0.17	8.6
6	4	7	7	7	2 < 3	43	0.19	0.27	0.21	0.17	–	–	–	8.2
6	4	7	7	7	3 – 5	39	0.17	0.21	0.19	0.17	–	–	–	8.2
6	4	7	7	7	10	39	0.17	0.20	0.21	0.17	–	–	–	8.2
6	4	7	7	7	15	38	0.18	0.27	0.27	0.17	–	–	–	8.2
6	4	7	7	7	20	38	0.24	0.34	0.35	0.17	–	–	–	8.2
6	4	7	7	7	25	38	0.29	0.43	0.42	0.17	–	–	–	8.2
6	4	7	7	7	30	38	0.35	0.51	0.52	0.17	–	–	–	8.2
6	5	8	7	7	< 2	-	0.19	0.37	0.28	0.17	0.19	0.19	0.17	9.3
6	5	7	7	7	2 < 3	43	0.17	0.30	0.24	0.17	–	–	–	8.9
6	5	7	7	7	3 – 5	43	0.17	0.23	0.21	0.17	–	–	–	8.9
6	5	7	7	7	10	39	0.17	0.22	0.23	0.17	–	–	–	8.9
6	5	7	7	7	15	38	0.17	0.28	0.29	0.17	–	–	–	8.9
6	5	7	7	7	20	38	0.20	0.37	0.38	0.17	–	–	–	8.9
6	5	7	7	7	25	38	0.25	0.45	0.46	0.17	–	–	–	8.9
6	5	7	7	7	30	38	0.30	0.54	0.55	0.17	–	–	–	8.9
6	6	8	7	7	< 2	-	0.19	0.38	0.30	0.17	0.19	0.19	0.17	10
6	6	7	7	7	2 < 3	52	0.17	0.32	0.26	0.17	–	–	–	9.6
6	6	7	7	7	3 – 5	52	0.17	0.24	0.22	0.17	–	–	–	9.6
6	6	7	7	7	10	43	0.17	0.23	0.24	0.17	–	–	–	9.6
6	6	7	7	7	15	39	0.17	0.29	0.31	0.17	–	–	–	9.6
6	6	7	7	7	20	39	0.18	0.38	0.39	0.17	–	–	–	9.6
6	6	7	7	7	25	38	0.23	0.46	0.48	0.17	–	–	–	9.6
6	6	7	7	7	30	38	0.27	0.55	0.57	0.17	–	–	–	9.6

(1) For box length = 8'-0"

(2) AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.

CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT 2 FT AND GREATER

CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

(4) Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)

SECTION A-A

(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:
Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)".

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST 6'-0" SPAN

SCP-6

FILE:	scp06xs-20.dgn	dn: TxDOT	ck: TxDOT	dw: TxDOT	ck: TxDOT
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY		SHEET NO.

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No liability of any kind is assumed by the Texas Department of Transportation for the use of these standards on any project, and no project engineer shall seal these standards in connection with any project.

DATE:
FILE:

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

TXDOT DETAILS SINGLE BOX CULVERTS (SCP-6) SHEET 4

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 73 of 73

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ATTACHMENT N

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

Masonwood HP II LLC, their successors or assigns is responsible for the inspection, maintenance, repair and retrofit, if necessary, of the permanent BMPs, the extended detention pond, within this project, as follows:

Maintenance Guidelines

Extended Detention Basins:

- *Inspections*. Basins should be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. When possible, inspections should be conducted during wet weather to dete1mine if the pond is meeting the target detention times. In particular, the extended detention control device should be regularly inspected for evidence of clogging, or conversely, for too rapid a release. If the design drawdown times are exceeded by more than 24 hours, then repairs should be scheduled immediately. The upper stage pilot channel, if any, and its flow path to the lower stage should be checked for erosion problems. During each inspection, erosion areas inside and downstream of the BMP should be identified and repaired or revegetated immediately.

- *Mowing*. The upper stage, side slopes, embankment, and emergency spillway of an extended detention basin must be mowed regularly to discourage woody growth and control weeds. Grass areas in and around basins should be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. When mowing of grass is performed, a mulching mower should be used, or grass clippings should be caught and removed.

- *Debris and Litter Removal*. Debris and litter will accumulate near the extended detention control device and should be removed during regular mowing operations and inspections. Particular attention should be paid to floating debris that can eventually clog the control device or riser.

- *Erosion Control*. The pond side slopes, emergency spillway, and embankment all may periodically suffer from slumping and erosion, although this should not occur often if the soils are properly compacted during

construction. Regrading and revegetation may be required to connect the problems. Similarly, the channel connecting an upper stage with a lower stage may periodically need to be replaced or repaired.

- *Structural Repairs and Replacement*. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. These repairs should include patching of cracked concrete, sealing of voids, and removal of vegetation from cracks and joints. The various inlet/outlet and riser works in a basin will eventually deteriorate and must be replaced.

- *Signage*. To facilitate inspections and reporting of BMPs that are not functioning correctly, a legible sign must be placed at all extended detention ponds. The sign shall be located in plain view of the public and shall provide the name of the owner or operator, the Edwards Aquifer program ID for the project, and a telephone number where the party responsible for the maintenance of the BMP can be contacted.

- *Nuisance Control*. Standing water (not desired in an extended detention basin) or soggy conditions within the lower stage of the basin can create nuisance conditions for nearby residents. Odors, mosquitoes, weeds, and litter are all occasionally perceived to be problems. Most of these problems are generally a sign that regular inspections and maintenance are not being performed (e.g., mowing, debris removal, clearing the outlet control device).

- *Sediment Removal*. When properly designed, dry extended detention basins will accumulate quantities of sediment over time. Sediment accumulation is a serious maintenance concern in extended detention dry ponds for several reasons. First, the sediment gradually reduces available stormwater management storage capacity within the basin. Second, unlike wet extended detention basins (which have a permanent pool to conceal deposited sediments), sediment accumulation can make dry extended detention basins very unsightly. Third, and perhaps most importantly, sediment tends to accumulate around the control device. Sediment deposition increases the risk that the orifice will become clogged, and gradually reduces storage capacity reserved for pollutant removal. Sediment can also be resuspended if allowed to accumulate over time and escape through the hydraulic control to downstream channels and streams. For these reasons, accumulated sediment needs to be removed from the lower stage when sediment buildup fills 20% of the volume of the basin or at least every 10 years.

- *Grass Reseeding and Mulching*. A healthy dense grass should be

maintained in the channel and side slopes. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during swale establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established.

Vegetative Filter Strips:

- *Pest Management*. An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

- *Seasonal Mowing and Lawn Care*. If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetated filter strip areas. Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the site can help assure a dense and healthy vegetative cover.

- *Inspection*. Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

- *Debris and Litter Removal*. Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.

- *Sediment Removal*. Sediment removal is not normally required in filter

strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.

- *Grass Reseeding and Mulching*. A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the egetation is initially established.

Sediment Disposal

Stormwater pollutants include a variety of substances that are deposited on pervious and impervious surfaces and then transported by rainfall. These contaminants include heavy metals, petroleum hydrocarbons, pesticides, and a variety of organic chemicals. Maintenance of BMP's frequently requires disposal of accumulated sediment and other material. These materials are normally classified as special wastes when disposed of in municipal landfills. Special waste is a waste that requires special handling at a Type I Municipal Solid Waste (MSW) landfill. The process to obtain authorization to dispose of a special waste begins with a request for approval called the "Request for Authorization for Disposal of Special Waste TCEQ Form 0152." The request is to the MSW permits section of the TCEQ for Executive Director· r review/approval.

Contact Information

The contact provided shall be responsible for maintenance of the BMPs during construction and until maintenance is formally relinquished to a secondary party. At that time, this plan shall be amended to include the name and contact information of the new responsible party.

Masonwood HP II LLC.
16314 Hamilton Pool Road
Austin, Texas 78738
512.306.8300 o
512.658.9700 c

3/5/25

(signature) (date)

Jack Meredith

(printed name)

CFO

(title)

ATTACHMENT O

PILOT-SCALE FIELD TESTING PLAN

No pilot-scale field testing plan is proposed with this project.

ATTACHMENT P

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Temporary and permanent BMPs have been designed to avoid or minimize surface stream contamination. No surface streams are present on site. Temporary BMP's include stabilized construction entrances, silt fence, and inlet protection. Permanent BMPs include revegetation of disturbed areas, extended detention ponds, and rock rip-rap. Due to the efficiency of the BMP proposed, more than 80% of the increase in the TSS loadings are treated, in compliance with TCEQ standards. No groundwater is known to exist. Streams with no base-flow exist on-site.

The existing water quality pond is a stand-alone BMP with no secondary treatment and outfall at the south end of the property. Rock rip-rap is used at pond overflow locations to reduce velocity and also help return runoff to sheet flow conditions. The pond has been oversized in order to account for some areas that do not drain to the pond.

SWPPP Stormwater Pollution Prevention Plan for:

Provence Phase 2, Section 2
Travis County, Texas

TPDES General Permit TXR150000

Owner(s):

Masonwood HP II LLC
16314 Hamilton Pool Road
Austin, TX 78738
512-306-8300

SWPPP Contacts:

Primary Operator: (Contractor)

_____
_____
_____
_____
_____

Secondary Operator

_____
_____
_____
_____
_____

SWPPP Preparation Date:

09 / 03 / 2025

Estimated Project Dates:

Project Start Date: 7 / 27 / 2026
Project Completion Date: 2 / 11 / 2027

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SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Provence Phase 2 Section 2

Project Street/Location: The site is located in western Travis County, on the north side of Hamilton Pool Road, 0.5 miles north (west) of the Hamilton Pool Road/Crumley Ranch Road intersection

City: Austin State: Texas ZIP Code: 78738

County: Travis

Latitude/Longitude

Latitude: 30°18'23"N

Longitude: 98°01'53"W

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale:_____) ☐ EPA Web site ☐ GPS

☒ Other (please specify): Google Maps

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."

not applicable

Is this project considered a federal facility? ☐ Yes ☒ No

TPDES project or permit tracking number*: _____

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate Texas Pollutant Discharge Elimination System (TPDES) construction general permit.)*

1.2 Contact Information/Responsible Parties

Operator(s):
Primary Operator (Contractor):
Name:
Address:
City/State/Zip:
Phone:
Fax/Email:

Secondary Operator (Owner):
Masonwood HP II LLC.
16314 Hamilton Pool Road
Austin, Texas 78738
512-306-8300

FOR CONTRACTOR (to be completed when bid/award complete):

Project Manager(s) or Site Supervisor(s):
Insert Company or Organization Name:
Insert Name:
Insert Address:
Insert City, State, Zip Code:
Insert Telephone Number:
Insert Fax/Email:
Insert area of control (if more than one operator at site) :
Repeat as necessary

FOR CONTRACTOR (to be completed when bid/award complete):

SWPPP Contact(s):
Insert Company or Organization Name:
Insert Name:
Insert Address:
Insert City, State, Zip Code:
Insert Telephone Number:
Insert Fax/Email:
Insert area of control (if more than one operator at site) :
Repeat as necessary
Certification:

This SWPPP was Prepared by:

Moody Engineering, Inc.
Alan Putnam, P.E.
9225 Bee Caves Road
Bldg. A, Ste. 200
Austin, Texas 78733
(512) 502-8333

FOR CONTRACTOR (to be completed when bid/award complete):

Emergency 24-Hour Contact:

Insert Company or Organization Name:
Insert Name:
Insert Title:
Insert Telephone Number:
Insert Cell Phone Number:

Subcontractor(s):

Insert Name:
Insert Title:
Insert Street Address:
Insert City, State, Zip:
Insert Telephone Number:
Insert Cell Phone Number:

1.3 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s):

The project alignment runs through four primary soil types; each listed below starting at the south end of the project area to the north end.

BID	Brackett-Rock outcrop complex, 1 to 12 percent slopes	Well drained with a high runoff class	Hydrologic Soil Group: D
TaD	Tarrant soils, 5 to 18 percent slopes	Well drained with a very high runoff class	Hydrologic Soil Group: D
VoD	Volatile silty clay loam, 1 to 8 percent slopes	Well drained with a high runoff class	Hydrologic Soil Group: C

As indicated in the table above, the majority of soils likely to be encountered are well drained and have a high runoff potential.

This information was obtained from the US Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) Web Soil Survey.

Slopes:

The majority of existing slopes within the project range are in the steep classification (over 7%), according to Table 2-1 in the City of Austin Drainage Criteria Manual. Slopes range from approximately 3% to 10%. Most existing slopes will be maintained at post construction conditions.

Drainage Patterns:

The existing drainage patterns within the limits of construction generally slope to the northeast. There is offsite drainage coming onto this site that will be routed around the site via channels and/or berms. Within the proposed limits of construction, overland flow will drain to streets where it will be captured into a storm sewer system that will transport it to two water quality ponds for the two extended detention drainage areas.

