QUIDDITY

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CONTRIBUTING ZONE PLAN APPLICATION

FOR

Ra Ra at Liberty Hill
WILLIAMSON COUNTY, TEXAS

Prepared for
Lux at Gateway, LP, a Texas Limited Partnership

07/28/2023

JULY 2023
Job No. 17207-0002-01

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: Ra Ra at Liberty Hill					**2. Regulated Entity No.:**				
3. Customer Name: Lux at Gateway, LP, a Texas Limited Partnership					**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):**		21.337	
9. Application Fee:	$6,500		**10. Permanent BMP(s):**			Batch Detention Basin			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Williamson		**14. Watershed:**			South Fork San Gabriel River			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
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 _X_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. Eric C Vann, P.E.
Print Name of Customer/Authorized Agent Eric Vann 07/28/2023
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):	

QUIDDITY

CONTRIBUTING ZONE PLAN APPLICATION

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: Eric C. Vann, P.E.

Date: 07/28/2023

Signature of Customer/Agent:

Regulated Entity Name: Ra Ra at Liberty Hill

Project Information

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

   Contact Person: Ramana Korada
   Entity: Lux at Gateway, LP, a Texas Limited Partnership
   Mailing Address: 2701 Dallas Pkwy, Suite 380
   City, State: Plano, Texas Zip: 75093
   Telephone: (214) 799 - 9127 Fax: _____
   Email Address: ramana@aspireventures.us

5. Agent/Representative (If any):

   Contact Person: Eric Vann
   Entity: Quiddity Engineering, Inc.
   Mailing Address: 101 E Old Settles Blvd, Suite 280
   City, State: Round Rock, Texas Zip: 78665
   Telephone: (512) 685 - 5138 Fax: _____
   Email Address: evann@quiddity.com

6. Project Location:

   ☒ The project site is located inside the city limits of Liberty Hill.
   ☐ 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 project site is located in Liberty Hill, Texas on the north side of CR 259 (Seward Junction Loop). US Highway 183 is the main roadway that would be used to get to the site from either Liberty Hill or Austin. The access driveway is off CR 259 and is approximently 500 feet east of the intersection of US Highway 183 and CR 259.

8. ☒ **Attachment A - Road Map**. A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.

9. ☒ **Attachment B - USGS Quadrangle Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) clearly show:

   ☒ Project site boundaries.
   ☒ USGS Quadrangle Name(s).

10. ☒ **Attachment C - Project Narrative**. A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:

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

11. Existing project site conditions are noted below:

☐ Existing commercial site
☐ Existing industrial site
☐ Existing residential site
☐ Existing paved and/or unpaved roads
☒ Undeveloped (Cleared)
☐ Undeveloped (Undisturbed/Not cleared)
☐ Other: _____

12. The type of project is:

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

13. Total project area (size of site): 21.337 Acres

    Total disturbed area: 17.497 Acres

14. Estimated projected population: 627

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	160,026	÷ 43,560 =	3.67
Parking	248,882	÷ 43,560 =	5.71
Other paved surfaces	46,073	÷ 43,560 =	1.06
Total Impervious Cover	454,981	÷ 43,560 =	10.44

Total Impervious Cover 10.44 **÷ Total Acreage** 21.337 **X 100 =** 48.93**% 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 Liberty Hill (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" = 60 '.

35. 100-year floodplain boundaries:

    ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

    ☒ No part of the project site is located within the 100-year floodplain.

    The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA firm panel #48491C0275E, dated August 26, 2008.

36. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.

    ☐ The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot contour intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

38. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

39. ☒ Areas of soil disturbance and areas which will not be disturbed.

40. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

41. ☒ Locations where soil stabilization practices are expected to occur.

42. ☒ Surface waters (including wetlands).

    ☐ N/A

43. ☒ Locations where stormwater discharges to surface water.

    ☐ There will be no discharges to surface water.

44. ☐ Temporary aboveground storage tank facilities.

    ☒ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

    ☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

47. ☒ Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

    ☐ N/A

48. ☒ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

    ☒ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

    ☐ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____.

    ☐ N/A

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

    ☐ N/A

50. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
☒ The site will not be used for low density single-family residential development.

51. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

☐ **Attachment I - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
☒ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
☐ The site will not be used for multi-family residential developments, schools, or small business sites.

52. ☒ **Attachment J - BMPs for Upgradient Stormwater**.

☐ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
☒ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

53. ☒ **Attachment K - BMPs for On-site Stormwater**.

☒ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

54. ☒ **Attachment L - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

☐ N/A

55. ☒ **Attachment M - Construction Plans**. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☐ N/A

56. ☒ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

☒ Prepared and certified by the engineer designing the permanent BMPs and measures
☒ Signed by the owner or responsible party
☒ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
☒ Contains a discussion of record keeping procedures

☐ N/A

57. ☐ **Attachment O - Pilot-Scale Field Testing Plan**. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

☒ N/A

58. ☒ **Attachment P - Measures for Minimizing Surface Stream Contamination**. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that result in water quality degradation.

☐ N/A

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

59. ☒ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be

responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

60. ☒ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

Administrative Information

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

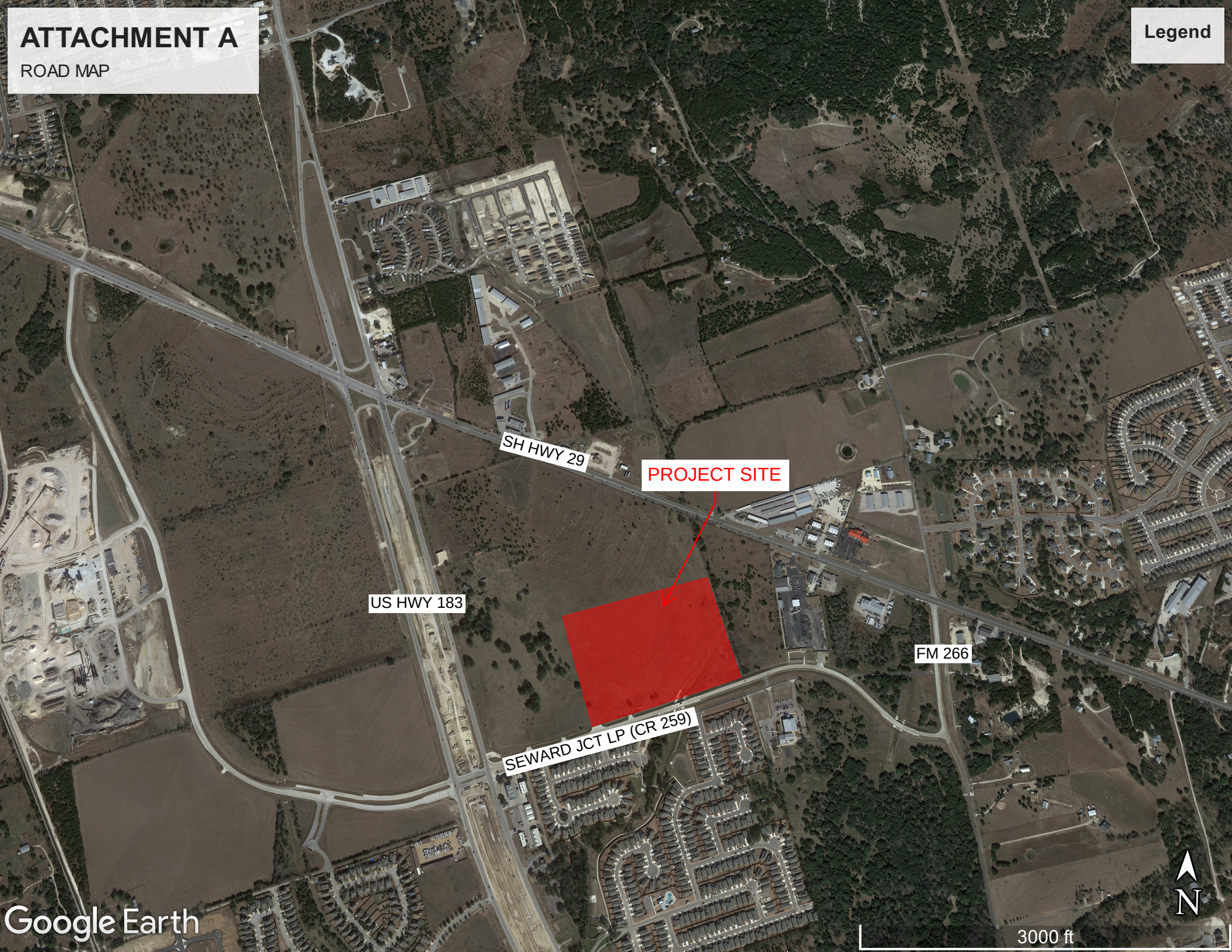
62. ☒ Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

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

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

ATTACHMENT A

ROAD MAP



ATTACHMENT B
USGS QUADRANGLE MAP

USGS science for a changing world

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

LEANDER NE QUADRANGLE
TEXAS - WILLIAMSON COUNTY
7.5-MINUTE SERIES

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, August 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 1979 - 2021
Hydrography.....National Hydrography Dataset, 2002 - 2021
Contours.....National Elevation Dataset, 2004
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
0°36' 11 MILS
3°46' 67 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
PV
00
PU
Grid Zone Designation 14R

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1 2 3
4 5
6 7 8
ADJOINING QUADRANGLES

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

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

LEANDER NE, TX
2022

NSN 7643016396982
NGA REF NO. USGSX24K22239

Attachment C

PROJECT DESCRIPTION

The proposed Ra Ra at Liberty Hill project consists of a 21.337-acre tract of land situated in the John B Robinson Survey, Abstract No. 521, in Williamson County, Texas. And being that certain 21.337-acre tract conveyed to LUX AT GATEWAY, LP, a Texas limited partnership, by Special Warranty Deed in Document No. 2023027872, of the Official Public Records of Williamson County, Texas that includes Lot 1, Block A, GUNNER SE MULTI-FAMILY SUBDIVISION, a subdivision in Williamson County, Texas, according to the map or plat thereof, recorded under Document No. 2023024930 of the Official Public Records of Williamson County, Texas. Said 21.337-acre tract will be developed into a multifamily residential lot.

The project site is located in West Williamson County, approximately five hundred (500) feet east of the intersection of US Highway 183 and County Road 259 (Seward Junction Loop). The site is within the city limits of Liberty Hill. This project lies in the contributing zone of Edwards Aquifer Recharge Zone.

The existing site is undeveloped but has been cleared. There are a number of existing easements located at the east side of the site, including drainage and utility easements. No part of the project site falls within the 100-year floodplain per FEMA firm panel #48491C0275E, dated September 26, 2008.

The project will include the construction of buildings, streets, sidewalks, a swimming pool, drainage facilities, sanitary sewer, water lines, and utility services. Approximately 10.44 acres of impervious cover (48.92% of the site, Total Treatment Required 9,085 lbs.) is proposed for construction. The proposed permanent best management practices (PBMPs) utilized on the site will achieve 80% removal of Total Suspended Solids (TSS).

Proposed PBMPs for the site is a Batch Detention Basin designed in accordance with TCEQ's Technical Guidance Manual (TGM) RG-348 (rev. 2005) to remove at least 80% TSS from the proposed improvements. The Batch Detention Basin will capture and treat an area of 16.09 acres (75.41% of the site, TSS Removed 9,085 lbs.). Upgradient runoff from the undeveloped offsite areas draining towards the site will be redirected through a grassy swale along the north side of the property to the drainage channel east of the site. Therefore, the upgradient stormwater will no longer enter the site and will not be captured in the proposed PBMPs.

Attachment D

FACTORS AFFECTING SURFACE WATER QUALITY

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site during construction include:

- Soil erosion due to clearing of the site.
- Contamination from construction equipment and vehicles, fuel, oil, and grease.
- Mud or dirt may be tracked onto streets from construction areas.
- Fine particles may be washed from non-stabilized surfaces.
- Hydrocarbons from asphalt paving operations.
- Concrete truck washout.
- Trash and litter from material wrapping and construction workers.
- Debris from the site may leave the site by person, vehicle, or construction equipment.
- Potential overflow/spills from portable toilets.

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site after development include:

Vehicular Traffic

- Mud or fine particles dropped from vehicular traffic.
- Fluids may be dropped from vehicular traffic.
- Vehicular accidents within the site may spill fluids.

Landscape and Property Maintenance

- Pesticides or herbicides used for landscaping maintenance may not be applied at a proper rate and may leak into groundwater or runoff into surface drains.
- Litter that comes from the general public within the site or in the surrounding areas.
- Maintenance of the swimming pool may include various chemicals such as the following:
    - Chlorine (granular or table form), Muriatic Acid, Sodium Bisulfate, Calcium Chloride, Calcium Hypochlorite (granular powder), Sodium Carbonate, Sodium Bisulfate, Sodium Bicarbonate
    - These chemicals are generally sold in small quantities which typically do not exceed 5 gallons for liquid chemicals or 50 pounds for dry chemicals, however they could affect surface water quality if spilled.
- Organics from lawn mowing may wash into the storm drainage system.
- Vegetative surfaces may provide treatment of runoff from roofs or other impervious areas within developed lots.

Attachment E

VOLUME AND CHARACTER OF STORMWATER

The stormwater runoff from the site will increase as a result of the development. There will be a Batch Detention Basin constructed as part of the development to mitigate the post project peak runoff. For the 25-year storm event, the pre-project runoff downstream for this site is 153.1 cfs. The post-project runoff for this site will be equal or less than the pre-project runoff. Stormwater has been analyzed through using the NRCS Method outlined in Section 2, Determination of Storm Runoff, of the Round Rock Drainage Criteria Manual.

Attachment F

SUITABILITY LETTER FROM AUTHORIZED AGENT

The site does not have an on-site sewage facility.

Attachment G

ALTERNATIVE SECONDARY CONTAINMENT METHODS

The site does not have any permanent aboveground storage tanks.

Attachment H

AST CONTAINMENT STRUCTURE DRAWINGS

The site does not have any permanent aboveground storage tanks.

Attachment I

20% OR LESS IMPERVIOUS COVER DECLARATION

The site will be used for a multi-family residential development but has more than 20% impervious cover.

Attachment J

BMPs FOR UPGRADIENT STORMWATER

There is one 8.13-acre offsite drainage area which flows onto the north side of the property in existing conditions. Flows originating from this area will be diverted within a proposed drainage swale. These flows will be conveyed to an existing drainage channel located in the existing drainage easements dedicated in document numbers 2023022368 O.P.R.W.C.T., 2023023113 O.P.R.W.C.T., and 2018015412 O.P.R.W.C.T., to the east of the proposed development, to discharge into the South Fork San Gabriel River. There is no impervious cover in the offsite area.

Attachment K

BMPs FOR ON-SITE STORMWATER

The proposed Permanent Best Management Practice (PBMP) for stormwater treatment is one (1) Batch Detention Basin designed in accordance with TCEQ's Technical Guidance Manual (TGM) RG-348 (rev. 2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site.

Attachment L

BMPs FOR SURFACE STREAMS

The project site will discharge directly into a water quality batch detention pond and then ultimately discharge to South Fork San Gabriel River (classified segment number 1250).

Temporary BMP's

During construction, the following methods will be used to prevent pollutants from entering surface streams. See the Erosion Control plans in the construction plans (Appendix A) for greater detail (Sheets 6-12).

- Stabilized Construction Entrance/Exit
- Silt Fencing
- Inlet Protection
- Rock Berms
- Temporary Spoils Area
- Temporary Sediment Basin
- Construction Staging Area with Silt Fence Boundaries

Permanent BMP's

Runoff from the impervious areas of the site will be treated by the proposed batch detention pond prior to being discharged into the South Fork San Gabriel River.

Attachment M

CONSTRUCTION PLAN

The project will be developed as a multi-family residential development with more than 20% impervious cover, as shown on the site development plan. The on-site impervious cover consists of building footprints, paved road and parking areas, and walkways. See attached detention basin construction plans, notes, and details.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: CR 259 Multifamily
Date Prepared: 6/8/2023

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 =	Williamson	
Total project area included in plan * =	21.34	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	10.44	acres
Total post-development impervious cover fraction * =	0.49	
P =	32	inches
$L_{M\,TOTAL\,PROJECT}$ =	9091	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	16.09	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	10.44	acres
Post-development impervious fraction within drainage basin/outfall area =	0.65	
$L_{M\,THIS\,BASIN}$ =	9091	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Extended Detention
Removal efficiency = 91 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 =	16.09	acres
A_I =	10.44	acres
A_P =	5.64	acres
L_R =	10613	lbs

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

Desired $L_{M\,THIS\,BASIN}$ = 9091 lbs.

F = 0.86

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 =	1.38	inches
Post Development Runoff Coefficient =	0.46	
On-site Water Quality Volume =	36981	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 =	7396	
Total Capture Volume (required water quality volume(s) x 1.20) =	44378	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.