Vegetation:

The project area is located in the eastern side of the Edwards Plateau region in southwestern Travis County. It is generally rangeland and/or pastureland with a mix of hardwood trees, the majority being Live Oak. Soils are mostly shallow and well drained.

1.4 Receiving Waters

Description of receiving waters:
Little Barton Creek (TCEQ Segment ID# 1430B), confluent with Barton Creek (TCEQ Segment ID# 1430), located in the Colorado River Basin.

Description of storm sewer systems:
Within the proposed limits of construction, overland flow will drain to streets where it will be captured into a storm sewer system that will transport it to three water quality ponds for the three drainage areas.

Description of impaired waters or waters subject to TMDLs:
As of the 2016 Texas Integrated Report for the Clean Water Act, Little Barton Creek (TCEQ Segment ID# 1430B) is not considered impaired.

1.5 Site Features and Sensitive Areas to be Protected

Describe unique features that are to be preserved:
Trees will be preserved where possible on the lots and in the water quality pond areas. No other unique features are located within the site.

Describe critical environmental features (CEF) that are to be preserved:
No critical environmental features were identified in the project area.

Describe measures to protect these features:
Protection measures such as tree protection fencing will be installed to guard against impacts from constructions activities. Temporary and permanent water quality controls and best management practices will be implemented as described in Section 3.

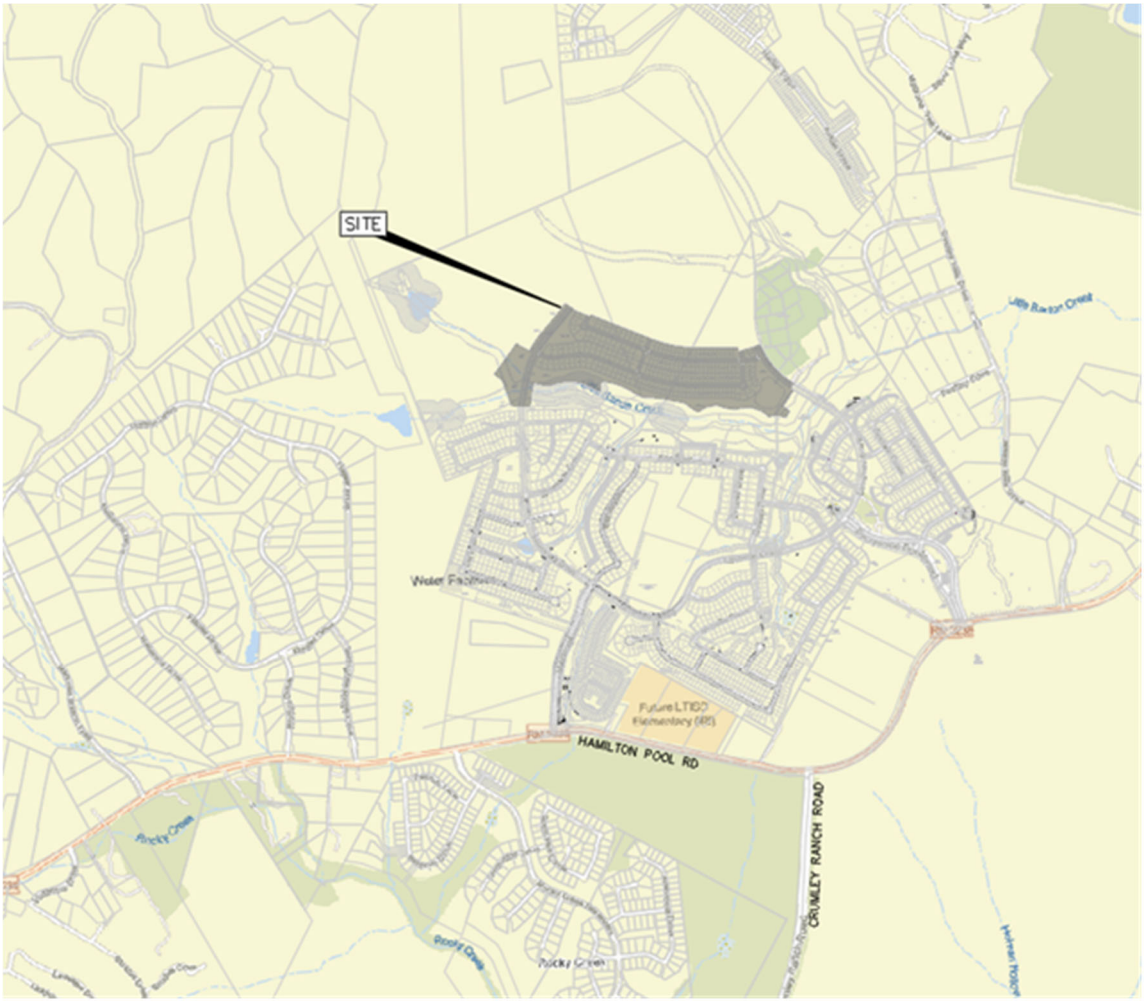
1.6 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☐ Yes ☒ No

Describe how this determination was made:
According to an assessment performed by Horizon Environmental Services, Inc. in January 2107, titled Threatened and Endangered Species Habitat Assessment Hatchett Property aka Masonwood Development, that development on the site would have “no affect” on any of the federally listed threatened/endangered (T/E) species that occur in Travis County. The report also details a list of various T/E species found in Travis County and states that no portion of the subject site exhibits preferred habitat characteristics of the species.

1.7 Maps



SECTION 2: CONSTRUCTION ACTIVITIES AND SITE MANAGEMENT PRACTICES

2.1 Nature and Sequence of Construction Activity

Describe the general scope of the work for the project, major phases of construction, etc:

The scope of work for this Project includes subdivision improvements for 126 single family homes. These improvements consist of paved streets with curb and gutter, wastewater lines and services, water lines and services, storm sewer system, and three water quality extended detention ponds.

Erosion controls such as silt fence will be installed prior to construction. The water quality ponds will be excavated first to serve as temporary water quality controls during construction. Streets will be rough cut, then utilities installed, then the streets will be constructed. The water quality ponds will be finished out and then the entire site will be revegetated. Silt fence will be removed upon full restoration of the site.

The Project consists of approximately:

- 6,015 LF of 29-ft wide paved streets with curb and gutter
- 2,084 LF of 31-ft wide paved streets with ribbon curb
- 2,096 LF of 16” PVC C900 water line
- 5,788 LF of 8” PVC C900 water line
- 6,620 LF of 8” SDR-26 PVC wastewater line
- 28 wastewater manholes
- 94 water services
- 94 wastewater services
- 6,000 LF of RCP storm sewer with sizes from 18-in to 48-in
- 36 concrete curb inlets
- 2 concrete drop inlets
- 11 storm sewer manholes
- 2 extended detention water quality ponds

What is the function of the construction activity?

☐ Flood Control, Land Reclamation

☒ Residential ☐ Commercial ☐ Industrial ☐ Road Construction ☐

☐ Other (please specify):

Estimated Project Start Date: 7 / 27 / 2026

Estimated Project Completion Date: 2 / 11 / 2027

2.2 Construction Site Estimates

The following are estimates of the construction site.

Total project area:	50.30 acres
Construction site area to be disturbed:	50.30 acres
Percentage impervious area before construction:	0 %
Rational method runoff coefficient before construction (25-yr):	C = 0.42
Percentage impervious area after construction:	35.75%
Rational method runoff coefficient after construction (25-yr):	C = 0.51

Demonstration of how spoils will be handled during construction:

FILL SOIL MANAGEMENT AND DISPOSAL PRACTICES
Excavated fill material from the construction activities (topsoil, subsoil, rock, etc.) will be handled using the following practices to minimize exposure to runoff:

- **CONTINUOUS REMOVAL OF EXCAVATED FILL** – Fill material not reused on site will be removed continuously as it is excavated (or by end of the work day) and taken to an approved disposal site.

- **TEMPORARY STOCKPILING** – Fill material temporarily stockpiled in place as excavation occurs will be located in areas protected by E&S controls described within appropriate E&S control plan sheets and placed in a manner that uses existing grades to enhance sediment control (i.e., placing stockpiles on upslope side of excavations, etc.).

- **REMOVAL AND PERMANENT DISPOSAL** – Fill soil will be removed to the designated storage or permanent disposal area(s) as soon as practicable.

- **PROHIBITED DISPOSAL MATERIALS** – No material classified as solid waste, industrial waste, or hazardous waste or hazardous materials shall be mixed or buried with the fill material.

- **OFF-SITE DISPOSAL PERMITs** – Off site permanent fill disposal may require additional development permits, which will be the responsibility of the contractor as such areas are not included under the original permitting of this construction site.

2.3 Phasing and Construction Sequence Plan

GENERAL CONSTRUCTION SEQUENCE:

THE OWNER AND PRIMARY OPERATOR MUST FOLLOW THIS BASIC SEQUENCE OF CONSTRUCTION FOR EACH SUBDIVISION DEVELOPMENT. WITHIN THE FOLLOWING SEQUENCE OF CONSTRUCTION ARE LISTED PRIORITY INSPECTIONS THAT THE OWNER AND PRIMARY OPERATOR MUST REQUEST FROM A REPRESENTATIVE OF TRAVIS COUNTY'S STORM WATER MANAGEMENT PROGRAM INSPECTION TEAM. EACH PRIORITY INSPECTION MUST BE REQUESTED ON-LINE THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. THE PRIORITY INSPECTIONS IN THIS EXHIBIT ARE CONSISTENT WITH THE PRIORITY INSPECTIONS FOUND IN THE CUSTOMER PORTAL FOR THE PROJECT. FOR ASSURANCE PURPOSES, A SECOND REQUEST TO TRAVIS COUNTY IS STRONGLY ENCOURAGED BY ADDITIONALLY SENDING AN E-MAIL TO THE FOLLOWING ADDRESS: ENV-INSPECT@TRAVISCOUNTYTX.GOV. THE SEQUENCE FOR ITEMS 1-4 AND ITEMS 17-22 MUST NOT BE ALTERED, BUT THE SEQUENCE FOR ITEMS 5-16 MAY BE MODIFIED WITH THE WRITTEN APPROVAL OF THE COUNTY.

1. ESC INSTALLATION. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS (ESC) AND TREE PROTECTION MEASURES IN ACCORDANCE WITH THE APPROVED ESC PLAN SHEETS AND THE SWP3.

A. HAVE A QUALIFIED INSPECTOR (AS SPECIFIED IN SECTION 482.934(C)(3) OF THE TRAVIS COUNTY CODE) INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROLS AND PREPARE A CERTIFIED SWP3 INSPECTION REPORT REGARDING WHETHER THE TEMPORARY EROSION AND SEDIMENT CONTROLS WERE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS;

B. UPLOAD THE QUALIFIED INSPECTOR'S CERTIFIED SWP3 INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY; AND

C. REQUEST A MANDATORY PRE-CONSTRUCTION MEETING WITH TRAVIS COUNTY THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY GIVING AT LEAST 3 BUSINESS DAYS NOTIFICATION.

2. PRE-CONSTRUCTION MEETING AND ESC INSPECTION. HOLD A MANDATORY PRE-CONSTRUCTION MEETING THAT ADDRESSES THE ITEMS IN EXHIBIT 482.950 AND THE ESC PRE-CONSTRUCTION INSPECTION BY THE COUNTY AND OBTAIN COUNTY'S APPROVAL TO START CONSTRUCTION. (PRIORITY INSPECTION)

3. INSPECT FOR COMPLIANCE WITH SWP3 AND ESC PLAN. MAINTAIN AND INSPECT THE SWP3 CONTROLS AND PREPARE AND UPLOAD A WEEKLY CERTIFIED SWP3 INSPECTION REPORT THAT INCLUDES THE CONTENTS LISTED IN EXHIBIT 482.951 TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY.

4. CONSTRUCT SEDIMENT BASIN(S). CONSTRUCT ANY STORM WATER POND(S) FIRST, WHENEVER APPLICABLE, TO BE FUNCTIONAL AS CONSTRUCTION SEDIMENT BASIN(S) BEFORE GRADING AND EXCAVATING THE ENTIRE SITE, AS FOLLOWS:

A. CLEAR, GRUB, AND EXCAVATE ONLY THE SITE AREAS AND CUT AND FILL QUANTITIES NECESSARY TO CONSTRUCT THE POND(S) IN ACCORDANCE WITH THESE APPROVED PLANS AND THE MINIMUM STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES FOR THE TEMPORARY SEDIMENT BASIN EMBANKMENTS, WALLS, INFLOWS, OUTFALLS, DRAINAGE CONVEYANCE MEASURES, SEDIMENT CONTROLS, AND STABILIZATION.

B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE TEMPORARY SEDIMENT BASIN(S) BEFORE PROCEEDING FURTHER IN THE SEQUENCE OF CONSTRUCTION. (PRIORITY INSPECTION)

5. CONSTRUCT SUBDIVISION IMPROVEMENTS. BEGIN THE PRIMARY SUBDIVISION CLEARING, EXCAVATION, AND CONSTRUCTION ACTIVITIES AND CONTINUE THE SWP3 AND ESC PLAN IMPLEMENTATION AND MAINTENANCE PER THE APPROVED PLANS.

6. ROUGH GRADE STREETS.

7. INSTALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT.

8. BEGIN INSTALLATION OF STORM SEWER LINES.

9. REGRADE STREETS TO SUBGRADE.

10. PERFORM TEMPORARY STABILIZATION IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER.

11. PERFORM PERMANENT SITE STABILIZATION/RE-VEGETATION IMMEDIATELY IN ALL SITE AREAS AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED FOR PHASED RE-VEGETATION.

12. COMPLETE UNDERGROUND UTILITY CROSSINGS ON ALL STREETS.

13. INSTALL CURB AND GUTTER.

14. LAY FINAL BASE COURSE MATERIAL.

15. INSTALL ALL TRAFFIC CONTROL SIGNING, STRIPING, AND PAVEMENT MARKERS.

16. COMPLETE ALL UNDERGROUND INSTALLATIONS WITHIN THE RIGHT-OF-WAY.

17. COMPLETE PERMANENT WATER QUALITY CONTROLS. BEGIN COMPLETION OF PERMANENT WATER QUALITY CONTROL(S) AND INSTALL THE UNDERDRAIN PER APPROVED PLANS, WHEN APPLICABLE.

A. REMOVE CONSTRUCTION SEDIMENT, RE-ESTABLISH THE BASIN SUBGRADE, AND INSTALL UNDERDRAIN PIPING.

B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE UNDERDRAIN PIPING INSTALLATION AND ASSOCIATED CONSTRUCTION

MATERIALS (AGGREGATE, FILTER MEDIA, ETC.) BEFORE COVERING THE UNDERDRAIN AND PROCEEDING WITH CONSTRUCTION OF THE CONTROL. (PRIORITY INSPECTION)

18. COMPLETE FINAL SITE STABILIZATION INCLUDING STABILIZATION OF ALL DISTURBED SUBDIVISION LOTS STILL UNDER THE SWP3 AND ESC PLAN OF THE PRIMARY OPERATOR FOR THE SUBDIVISION STREET AND DRAINAGE CONSTRUCTION.

19. PROVIDE ENGINEER'S CONCURRENCE LETTER THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE AND REQUEST A FINAL INSPECTION BY TRAVIS COUNTY.

20. PERFORM A FINAL INSPECTION WITH THE COUNTY AND PREPARE A PUNCH LIST WITH REMAINING ITEMS THAT NEED TO BE COMPLETED FOR PROJECT ACCEPTANCE. (PRIORITY INSPECTION)

21. OBTAIN A CERTIFICATE OF COMPLIANCE FOR FINAL STABILIZATION FROM THE COUNTY WHEN ALL FINAL INSPECTION PUNCH LIST ITEMS ARE FINISHED AND FINAL SITE STABILIZATION AND REMOVAL OF TEMPORARY SEDIMENT CONTROLS IS COMPLETE. (PRIORITY INSPECTION)

A. PROVIDE SEPARATE PERMIT DOCUMENTATION FOR ANY SUBDIVISION LOTS NOT STABILIZED AS PART OF THE FINAL SUBDIVISION STABILIZATION PLAN, IF NECESSARY – INCLUDING SEPARATE COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), ESC PLAN(S).

B. PROVIDE A DEVELOPERS CONTRACT, IF NECESSARY, IF ALL ITEMS ARE COMPLETE EXCEPT RE-VEGETATION COVERAGE AND CONDITIONAL ACCEPTANCE IS REQUESTED. REQUEST RE-INSPECTION WHEN RE-VEGETATION COVERAGE IS COMPLETE.

22. RECEIVE A CONDITIONAL ACCEPTANCE FROM TRAVIS COUNTY TO BEGIN THE CONSTRUCTION WARRANTY PERIOD WHEN ALL PUNCH LIST ITEMS ARE COMPLETE. (PRIORITY INSPECTION).

2.4 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

During excavation, grading, and revegetation activities, improper installation and/or maintenance of the E&S controls could result in sediment being conveyed with stormwater runoff. In addition, construction vehicles exiting the site are potential sources where sediment can be conveyed with stormwater runoff.

Potential pollutants and sources, other than sediment, to stormwater runoff:

Industrial materials and products indicated below (**X**) may be present on site at some time during the construction activities. Spills or improper use of these substances can cause soil contamination and result in storm water pollution when mixed with runoff. **(Contractor to add to this list as necessary)**

X	Concrete, grout mix	**X**	Diesel fuel		Lime
X	Fertilizer	**X**	Gasoline		
	Pesticides	**X**	Motor oil		
X	Herbicides	**X**	Hydraulic and brake fluid		
X	Batteries	**X**	Liquid asphalt emulsion		
X	Cleaning solvents	**X**	Hot mix asphalt - HMAC		
X	Paint	**X**	Cold mix asphalt		

A log form to keep track of when materials are delivered and removed from the site is included in Appendix F.

Pollution control procedures and devices:

GENERAL MATERIALS MANAGEMENT PRACTICES

The following practices will be used for all industrial materials and products present on site to reduce the risk of spills or other accidental exposure of these substances to storm water:

LIMIT INVENTORY – Efforts will be made to store only enough product required for the job, and limit extended storage time of unused materials on-site by scheduling deliveries just prior to actual need.

SECURE STORAGE - All materials stored onsite will be in a secured location, in an orderly manner, under a roof or other enclosure where possible, protected from rainfall and spillage.

ORIGINAL CONTAINERS - Products will be kept in their original containers with the original manufacturers' label and Material Safety Data Sheets (MSDS) retained and followed.

CONTAINER AND SURPLUS MATERIALS DISPOSAL - Whenever possible, all of a product will be used before disposing of the container. If surplus product must be disposed of, manufacturers' or State required methods for proper disposal shall be followed.

INSPECTION AND TRAINING - The site operator superintendent (s) will inspect regularly and inform site workers to ensure proper use, storage, and disposal of industrial products and materials.

PETROLEUM PRODUCT PRACTICES

ON-SITE STORAGE – Any on-site storage of diesel, gasoline, and petroleum oil products will be aboveground, protected by secondary containment, and in compliance with all applicable TCEQ regulations 30 T.A.C., Chapter 334, Underground/Aboveground Storage Tanks and Fire Code regulations.

MOBILE STORAGE - Fuel and automotive fluids service for operator vehicles not provided on-site will be provided by mobile vehicles meeting all hazardous materials storage and transportation regulations.

VEHICLE MAINTENANCE - All onsite vehicles will be monitored for oil and fluids leaks and receive regular preventive maintenance to reduce the chance of oil leaks, and any spills cleaned up.

LIQUID ASPHALT APPLICATIONS - Liquid asphalt emulsion “prime” coat for unpaved roads or HMAC paving operations will be applied no later than 24 Hrs prior to forecasted storm events to prevent runoff contamination. Asphalt substances will be applied according to the manufacturer’ recommendations.

SPILL PREVENTION AND CONTROL PRACTICES

SPILL REGULATIONS - Spill prevention, control, cleanup, and reporting shall comply with TCEQ regulations 30 T.A.C., Chapter 327 Spill Prevention and Control and any local regulations.

SPILL PROCEDURES- The primary operator (CONTRACTOR) shall supply and attach to this SWPPP a “Spill Prevention and Control Plan” specific to the materials stored and used on site.

Spill cleanup procedures and training are the responsibility of the primary operator (CONTRACTOR). Personal safety guidelines shall be clearly posted and available for operator personnel in the event of a spill. The spill prevention plan will be adjusted as necessary to include measures to prevent particular types of spills from reoccurring.

SPILL CLEAN UP MATERIALS - Materials and equipment for spill cleanup, such as absorbent, rags, sand, sawdust, containers, etc., will be available in vehicles or at the materials storage area onsite. All spills will be cleaned up immediately and waste residue disposed of properly.

SPILL REPORTING – Any reportable quantities of spills of hazardous materials shall be reported to the City of San Marcos and appropriate TCEQ and/or local officials as required by law. If the responsible party is uncertain whether the quantity is reportable, the City of San Marcos Inspector shall be notified and their direction followed.
For further direction, see http://www.tceq.state.tx.us/compliance/er/spill_rq.html

SECTION 3: GRADING AND EROSION/SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs)

3.1 Minimize Disturbed Area and Protect Natural Features and Soil

Site disturbance will be contained within the site's Limits of Construction. Temporary E&S controls will be installed as shown on the Erosion/Sedimentation Plans in the plans to minimize site disturbance.

3.2 Control Stormwater Flowing onto and through the Project

BMP Description: **Silt fence** will be installed to control flows through the site during construction. A line of silt fence will be placed along portions of the up-gradient limits of construction to divert off-site (outside of LOC) run-on around the construction activities.	
Installation Schedule:	Silt fence will be installed prior to initiation of construction activities.
Maintenance and Inspection:	Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season. Repair undercut silt fences. Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months. Silt fences that are damaged and become unsuitable for the intended purpose should be removed from the site of work, disposed of, and replaced with new silt fence barriers. Sediment that accumulates in the silt fence must be periodically removed in order to maintain silt fence effectiveness. Sediment should be removed when the sediment accumulation reaches approximately one-half of the fence height (one foot) on the silt fence. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location. Upon removal of silt fence, accumulated sediment must also be removed and disposed of properly. Silt fences should be left in place until the upstream area is permanently stabilized. Until then, the silt fence must be inspected and maintained. Holes, depressions, or other ground disturbance caused by the removal of the silt fences should be backfilled and repaired.
Responsible Staff:	Contractor

3.3 Stabilize Soils

BMP Description: **Seeding** per Erosion Control Notes in plans will be used to stabilize exposed soils where construction activities have permanently ceased or be temporarily halted for 14 days or longer.

☒ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to begin within 14 days of end of construction activity.
Maintenance and Inspection:	Weekly and after storm events until a dense cover of vegetation has become established, all seeded areas shall be inspected for failures and reseeded as necessary.
Responsible Staff:	Contractor

BMP Description: **Mulching** will be used to stabilize exposed soils flatter than 3:1 where construction activities have temporarily halted for 5 days or longer.

☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The mulched area shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately, with additional mulching material placed on top of the mulch to reach the recommended thickness. When the mix is decomposed, clogged with sediment, eroded or ineffective, it must be replaced or repaired
Responsible Staff:	Contractor

BMP Description: **Sprinkling for Dust Control:** Sprinkling will be applied to stock pile areas, active excavation sites, and along interior roads as necessary to minimize dust generation. Dust control will be implemented as needed once soil disturbance activities have been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of water at a rate of 300 gallons per acre or less will be performed by a mobile pressure-type distributor truck no more than three times a day during the months of May–September and once per day during the months of October–April or whenever the dryness of the soil warrants it.

☐ ***Permanent***	☒ ***Temporary***
Schedule:	Sprinkling shall occur as necessary to minimize dust generation.
Responsible Staff:	It shall be the Contractor's continuous responsibility at all times, including nights, holidays and weekends until acceptance of the project by the City, to maintain the specified areas relatively free of dust in a manner that will cause the least inconvenience to the public.

3.4 Protect Slopes

BMP Description: **Mulching** will be used to stabilize exposed soils on slopes flatter than 3:1 where construction activities have temporarily halted for 5 days or longer.	
☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The mulched area shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately, with additional mulching material placed on top of the mulch to reach the recommended thickness. When the mix is decomposed, clogged with sediment, eroded or ineffective, it must be replaced or repaired
Responsible Staff:	Contractor

BMP Description: **Soil Retention Blanket:** will be used to stabilize exposed soils on slopes steeper than 3:1 where construction activities have temporarily halted for 5 days or longer.	
☒ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The blanketed areas shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately and specified by the manufacturer for repairs.
Responsible Staff:	Contractor

3.5 Protect Storm Drain Inlets

Existing and proposed storm drain inlets present within and adjacent to the limits of construction will be protected with filter curb inlet protection.