7. Retention/Irrigation System Designed as Required in RG-348 — Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = NA cubic feet

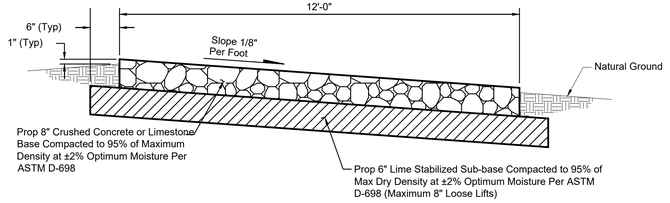
Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr
Irrigation area =	NA	square feet
	NA	acres

Enter determined permeability rate or assumed value of 0.1

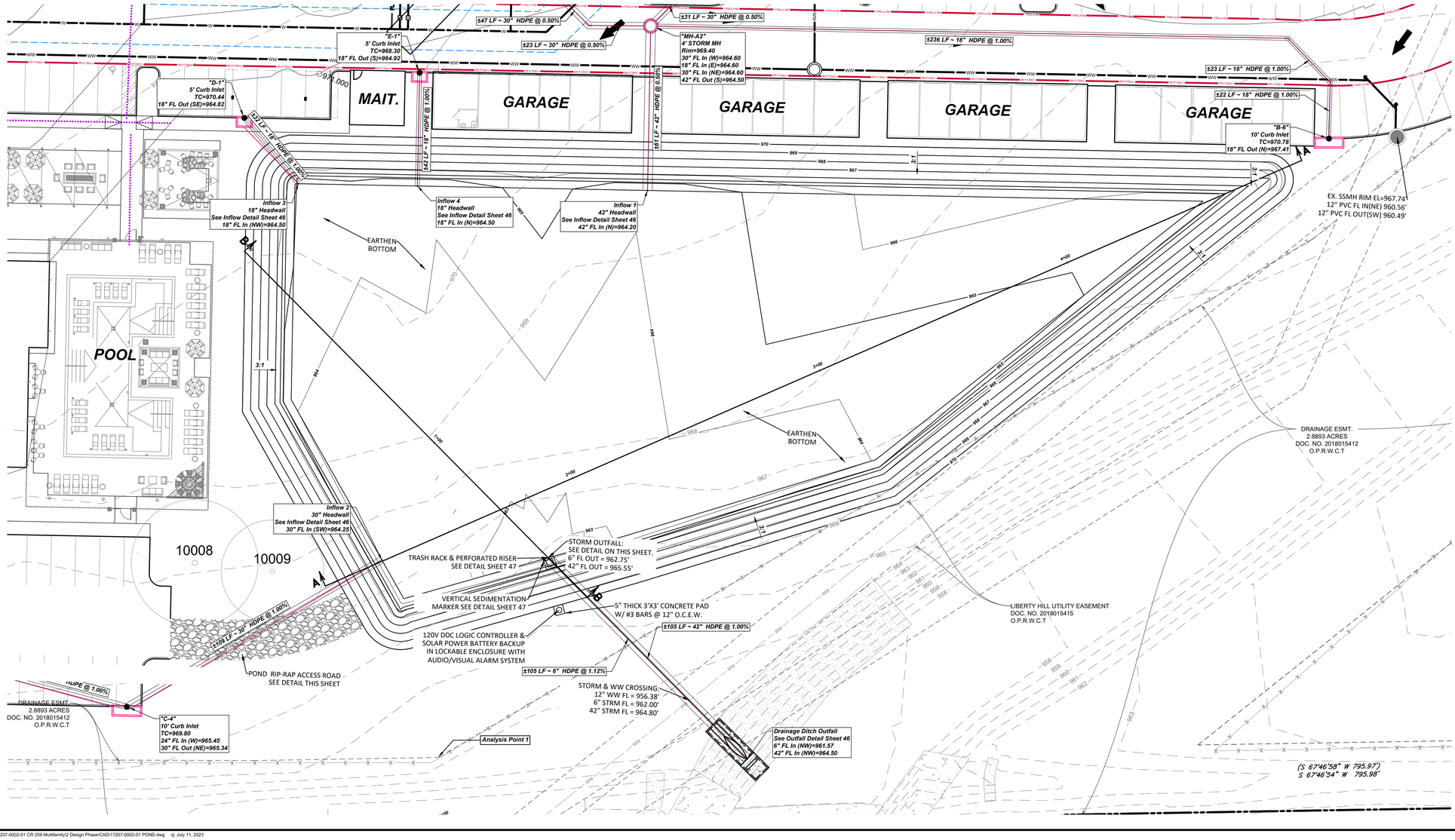
8. Extended Detention Basin System Designed as Required in RG-348 — Pages 3-46 to 3-51

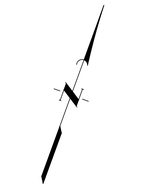
Required Water Quality Volume for extended detention basin = 44378 cubic feet



ACCESS ROAD - PAVEMENT SECTION

NOT TO SCALE





SCALE: 1" = 20'

EXISTING LEGEND

- WATER
- WASTEWATER
- STORM SEWER
- OVERHEAD ELECTRIC
- GROUND CONTOUR

PROPOSED LEGEND

- FIRE HYDRANT W/ GATE VALVE
- WATERLINE W/ GATE VALVE
- WASTEWATER W/ MANHOLE
- WASTEWATER W/ CLEANOUT
- STORM SEWER W/ MANHOLE
- CURB INLET
- GRATE INLET
- LANDSCAPE DRAIN
- GROUND CONTOUR

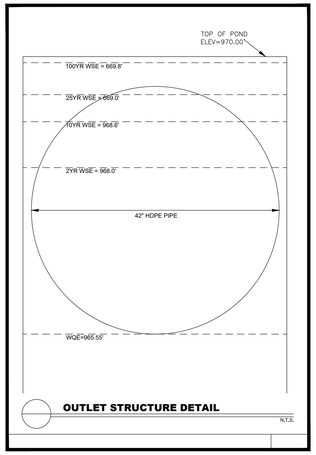
POND TABLE			
	WSE	STORAGE	DISCHARGE
	FEET	ACRE-FEET	CFS
2 YEAR	968.0	3.2	38.5
10 YEAR	968.6	3.8	52.4
25 YEAR	969.0	4.3	60.8
100 YEAR	969.8	5.2	73.4

POND STAGE STORAGE	
ELEV (FT)	VOL (CF)
962.75	0
963.00	58.94
964.00	6,458.43
965.00	28,629.05
965.55	45,456.35
966.00	60,955.29
967.00	87,372.38
968.00	141,420.43
969.00	186,329.36
970.00	234,152.19

Existing Vs Proposed Flows at Analysis Point 1		
	Existing	Proposed
Q2 (cfs)	67.1	57.8
Q10 (cfs)	118.6	88.8
Q25 (cfs)	153.1	108.9
Q100 (cfs)	210.7	141.8

NOTES:

1. FOR POND INFLOWS SEE STANDARD HEADWALL AND ENERGY DISSIPATERS DETAIL 508S-13 ON SHEET 46.



OUTLET STRUCTURE DETAIL

N.T.S.

No.	Date	REVISIONS	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23004 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN
DATE: 11/07/23
JOB NO.: 17207-0002-01
DESIGNED BY: CDJ
CHECKED BY: PKC
DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED
PROFESSIONAL ENGINEER
07/10/2023

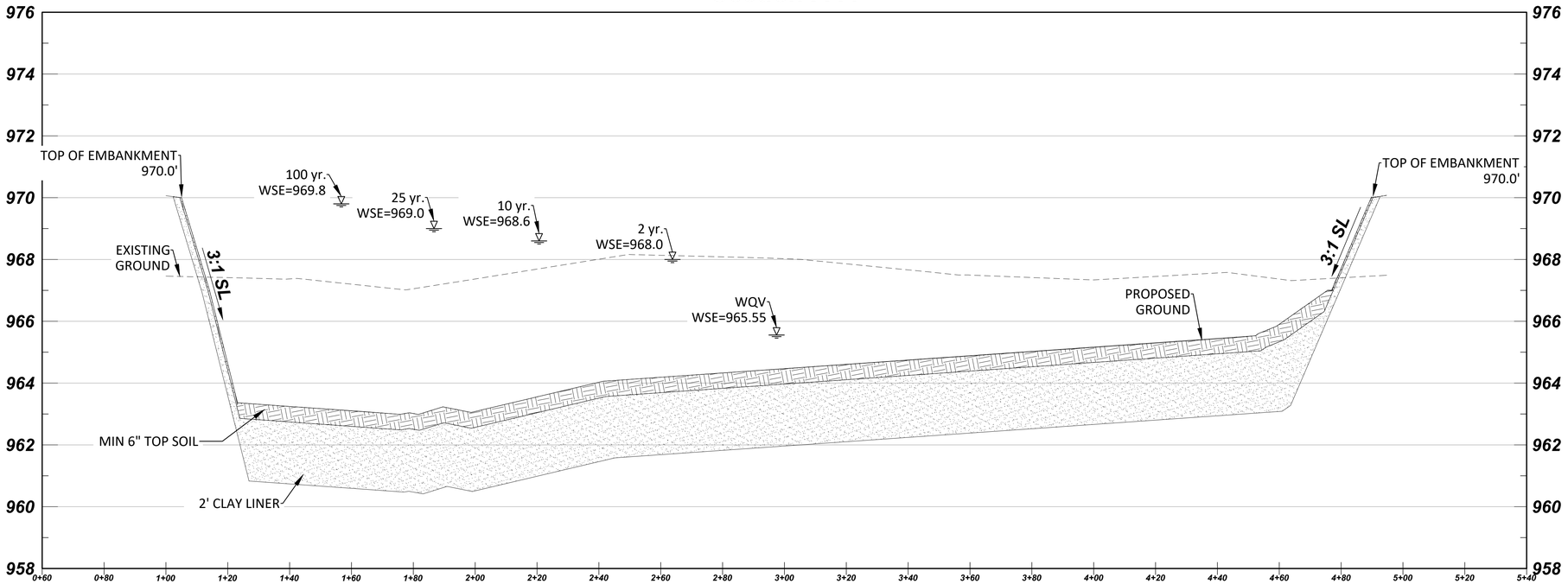
CR 259 MULTIFAMILY
CR 259

POND SHEET

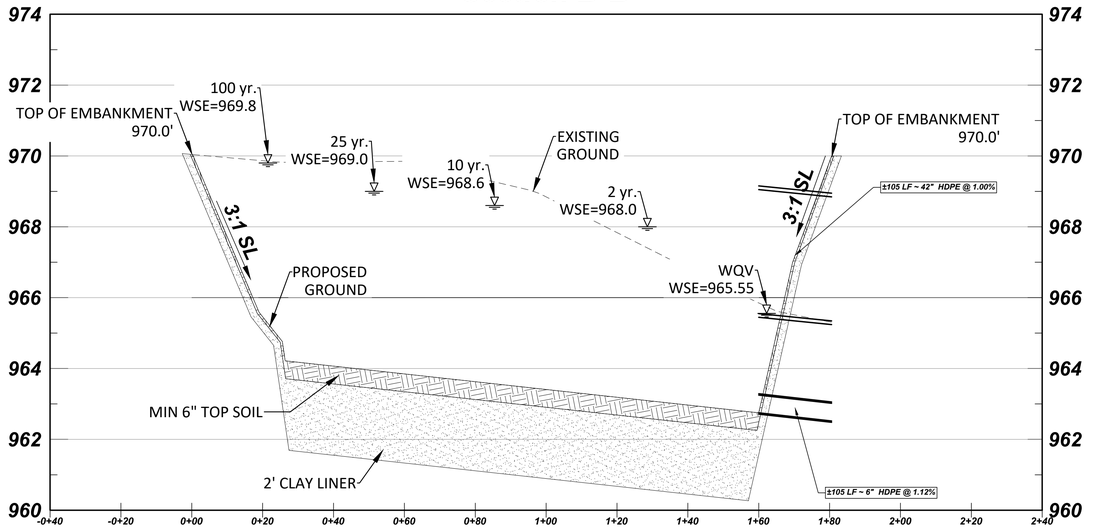
SHEET NO. 39
OF 50

K:\17207\17207-0002-01 CR 259 Multifamily\2 Design Phase\CAD\17207-0002-01 POND.dwg ej: July 11, 2023

Section A-A



Section B-B



REVISIONS

No.	Date	App.

QUIDDITY

Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN
DATE: 11/07/23
JOB NO.: 17207-0002-01

DESIGNED BY: CDJ
CHECKED BY: PKC
DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED
PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

POND PROFILE

SHEET NO. 40
OF 50

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.

— **Plan sheets submitted to the City of Austin MUST show the following:**

Direction of flow during grading operations.

Location, description, and calculations for off-site flow diversion structures.

Areas that will not be disturbed; natural features to be preserved.

Delineation of contributing drainage area to each proposed BMP (e.g., silt fence, sediment basin, etc.).

Location and type of E&S BMPs for each phase of disturbance.

Calculations for BMPs as required.

Location and description of temporary stabilization measures.

Location of on-site spoils, description of handling and disposal of borrow materials, and description of on-site permanent spoils disposal areas, including size, depth of fill and revegetation procedures.

Describe sequence of construction as it pertains to ESC including the following elements:

1.Installation sequence of controls (e.g. perimeter controls, then sediment basins, then temporary stabilization, then permanent, etc.)

2.Project phasing if required (LOC greater than 25 acres)

3.Sequence of grading operations and notation of temporary stabilization measures to be used

4.Schedule for converting temporary basins to permanent WQ controls

5.Schedule for removal of temporary controls

6.Anticipated maintenance schedule for temporary controls

— **Categorize each BMP under one of the following areas of BMP activity as described below:**

3.1 Minimize disturbed area and protect natural features and soil

3.2 Control Stormwater flowing onto and through the project

3.3 Stabilize Soils

3.4 Protect Slopes

3.5 Protect Storm Drain Inlets

3.6 Establish Perimeter Controls and Sediment Barriers

3.7 Retain Sediment On-Site and Control Dewatering Practices

3.8 Establish Stabilized Construction Exits

3.9 Any Additional BMPs

— **Note the location of each BMP on your site map(s).**

— **For any structural BMPs, you should provide design specifications and details and refer to them.**

— **For more information, see City of Austin Environmental Criteria Manual 1.4.**

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. In addition, if the project site is located within the Edwards Aquifer, the Project Manager must notify the Travis County Balcones Canyonlands Conservation Preserve (BCCP) by email at bccp@traviscountytx.gov. Construction activities within 50 feet of the void must stop.

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

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.
B.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

10.Developer Information:

Owner LUX AT GATEWAY, LP, A TEXAS LIMITED PARTNERSHIP

Phone # 469-304-1422

Address 2701 DALLAS PKWY, SUITE 380
PLANO, TEXAS 75093

Owner's representative responsible for plan alterations: _____

Phone # _____

Person or firm responsible for erosion/sedimentation control maintenance: _____

Phone # _____

Person or firm responsible for tree/natural area protection Maintenance: _____

Phone # _____

11.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.

Source: Rule No. R161-15.13, 1-4-2016 ; Rule No. R161-17.03 , 3-2-2017; Rule No. R161-19.02 , 3-14-2019.

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 Arborist;

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.

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.

APPENDIX P-4: - STANDARD SEQUENCE OF CONSTRUCTION

The following sequence of construction shall be used for all development. The applicant is encouraged to provide any additional details appropriate for the particular development.

1.Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan or subdivision construction plan and in accordance with the Erosion Sedimentation Control Plan (ESC) and Stormwater Pollution Prevention Plan (SWPPP) that is required to be posted on the site. Install tree protection, initiate tree mitigation measures and conduct "Pre - Construction" tree fertilization (if applicable).

2.The Environmental Project Manager or Site Supervisor must contact the Development Services Department, Environmental Inspection, at 512-974-2278, 72 hours prior to the scheduled date of the required on-site preconstruction meeting.

3.The Environmental Project Manager, and/or Site Supervisor, and/or Designated Responsible Party, and the General Contractor will follow the Erosion Sedimentation Control Plan (ESC) and Storm Water Pollution Prevention Plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with City Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.

4.Rough grade the pond(s) at 100% proposed capacity. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of embankment or excavation that leads to ponding conditions. The outlet system must consist of a sump pit outlet and an emergency spillway meeting the requirements of the Drainage Criteria Manual and/or the Environmental Criteria Manual, as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until installation of the permanent water quality pond(s).

5.Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the Erosion Sedimentation Control Plan (ESC) and Storm Water Pollution Prevention Plan (SWPPP) posted on the site.

6.Begin site clearing/construction (or demolition) activities.

7.In the Barton Springs Zone, the Environmental Project Manager or Site Supervisor will schedule a mid-construction conference to coordinate changes in the construction schedule and evaluate effectiveness of the erosion control plan after possible construction alterations to the site. Participants shall include the City Inspector, Project Engineer, General Contractor and Environmental Project Manager or Site Supervisor. The anticipated completion date and final construction sequence and inspection schedule will be coordinated with the appropriate City Inspector.

8.Permanent water quality ponds or controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.

9.Complete construction and start revegetation of the site and installation of landscaping.

10.Upon completion of the site construction and revegetation of a project site, the design engineer shall submit an engineer's letter of concurrence bearing the engineer's seal, signature, and date to the Development Services Department indicating that construction, including revegetation, is complete and in substantial compliance with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate City inspector.

11.Upon completion of landscape installation of a project site, the Landscape Architect shall submit a letter of concurrence to the Development Services Department indicating that the required landscaping is complete and in substantial conformity with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate City inspector.

12.After a final inspection has been conducted by the City inspector and with approval from the City inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.