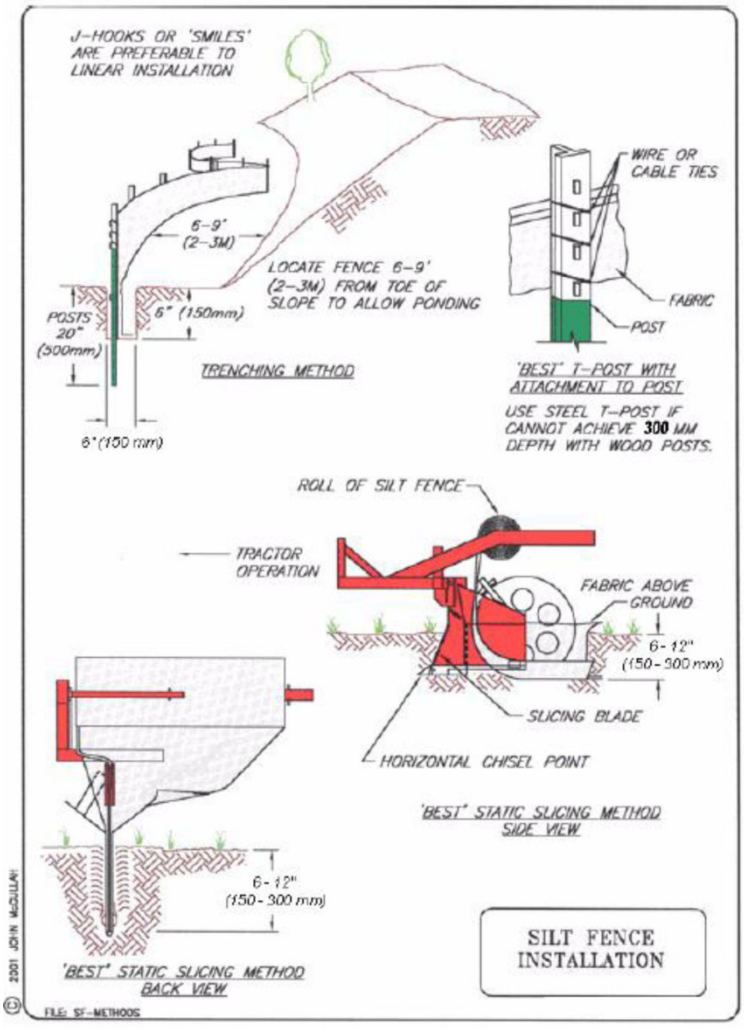
3.6 Establish Perimeter Controls and Sediment Barriers

BMP Description: **Silt fence** per Detail 642S-1 will be installed in appropriate lengths and spacing to prevent sediment escape from disturbed areas within the Limits of Construction. See Erosion Control Sheets of the approved plans for silt fence locations.	
☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	The perimeter silt fences will be installed prior to initiating construction activities.
Maintenance and Inspection:	Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season. Repair undercut silt fences where no longer trenched in at the toe. Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months. Silt fences that are damaged and become unsuitable for the intended purpose should be removed from the site of work, disposed of, and replaced with new silt fence barriers. Sediment that accumulates in the silt fence must be periodically removed in order to maintain silt fence effectiveness. Sediment should be removed when the sediment accumulation reaches approximately one-half of the fence height (one foot) on the silt fence. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location. Upon removal of silt fence, accumulated sediment must also be removed and disposed of properly. Silt fences should be left in place until the upstream area is permanently stabilized. Until then, the silt fence must be inspected and maintained. Holes, depressions, or other ground disturbance caused by the removal of the silt fences should be backfilled and repaired.
Responsible Staff:	Contractor

Maximum spacing between silt fences on slopes (also refer to plans)

Slope	Spacing Interval (ft)	Max. Drainage Area (SF) per 100 LF of silt fence
100:1 to 50:1 (1-2%)	500	25,000
50:1 to 30:1 (2-3.3%)	250	15,000
30:1 to 25:1 (3.3-4%)	150	12,000
25:1 to 20:1 (4-5%)	120	10,000
20:1 to 10:1 (5-10%)	100	5,000
10:1 to 5:1 (10-20%)	50	2,500
5:1 to 2:1 (20-50%)	10	1,000

Recommended Installation method per COA ECM 1.4.5.G:



Note: for further installation instructions, see Detail 642S-1 on the Erosion/Sedimentation and Tree Protection Details in the plans.

3.7 Retain Sediment On-Site

Sediment will be retained onsite through the practices and BMPs identified in Sections 3.2, 3.3, 3.4, 3.6, and 3.8 of this SWPPP.

3.8 Establish Stabilized Construction Entrances

BMP Description: **Stabilized Construction Entrances** will be installed per Standard Specification 641S at the point of exit from off-street staging areas to prevent the off-site transport of sediment by construction vehicles.	
Installation Schedule:	The stabilized construction entrances will be installed before construction begins area and will remain in place until revegetation replaces them as appropriate.
Maintenance and Inspection:	The entrance shall 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 clean out of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights of way must be removed immediately by contractor. When necessary, wheels must be cleaned to remove sediment prior to entrance onto public right of way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
Responsible Staff:	Contractor

3.9 Additional BMPs

If the contractor encounters groundwater during drilled shaft construction, the following shall be used to retain sediment on site.

BMP Description: **Sediment Trapping Devices for Excavation Pumpage**. A sediment trapping device to trap and filter sediment from water pumped from excavated areas. The sediment trapping device utilized by the primary operator (CONTRACTOR) shall treat groundwater encountered during excavation and tunneling activities to achieve the acceptable water quality standards. The location of sediment trap shall be convenient for clean out and disposal of the trapped sediment and shall minimize the interference with construction activities.

Installation Schedule:	No excavation may begin until submittal of dewatering sediment trapping devices and/or methods is approved and equipment is delivered to the site and fully functional.
Maintenance and Inspection:	As necessary to meet the applicable water quality requirements.
Responsible Staff:	Contractor

SECTION 4: GOOD HOUSEKEEPING BMPs

4.1 Material Handling and Waste Management

Waste Materials	
BMP Description: All waste materials will be collected and disposed of into metal trash dumpsters located within the limits of construction. Dumpsters will have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all local and state solid-waste management regulations. Only trash and construction debris from the site will be deposited in the dumpsters. All personnel will be instructed, during training sessions, regarding the correct procedure for disposal of trash and construction debris. Notices that state these practices will be posted in the onsite construction office and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.	
Installation Schedule:	Trash dumpsters will be installed concurrent with the beginning of site work.
Maintenance and Inspection:	The dumpsters will be inspected weekly and immediately after storm events. The dumpster will be emptied weekly. If trash and construction debris are exceeding the dumpster capacity, the dumpsters will be emptied more frequently, or more dumpsters will be provided to meet the site's demands.
Responsible Staff:	Contractor

Hazardous Waste	
BMP Description: All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids will be stored in structurally sound and sealed shipping containers in a hazardous-materials storage area located within the limits of construction and segregated from other non-waste materials. Secondary containment will be provided for all materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous materials will be disposed of in accordance with federal, state, and municipal regulations. Hazardous waste materials will not be disposed of into the on-site dumpsters. All personnel will be instructed, during training sessions, regarding proper procedures for hazardous waste disposal. Notices that state these procedures will be posted in the office trailer and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.	
Installation Schedule:	Shipping containers used to store hazardous waste materials will be installed once the materials storage area has been installed for the site.
Maintenance and Inspection:	The hazardous materials storage areas will be inspected at least weekly and after storm events. The storage areas will be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material Safety Data Sheets, material inventory, and emergency contact numbers will be maintained in the office trailer.
Responsible Staff:	Contractor

Sanitary Waste	
BMP Description: Temporary sanitary facilities (portable toilets) will be provided at the site. The toilets will be away from any concentrated flow paths and traffic flow and will have collection pans underneath as secondary containment.	
Installation Schedule:	The portable toilets will be installed concurrent with the beginning of site work.
Maintenance and Inspection:	All sanitary waste will be collected from the portable toilets a minimum of weekly or as required. The toilets will be inspected weekly for evidence of leaking holding tanks. Toilets with leaking holding tanks will be removed from the site immediately and replaced.
Responsible Staff:	Contractor

4.2 Establish Proper Material Staging Areas

Combined Staging Area and Materials Storage Area	
BMP Description: Construction equipment and maintenance materials will be stored at the combined staging area and materials storage areas. Large items will be stored in the open in the storage area. Such materials will be elevated to minimize contact with runoff.	
Installation Schedule:	The combined staging and materials storage area will be installed before any infrastructure is constructed at the site.
Maintenance and Inspection:	Storage areas will be inspected weekly and after storm events. Storage areas will be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners will be repaired or replaced as needed to maintain proper function.
Responsible Staff:	Contractor

4.3 Designate Washout Areas

Concrete Washout
BMP Description: A concrete washout system will be installed with sufficient quantity and volume to contain all liquid and concrete waste generated by the washout operations. Concrete pours will not be conducted during or before an anticipated storm event. All excess concrete and concrete washout slurries from concrete mixer trucks and chutes will be discharged to the washout area or hauled off-site for disposal. When the temporary washout areas are no longer needed for the construction project, the hardened concrete and materials used to construct the areas will be removed and disposed of according to the maintenance section below and the washout areas will be backfilled, graded and stabilized with erosion controls.

Installation Schedule:	The washout areas will be constructed before they are required by construction activities. Contractor is to obtain Engineer's approval of washout location at least 2 weeks before installation.
Maintenance and Inspection:	The washout areas will be inspected daily to ensure that all concrete washing is being discharged into the washout area and to identify when concrete wastes need to be removed. The washout areas will be cleaned out once the area is filled to 75 percent of the holding capacity. Once the area's holding capacity has been reached the concrete wastes will be allowed to harden, the concrete will be broken up, removed, and properly disposed of.
Responsible Staff:	Contractor

4.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

Vehicle/Equipment Fueling and Maintenance

BMP Description: Several types of vehicles and equipment will be used on-site throughout the project, including graders, scrapers, excavators, loaders, paving equipment, rollers, trucks and trailers, backhoes, and forklifts. All major equipment/vehicle fueling and maintenance will be performed off-site. When vehicle fueling must occur on-site, the fueling activity will occur in the staging area. Only minor equipment maintenance will occur on-site. All equipment fluids generated from maintenance activities will be disposed of into designated drums stored on spill pallets in accordance with Section 4, Part 4.1. Absorbent, spill-cleanup materials and spill kits will be available at the combined staging and materials storage area. Drip pans will be placed under all equipment receiving maintenance and vehicles and equipment parked overnight.

Fueling and maintenance of equipment and/or vehicles shall not occur within 50 feet of the top of the creek bank.

Installation Schedule:	Equipment and vehicle maintenance and fueling practices will be implemented at the beginning of construction.
Maintenance and Inspection:	Inspect equipment/vehicle storage areas and fuel tank weekly and after storm events. Vehicles and equipment will be inspected daily when stored on site. Leaks will be repaired immediately, or the problem vehicle(s) or equipment will be removed from the project site. Keep ample supply of spill-cleanup materials on-site and immediately clean up spills and dispose of materials properly.
Responsible Staff:	Contractor

4.5 Control Equipment/Vehicle Washing

BMP Description: All equipment and vehicle washing will be performed off-site.	
Installation Schedule:	N/A
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

4.6 Spill Prevention and Control Plan

Spill Prevention and Control Procedures

BMP Description:

1. The primary operator (CONTRACTOR) shall supply and attach to this SWPPP a "Spill Prevention and Control Plan" specific to the materials stored and used on site.
2. Employee Training: The primary operator shall train all employees detailed in Section 7, Part 7.3.
3. Vehicle Maintenance: Vehicles and equipment will be maintained off-site. All vehicles and equipment including subcontractor vehicles will be checked for leaking oil and fluids. Vehicles leaking fluids will not be allowed on-site. Drip pans will be placed under all vehicles and equipment that are parked overnight.
4. Hazardous Material Storage: Hazardous materials will be stored in accordance with Section 4, Part 4.1 and federal and municipal regulations.
5. Spill Kits: Spill kits will be within the material storage area and concrete washout areas.
6. Spills: All spills will be cleaned up immediately upon discovery. Spent absorbent materials and rags will be hauled off-site immediately after the spill is cleaned up for disposal. Spills large enough to be reportable (25 gallons to land or a sheen to water) will be reported to the National Response Center (800-424-8802) and the Texas Emergency Response Center (800-832-8224).
7. Material Safety Data Sheets, a material inventory, and emergency contact information will be maintained at the on-site project trailer.

Installation Schedule:	The spill prevention and control procedures will be implemented once construction begins on-site.
Maintenance and Inspection:	All personnel will be instructed regarding the correct procedures for spill prevention and control. Notices that state these practices will be posted in the office trailer, and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.
Responsible Staff:	Contractor

4.7 Any Additional BMPs

BMP Description: No Additional BMPs were identified. As construction progresses, contractor shall monitor any additional BMPs required by Engineer, Owner, or City Inspector.	
Installation Schedule:	N/A
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

4.8 Allowable Non-Stormwater Discharge Management

The allowable non-stormwater discharges identified include the following:

Waters used to wash vehicles where detergents are not used

Water used to control dust

Potable water including uncontaminated water line flushings

Routine external building wash down that does not use detergents

Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used

Uncontaminated air conditioning or compressor condensate

Uncontaminated ground water or spring water

Foundation or footing drains where flows are not contaminated with process materials such as solvents

Uncontaminated excavation dewatering

Landscape irrigation

Water Used to Control Dust	
BMP Description: Dust control will be implemented as needed once site grading has been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of water at a rate of 300 gallons per acre or less will be performed by a mobile pressure-type distributor truck no more than three times a day during the months of May–September and once per day during the months of October–April or whenever the dryness of the soil warrants it.	
Installation Schedule:	As needed during construction activities
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

Uncontaminated Excavation Dewatering	
BMP Description: For dewatering activities, refer to Section 3.9 of this SWPPP for appropriate BMP.	
Installation Schedule:	refer to Section 3.9
Maintenance and Inspection:	refer to Section 3.9
Responsible Staff:	Contractor

Landscape Irrigation	
BMP Description: Irrigation water will not be sprayed onto impermeable surfaces such as paved driveways and roads. Water will be directed onto soil and lawns by using hoses and correctly sized sprinklers with adjustable spray patterns. To avoid discharges of irrigation waters, the sprinklers will have low-flow rates and increased watering time. The irrigated area will be inspected for excess watering and to adjust watering times and schedules.	
Installation Schedule:	N/A
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor/Owner

Uncontaminated Water Line Flushing	
BMP Description: If flushing is to occur, uncontaminated water from water line flushing of the site infrastructure will be discharged to the sediment basin/tank, while avoiding any contact with disturbed areas. If water from the line flushing becomes contaminated, the water line will be blocked off and the flush water will be pumped to a tanker truck, which will haul the contaminated water off-site for disposal.	
Installation Schedule:	As needed during construction activities
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

SECTION 5: SELECTING POST-CONSTRUCTION BMPs

BMP Description: Extended Detention Water Quality Ponds: Designed to capture and temporarily detain the water quality volume, serving as settling basins for the solids fraction, nutrients attached to solids, and as a means of limiting downstream erosion by managing stormwater.	
☒ ***Permanent***	☐ ***Temporary***
Installation Schedule:	Ponds to be rough/cut graded prior to beginning construction to act as water quality control during construction. Ponds to be fine graded/final build out/revegetated prior to project acceptance.
Maintenance and Inspection:	Detailed inspections to occur at least twice annually, with one of the inspections being during or immediately following runoff producing rain event. Deficiencies identified during inspection to be repaired immediately. Identify, replant, and restore eroded areas. Add repairs to prevent future erosion. Ensure 80% or higher vegetated covers. Mow sites twice annually to keep grass height under 18 inches. Remove clippings and any woody growth. Prevent over-compaction during mowing. Remove and property dispose any built-up sediment and debris when it reaches 10% of pond volume.
Responsible Staff:	OWNER

SECTION 6: INSPECTIONS

6.1 Inspections

1. ***Inspection Personnel:*** *Identify the person(s) who will be responsible for conducting inspections and describe their qualifications:*

   A) Contractor to supply information

2. ***Inspection Schedule and Procedures:***

   Personnel provided by the contractor must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, discharge locations, and structural controls for evidence of, or the potential for, pollutants entering the drainage system.

   Personnel conducting these inspections must be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWPPP for the site.

   Sediment and erosion control measures identified in the SWPPP must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections must be conducted at least once every 7 calendar days (or a specific day each week as established by the contractor) and within 24 hours of the end of a storm event of 0.5 inches or greater.

   For dewatering activities, the primary operator (CONTRACTOR) shall monitor excavation, groundwater inflow, and containment volume to prevent unauthorized discharge of stormwater from the project site.

   Erosion and sedimentation control measures identified in this SWPPP shall be observed to ensure that they are operating correctly. Based on the results of the inspection, the SWPPP shall be (with the approval of the City inspector) modified as necessary (e.g. show additional controls on the erosion/sedimentation controls plan sheet and revise description of controls) to include additional or modified controls, or best management practices (BMPs), designed to correct problems identified. Revisions to the SWPPP shall be completed within 7 calendar days following the inspection. If existing controls need to be modified or if additional controls are necessary, implementation shall be completed before the next anticipated storm event, or as soon as practicable. The date that the modifications or additions were made should be noted on the “SWPPP Amendment Log” form included in Appendix H.

   Refer to Sections 3 and 4 of this SWPPP for specific maintenance schedule requirements per BPM.

   CONTRACTOR to attach a copy of the inspection report to be used on site.

   See Appendix G – Inspection Reports

6.2 Delegation of Authority

Duly Authorized Representative(s) or Position(s):
Contractor to identify the individual(s) or specifically describe the position where the construction site operator has delegated authority for the purposes of signing inspection reports, certifications, or other information.

Company or Organization Name:
Name:
Position:
Address:
City, State, Zip Code:
Telephone Number:
Fax/Email:

Attach a copy of the signed delegation of authority form.

Sample Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in _____ (Reference State Permit), and that the designee above meets the definition of a "duly authorized representative" as set forth in _____ (Reference State Permit).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

6.3 Corrective Action Log

Corrective Action Log:
See Appendix I – Corrective Action Log

SECTION 7: RECORDKEEPING AND TRAINING

7.1 Recordkeeping

Instructions:

- The following is a list of records you should keep at your project site available for inspectors to review:
- Dates of grading, construction activity, and stabilization (which is covered in Sections 3 and 4)
- A copy of the construction general permit (attach)
- The signed and certified NOI form or permit application form (attach)
- A copy of the letter from EPA or/the state notifying you of their receipt of your complete NOI/application (attach)
- Inspection reports (attach)
- Records relating to endangered species and historic preservation (attach)
- Check your permit for additional details
- For more on this subject, see *SWPPP Guide*, Chapter 6.C.

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

Date(s) when major grading activities occur:

Date(s) when construction activities temporarily or permanently cease on a portion of the site:

Date(s) when an area is either temporarily or permanently stabilized:

7.2 Log of Changes to the SWPPP

Instructions:

- Create a log here, or as an attachment, of changes and updates to the SWPPP. You should include additions of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures, updates to site maps, and so on.

Log of changes and updates to the SWPPP prepared on date noted in header above
See Appendix H - SWPPP Amendment Log

7.3 Training

Instructions:

- Training your staff and subcontractors is an effective BMP. As with the other steps you take to prevent stormwater problems at your site, you should document the training that you conduct for your staff, for those with specific stormwater responsibilities (e.g. installing, inspecting, and maintaining BMPs), and for subcontractors.
- Include dates, number of attendees, subjects covered, and length of training.
- For more on this subject, see *SWPPP Guide*, Chapter 8.

Individual(s) Responsible for Training: (Contractor to Complete)

Describe Training Conducted: (Contractor to Complete, See Appendix J “Training Log”)

- General stormwater and BMP awareness training for staff and subcontractors:

- Detailed training for staff and subcontractors with specific stormwater responsibilities:

SECTION 8: PERMANENT STABILIZATION

BMP Description: Permanent **seeding** will be applied immediately after the final design grades are achieved on portions of the site but no later than 14 days after construction activities have halted. Construction debris, trash and temporary BMPs (including silt fences, material storage areas, sanitary toilets, and inlet protection) will also be removed and any areas disturbed during removal will be seeded immediately.	
Installation Schedule:	Permanent seeding will be applied immediately after the final design grades are achieved on portions of the site but no later than 14 days after construction activities have halted
Maintenance and Inspection:	**Maintenance.** Maintenance is a vital factor in providing an adequate vegetative erosion control cover. Permanent revegetation has not been achieved until at least the minimum is satisfied: 95 percent coverage with no bare areas exceeding 16 square feet with a 1½ inch stand of grass.
Responsible Staff:	Contractor

BMP Description: **Soil Retention Blanket:** will be used to stabilize exposed soils on slopes steeper than 3:1 where construction activities have temporarily halted for 5 days or longer.	
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The blanketed areas shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately and specified by the manufacturer for repairs.
Responsible Staff:	Contractor

SECTION 9: CERTIFICATION AND NOTIFICATION

Instructions:

- The SWPPP should be signed and certified by the construction operator(s) designer. Attach a copy of the NOI and permit authorization letter received from EPA or the state.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

SWPPP APPENDICES

Appendix A	TPDES General Permit NO TXR150000
Appendix B	Notice of Intent (NOI)
Appendix C	Notice of Change (NOC)
Appendix D	Notice of Termination (NOT)
Appendix E	Construction Activities Log
Appendix F	Materials Delivered and Stored Onsite Log
Appendix G	Inspection Report
Appendix H	SWPPP Amendment Log
Appendix I	Corrective Action Log
Appendix J	Training Log
Appendix K	Subcontractor Certifications/Agreements

Appendix A
TPDES General Permit NO TXR150000

Appendix B
Notice of Intent (NOI)

Appendix C
Notice of Change (NOC)

Appendix D
Notice of Termination (NOT)

Appendix E
SWPPP Construction Activities Log

Appendix E – Construction Activities Log

Project Name:
SWPPP Contact:

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

Appendix F
Materials Delivered and Stored Onsite Log

Appendix F – Materials Delivered and Stored Onsite Log

Project Name:
SWPPP Contact:

Material	Date Delivered	Date Removed

Appendix G
Inspection Reports

Inspection Report

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

SILT FENCE

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Where is the Silt Fence Located?	Is the Bottom of the Fabric Still Buried?	Is the Fabric Torn or Sagging?	Are the Posts Tipping Over?	How Deep is the Sediment?

MAINTENANCE REQUIRED FOR SILT FENCE: _____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ **ON OR BEFORE: _____**

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

SOIL RETENTION BLANKET

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Where are the Soil Retention Blanket Located?	Are the Soil Retention Blankets Embedded in the Ground?	Are the Soil Retention Blankets Anchored in Place?	What is the Condition of the Soil Retention Blanket?

MAINTENANCE REQUIRED FOR SOIL RETENTION BLANKET:_____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ **ON OR BEFORE:** _____

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

ROCK BERMS

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Where is the Rock Berm Located?	Is the Rock Berm Still in Place?	What is the Condition of the Rock Berm?

MAINTENANCE REQUIRED FOR ROCK BERMS: _____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

INLET PROTECTION BARRIERS

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Location	In Place?	Depth of Sediment	Condition of Inlet

MAINTENANCE REQUIRED FOR INLET PROTECTION BARRIERS: _____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

(Completed weekly or as soon as possible after a significant storm event)

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

STABILIZATION MEASURES					
Area or Drainage Areas*	**Date Since Last Disturbance**	**Date of Next Disturbance**	**Stabilized (Yes or No)**	**Control Measures Implemented**	**Current Conditions of Control Measures**

* See site map for drainage area. Site may include borrow sources, haul roads, contractor's yard, stockpiles, etc.
** Areas that will be exposed more than 21 days must be stabilized within 14 days.

STABILIZATION REQUIRED: _____
_____
_____
_____

TO BE PERFORMED BY: _____ **ON OR BEFORE:** _____

Control Measure Codes		Condition Codes
1. Temporary Seeding	14. Rock Bed at Construction Exit	U – Upgrade Needed
2. Permanent Plant, Sod, or Seed	15. Timber Mat at Construction Entrance	R – Replacement Needed
3. Mulch	16. Channel Liner	M – Maintenance Needed
4. Soil Retention Blanket	17. Sediment Trap	C – Cleaning Needed
5. Buffer Zone	18. Sediment Basin	I – Increase Measures
6. Preserve Natural Resources	19. Storm Inlet Sediment Trap	S – Stable (no action required)
7. Silt Fence	20. Stone Outlet Structure	
8. Hay Bales	21. Curb and Gutter	
9. Rock Berm	22. Storm Sewers	
10. Diversion Dike	23. Velocity Control Devices	
11. Diversion Swale	24. Excess Dirt Removed From Road	
12. Pipe Slope Drain	25. Haul Roads Dampened for Dust	
13. Paved Flume	26. Cleanup of Possible Contaminants	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry or the person who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

Appendix H
SWPPP Amendment Log

Appendix H – SWPPP Amendment Log

Project Name:
SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix I
SWPPP Corrective Action Log

Appendix I – Corrective Action Log

Project Name:
SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Appendix J
SWPPP Training Log

Appendix J – SWPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ❑ **Erosion Control BMPs**
- ❑ **Emergency Procedures**
- ❑ **Sediment Control BMPs**
- ❑ **Good Housekeeping BMPs**
- ❑ **Non-Stormwater BMPs**

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Appendix K
Subcontractor Certifications/Agreements

Appendix K – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: M. Kevin Denson Telephone: 512-442-1122

Date: 09/07/2025 Fax: 512-442-1181

Representing: Terracon Consultants, Inc. (TBPG 50058) (Name of Company and TBPG or TBPE registration number)

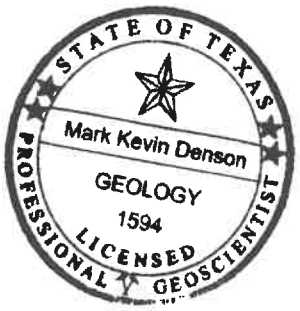
Signature of Geologist:

M Kevin Denson

Regulated Entity Name: Provence Phase 2 (Sections 1,2, and 3) North of Hamilton Pool Road, Austin, Travis County, Texas

Project Information

1. Date(s) Geologic Assessment was performed: May 29-30, 2025; July 1, 2025; July 9, 2025
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☐ Recharge Zone
   - ☐ Transition Zone
   - ☒ Contributing Zone ~~within the Transition Zone~~



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

5. ☒ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Eckrant very stony clay (TaD)	D	0-1
Brackett-Rock outcrop complex (BiD)	D	1-2
Volente silty clay loam (VoD)	C	4-5

** Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

   Applicant's Site Plan Scale: 1" = _'
   Site Geologic Map Scale: 1" = 300'
   Site Soils Map Scale (if more than 1 soil type): 1" = 1,000 '

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.