Source: Rule No. R161-17.03 , 3-2-2017.

No.	Date	REVISIONS	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

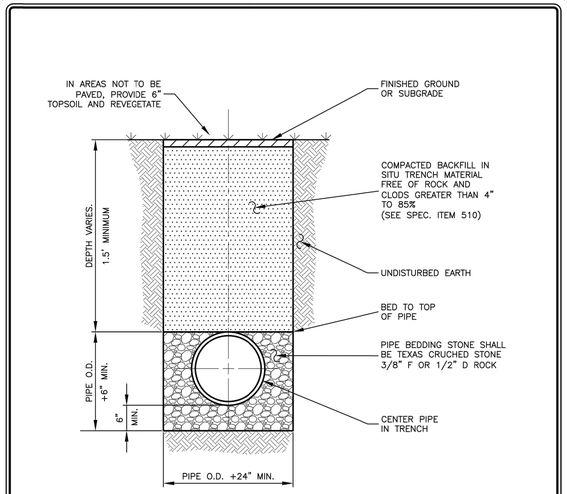
SCALE: AS SHOWN | DESIGNED BY: CDJ
DATE: 11/07/23 | CHECKED BY: PKC
JOB NO.: 17207-0002-01 | DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED
PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

EROSION CONTROL NOTES

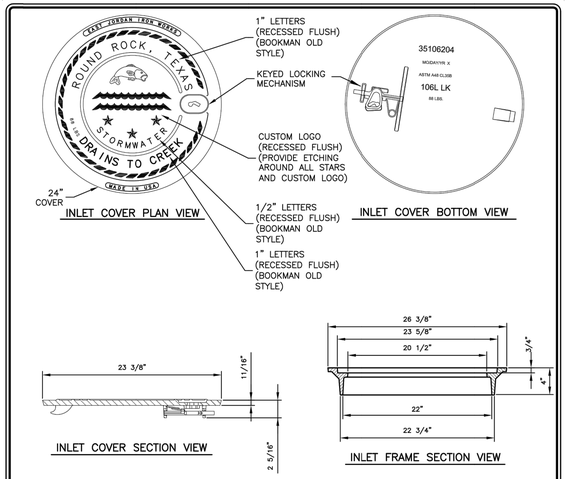
SHEET NO.
42
OF **50**



NOTE:

ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

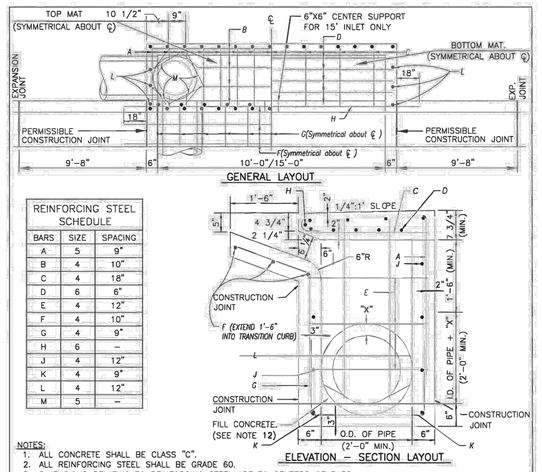
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: DR-02
APPROVED 04-01-10 DATE	STORM SEWER LINE BEDDING DETAIL (NON-PAVED SURFACE)	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



NOTES:

1. COVER AND FRAME SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR DRAINAGE, SEWER, UTILITY AND RELATED CASTINGS: AASHTO DESIGNATION M306-04.
2. INLET COVER SHALL BE MODEL NUMBER: 106L LK (PRODUCT NUMBER: 35106204), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
3. INLET FRAME SHALL BE MODEL NUMBER: 106L LK (PRODUCT NUMBER: 35206004), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
4. INLET COVER AND FRAME ASSEMBLY, IF ORDERED AS A SET, SHALL BE MODEL NUMBER: 106L-4L LK (PRODUCT NUMBER: 35506204), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
5. ALL CORNERS AND EDGES SHALL HAVE A 1/16" MINIMUM AND 1/8" MAXIMUM RADIUS.
6. INLET COVER WEIGHT SHALL BE 88 LBS. FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF COVER.
7. FILLETS SHALL BE 1/4" RADIUS UNLESS OTHERWISE SPECIFIED.
8. MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
9. INLET COVER SHALL BE DIPPED IN A WATER-BASED ASPHALTIC COATING, PRIOR TO SHIPMENT FROM FOUNDRY.

RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: DR-07
APPROVED 04-01-10 DATE	STORM SEWER INLET COVER AND FRAME DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



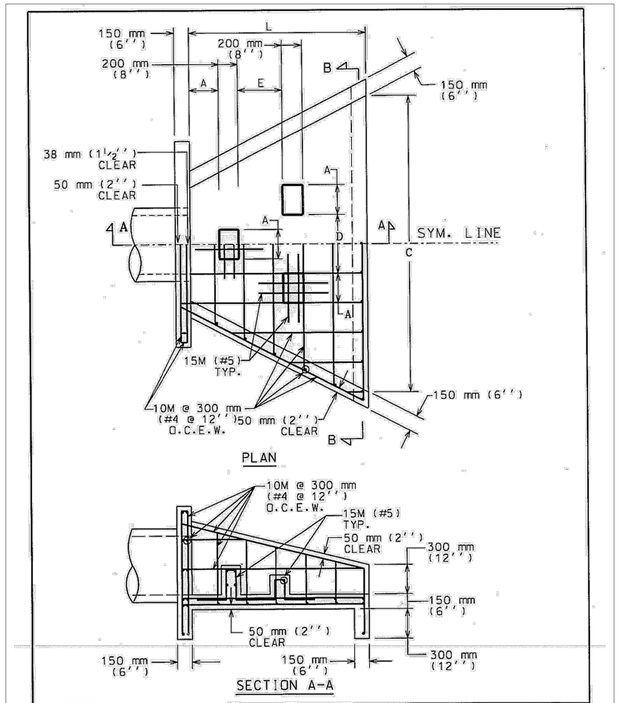
REINFORCING STEEL SCHEDULE		
BARS	SIZE	SPACING
A	5	9"
B	4	10"
C	4	18"
D	6	6"
E	4	12"
F	4	10"
G	4	9"
H	6	–
J	4	12"
K	4	9"
L	4	12"
M	5	–

NOTES:

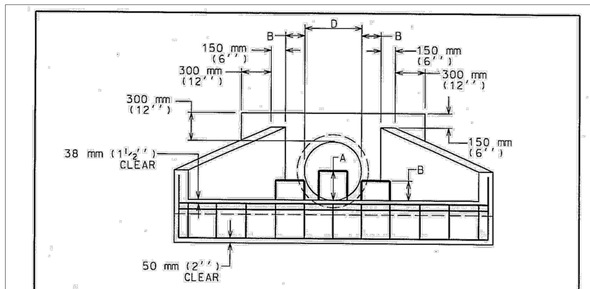
1. ALL CONCRETE SHALL BE CLASS "C".
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
4. VERTICAL STEEL MAY BE SPLICED (15" MIN. LAP) IN THE LOWER ONE-HALF OF ALL INLET WALLS.
5. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, PIPES AND MANHOLE FRAME THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
6. PAYMENT WILL BE MADE FOR EACH INLET OF THE TYPE SPECIFIED, COMPLETE IN PLACE INCLUDING MANHOLE FRAME AND COVER.
7. CHAMFER ALL EXPOSED EDGES 3/4".
8. MANHOLE FRAME AND COVERS SHALL BE FURNISHED IN ACCORDANCE WITH STANDARD DRAWING DR-07, STORM SEWER INLET COVER AND FRAME DETAIL.
9. 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.
10. 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.
11. PAYMENT FOR INLETS AT THE CONTRACT PRICE SHALL INCLUDE THE TRANSITION CURB.
12. INVERT OF INLET SHALL BE SLOPED 1:20 WITH FILL CONCRETE.

SCALE: NTS

RECORD SIGNED COPY ON FILE APPROVED 01-28-21 DATE	CITY OF ROUND ROCK	DRAWING NO: ST-29 SHEET 1 of 1
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.	STANDARD 10' AND 15' CURB INLET DETAIL	



STANDARD HEADWALL AND ENERGY DISSIPATORS	STANDARD NO. 508S-13 1 OF 2
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	



NOTES:

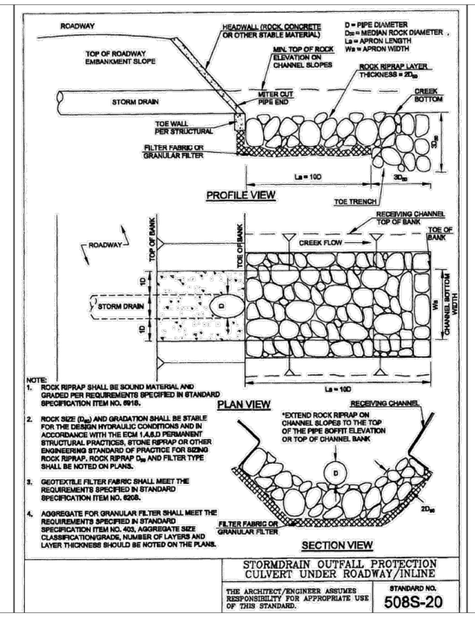
1. ALL CONCRETE SHALL BE TYPE "C" AS PER SPEC. 403S. CONCRETE FOR STURCTURES.
2. CHAMFER ALL EXTERNAL VISIBLE CORNERS.
3. DISSIPATOR BLOCKS REQUIRED ON DISCHARGE HEADWALLS ONLY.

D	457 mm (18'')	533 mm (21'')	610 mm (24'')	685 mm (27'')	765 mm (30'')	838 mm (33'')	914 mm (36'')	1.067 m (42'')	.219 m (48'')	.372 m (54'')	.524 m (60'')	
A	225 mm (9'')	250 mm (10'')	300 mm (12'')	350 mm (14'')	375 mm (15'')	400 mm (16'')	450 mm (18'')	525 mm (21'')	600 mm (24'')	675 mm (27'')	750 mm (30'')	
B	150 mm (6'')	175 mm (7'')	200 mm (8'')	225 mm (9'')	250 mm (10'')	275 mm (11'')	300 mm (12'')	350 mm (14'')	400 mm (16'')	450 mm (18'')	500 mm (20'')	
C	2.29 m (90'')	2.67 m (105'')	3.05 m (120'')	343 m (135'')	3.81 m (150'')	4.19 m (165'')	4.57 m (180'')	5.33 m (210'')	6.10 m (240'')	6.86 m (270'')	7.62 m (300'')	
L	1.37 m (54'')	1.60 m (63'')	1.83 m (72'')	2.06 m (81'')	2.29 m (90'')	2.51 m (99'')	2.74 m (108'')	3.20 m (126'')	3.66 m (144'')	4.11 m (162'')	4.57 m (180'')	
E	300 mm (12'')	350 mm (14'')	400 mm (16'')	450 mm (18'')	500 mm (20'')	550 mm (22'')	600 mm (24'')	700 mm (28'')	800m (32'')	900 mm (36'')	1000 mm (40'')	

DIMENSIONS IN MILLIMETERS, METERS AND (INCHES).

DISCHARGE VELOCITIES GREATER THAN 3 METERS/SECOND (10 fps) REQUIRE ROCK OUTLET PROTECTION.

STANDARD HEADWALL AND ENERGY DISSIPATORS	STANDARD NO. 508S-13 2 OF 2
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	



NOTE:

1. ROCK RIPRAP SHALL BE SOUND MATERIAL AND GRADED PER REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 697S.
2. ROCK SIZE (D_{50}) AND GRADATION SHALL BE STABLE FOR THE DESIGN HYDRAULIC CONDITIONS AND IN ACCORDANCE WITH THE FCM 1 AUD PERMANENT STRUCTURAL PRACTICES, STONE RIPRAP OR OTHER ENGINEERING STANDARD OF PRACTICE FOR SIZING ROCK RIPRAP. ROCK RIPRAP D_{50} AND FILTER TYPE SHALL BE NOTED ON PLANS.
3. GEOTEXTILE FILTER FABRIC SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 620S.
4. AGGREGATE FOR GRANULAR FILTER SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 420, AGGREGATE SIZE CLASSIFICATION/GRADE, NUMBER OF LAYERS AND LAYER THICKNESS SHOULD BE NOTED ON THE PLANS.

STORMDRAIN OUTFALL PROTECTION CULVERT UNDER ROADWAY/INLINE	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-20

No. | Date | REVISIONS | App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23004, 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

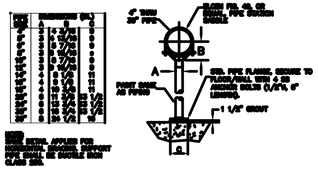
SCALE: AS SHOWN | DESIGNED BY: CDJ
DATE: 11/07/23 | CHECKED BY: PKC
JOB NO.: 17207-0002-01 | DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED PROFESSIONAL ENGINEER
07/10/2023

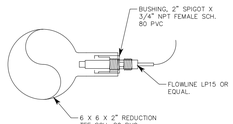
CR 259 MULTIFAMILY
CR 259

DRAINAGE DETAILS 1 OF 2

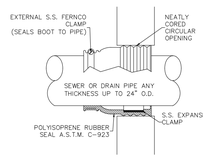
SHEET NO. 46
OF 50



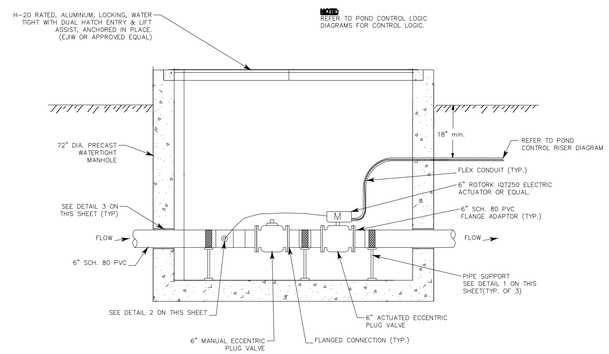
1 PIPE SUPPORT DETAIL
SCALE: NOT TO SCALE



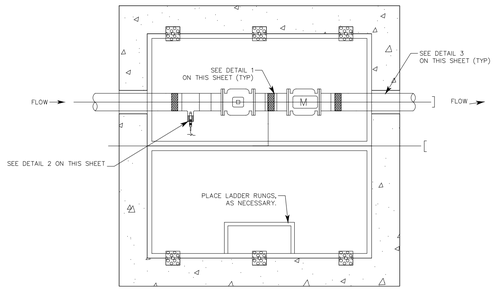
2 WET SWITCH DETAIL
SCALE: NOT TO SCALE



3 MANHOLE CONNECTION DETAIL
SCALE: NOT TO SCALE



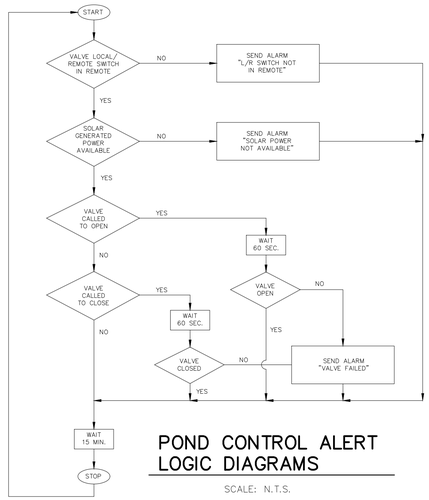
CROSS SECTION VIEW
SCALE: NOT TO SCALE



PLAN VIEW
SCALE: NOT TO SCALE

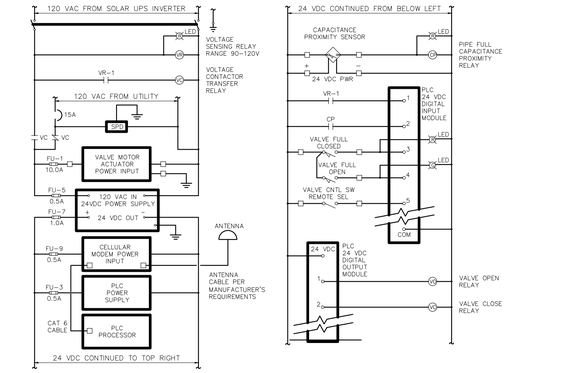
BATCH DETENTION OUTLET STRUCTURE

SCALE: 1 INCH = 50 FEET



POND CONTROL ALERT LOGIC DIAGRAMS

SCALE: N.T.S.