☐ Other method(s). Please describe method of data collection: _____

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.
12. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☐ Geologic or manmade features were not discovered on the project site during the field investigation.

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☒ There are 3 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☒ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

    ☐ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

15. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

Attachment A

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Provence Phase 2 (Sections 1, 2, and 3), Hamilton Pool Road, Austin Travis County, Texas

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
WW1	30.31483	98.024	MB	30	Kgru									0	30	x		x		Hilltop
CIS1	30.31482	98.024	MB	30	Kgru									0	30	x		x		Hilltop
WW2	30.314667	98.02567	MB	30	Kgru									0	30	x		x		Hilltop
WW3	30.302167	98.03133	MB	30	Kgru									0	30	x		x		Hilltop
Q1	30.30133	98.03233	MB	30	Kgru									5	35	x		x		Hillside

* DATUM NAD27

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

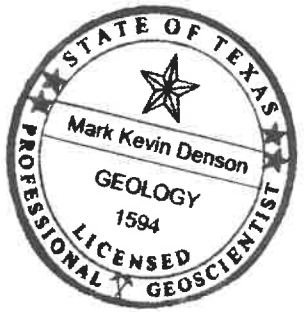
I have read, I understood, and I have followed the Texas Natural Resource Conservation Commission's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by 30 TAC 213

Date 9/7/2025

TNRCC-0585-Table (Rev. 5-1-02)

Sheet 1 of 1



Attachment B

Stratigraphic Column
Provence Phase 2 (Sections 1, 2, and 3)
North of Hamilton Pool Road
Austin, Travis County, Texas

HYDROGEOLOGIC SUBDIVISION	FORMATION	THICKNESS (feet)	LITHOLOGY
Edwards Aquifer	Walnut Formation	50	Limestone, marl, and dolomitic limestone
Lower confining unit	Glen Rose limestone	380	Dolomitic limestone interbedded with marl in alternating resistive and recessive beds

Source: Senger, Collins and Kreitler, 1990

9/7/2025

STATE OF TEXAS
Mark Kevin Denson
GEOLOGY
1594
LICENSED
PROFESSIONAL GEOSCIENTIST

Terracon

ATTACHMENT C
SITE-SPECIFIC GEOLOGY

The Geologic Assessment (GA) of the Provence Phase 2 (Sections 1, 2, and 3) site was performed by Kevin Denson, P.G., of Terracon. The approximate 230-acre site is located north of Hamilton Pool Road at its intersection with Martinet Drive. The property is characterized as ranchland and is undeveloped with the exception of several barns, wellhouses, and other small structures. The site is vegetated with a mix of native hardwoods, mostly Ashe Juniper and Live Oak, interspersed with areas of native grasses. Exhibit 1 (attached) is a site location map depicting the site in relation to the surrounding area. The areas immediately surrounding the site are a mix of residential and undeveloped properties. The site is characterized as gently to steeply sloping, and Little Barton Creek traverses the southern portion of the site adjacent to the proposed Sections 1 and 2. Site elevation ranges from about 1,234 to 1,110 feet above mean sea level (msl).

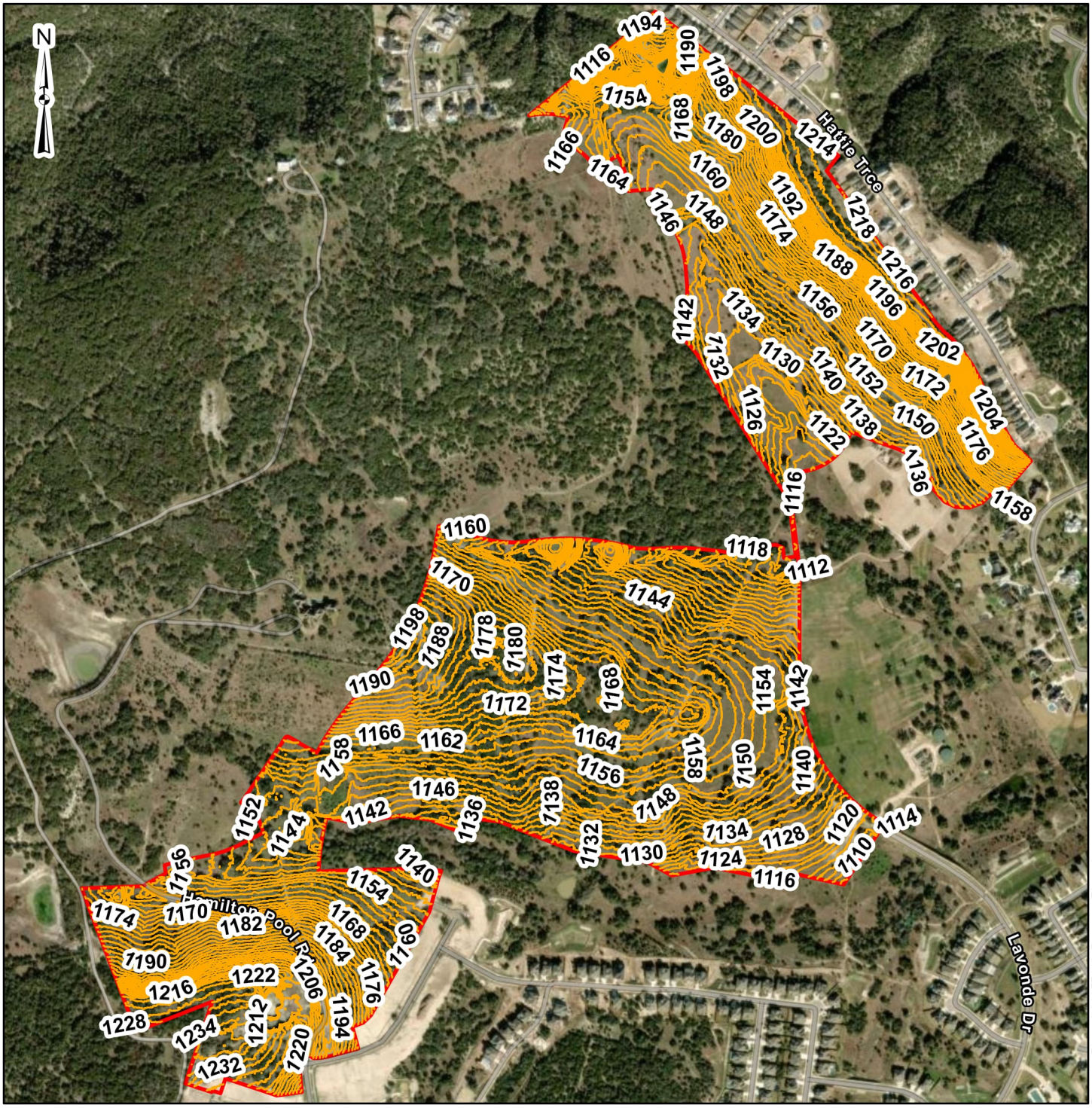
The surficial geologic units present at the site have been identified as the Walnut Formation and the Glen Rose Formation. The Walnut Formation underlies the Edwards Formation and consists of a hard, fine to medium grained limestone and marl. The Walnut Formation is about 50 feet thick in the area and represents a transgressive facies separating the Edwards from the underlying Glen Rose Formation. The Glen Rose Formation forms the lower confining unit to the Edwards aquifer and generally consists of a yellowish-tan, thinly bedded limestone and marl. The upper member of the Glen Rose (present on the site) consists of shale and marl alternating with thin beds of limestone and dolomite. This alternating bedding forms the typical stairstep topography observed in outcrops in the area. A stratigraphic column prepared for the site is attached. Exhibit 3 (attached) is a geologic map of the site.

Exposure of the geologic units is typically obscured by soil in gently sloping areas, with good exposure in more steeply sloping areas associated with dry, intermittent drainages. No faulting was observed on the site and the nearest mapped fault is located approximately 11 miles southeast of the site. The fault, locally referred to as the Mount Bonnell Fault, trends toward the northeast and is associated with the Balcones Fault zone, which represents the dominant structural trend in the vicinity of the site.

The site is located predominantly within the Edwards Aquifer Contributing Zone, with the exception of a small area in the far northern portion of Section 3. A GA was required for the site due to the proposed use of a Contributing Zone Plan with Optional Enhanced Measures (CZP-OEM). Exhibit 4 is an Edwards Aquifer Zones map depicting the site. The completed Geologic Assessment form and Geologic Assessment Table are attached.

No sensitive geologic features were observed on the site. A total of three water wells, one apparent cistern, and a historic quarry were observed in the locations depicted on Exhibit 3. If no further use is intended for the water wells as part of the proposed site development, then they should be properly plugged and abandoned in accordance with applicable regulations. A review of the Texas Water Development Board (TWDB) Water Data Interactive website did not identify information regarding the water wells.

Since the site is not located within the Recharge Zone of the Edwards Aquifer, there is no potential for recharge to the Edwards Aquifer at the site.



DATA SOURCES:
Esri Community Maps Contributors, City of Austin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Project No.:	96257140
Date:	Jul 2025
Drawn By:	RC
Reviewed By:	KD

terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

Site Specific Topography

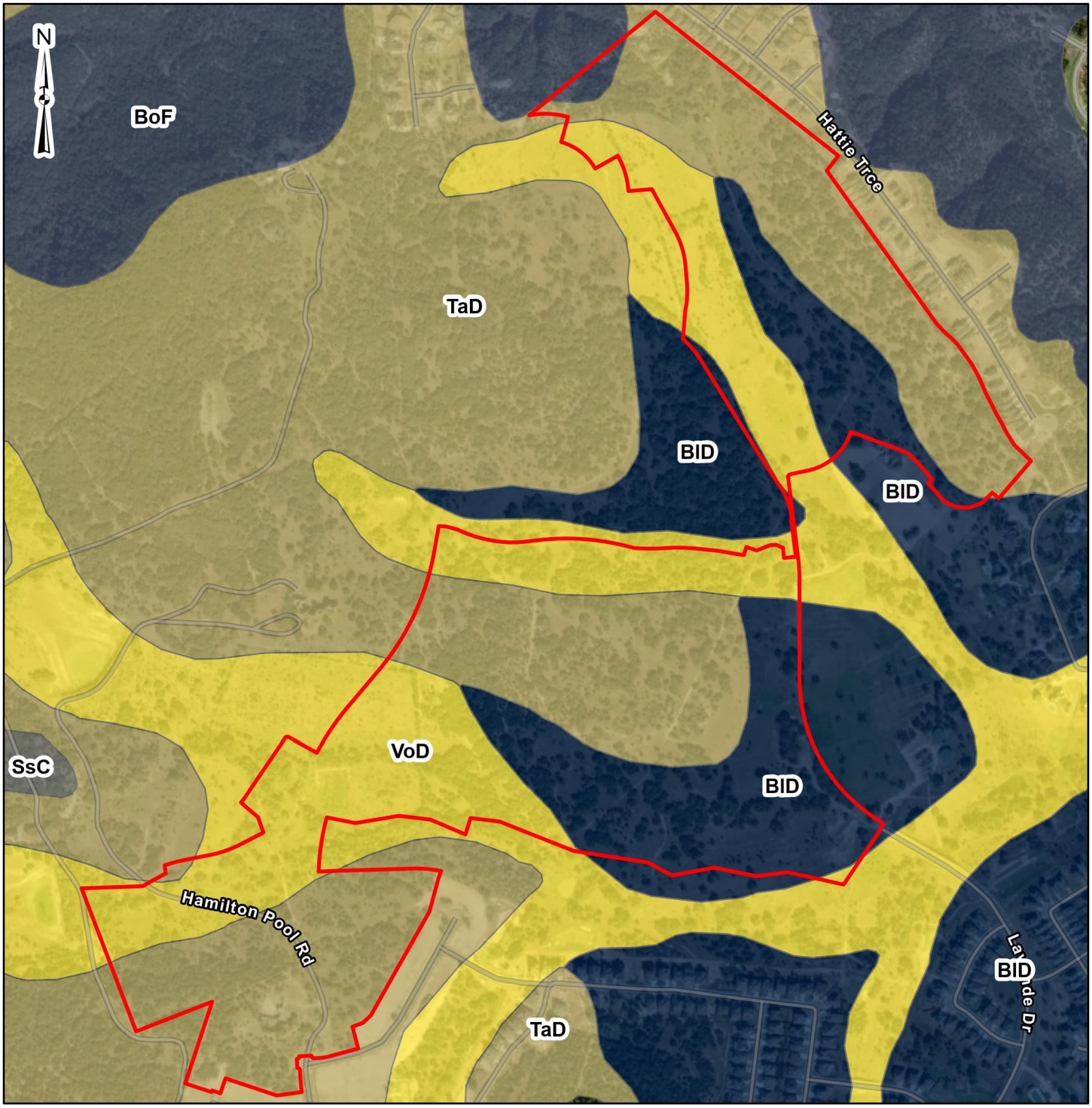
Provence Phase II - Sections 1, 2, and 3