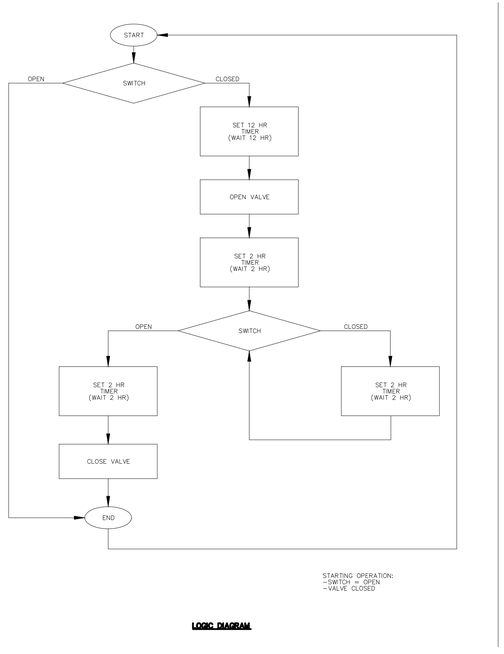
NOTES:
1. INSTALL COMPONENTS FOR SOLAR PHOTOVOLTAIC SYSTEM IN ACCORDANCE WITH NEC.
2. PROVIDE NEMA 3R CABINETS FOR ALL EQUIPMENT.
3. INSTALL ALL CABLES IN RIGID CONDUIT UNLESS OTHERWISE SPECIFICALLY IDENTIFIED BY THE MANUFACTURER AS DETRIMENTAL TO SIGNAL STRENGTH.
4. CONNECT VALVE PER MANUFACTURER'S REQUIREMENTS. PROVIDE ADDITIONAL WIRING AT VALVE AS REQUIRED.

LEGEND

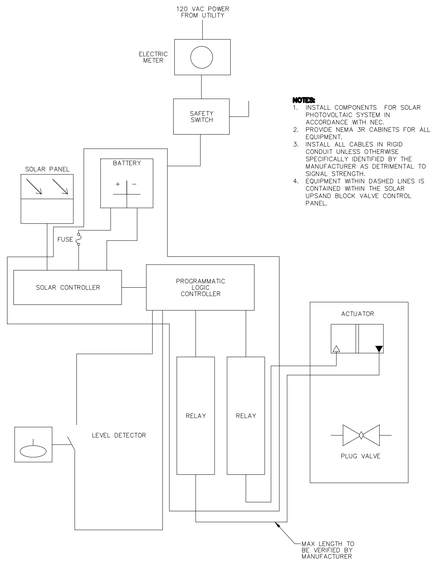
- CR — RELAY CONTACT
- VR — RELAY COIL
- LED — LED INDICATING LIGHT
- POSITION LIMIT SWITCH
- SELECTOR SWITCH CONTACT
- FU-X 0.5A — FUSE
- 15A AC CIRCUIT BREAKER
- SPD — SURGE PROTECTIVE DEVICE
- VO — TO MOTOR OPERATED VALVE OPEN CONTROL CIRCUIT
- VC — TO MOTOR OPERATED VALVE CLOSE CONTROL CIRCUIT

POND LEVEL CONTROL ELEMENTAR DIAGRAM

SCALE: N.T.S.



LOGIC DIAGRAM



NOTES:
1. INSTALL COMPONENTS FOR SOLAR PHOTOVOLTAIC SYSTEM IN ACCORDANCE WITH NEC.
2. PROVIDE NEMA 3R CABINETS FOR ALL EQUIPMENT.
3. INSTALL ALL CABLES IN RIGID CONDUIT UNLESS OTHERWISE SPECIFICALLY IDENTIFIED BY THE MANUFACTURER AS DETRIMENTAL TO SIGNAL STRENGTH.
4. EQUIPMENT WITHIN DASHED LINES IS CONTAINED WITHIN THE SOLAR - UPSAND BLOCK VALVE CONTROL PANEL

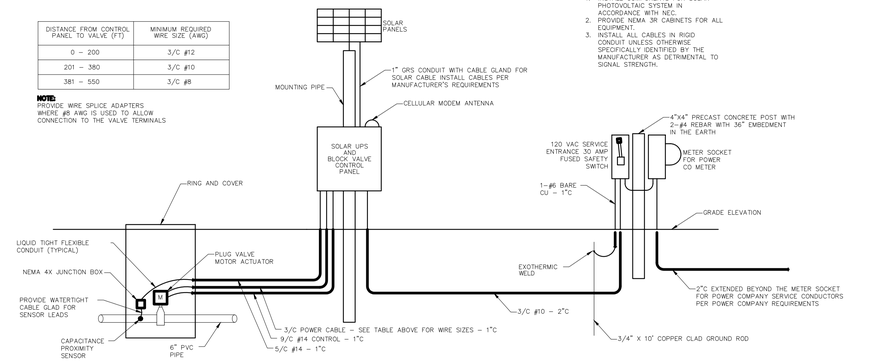
BLOCK DIAGRAM

POND CONTROL LOGIC DIAGRAMS

SCALE: N.T.S.

DISTANCE FROM CONTROL PANEL TO VALVE (FT)	MINIMUM REQUIRED WIRE SIZE (AWG)
0 – 200	3/C #12
201 – 380	3/C #10
381 – 550	3/C #8

NOTE:
PROVIDE WIRE SPLICE ADAPTERS WHERE #8 AWG IS USED TO ALLOW CONNECTION TO THE VALVE TERMINALS



NOTES:
1. INSTALL COMPONENTS FOR SOLAR PHOTOVOLTAIC SYSTEM IN ACCORDANCE WITH NEC.
2. PROVIDE NEMA 3R CABINETS FOR ALL EQUIPMENT.
3. INSTALL ALL CABLES IN RIGID CONDUIT UNLESS OTHERWISE SPECIFICALLY IDENTIFIED BY THE MANUFACTURER AS DETRIMENTAL TO SIGNAL STRENGTH.

GENERAL NOTES:

SOLAR UPS AND BLOCK VALVE CONTROL PANEL

This panel shall contain the solar controller equipment, batteries, inverter, and block valve controls within the same enclosure. The enclosure shall be pole-mounted and a NEMA 3R powder coated aluminum enclosure.
The Solar UPS Controller shall provide a continuous power to the Block Valve Controls. The Controller shall include, but not necessarily be limited to, solar panels, batteries, surge arrestor, solar controller, 24 VDC to 120 VAC inverter, overcurrent protection, etc. The Controller shall be capable of providing 1 Amps of continuous 120 VDC power for the worst anticipated available daylight. The controller shall also be capable of providing an additional 4.5 Amps of 120 VAC power for a 30 second interval twice on a daily basis. The Controller shall be capable of operating in temperatures ranging from -20□°C to 65□°C and a humidity of 5% to 95% non-condensing. The Controller shall be a complete turn-key packaged system integrated by a single provider. The Controller supplier shall be regularly engaged in fabricating controllers of this type for a minimum of 5 years. The Contractor shall provide a list of Controller supplier(s) for approval. The supplier shall be similar to Solarcraft or an approved equal. For calculating the daylight availability the system design shall be based on the central Texas area.
The Block Valve Controls shall include the controls for the block valve and the capacitance proximity sensor to detect water in the pipe. These controls shall contain, but not necessarily limited to, the PLC, the Cellular Modem, the Cellular Modem Antenna, interposing relays, terminal blocks, LED indicating lights, and voltage monitor relay. The internal wiring of this Control Panel shall be as indicated. The control panel shall also be equipped with a 120 VAC single-phase surge suppressor for the incoming service as indicated.

PROGRAMMABLE LOGIC CONTROLLER

The Programmable Logic Controller (PLC) shall include timing and logic functions to control the pond plug valve based on sensing the presence of water in a pipe with a level capacitance switch. The PLC shall operate from 24 VDC and shall include the required number of 24 VDC digital inputs and outputs as indicated. The PLC shall include a build-in 10/100 Mbps EtherNet/IP port for peer-to-peer messaging. The PLC shall also include an RS-232 port for connection for a programming laptop computer. The PLC shall also include an embedded Web server and Email support. The PLC shall be capable of operation in temperatures ranging from -20□°C to 65□°C. The PLC shall be model MicroLogix 1100 by Rockwell Automation or a similar model by GE or Square D.

CELLULAR MODEM AND ANTENNA

The Cellular Modem shall include a 10/100 Mbps RJ45 EtherNet/IP port. The Modem shall be FCC approved and approved for the following carriers: AT&T, Verizon, Sprint, US Cellular, and Aeris. The Modem shall be capable of operating in temperatures ranging from -20□°C to 65□°C and a humidity of 5% to 95% non-condensing. The Modem shall be capable of operating from 24 VDC and include a two-year warranty from the date of purchase. The Modem shall be model M2M 3G CDMA/GSM Cellular Gateway of US Robotics or an approved equivalent. The Cellular Antenna shall be screw-mounted on top of the Block Valve Control Panel. The antenna shall be capable of operating in temperatures ranging from -20□°C to 65□°C. The antenna shall be compatible with the Cellular Modem and shall be model G24-A-305111 as manufactured by Taoglas Antenna Solutions or an approved equal.

POND CONTROL ALERT LOGIC DIAGRAMS

SCALE: N.T.S.

No.	Date	REVISIONS	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23004, 10064100
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SCALE: AS SHOWN | DESIGNED BY: CDJ
DATE: 11/07/23 | CHECKED BY: PKC
JOB NO.: 17207-0002-01 | DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

DRAINAGE DETAILS 2 OF 2

SHEET NO. 47
OF 50

K:\17207\17207-0002-01 CR 259 Multifamily\2 Design Phase\CAD\17207-0002-01 DETAILS.dwg cj: July 11, 2023

Attachment N

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

The following guidelines should be used to develop the maintenance plan for the Batch Detention BMP.

- **Inspections.** Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s) as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately.

- **Mowing.** The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

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

- **Erosion Control.** The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

- **Nuisance Control.** Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

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

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

- **Logic Controller.** The Logic Controller should be inspected as part of the twice-yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

An amended copy of this document will be provided to the Texas Commission on Environmental Quality within thirty (30) days of any changes in the following information.

Responsible Party: Lux at Gateway LP

Signature of Responsible Party **Date** 07/19/2023

Design Engineer: Eric C Vann, P.E.

Signature of Design Engineer **Date** 07/28/2023

Attachment O

PILOT-SCALE FIELD TESTING PLAN

The site will not use any BMPs in pilot studies.

Attachment P

MEASURES FOR MINIMIZING SURFACE STREAM CONSIDERATION

1. Storm flow energy dissipators will be used at the discharge point of small drainage channels when discharging velocities may cause scouring. The design of the energy dissipators will vary based on the design of storm flow, and the design of the outfall channel. Energy dissipators shall be designed and constructed in accordance with the City of Round Rock drainage criteria for energy dissipators.
2. On-site batch detention will be constructed and will provide an area for sedimentation settling prior to leaving the site. Storm runoff will be reduced to predevelopment flows prior to leaving the site.

QUIDDITY

TEMPORARY STORMWATER SECTION

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Eric C Vann, P.E.

Date: 07/28/2023

Signature of Customer/Agent:

Eric C Vann

Regulated Entity Name: Ra Ra at Liberty Hill

Project Information

Potential Sources of Contamination

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

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

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

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

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

☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☒ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions**. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☒ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

5. ☒ **Attachment C - Sequence of Major Activities**. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.

   ☒ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.

   ☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: South Fork San Gabriel River

Temporary Best Management Practices (TBMPs)

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

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

☒ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

☒ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

☒ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

11. ☒ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☐ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

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

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

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

Soil Stabilization Practices

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

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

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

Attachment A

SPILL RESPONSE ACTIONS

From TCEQ Section 30 TAC 327.5.

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1. The responsible person shall immediately abate and contain the spill or discharge and cooperate fully with the executive director and the local incident command system. The responsible person shall also begin reasonable response actions which may include, but are not limited to, the following actions:
    - arrival of the responsible person or response personnel hired by the responsible person at the site of the discharge or spill;
    - initiating efforts to stop the discharge or spill;
    - minimizing the impact to the public health and the environment;
    - neutralizing the effects of the incident;
    - removing the discharged or spilled substances; and
    - managing the wastes.
2. Upon request of the local government responders or the executive director, the responsible person shall provide a verbal or written description, or both, of the planned response actions and all actions taken before the local governmental responders or the executive director arrive. When the agency on-scene coordinator requests this information, it is subject to possible additional response action requirements by the executive director. The information will serve as a basis for the executive director to determine the need for:
    - further response actions by the responsible person;
    - initiating state funded actions for which the responsible person may be held liable to the maximum extent allowed by law; and
    - subsequent reports on the response actions.
3. Except for discharges or spills occurring during the normal course of transportation about which carriers are required to file a written report with the U.S. Department of Transportation under 49 CFR §171.16, the responsible person shall submit written information, such as a letter, describing the details of the discharge or spill and supporting the adequacy of the response action, to the appropriate TNRCC regional manager within 30 working days of the discovery of the reportable discharge or spill. The regional manager has the discretion to extend the deadline. The documentation shall contain one of the following items:
    - A statement that the discharge or spill response action has been completed and a description of how the response action was conducted. The statement shall include the initial report information required by §327.3(c) of this title (relating to Notification Requirements). The executive director may request additional information. Appropriate response actions at any time following the discharge or spill include use of the Texas Risk Reduction Program rules in Chapter 350 of this title (relating to Texas Risk Reduction Program).
    - A request for an extension of time to complete the response action, along with the reasons for the request. The request shall also include a projected work schedule outlining the time required to complete the response action. The executive director may grant an extension up to six months from the date the spill or discharge was reported. Unless otherwise notified by the

appropriate regional manager or the Emergency Response Team, the responsible person shall proceed according to the terms of the projected work schedule.

- A statement that the discharge or spill response action has not been completed nor is it expected to be completed within the maximum allowable six month extension. The statement shall explain why completion of the response action is not feasible and include a projected work schedule outlining the remaining tasks to complete the response action. This information will also serve as notification that the response actions to the discharge or spill will be conducted under the Texas Risk Reduction Program rules in Chapter 350 of this title (relating to Texas Risk Reduction Program)

Numbers for Spill Response:

State of Texas 24-Hour Spill-Reporting Hotline and the State Emergency Response Commission

Phone: 1-800-832-8224

Texas Commission on Environmental Quality (San Antonio Regional Office),

Hours: Monday-Friday, 8:00 a.m.–5:00 p.m.

Address: 14250 Judson Rd, San Antonio TX 78233-4480,

Main Line: 210-490-3096

Local Emergency Response Teams

911

Attachment B

POTENTIAL SOURCES OF CONTAMINATION

1. Fluids may be dropped from the use of construction equipment.
2. Fluids may be dropped from vehicles entering the site during construction.
3. Fluids may be dropped or spilled by construction workers constructing on site.
4. Mud or dirt may be tracked onto streets from construction areas.
5. Fine particles may be washed from non-stabilized surfaces.
6. Debris from the site may leave the site by person, vehicle, or construction equipment.
7. Miscellaneous litter may be left on site from construction workers on site.

Attachment C

SEQUENCE OF MAJOR ACTIVITIES

Major Activities	Area Disturbed	Permanent Stabilization
Installation of Temporary Best Management Practices • Silt Fence • Stabilized Construction Entrance • Tree Protection • Temporary Sediment Basin • Inlet Protection • Rock Berm • Temporary Spoils Area • Construction Staging Area	17.50 acres	Sod/Seeding
Earthwork: site grading, excavation, etc.	17.50 acres	Sod/Seeding/Pavement
Installation of site utilities	2.48 acres	Sod/Seeding/Pavement
Building Structures	3.68 acres	Concrete
Clean up of site and removal of Temporary Best Management Practices	17.50 acres	Sod/Seeding

Attachment D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

Upgradient Storm Flow

In order to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site, the following measures will be implemented.

1. Upgradient offsite stormwater originates from an undeveloped area adjacent to the north boundary of the site. This area is shown on the drainage plan included in this section and is identified as EO-1/PO-1. The Offsite area is completely undeveloped with zero (0) percent impervious cover. In existing conditions, the drainage area enters the property through sheet flow. In proposed conditions, flows originating from this area will be diverted within a proposed drainage swale, as seen in the proposed drainage area map included in this section. The flows will be conveyed to an existing drainage channel located in the existing drainage easements to the east of the proposed development, as it continues flowing into the South Fork San Gabriel River.

Sediment Control Measures

The following items describe how BMP's and measures will prevent pollution of surface water or groundwater that originates on-site or flows offsite, including potential pollution caused by contaminated stormwater runoff from the site.

1. During construction activities, vehicular traffic will enter and exit the project at a designated point. This access point will include a stabilized construction entrance/exit roadway to minimize the tracking of mud, dirt, or debris onto offsite roadways.
2. During construction activities, silt fencing will be maintained in specified areas and will provide treatment of runoff prior to discharge into drainage channels.
3. During construction activities, tree protection will be maintained in the specified areas and will protect the trees specified as "to be saved" from construction activities.
4. Storm sewers that are made operational prior to stabilization of the drainage areas are to maintain inlet protection to prevent sediment from entering the system at the inlets.
5. A temporary sediment basin is to be maintained to intercept sediment-laden runoff and trap the sediment in order to protect drainage ways below the sediment basin from sedimentation.

Erosion Control Measures

The following items describe the BMP's and other measures which will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

1. Temporary best management practices provide a method of slowing the runoff from the construction site and allowing sediments and suspended solids to be removed. Containing sediment and suspended solids within the site will prevent them from entering surface streams and/or sensitive features.
2. Silt fencing and the temporary sediment basin will be used to treat storm water flowing from disturbed areas, before this stormwater discharges into drainage outfall channels.

3. Inlet protection will be placed along inlet openings during the roadway construction, until the roadway is paved, and adjacent disturbed areas have been stabilized.

Sensitive Geologic Features

The following items describe the measures which will be used to help maintain flow to naturally occurring sensitive features on the site.

1. This project is not on the recharge or transition zone, therefore there are no sensitive geologic features on the site.

Attachment E

REQUEST TO TEMPORARY SEAL A FEATURE

There are no features that need to be sealed on the site.

Attachment F

STRUCTURAL PRACTICES

1. A stabilized construction entrance with washout pit will be constructed at all locations where vehicular traffic enters and leaves the site. This will reduce sediments which leave the site and are tracked or fall onto adjacent roadways.

2. Silt fencing and silt fencing will be installed adjacent to any drainage way which receives sheet flow from upgradient-disturbed areas and along the side slope perimeter of disturbed areas.

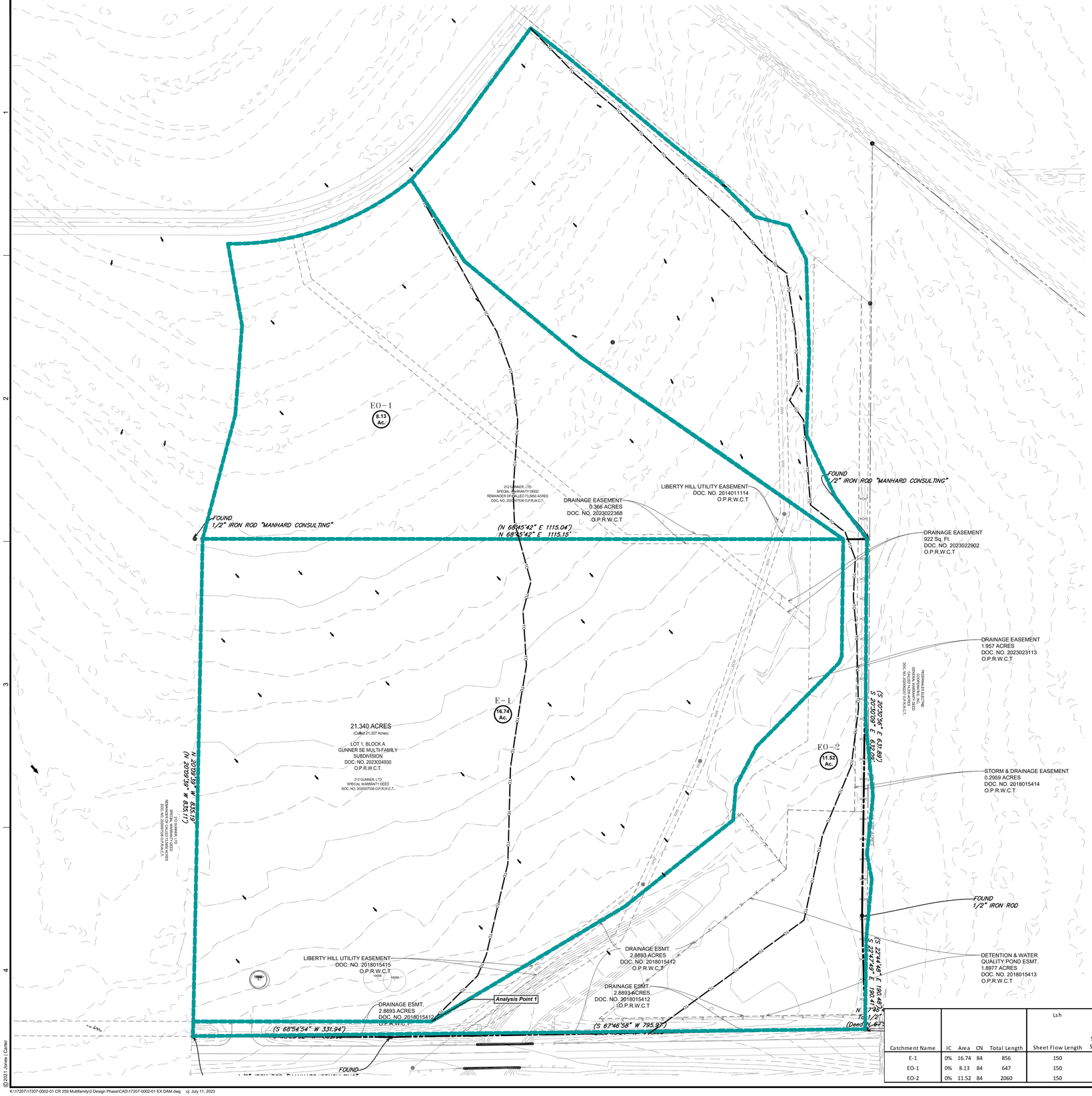
3. Inlet protection will be used at storm drainage inlets prior to stabilization of the area.

4. A temporary sedimentation basin will be maintained to intercept sediment-laden runoff and trap the sediment in order to protect downstream drainage channels.

Attachment G

DRAINAGE AREA MAP

The project site will have more than 10 acres within a common drainage area disturbed at one time and a temporary sediment basin will be used. The Proposed Drainage Area Map is included in this section.



60 0 30 60

SCALE: 1" = 60'

EXISTING LEGEND

- WATER
- WASTEWATER
- STORM SEWER
- OVERHEAD ELECTRIC
- GROUND CONTOUR

DAMAP LEGEND

- 1.82 Ac. — DRAINAGE AREA IN ACRES
- DRAINAGE AREA LINE
- A-1 — DRAINAGE AREA NUMBER
- FLOW DIRECTION

Existing Vs Proposed Flows at Analysis Point 1		
	Existing	Proposed
Q2 (cfs)	67.1	57.8
Q10 (cfs)	118.6	88.8
Q25 (cfs)	153.1	108.9
Q100 (cfs)	210.7	141.8

Existing Drainage Calcs

Catchment Name	IC	Area	CN	Total Length	Lsh Sheet Flow Length	Ssh Sheet Flow Slope (ft/ft)	Surface Description	P2 2-yr, 24-hr rainfall depth (in.)	nol overland flow roughness coeff.	tsh sheet flow travel time (hr)	Lsc shallow conc. Flow slope (ft/ft)	Ssc Shallow Conc. Slope (ft/ft)	K 16.136 - unpaved 20.328 - paved	tsc shallow conc. Flow time (hr)	tc time of conc. (hr)	tc time of conc. (min)	tL lag time (min)
E-1	0%	16.74	84	856	150	0.015	grass	3.94	0.15	0.23	706	0.015	16.136	0.10	0.33	19.66	11.79
EO-1	0%	8.13	84	647	150	0.014	grass	3.94	0.15	0.23	497	0.014	16.136	0.07	0.31	18.42	11.05
EO-2	0%	11.52	84	2060	150	0.011	grass	3.94	0.15	0.26	1910	0.011	16.136	0.31	0.57	34.32	20.59

REVISIONS

No.	Date	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN
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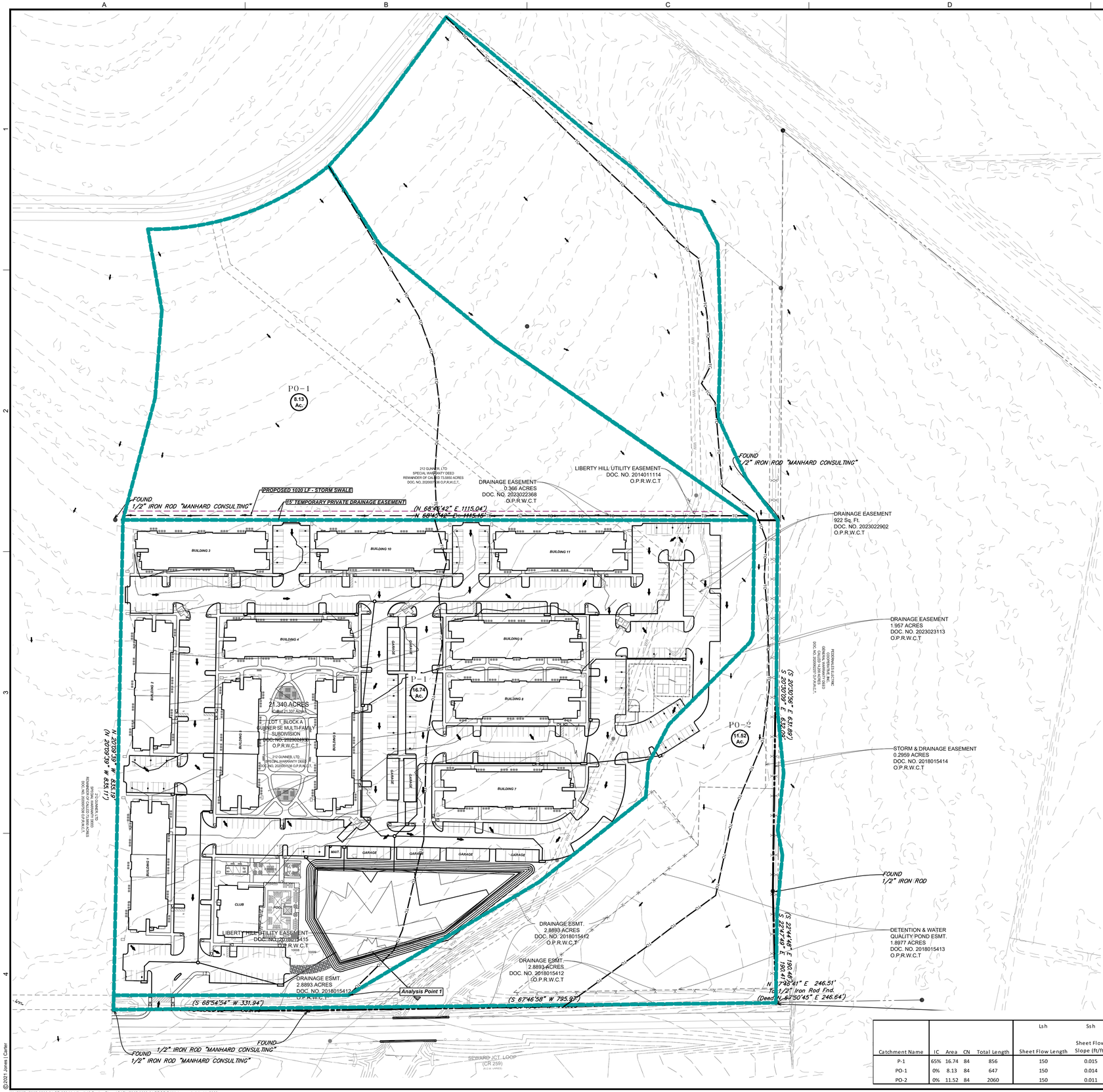
STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

EXISTING OVERALL DRAINAGE AREA MAP

SHEET NO. 35
OF 50



60 0 30 60

SCALE: 1" = 60'

EXISTING LEGEND

- W — WATER
- WW — WASTEWATER
- STORM SEWER
- OHE — OVERHEAD ELECTRIC
- 700 — GROUND CONTOUR

DAMAP LEGEND

- 1.82 Ac. — DRAINAGE AREA IN ACRES
- DRAINAGE AREA LINE
- A-1 — DRAINAGE AREA NUMBER
- FLOW DIRECTION

Existing Vs Proposed Flows at Analysis Point 1		
	Existing	Proposed
Q2 (cfs)	67.1	57.8
Q10 (cfs)	118.6	88.8
Q25 (cfs)	153.1	108.9
Q100 (cfs)	210.7	141.8

Proposed Drainage Calcs

Catchment Name	IC	Area	CN	Total Length	Lsh Sheet Flow Length	Ssh Sheet Flow Slope (ft/ft)	Surface Description	P2 2-yr, 24-hr rainfall depth (in.)	nol overland flow roughness coeff.	tsh sheet flow travel time (hr)	Lsc shallow conc. Flow slope (ft/ft)	Ssc Shallow Conc. Slope (ft/ft)	K 16.136 - unpaved 20.328 - paved	tsc shallow conc. Flow time (hr)	tc time of conc. (hr)	tc time of conc. (min)	tL lag time (min)
P-1	65%	16.74	84	856	150	0.015	concrete, grass	3.94	0.06	0.11	706	0.015	20.328	0.08	0.19	11.52	6.91
PO-1	0%	8.13	84	647	150	0.014	grass	3.94	0.15	0.23	497	0.014	16.136	0.07	0.31	18.42	11.05
PO-2	0%	11.52	84	2060	150	0.011	grass	3.94	0.15	0.26	1910	0.011	16.136	0.31	0.57	34.32	20.59

No.	Date	REVISIONS	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-22904 & 10040100
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PROFESSIONAL ENGINEER
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CR 259 MULTIFAMILY
CR 259

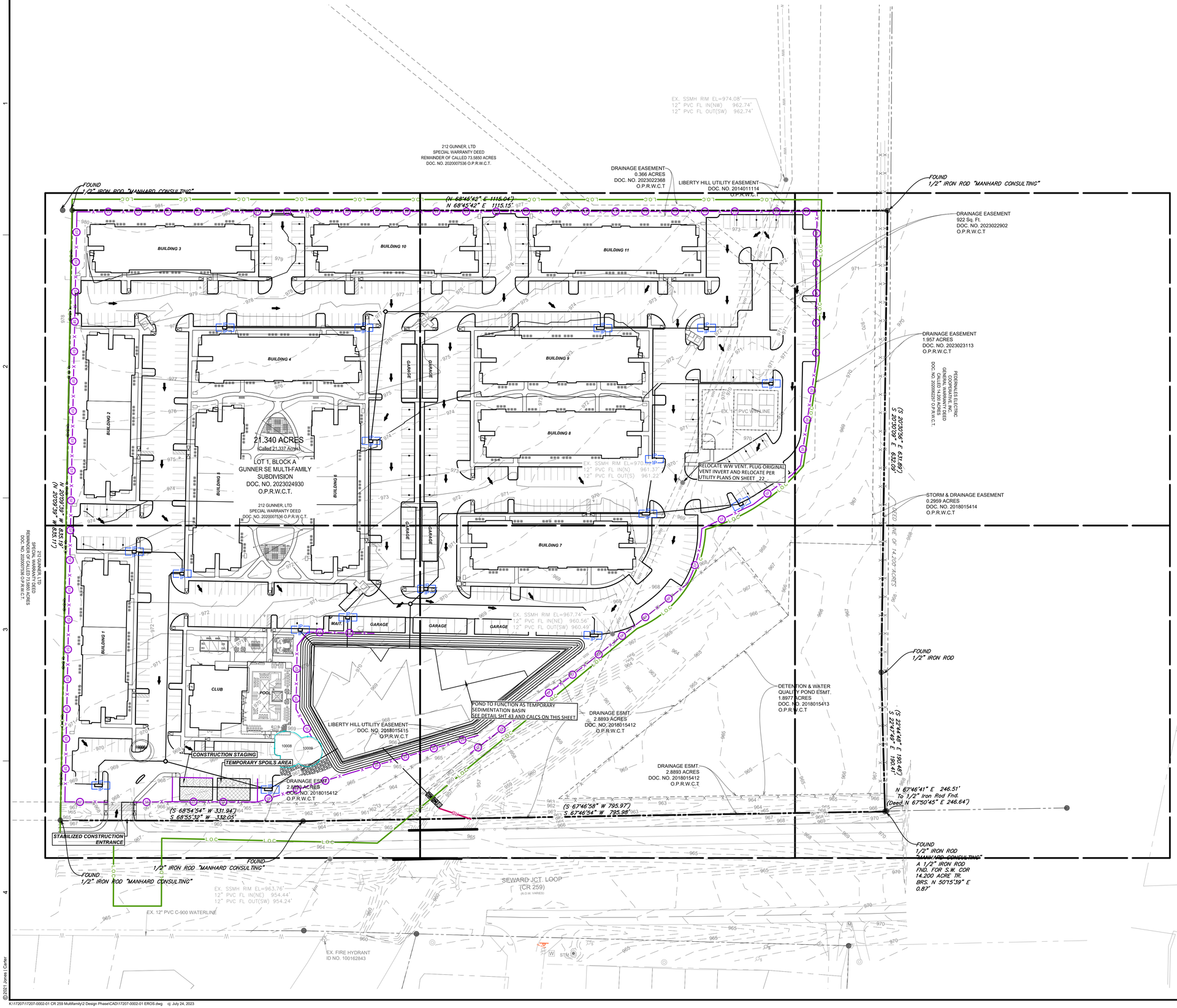
PROPOSED OVERALL DRAINAGE AREA MAP

SHEET NO. 36
OF 50

Attachment H

TEMPORARY SEDIMENT POND PLANS AND CALCULATIONS

The project site will have more than 10 acres within a common drainage area disturbed at one time and a temporary sediment basin will be used. The sediment basin will provide storage for the volume of runoff from a 2-year, 24-hour storm in Williamson County, in accordance with TCEQ's Technical Guidance Manual (TGM) RG-348 (rev. 2005). Construction plans and calculations for the proposed temporary BMPs and measures are included in this section.