Lavonde Drive at Montage Drive
Austin, Travis County, Texas

Exhibit

1.0

G:\0096\Projects\2025\96257140_ProvencePhase2\Maps\96257140_ProvencePhase2.aprx



Approximate Project Boundary

USDA Web Soil Survey Map Units

- Brackett-Rock outcrop complex (BID)
- Brackett-Rock outcrop-Real complex (BoF)
- Speck clay loam (SsC)
- Eckrant very stoney clay (TaD)
- Volente silty clay loam (VoD)

0 500 1,000 2,000 Feet

DATA SOURCES:
Esri Community Maps Contributors, City of Austin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Project No.:	96257140
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Reviewed By:	KD

terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

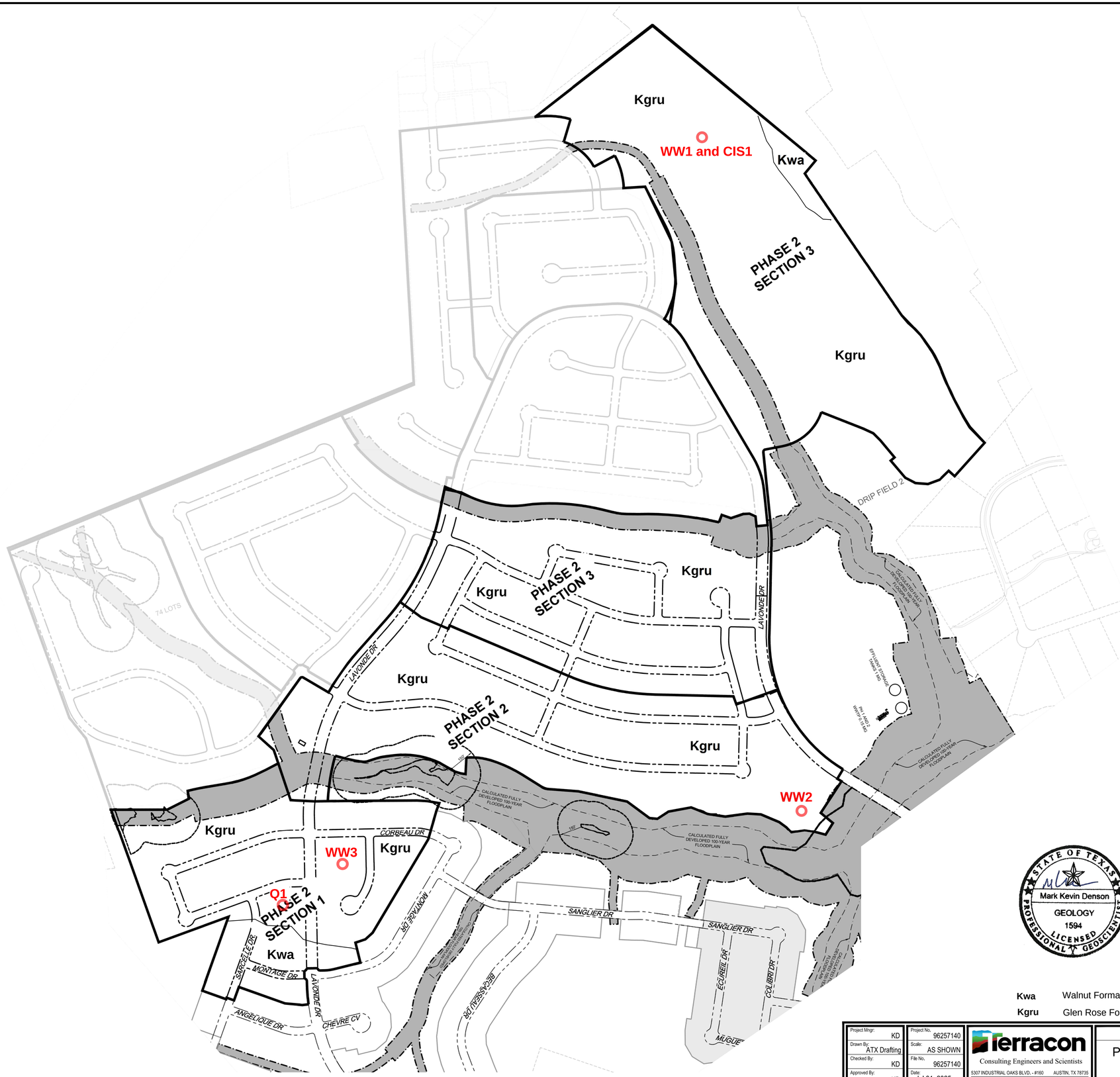
USDA Site Soil Map

Provence Phase II - Sections 1, 2, and 3

Lavonde Drive at Montage Drive
Austin, Travis County, Texas

Exhibit

2.0



N

T

300 0 150 300

APPROXIMATE SCALE IN FEET

STATE OF TEXAS
Mark Kevin Denson
GEOLOGY
1594
LICENSED
PROFESSIONAL GEOSCIENTIST

LEGEND

- Site Boundary
- Road ROW
- 100-Year Floodplain
- Geologic Contact

Kwa Walnut Formation

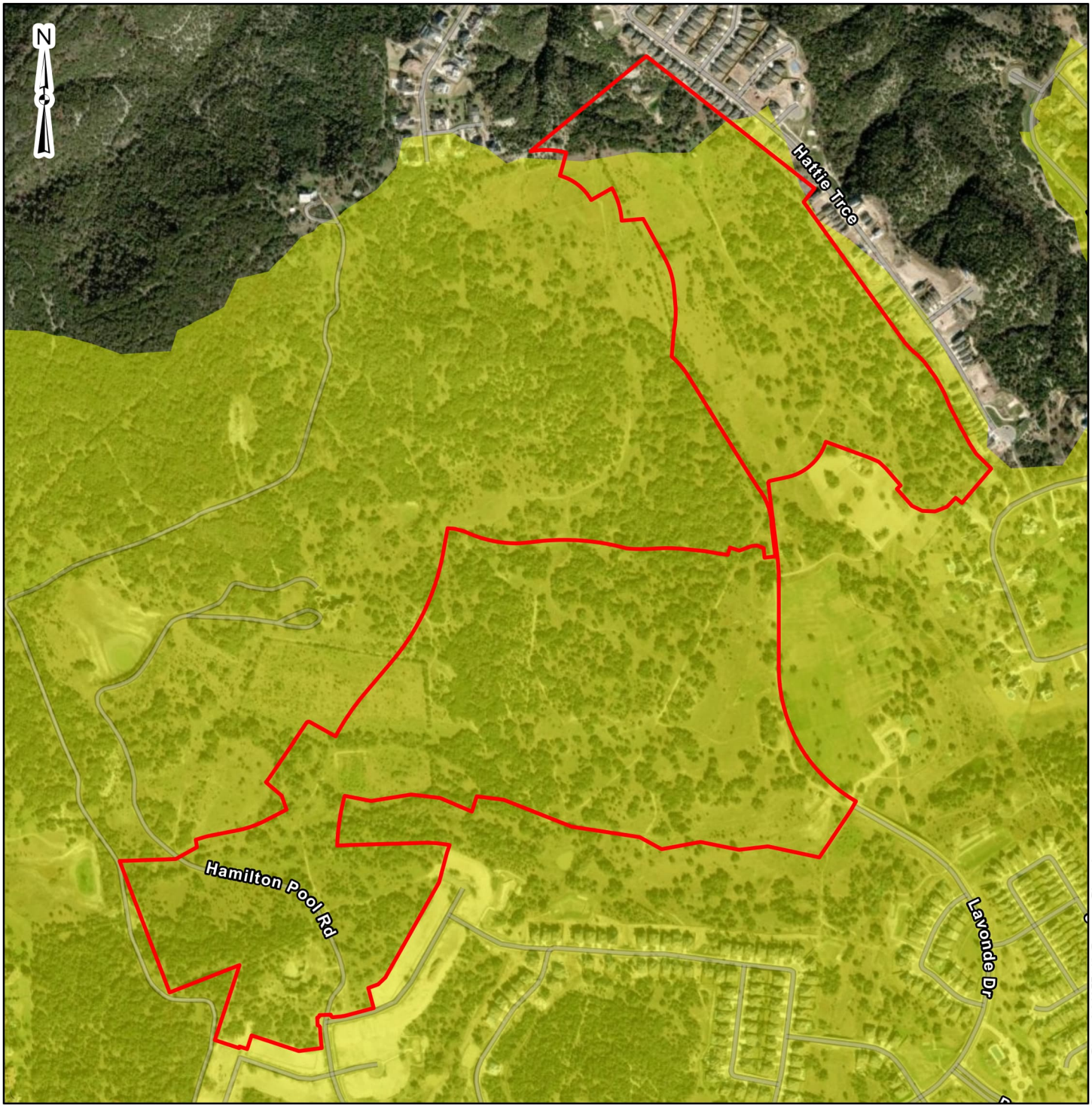
Kgru Glen Rose Formation

Kgru Geologic Formation

Feature ID

Project Mngr: KD	Project No. 96257140	Terracon Consulting Engineers and Scientists	SITE DIAGRAM
Drawn By: ATX Drafting	Scale: AS SHOWN	5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735	Provence Phase 2 - Sections 1, 2, & 3
Checked By: KD	File No. 96257140	PH. (512) 442-1122 FAX (512) 442-1181	Lavonde Drive at Montage Drive
Approved By: KD	Date: Jul 31, 2025		Austin, Travis County, Texas

EXHIBIT 3



Approximate Project Boundary

Edwards Aquifer Contributing Zone

0 500 1,000 2,000 Feet

DATA SOURCES:
Esri Community Maps Contributors, City of Austin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Project No.:	96257140
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Reviewed By:	KD

terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

Edwards Aquifer Zones

Provence Phase II - Sections 1, 2, and 3

Lavonde Drive at Montage Drive
Austin, Travis County, Texas

Exhibit

4.0

G:\0096\Projects\2025\96257140_ProvencePhase2\Maps\96257140_ProvencePhase2_aprx

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

I Jack Meredith,
Print Name

CFO,
Title - Owner/President/Other

of Masonwood HP II LLC,
Corporation/Partnership/Entity Name

have authorized Alan Putnam, P.E.
Print Name of Agent/Engineer

of Moody Engineering, Inc.
Print Name of Firm

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

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

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

3/5/2025
Date

THE STATE OF Texas §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared March 5th 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 5th day of March, 2025.

NINA ZAVALA
Notary ID #129918883
My Commission Expires
June 7, 2025

Nina Zavala
NOTARY PUBLIC

Nina Zavala
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: June 7, 2025

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Provence Phase 2 Section 3

Regulated Entity Location: Off Hamilton Pool Rd, 3.7 miles from Hwy 71, Travis County

Name of Customer: Masonwood HP II LLC

Contact Person: Jack Meredith Phone: 512-306-8300

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

☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ San Antonio Regional Office

☐ Overnight Delivery to: TCEQ - Cashier
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	50.30 Acres	$ 6,500
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
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: 9/3/2025

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions 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.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ 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) 8/1/2025

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

Masonwood HP II 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)*
0805955711	32099356373		137251770

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

4501 WESTBANK DR, BLDG. A, STE. 110

City	Austin	**State**	TX	**ZIP**	78746	**ZIP + 4**	7407

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)*

(512) 306-8300		( ) -

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.)*

Provence Phase 2 Section 2

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City	Austin	**State**	TX	**ZIP**	78733	**ZIP + 4**	
24. County	Travis							

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

25. Description to Physical Location:	This site is located in western Travis County, on the north side of Hamilton Pool Road 0.5 miles north (east) of the Hamilton Pool Road/Crumley Ranch Road Intersec on. This site lies within the Provence development.				
26. Nearest City			**State**	**Nearest ZIP Code**	
Bee Cave					
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:	30.306389		**28. Longitude (W) In Decimal:**	-98.031389	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
1521		236115	

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

DEVELOPMENT

34. Mailing Address:	**16314 Hamilton Pool Road**							
	City	**Austin**	**State**	**TX**	**ZIP**	**78738**	**ZIP + 4**	**7407**
35. E-Mail Address:	**Jack@masonwoodtx.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 306-8300		( ) -

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.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Leo Ramirez		41. Title:	Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(512) 502-8333	117	( ) -	leo@moodyengineering.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:	Masonwood HP II LLC	Job Title:	CFO	
Name *(In Print)*:	Jack Meredith	Phone:	(512) 306- 8300	
Signature:		Date:	9/3/2025	

Moody Engineering, Inc.