60 0 30 60

SCALE: 1" = 60'

EXISTING LEGEND

- WATER
- WASTEWATER
- STORM SEWER
- OVERHEAD ELECTRIC
- GROUND CONTOUR

EROSION LEGEND

- LIMITS OF CONSTRUCTION
- SILT FENCE
- INLET PROTECTION
- ROCK BERM
- TREE PROTECTION
- MULCH LOG
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- TEMPORARY SPOILS AREA
- FLOW DIRECTION

TREE LEGEND

- TREE TO REMAIN (8"-18")
- TREE TO BE REMOVED (8"-18")
- PROTECTED TREE TO REMAIN (19"-23")
- PROTECTED TREE TO BE REMOVED (19"-23")
- HERITAGE TREE TO REMAIN (24"+)
- HERITAGE TREE TO BE REMOVED (24"+)

SEDIMENTATION TRAP DATA	
	Trap #1
Drainage Area Size (Ac.)	16.74
Trap Volume Req'd (CF)	30,132
Trap Volume Provided (CF)	234,152
Trap Area(SF)	1.13
Embankment Height (MSL)	970.00
Excavation Depth (MSL)	962.75

No.	Date	REVISIONS	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23004 & 10040100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN
DESIGNED BY: CDJ
DATE: 24/07/23
CHECKED BY: PKC
JOB NO.: 17207-0002-01
DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED
PROFESSIONAL ENGINEER
07/24/2023

RA RA AT LIBERTY HILL
CR 259

OVERALL ESC PLAN

SHEET NO. 06
OF 50

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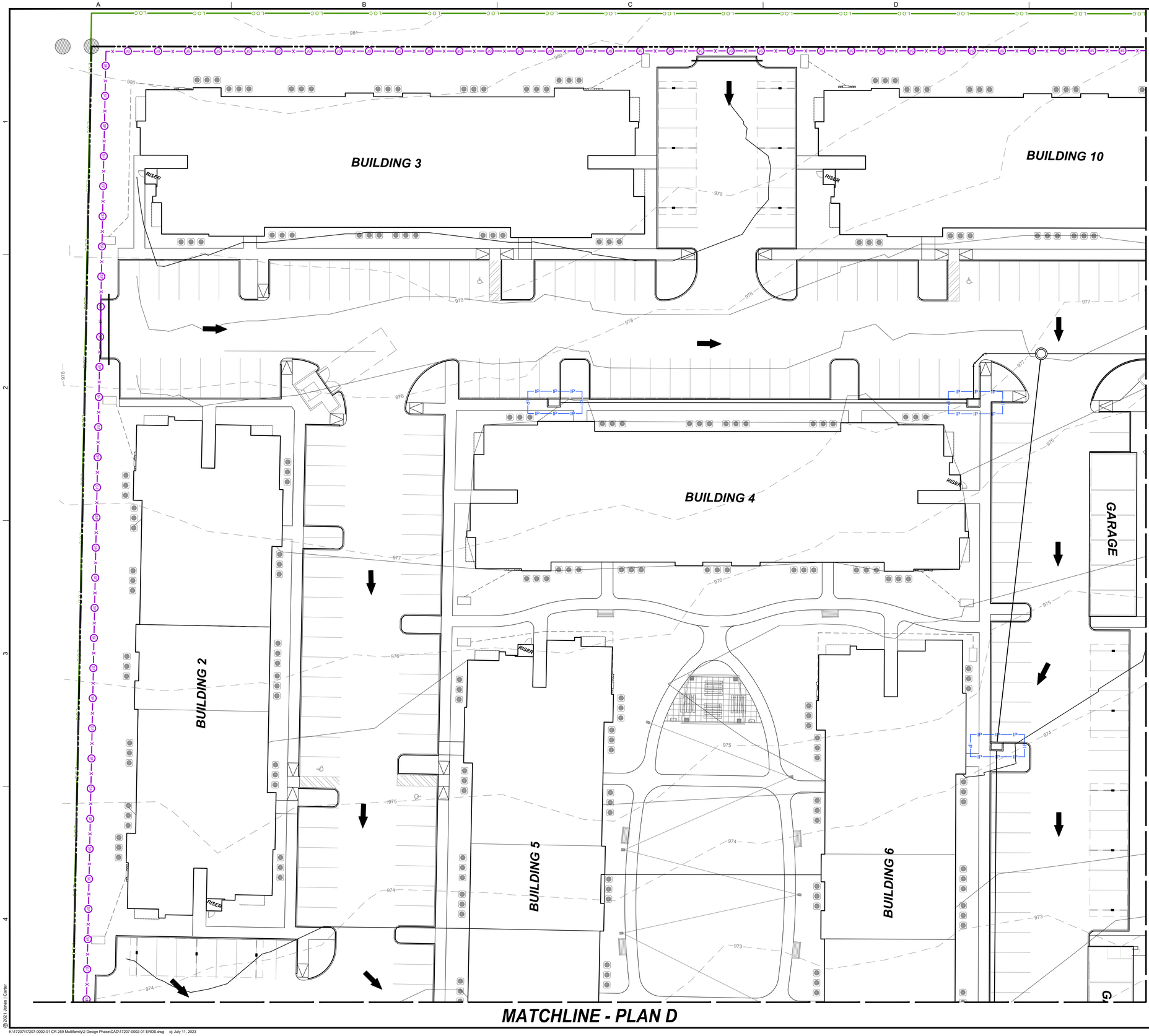


SCALE: 1" = 20'

EXISTING LEGEND

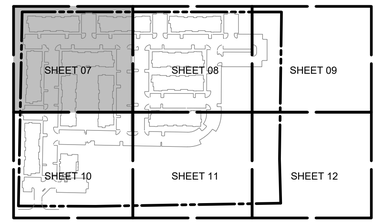
- WATER
- WASTEWATER
- STORM SEWER
- OVERHEAD ELECTRIC
- GROUND CONTOUR

EROSION LEGEND

- LIMITS OF CONSTRUCTION
- SILT FENCE
- INLET PROTECTION
- ROCK BERM
- TREE PROTECTION
- MULCH LOG
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- TEMPORARY SPOILS AREA
- FLOW DIRECTION

TREE LEGEND

- TREE TO REMAIN (8"-18")
- TREE TO BE REMOVED (8"-18")
- PROTECTED TREE TO REMAIN (19"-23")
- PROTECTED TREE TO BE REMOVED (19"-23")
- HERITAGE TREE TO REMAIN (24"+)
- HERITAGE TREE TO BE REMOVED (24"+)



REVISIONS

No.	Date	App.

QUIDDITY
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3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN
DATE: 11/07/23
JOB NO.: 17207-0002-01
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CHECKED BY: PKC
DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

ESC PLAN A

SHEET NO. 07
OF 50

K:\17207\17207-0002-01 CR 259 Multifamily\2 Design Phase\CAD\17207-0002-01 EROS.dwg cj: July 11, 2023

(N 68°45'42" E 1115.04')
N 68°45'42" E 1115.15'

BUILDING 11

DRAINAGE EASEMENT
0.366 ACRES
DOC. NO. 2023022368
O.P.R.W.C.T

DRAINAGE EASEMENT
922 Sq. Ft.
DOC. NO. 2023022902
O.P.R.W.C.T

BUILDING 9

BUILDING 8

GARAGE

RISER

EX. 12" PVC WW LINE

PICKELBALL

DOG PARK

EX. SSMH RIM EL=970.02'
12" PVC FL IN(N) 961.37'
12" PVC FL OUT(S) 961.22'

RELOCATE WW VENT. PLUG ORIGINAL VENT INVERT AND RELOCATE PER UTILITY PLANS ON SHEET _22_.

MATCHLINE - PLAN A

MATCHLINE - PLAN C

MATCHLINE - PLAN E

20 0 10 20

SCALE: 1" = 20'

EXISTING LEGEND

- WATER
- WASTEWATER
- STORM SEWER
- OVERHEAD ELECTRIC
- GROUND CONTOUR

EROSION LEGEND

- LIMITS OF CONSTRUCTION
- SILT FENCE
- INLET PROTECTION
- ROCK BERM
- TREE PROTECTION
- MULCH LOG
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- TEMPORARY SPOILS AREA
- FLOW DIRECTION

TREE LEGEND

- TREE TO REMAIN (8"-18")
- TREE TO BE REMOVED (8"-18")
- PROTECTED TREE TO REMAIN (19"-23")
- PROTECTED TREE TO BE REMOVED (19"-23")
- HERITAGE TREE TO REMAIN (24"+)
- HERITAGE TREE TO BE REMOVED (24"+)

SHEET 07 | SHEET 08 | SHEET 09
SHEET 10 | SHEET 11 | SHEET 12

REVISIONS

No.	Date	App.

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Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
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SCALE: AS SHOWN | DESIGNED BY: CDJ
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JOB NO.: 17207-0002-01 | DRAWN BY: JMG

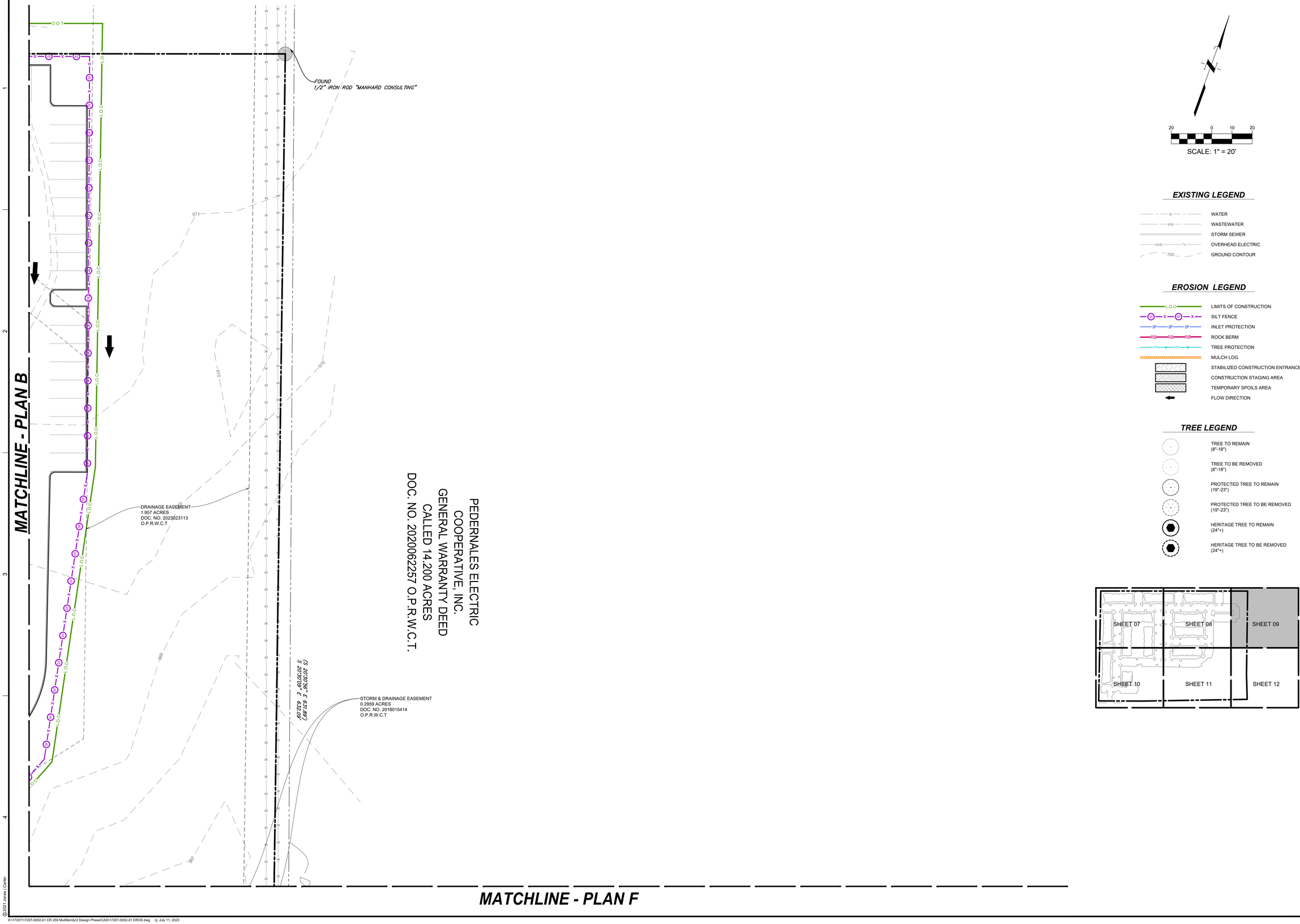
STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED
PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

ESC PLAN B

SHEET NO. 08
OF 50

K:\17207\17207-0002-01 CR 259 Multifamily\2 Design Phase\CAD\17207-0002-01 EROS.dwg cj: July 11, 2023



SCALE: 1" = 20'

EXISTING LEGEND

- WATER
- WASTEWATER
- STORM SEWER
- OVERHEAD ELECTRIC
- GROUND CONTOUR

EROSION LEGEND

- LIMITS OF CONSTRUCTION
- SILT FENCE
- INLET PROTECTION
- ROCK BERM
- TREE PROTECTION
- MULCH LOG
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- TEMPORARY SPOILS AREA
- FLOW DIRECTION

TREE LEGEND

- TREE TO REMAIN (8"-18")
- TREE TO BE REMOVED (8"-18")
- PROTECTED TREE TO REMAIN (19"-23")
- PROTECTED TREE TO BE REMOVED (19"-23")
- HERITAGE TREE TO REMAIN (24"+)
- HERITAGE TREE TO BE REMOVED (24"+)

REVISIONS

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STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

ESC PLAN C

SHEET NO. 09
OF 50

MATCHLINE - PLAN A

BUILDING 1

CLUB

POOL

MAIT.

GARAGE

RISER

FR

10006

10007

10008

10009

CONSTRUCTION STAGING

TEMPORARY SPOILS AREA

STABILIZED CONSTRUCTION ENTRANCE

DRAINAGE ESMT.
2.8893 ACRES
DOC. NO. 2019015412
O.P.R.W.C.T

(S 68°54'54" W 331.94')
S 68°55'32" W 332.05"

FOUND
1/2" IRON ROD "MANHARD CONSULTING"

FOUND
1/2" IRON ROD "MANHARD CONSULTING"

MATCHLINE - PLAN E

20 0 10 20

SCALE: 1" = 20'

EXISTING LEGEND

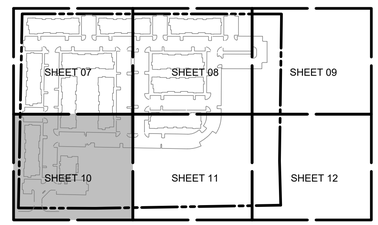
- W — WATER
- WW — WASTEWATER
- STORM SEWER
- OHE — OVERHEAD ELECTRIC
- 700 — GROUND CONTOUR

EROSION LEGEND

- L.O.C — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- IP — INLET PROTECTION
- RB — ROCK BERM
- TP — TREE PROTECTION
- MULCH LOG
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- TEMPORARY SPOILS AREA
- FLOW DIRECTION

TREE LEGEND

- TREE TO REMAIN (8"-18")
- TREE TO BE REMOVED (8"-18")
- PROTECTED TREE TO REMAIN (19"-23")
- PROTECTED TREE TO BE REMOVED (19"-23")
- HERITAGE TREE TO REMAIN (24"+)
- HERITAGE TREE TO BE REMOVED (24"+)



No.	Date	REVISIONS	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN | DESIGNED BY: CDJ
DATE: 11/07/23 | CHECKED BY: PKC
JOB NO.: 17207-0002-01 | DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY
CR 259

ESC PLAN D

SHEET NO. 10
OF 50

MATCHLINE - PLAN B

GARAGE

BUILDING 7

RISER

GARAGE

GARAGE

GARAGE

POND TO FUNCTION AS TEMPORARY
SEDIMENTATION BASIN
SEE DETAIL SHT 43 AND CALCS ON THIS SHEET.

DRAINAGE ESMT.
2.8893 ACRES
DOC. NO. 2018015412
O.P.R.W.C.T

LIBERTY HILL UTILITY EASEMENT
DOC. NO. 2018015415
O.P.R.W.C.T

DETENTION & WATER
QUALITY POND ESMT.
1.8977 ACRES
DOC. NO. 2018015413
O.P.R.W.C.T

DRAINAGE ESMT.
2.8893 ACRES
DOC. NO. 2018015412
O.P.R.W.C.T

(S 67°46'58" W 795.97')
S 67°46'54" W 795.98'

MATCHLINE - PLAN D

MATCHLINE - PLAN F

SCALE: 1" = 20'

EXISTING LEGEND

- WATER
- WASTEWATER
- STORM SEWER
- OVERHEAD ELECTRIC
- GROUND CONTOUR

EROSION LEGEND

- LIMITS OF CONSTRUCTION
- SILT FENCE
- INLET PROTECTION
- ROCK BERM
- TREE PROTECTION
- MULCH LOG
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- TEMPORARY SPOILS AREA
- FLOW DIRECTION

TREE LEGEND

- TREE TO REMAIN (8"-18")
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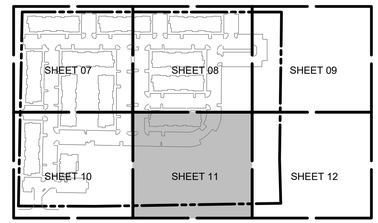
- PROTECTED TREE TO BE REMOVED (19"-23")
- HERITAGE TREE TO REMAIN (24"+)
- HERITAGE TREE TO BE REMOVED (24"+)



SEDIMENTATION TRAP DATA	
	Trap #1
Drainage Area Size (Ac.)	16.74
Trap Volume Req'd (CF)	30,132
Trap Volume Provided (CF)	234,152
Trap Area(SF)	1.13
Embankment Height (MSL)	970.00
Excavation Depth (MSL)	962.75

REVISIONS

No.	Date	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN
DATE: 24/07/23
JOB NO.: 17207-0002-01
DESIGNED BY: CDJ
CHECKED BY: PKC
DRAWN BY: JMG

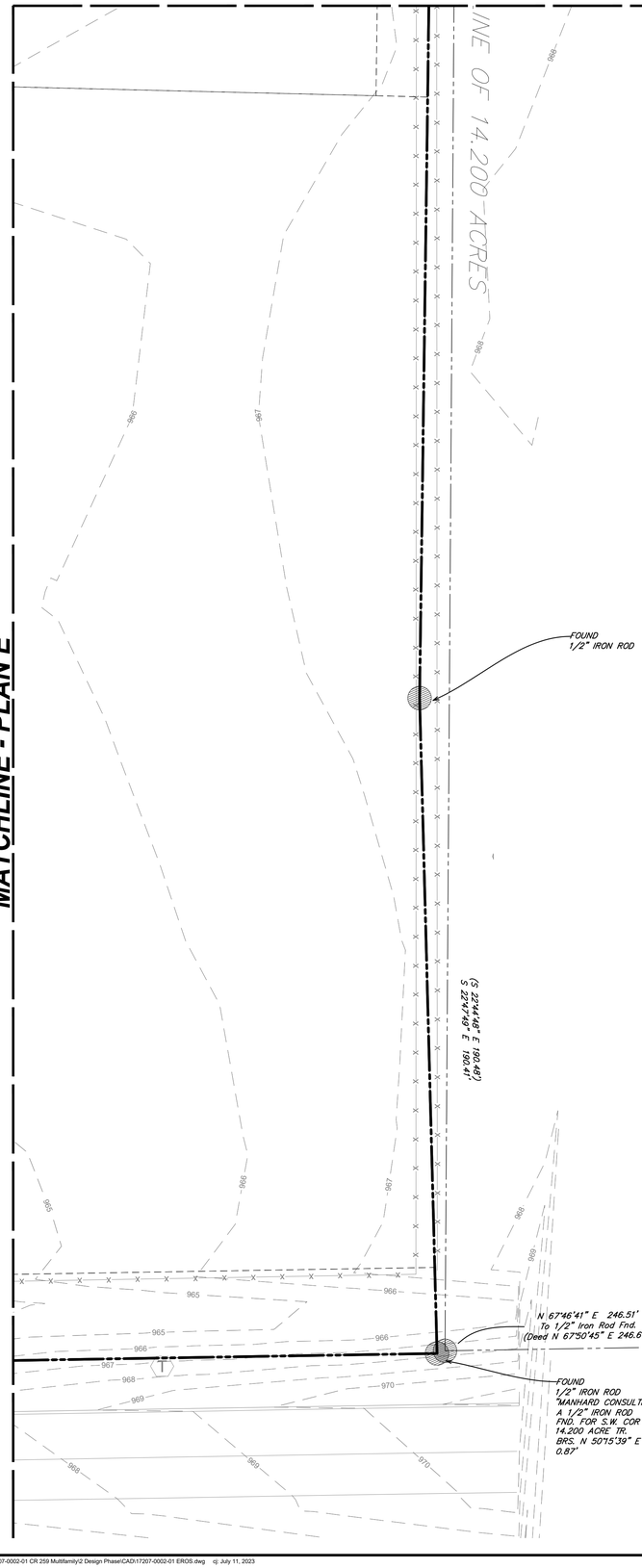
STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED
PROFESSIONAL ENGINEER
07/24/2023

RA RA AT LIBERTY HILL
CR 259

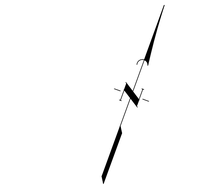
ESC PLAN E

SHEET NO. 11
OF 50

MATCHLINE - PLAN C



MATCHLINE - PLAN E



SCALE: 1" = 20'

EXISTING LEGEND

- W — WATER
- WW — WASTEWATER
- STORM SEWER
- OHE — OVERHEAD ELECTRIC
- 700 — GROUND CONTOUR

EROSION LEGEND

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- SF — SILT FENCE
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- TP — TREE PROTECTION
- MULCH LOG
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- TEMPORARY SPOILS AREA
- FLOW DIRECTION

TREE LEGEND

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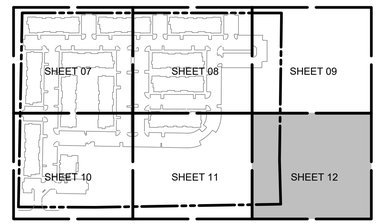
- PROTECTED TREE TO BE REMOVED (19"-23")
- HERITAGE TREE TO REMAIN (24"+)
- HERITAGE TREE TO BE REMOVED (24"+)



REVISIONS

No.	Date	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN
DATE: 11/07/23
JOB NO.: 17207-0002-01

DESIGNED BY: CDJ
CHECKED BY: PKC
DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED PROFESSIONAL ENGINEER

07/10/2023 Eric Vann

CR 259 MULTIFAMILY

CR 259

ESC PLAN F

SHEET NO. 12
OF 50

K:\17207\17207-0002-01 CR 259 Multifamily\2 Design Phase\CAD\17207-0002-01 EROS.dwg cj: July 11, 2023

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.

— Plan sheets submitted to the City of Austin MUST show the following:

Direction of flow during grading operations.

Location, description, and calculations for off-site flow diversion structures.

Areas that will not be disturbed; natural features to be preserved.

Delineation of contributing drainage area to each proposed BMP (e.g., silt fence, sediment basin, etc.).

Location and type of E&S BMPs for each phase of disturbance.

Calculations for BMPs as required.

Location and description of temporary stabilization measures.

Location of on-site spoils, description of handling and disposal of borrow materials, and description of on-site permanent spoils disposal areas, including size, depth of fill and revegetation procedures.

Describe sequence of construction as it pertains to ESC including the following elements:

1.Installation sequence of controls (e.g. perimeter controls, then sediment basins, then temporary stabilization, then permanent, etc.)

2.Project phasing if required (LOC greater than 25 acres)

3.Sequence of grading operations and notation of temporary stabilization measures to be used

4.Schedule for converting temporary basins to permanent WQ controls

5.Schedule for removal of temporary controls

6.Anticipated maintenance schedule for temporary controls

— Categorize each BMP under one of the following areas of BMP activity as described below:

3.1 Minimize disturbed area and protect natural features and soil

3.2 Control Stormwater flowing onto and through the project

3.3 Stabilize Soils

3.4 Protect Slopes

3.5 Protect Storm Drain Inlets

3.6 Establish Perimeter Controls and Sediment Barriers

3.7 Retain Sediment On-Site and Control Dewatering Practices

3.8 Establish Stabilized Construction Exits

3.9 Any Additional BMPs

— Note the location of each BMP on your site map(s).

— For any structural BMPs, you should provide design specifications and details and refer to them.

— For more information, see City of Austin Environmental Criteria Manual 1.4.

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. In addition, if the project site is located within the Edwards Aquifer, the Project Manager must notify the Travis County Balcones Canyonlands Conservation Preserve (BCCP) by email at bccp@traviscountytx.gov. Construction activities within 50 feet of the void must stop.

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

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.
B.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

10.Developer Information:

Owner LUX AT GATEWAY, LP, A TEXAS LIMITED PARTNERSHIP

Phone # 469-304-1422

Address 2701 DALLAS PKWY, SUITE 380
PLANO, TEXAS 75093

Owner's representative responsible for plan alterations: _____

Phone # _____

Person or firm responsible for erosion/sedimentation control maintenance: _____

Phone # _____

Person or firm responsible for tree/natural area protection Maintenance: _____

Phone # _____

11.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.

Source: Rule No. R161-15.13, 1-4-2016 ; Rule No. R161-17.03 , 3-2-2017; Rule No. R161-19.02 , 3-14-2019.

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 Arborist;

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.

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.

APPENDIX P-4: - STANDARD SEQUENCE OF CONSTRUCTION

The following sequence of construction shall be used for all development. The applicant is encouraged to provide any additional details appropriate for the particular development.

1.Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan or subdivision construction plan and in accordance with the Erosion Sedimentation Control Plan (ESC) and Stormwater Pollution Prevention Plan (SWPPP) that is required to be posted on the site. Install tree protection, initiate tree mitigation measures and conduct "Pre - Construction" tree fertilization (if applicable).

2.The Environmental Project Manager or Site Supervisor must contact the Development Services Department, Environmental Inspection, at 512-974-2278, 72 hours prior to the scheduled date of the required on-site preconstruction meeting.

3.The Environmental Project Manager, and/or Site Supervisor, and/or Designated Responsible Party, and the General Contractor will follow the Erosion Sedimentation Control Plan (ESC) and Storm Water Pollution Prevention Plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with City Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.

4.Rough grade the pond(s) at 100% proposed capacity. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of embankment or excavation that leads to ponding conditions. The outlet system must consist of a sump pit outlet and an emergency spillway meeting the requirements of the Drainage Criteria Manual and/or the Environmental Criteria Manual, as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until installation of the permanent water quality pond(s).

5.Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the Erosion Sedimentation Control Plan (ESC) and Storm Water Pollution Prevention Plan (SWPPP) posted on the site.

6.Begin site clearing/construction (or demolition) activities.

7.In the Barton Springs Zone, the Environmental Project Manager or Site Supervisor will schedule a mid-construction conference to coordinate changes in the construction schedule and evaluate effectiveness of the erosion control plan after possible construction alterations to the site. Participants shall include the City Inspector, Project Engineer, General Contractor and Environmental Project Manager or Site Supervisor. The anticipated completion date and final construction sequence and inspection schedule will be coordinated with the appropriate City Inspector.

8.Permanent water quality ponds or controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.

9.Complete construction and start revegetation of the site and installation of landscaping.

10.Upon completion of the site construction and revegetation of a project site, the design engineer shall submit an engineer's letter of concurrence bearing the engineer's seal, signature, and date to the Development Services Department indicating that construction, including revegetation, is complete and in substantial compliance with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate City inspector.

11.Upon completion of landscape installation of a project site, the Landscape Architect shall submit a letter of concurrence to the Development Services Department indicating that the required landscaping is complete and in substantial conformity with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate City inspector.

12.After a final inspection has been conducted by the City inspector and with approval from the City inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.

Source: Rule No. R161-17.03 , 3-2-2017.

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 approved 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 the 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 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 structures(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
    B. any change in 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	SAN ANTONIO REGIONAL OFFICE
12100 Park 35 Circle, Building A Austin, Texas 78753-1808 Phone (512) 339-2929 Fax (512) 339-3795	14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

REVISIONS

No.	Date	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10044100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

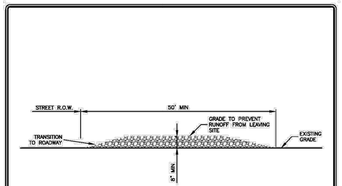
SCALE: AS SHOWN
DESIGNED BY: CDJ
DATE: 24/07/23
CHECKED BY: PKC
JOB NO.: 17207-0002-01
DRAWN BY: JMG

STATE OF TEXAS
ERIC CHRISTOPHER VANN
144638
LICENSED
PROFESSIONAL ENGINEER
07/24/2023

RA RA AT LIBERTY HILL
CR 259

EROSION CONTROL NOTES

SHEET NO. 42
OF 50

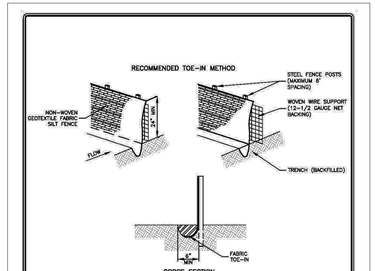


CROSS SECTION

NOTES:

1. STONE SIZE SHALL BE 3" – 8" OPEN GRADED ROCK.
2. THICKNESS OF CRUSHED STONE PAD TO BE NOT LESS THAN 8".
3. LENGTH SHALL BE A MINIMUM OF 50' FROM ACTUAL ROADWAY, AND WIDTH NOT LESS THAN FULL WIDTH OF INGRESS/EGRESS.
4. ENTRANCE SHALL BE PROPERLY GRADED TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
5. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY BY CONTRACTOR.
6. AS 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.

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC–09
APPROVED 03–25–11 DATE	STABILIZED CONSTRUCTION ENTRANCE DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

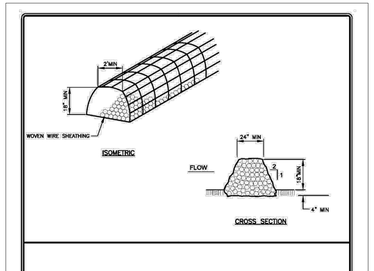


CROSS SECTION

NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MIN. OF ONE (1) FOOT.
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. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDERNEATH.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHALL BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS SECURELY FASTENED TO THE STEEL FENCE POSTS.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. SILT FENCE SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC–10
APPROVED 03–25–11 DATE	SILT FENCE DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

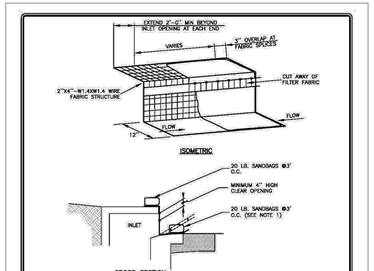


CROSS SECTION

NOTES:

1. USE ONLY OPEN GRADED ROCK (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1" OPENING AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/ OR FABRIC REPAIRED, REPLACED, OR SUPPLEMENTED WITH ADDITIONAL STONE AS REQUIRED TO KEEP IT FUNCTIONED, DUE TO SEDIMENT ACCUMULATION, ANIMAL THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH OF 6", THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTATION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

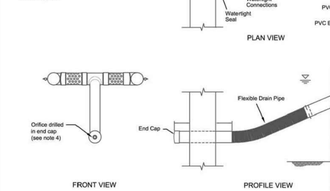
RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC–12
APPROVED 03–25–11 DATE	ROCK BERM DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



NOTES:

1. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1" X 4" BOARD SECURED WITH CONCRETE NAILS 3' O.C. NAILED INTO THE GUTTER IN LIEU OF SANDBAGS TO HOLD THE FILTER FABRIC IN PLACE. UPON REMOVAL, CLEAN ANY DIRT/DEBRIS FROM NAILING LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON-SHRINK GROUT FLUSH WITH SURFACE OF GUTTER.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR SIMILAR METHOD.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM-WATER BEGINS TO OVERTOP THE CURB.
5. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC–14
APPROVED 03–25–11 DATE	CURB INLET PROTECTION DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

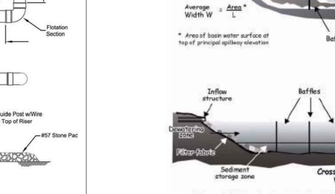


ISOMETRIC CROSS SECTION

NOTES:

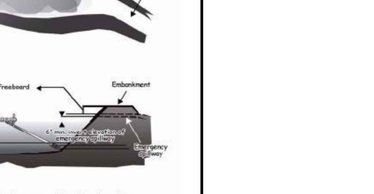
1. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
2. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY CLEAN THE INLET PROTECTION IF EXCESSIVE PONDING OCCURS.
3. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC–15
APPROVED 03–25–11 DATE	AREA INLET PROTECTION DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



FOR QUESTIONS CONCERNING THIS DETAIL, PLEASE CONTACT THE FORESTRY MANAGER.

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	SCALE: NTS DRAWING NO: EC–04 SHEET 1 of 1
APPROVED 01–28–21 DATE	TREE PROTECTION FENCE CHAIN LINK	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



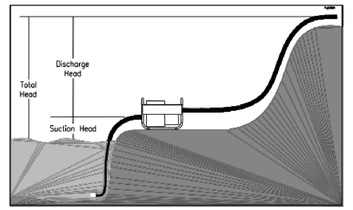
FOR QUESTIONS CONCERNING THIS DETAIL, PLEASE CONTACT THE FORESTRY MANAGER.

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	SCALE: NTS DRAWING NO: EC–03 SHEET 1 of 1
APPROVED 01–28–21 DATE	TREE PROTECTION FENCE LOCATIONS	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

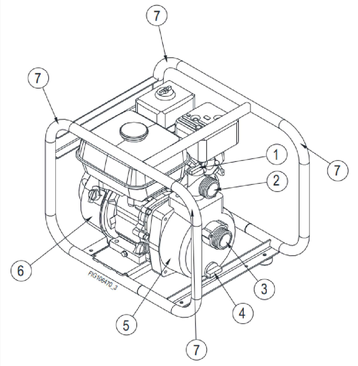
Figure 6.64c Example of a sediment basin with a skimmer outlet and emergency spillway. From Pennsylvania Erosion and Sediment Pollution Control Manual, March, 2000.