9225 Bee Caves Road
Bldg. A, Suite 200
Austin, Texas 78733

Telephone: (512)502-8333
Toll Free: (800)821-9112
Fax: (512)502-8334
MOODYENGINEERING.COM

September 4, 2025

Ms. Lori Wilson
Regional Director
Texas Commission on Environmental Quality-Region 11
MC R11
P.O. Box 13087
Austin, Texas 78711-3087

RE: Provence Phase 2 – Section 2 Subdivision Improvements
TCEQ OEM Compliance
MEI 2018.227.22

Dear Mr. Van Soest,

The purpose of this letter is to provide TCEQ a summary of how the proposed Provence Phase 2, Section 2 subdivision will comply with the Optional Enhanced Measures (OEM) for the Protection of Water Quality in the Edwards Aquifer as listed in RG-348, Appendix A. No variances from the OEMs are requested. This submittal is enclosed with a Contributing Zone Plan (CZP) as required for a project located within the Contributing Zone to the Edwards Aquifer.

Site Planning

A Geologic Assessment was prepared by Southwest Geoscience dated March 2014 and is provided in the CZP. This report indicates that there are no sensitive features, based on the assessment by Southwest Geoscience staff within the subject site.

The guidelines set forth in RG-348A for stream buffer setbacks have been applied to the site;

- Streams draining between 5 and 40 acres should have a minimum buffer of 25 feet from the centerline.
- Streams draining between 40 and 128 acres should have a minimum buffer of 50 feet from the centerline.

- Streams draining between 128 and 320 acres should have a minimum buffer of 100 feet from the centerline.
- Streams draining between 320 and 640 acres should have a minimum buffer of 200 feet from the centerline.
- Streams draining more than 640 acres should have a minimum buffer of 300 feet from the centerline.

Temporary rock berms are proposed during construction to reduce flow velocities and minimize construction sediment from leaving the site.

Construction:

Most of the property drains towards the northeast into a natural drainage way that drains to Little Barton Creek. The proposed development will have an increase in impervious cover and subsequently, more runoff. This increase in runoff will be negated by onsite water quality ponds and a regional detention pond built with Section 1. TCEQ requires at least eighty percent (80%) of the increase in TSS load for the developed site to be mitigated. Calculations are provided in the CZP and a summary is provided in the construction plans.

Erosion controls will follow the recommendations in RG-348.

Prior to site clearing, grading, and excavation, the stabilized construction entrance, tree protection, and silt fencing will be installed at the downstream edge of disturbed areas where shallow sheet runoff occurs. The water quality ponds will act as a sediment trap for the project during construction. During all aspects of construction, the contractor shall maintain these controls. The contractor will be responsible for stabilization practices (revegetation). The contractor will be responsible for removing the temporary controls once the revegetation is established.

Permanent BMP Implementation

The proposed permanent best management practices (BMP's) for this project include extended detention ponds. The required 80% reduction of the annual TSS loading is achieved using this BMP design. Calculations are provided in the CZP.

Measures to Protect Stream Morphology

RG-348A requires demonstration of the limitation of stormwater runoff to protect stream morphology. The peak rate of runoff for the 2-year, 24-hour storm will be limited to 50% of the undeveloped rate of runoff. Also, the 10-, 25-, and 100-year, 24-hour storm peak runoff rate will be limited to the rate of runoff calculated for the undeveloped condition based on City of Austin design criteria, using the proposed stormwater detention facilities. The regional detention pond that serves all of phase 1 was built with section 1 and Table 1 below demonstrates the Stream Morphology 2-year and 10-year storm requirements for this site. Additionally, see attached for TCEQ OEM Drainage Analysis.

Table 1

Provence Phase 2 Section 2 TCEQ OEM DRAINAGE ANALYSIS				
		Impervious	Existing Conditions	
ID	Area (ac)	Cover (%)	2-Year	10-Year
DA-1	35.66	0.0%	115.2	210.1
DA-2	18.48	0.0%	60.4	110.0
DA-3	23.11	0.0%	67.6	123.6
POI-A			**115.2**	**210.1**
POI-B			**60.4**	**110.0**
POI-C			**67.6**	**123.6**
		Impervious	Proposed Conditions	
ID	Area (ac)	Cover (%)	2-Year	10-Year
PROP-1	14.64	15.37%	52.2	92.2
PROP-2	13.75	17.53%	57.3	100.4
PROP-3	30.25	40.46%	126.9	211.6
OFF-1	10.34	0.00%	33.9	61.7
OFF-2	4.32	0.00%	16.5	30.2
POI-A			**21.4**	**121.7**
POI-B			**57.3**	**100.4**
POI-C			**26.4**	**152.9**

Maintenance Requirements

Masonwood HP II LLC, will own and operate all best management practices within the Provence Phase 2 development. The developer's contractor will construct and operate the facilities per the maintenance plan during the warranty period, after which time responsibility for the maintenance plan will be transferred to the MUD.

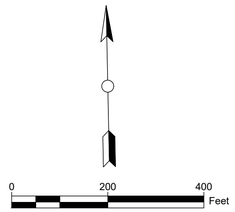
Please see the attached maintenance plan for the project in the CZP.

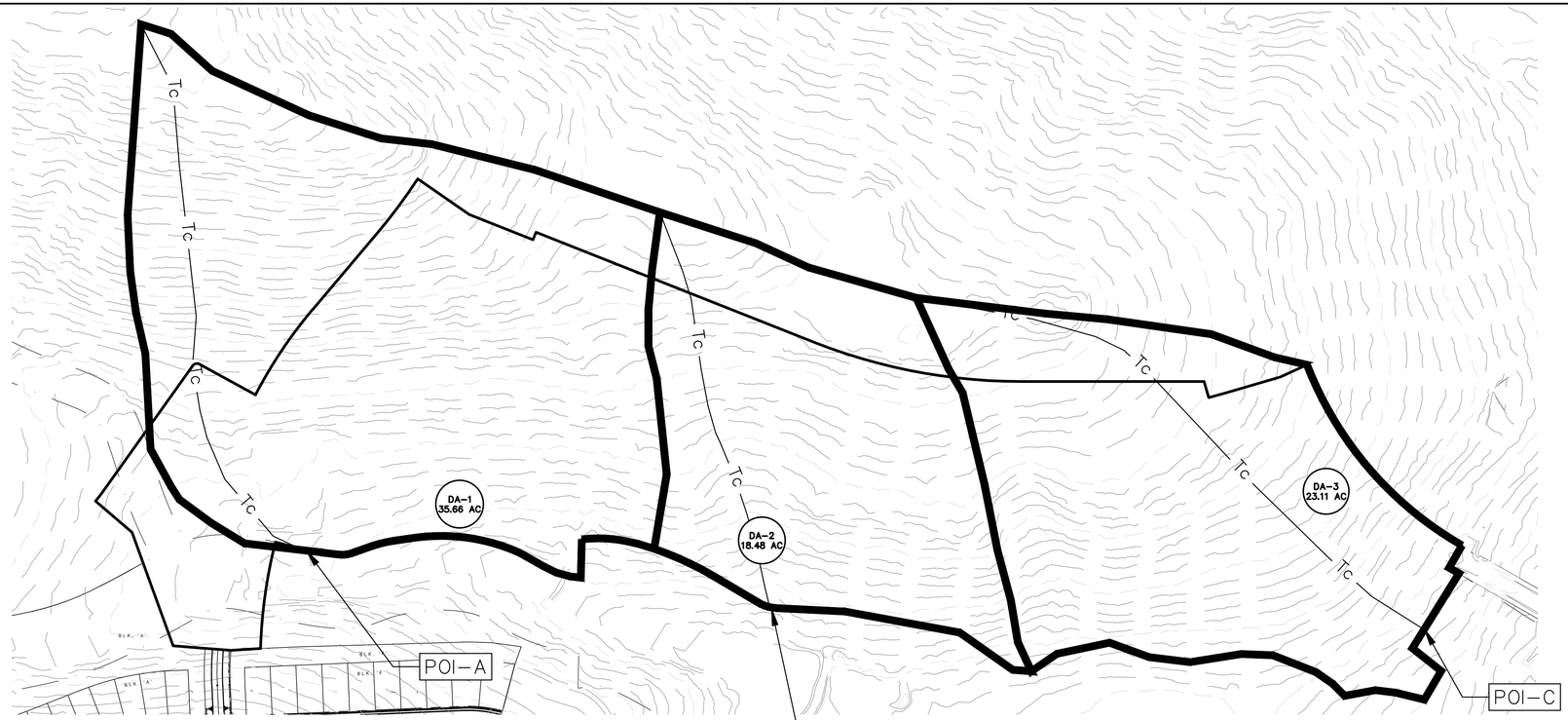
Sincerely,

Joshua F. Henke, P.E.
Project Manager

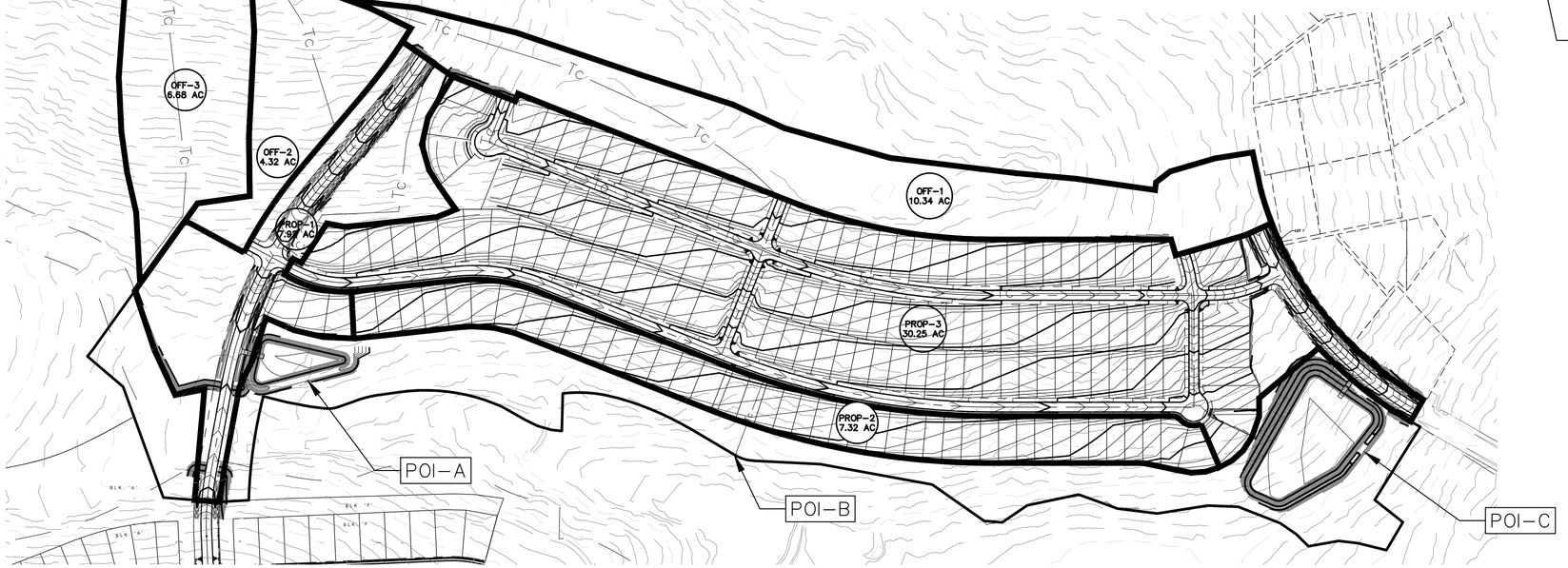
P:\Active Projects\2018-227 Provence\22-Phase_2_Sec_2\CZP\Documents\7 - TCEQ CZP OEM Letter - Phase 2 Section 2.docx

Provence Phase 2 Section 2 TCEQ OEM Drainage Analysis		
	Existing Conditions	
ID	2-Year	10-Year
POI-A	115.2	210.1
POI-B	60.4	110
POI-C	67.6	123.6
	Proposed Conditions	
ID	2-Year	10-Year
POI-A	21.4	121.7
POI-B	57.3	100.4
POI-C	26.4	152.9





EXISTING DRAINAGE AREA MAP



PROPOSED DRAINAGE AREA MAP

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
(512) 502-8333
TBPE FIRM REG. NO. F-18320

EXHIBIT A
TCEQ OEM DRAINAGE ANALYSIS

PROVENCE PHASE 2 SECTION 2
TRAVIS COUNTY, TEXAS

SEP 2025

2018-227

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Moody Engineering, Inc.