	DEWATERING SKIMMER

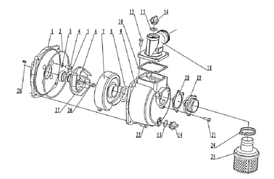
NorthStar Self-Priming Semi-Trash Water Pump — 3in. Ports, 15,850 GPH, 3/4in. Solids Capacity, 163cc Honda GX160 Engine (SUMP PUMP DETAIL)



109173 – 3" Semi-Trash	
Engine	Honda GX160
Suction & Discharge Size	3" NPT
Maximum Flow	15,850 (59999 L/hr)
Maximum Suction Head	23 ft (7 m)
Maximum Total Head	98 ft (29.9 m)
Maximum Pressure	42 psi (2.90 bar)
Passable Solid Size	3/4" (1.9 cm)
Mechanical Seal	Silicon Carbide
Overall Dimensions (L x W x H)	20" x 16" x 16" (50.8 x 40.6 x 40.6 cm)
Dry Weight	68 lbs (30.8 kg)
Noise Level (dB)	100 dB



780970 Pump Exploded View



Item	Description	Part #	Qty.
1	Pump Cover	781257	1
2	Large O-ring	781258	1
3	Sealing Washer	781259	5
4	Mount Bolt	781260	4
5	Mechanical Seal	781261	1
6	Impeller	781262	1
7	Volute	781263	1
8	Small O-ring	781264	1
9	Seal Plate	781265	1
10	Outlet Body	781266	1
12	Outlet Connection Bolt	788870	4
13	Plug O-ring	782855	2
14	Drain/Prime Plug		2

Item	Description	Part #	Qty.
18	Outlet Flange	782268	1
19	Inlet Flange	782867	1
20	Inlet Check Valve	781271	1
21	Inlet Connection Bolt	788867	3
22	Pump Body Bolt	788998	4
24	Inlet Hose Clamp	781275	3
25	Suction Strainer	781276	1
26	Shaft Bolt	781256	1
27	Shaft Bolt Washer	788998	1
28	Key	788989	1

1. **Prime Port:** Fill the priming port to prime the pump.
2. **Discharge Fitting:** Connect the discharge hose to the discharge fitting.
3. **Suction Fitting:** Connect the suction hose to the suction fitting.
4. **Drain Port:** Drain the liquid in the pump through the drain port.
5. **Pump:** The pump moves the liquid.
6. **Engine:** The air-cooled engine powers the pump.
7. **Lifting Points:** Lift the machine from these points when transporting.

No. Date REVISIONS App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23264 & 10064100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN DESIGNED BY: CDJ
DATE: 11/07/23 CHECKED BY: PKC
JOB NO.: 17207-0002-01 DRAWN BY: JMG

STATE OF TEXAS ERIC CHRISTOPHER VANN 144638 LICENSED PROFESSIONAL ENGINEER
07/10/2023

CR 259 MULTIFAMILY — CR 259

EROSION CONTROL DETAILS

SHEET NO. 43
OF 50

Attachment I

INSPECTION AND MAINTENANCE FOR BMPS

1. Inspection
   a. A qualified inspector (representing the discharger) shall inspect the following items once per calendar week and within 24 hours after the end of a ½-inch or greater rainfall:
      i. Disturbed areas of the construction site that have not been finally stabilized
      ii. Areas used for storage of materials that are exposed to precipitation
      iii. Structural and stabilization control measures
      iv. Construction entrance/exists
   b. The E & S inspector shall have authority to require immediate action on the part of the Contractor to correct any nonconforming items found during inspections or to require revisions to the E & S controls if appropriate. If revisions are needed, they shall be implemented within 7 calendar days after the date of inspection.
   c. The E & S inspector will provide written reports covering all items/areas inspected and outlining corrective measures if any.
   d. The embankment, spillways, and outlet of the temporary sediment basin shall be inspected for piping and settlement.

2. Maintenance
   a. All erosion and sedimentation (E & S) measures/controls shall be maintained in good working order by the Contractor. Written maintenance reports shall be prepared covering all inspections and maintenance affecting E & S controls. If repair(s) are necessary, they shall be initiated within 24 hours after report.
   b. The construction entrance shall be maintained in a condition which will prevent/minimize tracking or flowing of sediments onto public roadways. Sediments spilled, dropped, washed, or tracked onto public roadway must be removed.
   c. Temporary and permanent seeding and planting shall be maintained to ensure the following:
      - Bare spots are filled in
      - Wash-outs are filled in
      - Healthy growth is promoted
   d. For silt fences, when the silt reaches a depth equal to 1/3 height of the barrier, the silt shall be removed and mixed with other soil materials to be placed within the embankment areas of the project site. After construction is complete, the silt fence shall be disposed of off-site.
   e. Silt fences shall be maintained to ensure the following:
      - torn fabric is replaced
      - loose fabric is properly resecured
      - loose post supports are plumbed and strengthened
      - fabric bottom is buried as anchor

f. The temporary sediment basin shall be maintained in accordance with the following:
   - Trash and debris are removed to prevent clogging in the outlet structure.
   - Accumulated silt should be removed, and the basin should be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to 75% of its original storage capacity.
   - The removed sediment should be stockpiled or redistributed in areas that are protected from erosion.

g. Inlet protection shall be maintained in accordance with the following:
   - Sediment is to be removed when buildup reaches a depth of 3 inches. Removed sediment should be deposited in a suitable area in such a manner that it will not erode.
   - Placement of device is to be checked to prevent gaps between device and the curb.
   - Patch or replace filter fabric if torn or missing.
   - Structures should be removed, and the area stabilized only after the remaining drainage area has been properly stabilized.

h. If damage to protected trees occurs, the following maintenance guidelines should be followed:
   - If the soil has become compacted over the root zone of any tree, the ground should be aerated by punching holes with an iron bar. The bar should be driven 1- foot deep and then moved back and forth until the soil is loosened. This procedure should be repeated every 18 inches until all of the compacted soil beneath the crown of the tree has been loosened.
   - Any damage to the crown, trunk, or root system of any tree retained on the site should be repaired immediately.
   - Whenever major root or bark damage occurs, remove some foliage to reduce the demand for water and nutrients.
   - Damaged roots should immediately be cut off cleanly inside the exposed or damaged area. Cut surfaces should be painted with approved tree paint, and moist peat moss, burlap, or topsoil should be spread over the exposed area.
   - To treat bark damage, carefully cut away all loosened bark back into the undamaged area, taper the cut at the top and bottom, and provide drainage at the base of the wound.
   - All tree limbs damaged during construction or removed for any other reason should be cut off above the collar at the preceding branch junction.
   - Care for serious injuries should be prescribed by a forester or a tree specialist.
   - Broadleaf trees that have been stressed or damaged should receive a heavy application of fertilizer to aid their recovery. Trees should be fertilized in the late fall (after November 1) or the early spring (until April 1). Fall applications are preferred, as the nutrients will be made available over a longer period of time. Fertilizer should be applied to the soil over the feeder roots. In no case should it be applied closer than 3 feet to the trunk. Fertilizer should be applied using approved fertilization methods and equipment.
   - Maintain a ground cover of organic mulch around trees that is adequate to prevent erosion, protect roots, and hold water.

Attachment J

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

1. Interim stabilization will be performed any time a denuded area remains disturbed for over 14 days without restart within 21 days.
2. Permanent stabilization will be done after construction is complete.
3. Contractor shall sod or seed all disturbed pervious areas once finished grade is met.
4. Seeding rates should be as shown in Table 1-3 or as recommended by the county agricultural extension agent.
5. The seed should be applied uniformly with a cyclone seeder, drill, cultipacker seeder or hydro seeder (slurry includes seed, fertilizer, and binder).
6. Slopes that are steeper than 3:1 should be covered with appropriate soil stabilization matting as described in the following section to prevent loss of soil and seed.

Table 1-3 Temporary Seeding for Hays, Travis, and Williamson Counties (Northcutt, 1993)

Dates	Climate	Species (lb/ac)	
Sept 1 to Nov 30	Temporary Cool Season	Tall Fescue Oats Wheat (Red, Winter) **Total**	4.0 21.0 30.0 **55.0**
Sept 1 to Nov 30	Cool Season Legume	Hairy Vetch	8.0
May 15 to Aug 31	Temporary Warm Season	Foxtail Millet	30.0

QUIDDITY

NOTICE OF INTENT

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 28, 2023

Dear Applicant:

Re: TPDES General Permit for Construction Stormwater Runoff (TXR150000)
Notice of Intent Authorization

Your Notice of Intent (NOI) application for authorization under the general permit for discharge of stormwater associated with construction activities has been received. Pursuant to authorization from the Executive Director of the Texas Commission on Environmental Quality, the Division Deputy Director of the Water Quality Division has issued the enclosed Certificate.

Please refer to the attached certificate for the authorization number that was assigned to your project/site and the effective date. Please use this number to reference this project/site for future communications with the Texas Commission on Environmental Quality (TCEQ).

Authorization under the Edwards Aquifer Protection Program is required before construction can begin where the site is located within the Edwards Aquifer Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone. See https://www.tceq.texas.gov/permitting/eapp/viewer.html for additional information.

It is the responsibility of the Operator to notify the TCEQ Stormwater Processing Center of any change in address supplied on the original Notice of Intent by submitting a Notice of Change.

A Notice of Termination must be submitted when permit coverage is no longer needed.

For questions related to processing of your application you may contact the Stormwater Processing Center by email at SWPERMIT@tceq.texas.gov or by telephone at (512) 239-3700. If you have any technical questions regarding the general permit, you may contact the stormwater technical staff by email at SWGP@tceq.texas.gov or by telephone at (512) 239-4671. Also, you may obtain information on the stormwater web site at https://www.tceq.texas.gov/permitting/stormwater.

Sincerely,

Robert Sadlier, Deputy Director

Water Quality Division

Texas Commission on Environmental Quality

Construction Notice of Intent

Site Information (Regulated Entity)

What is the name of the site to be authorized?	Ra Ra at Liberty Hill
Does the site have a physical address?	Yes
Physical Address	
Number and Street	313 Seward Junction Loop
City	Liberty Hill
State	TX
ZIP	78642
County	WILLIAMSON
Latitude (N) (##.######)	30.646103
Longitude (W) (-###.######)	-97.867739
Primary SIC Code	1522
Secondary SIC Code	
Primary NAICS Code	236116
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	
What is the name of the Regulated Entity (RE)?	Ra Ra at Liberty Hill
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	313 SEWARD JUNCTION LOOP
City	LIBERTY HILL
State	TX
ZIP	78642
County	WILLIAMSON
Latitude (N) (##.######)	30.646103
Longitude (W) (-###.######)	-97.867739
Facility NAICS Code	236116
What is the primary business of this entity?	Multi-family Residential Development

Customer (Applicant) Information

How is this applicant associated with this site?	Operator
What is the applicant's Customer Number (CN)?	
Type of Customer	Partnership
Full legal name of the applicant:	
Legal Name	Lux at Gateway, LP

Texas SOS Filing Number	804412307
Federal Tax ID	881174744
State Franchise Tax ID	32082950638
State Sales Tax ID	
Local Tax ID	
DUNS Number	
Number of Employees	0-20
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes

Responsible Authority Contact

Organization Name	Lux at Gateway, LP
Prefix	
First	Ramana
Middle	
Last	Korada
Suffix	
Credentials	
Title	principal

Responsible Authority Mailing Address

Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	2701 DALLAS PKWY STE 380
Routing (such as Mail Code, Dept., or Attn:)	
City	PLANO
State	TX
ZIP	75093
Phone (###-###-####)	2147799127
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	ramana@aspireventures.us

Application Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	
Organization Name	Quiddity Engineering Inc
Prefix	
First	Paul
Middle	

Last	Choi
Suffix	
Credentials	PE
Title	Project Engineer
Enter new address or copy one from list:	

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	101 E OLD SETTLERS BLVD STE 280
Routing (such as Mail Code, Dept., or Attn:)	
City	ROUND ROCK
State	TX
ZIP	78664
Phone (###-###-####)	5126855138
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	pchoi@quiddity.com

CNOI General Characteristics

1	Is the project or site located on Indian Country Lands?	No
2	Is the project or site associated to a facility that is licensed for the storage of high-level radioactive waste by the United States Nuclear Regulatory Commission under 10 CFR Part 72?	No
3	Is your construction activity associated with an oil and gas exploration, production, processing, or treatment, or transmission facility?	No
4	What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site?	1522
5	If applicable, what is the Secondary SIC Code(s)?	
6	What is the total number of acres that the construction project or site will disturb under the control of the primary operator?	17.5
7	What is the construction project or site type?	Multi-family residential
8	Is the project part of a larger common plan of development or sale?	No
9	What is the estimated start date of the project?	02/15/2024
10	What is the estimated end date of the project?	02/15/2026
11	Will concrete truck washout be performed at the site?	Yes
12	What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site?	South Fork San Gabriel River
13	What is the segment number(s) of the classified water body(s) that the discharge will eventually reach?	1250
14	Is the discharge into a Municipal Separate Storm Sewer System (MS4)?	Yes
14.1	What is the name of the MS4 Operator?	City of Liberty Hill

15	Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?	Yes
15.1	I certify that the copy of the TCEQ-approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) that is included or referenced in the Stormwater Pollution Prevention Plan will be implemented.	Yes
16	I certify that a stormwater pollution prevention plan (SWP3) has been developed, will be implemented prior to construction, and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the general permit TXR150000. Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator.	Yes
17	I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000).	Yes
18	I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.	Yes

Certification

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

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

1. I am Paul K Choi, the owner of the STEERS account ER098887.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Construction Notice of Intent.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OPERATOR Signature: Paul K Choi OPERATOR

Customer Number:

Legal Name:	Lux at Gateway, LP
Account Number:	ER098887
Signature IP Address:	71.40.31.90

Signature Date:	2023-07-28
Signature Hash:	17B5B4761B59A233AE953BA0B276022AAA840ACF4CC1621D49C4EF0F14FF1FEE
Form Hash Code at time of Signature:	2198AE824EE458614F9761C663ABD242C3953949F737967BEBB95D380D9C0D0F

Fee Payment

Transaction by:	The application fee payment transaction was made by ER098887/Paul K Choi
Paid by:	The application fee was paid by CRISTINA JOHNSON
Fee Amount:	$225.00
Paid Date:	The application fee was paid on 2023-07-28
Transaction/Voucher number:	The transaction number is 582EA000562180 and the voucher number is 654438

Submission

Reference Number:	The application reference number is 579424
Submitted by:	The application was submitted by ER098887/Paul K Choi
Submitted Timestamp:	The application was submitted on 2023-07-28 at 12:22:48 CDT
Submitted From:	The application was submitted from IP address 71.40.31.90
Confirmation Number:	The confirmation number is 482167
Steers Version:	The STEERS version is 6.68

Additional Information

Application Creator: This account was created by Cristina D Johnson

QUIDDITY

AGENT AUTHORIZATION FORM

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

I Ramana Korada,
Print Name

Principal,
Title - Owner/President/Other

of Lux at Gateway, LP, a Texas Limited Partnership,
Corporation/Partnership/Entity Name

have authorized Eric C Vann
Print Name of Agent/Engineer

of Quiddity Engineering, LLC.
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:

K. Ramana

Applicant's Signature

7/19/23

Date

THE STATE OF Texas §

County of Denton §

BEFORE ME, the undersigned authority, on this day personally appeared Ramana Korada 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 19 day of July 2023

NOTARY PUBLIC

JOSEPH RODRIGUEZ
Notary Public, State of Texas
Comm. Expires 03-06-2027
Notary ID 134236520

Joseph Rodriguez

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 03/06/2027

QUIDDITY

CONTRIBUTING ZONE APPLICATION FEE FORM

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Ra Ra at Liberty Hill
Regulated Entity Location: 313 Seward Jct Lp, Liberty Hill, Texas 78642
Name of Customer: Lux at Gateway, LP, a Texas Limited Partnership
Contact Person: Ramana Korada Phone: (214) 799 - 9127
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	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	21.337 Acres	$ 6,500
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: K. Ramana

Date: 07/19/2023

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

QUIDDITY

CORE DATA FORM

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) 07/19/2023

☒ 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:*

Lux at Gateway, LP, a Texas Limited Partnership

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
0804412307	32082950638	88-1174744	

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: Principal

15. Mailing Address: 2701 Dallas Pkwy, Suite 380

City	Plano	**State**	TX	**ZIP**	75093	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*

17. E-Mail Address *(if applicable)*
ramana@aspireventures.us

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(214) 779-9127		( ) -

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.)*

Ra Ra at Liberty Hill

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	313 Seward Jct Lp							
	City	Liberty Hill	**State**	TX	**ZIP**	78642	**ZIP + 4**	
24. County	Williamson							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

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

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
1522		236116	

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

Multi-family Residential Development

34. Mailing Address:	**2701 Dallas Pkwy, Suite 380**							
	City	**Plano**	**State**	**TX**	**ZIP**	**75093**	**ZIP + 4**	
35. E-Mail Address:	**ramana@aspireventures.us**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(214) 799-9127		( ) -

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:	Cristina D. Johnson	**41. Title:**	Design Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210 **)** 546-0083		**( )** -	cjohnson@quiddity.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:	Quiddity Engineering. L.LC	**Job Title:**	Project Manager
Name *(In Print):*	Eric C. Vann, P.E.	**Phone:**	**(** 512 **)** 685- **5138**
Signature:		**Date:**	07/28/2023