CONTRUBUTING ZONE PLAN (CZP) FOR

LAUREN CONCRETE PLANT 7 100 CR 258 LIBERTY HILL, TEXAS 78642

Prepared for:

KLATT PROPERTIES, LP

Ryan Bartholomew, CEO 4503 River Wood Ct, Austin, Texas 78731

Prepared by:

WAELTZ & PRETE, INC.

Antonio A. Prete, P.E. 211 N. A.W. Grimes Blvd. Round Rock, Texas 78665



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. <u>Edwards Aquifer applications</u> 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

- 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.

Regulated Entity Name: Lauren Concrete Plant 7				2. Regulated Entity No.: 104992979					
3. Customer Name: Klatt Properties, LP				4. Customer No.:					
5. Project Type: (Please circle/check one)	New	V	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)	Residen	ıtial	Non-residential		√ 8. Site (ac		e (acres):	35.10 AC (Permitting) 2.28 AC (LOC)	
9. Application Fee:	\$4,0	00	10. Permanent I			BMP(s	SMP(s): n/a – Less then 20%		Less then 20% I.C.
11. SCS (Linear Ft.):	n/a	ì	12. AST/UST (No			o. Tar	ıks):	n/a	
13. County:	Willian	nson	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 AuthorityBarton Springs/ Edwards AquiferHays TrinityPlum Creek	Barton Springs/ Edwards Aquifer	NA		
City(ies) Jurisdiction	AustinBudaDripping SpringsKyleMountain CitySan MarcosWimberleyWoodcreek	AustinBee CavePflugervilleRollingwoodRound RockSunset ValleyWest Lake Hills	AustinCedar ParkFlorenceGeorgetownJerrellLeander _√_Liberty HillPflugervilleRound 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 HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan 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.				
Antonio A. Prete, P.E.				
Print Name of Customer /Authorized Agent				
4± 4R	05/19/2025			
Signature of Customer /Authorized Agent	Date			

FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Adn	ninistratively Comple	ete:
Received From:		Correct Number of Copies:		
Received By:		Distribut	ion Date:	
EAPP File Number:		Complex	:	
Admin. Review(s) (No.):		No. AR R	ounds:	
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee	Payable to TCEQ (Y	/N):
Core Data Form Complete (Y/N):		Check:	Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days of	ld (Y/N):

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), Effective June 1, 1999

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Contributing Zone Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Antonio A. Prete, P.E
Date: 05/19/2025
Signature of Customer/Agent:
4t 1R

Regulated Entity Name: Lauren Concrete Plant 7

Project Information

1. County: Williamson

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

Contact Person: Ryan Bartholomew, CEO Entity: Klatt Properties, LP Mailing Address: 4503 River Wood Ct

City, State: Austin, Texas Zip: 78731

Telephone: _____

	Fax: Email Address: <u>bartryan@gmail.com</u>	
5.	Agent/Representative (If any):	
	Contact Person: <u>Antonio A. Prete ,P.E.</u> Entity: <u>Waeltz & Prete, Inc</u> Mailing Address: <u>211 N. A.W. Grimes Blvd.</u> City, State: <u>Round Rock, Texas</u>	Zip: <u>78655</u>
	Telephone: <u>(512)</u> 505-8953	Fax:
	Email Address: tony@w-pinc.com	
6.	Project Location:	
	 ☐ The project site is located inside the city lim ☐ The project site is located outside the city light jurisdiction) of Liberty Hill. ☐ The project site is not located within any cit 	mits but inside the ETJ (extra-territorial
7.	The location of the project site is described provided so that the TCEQ's Regional staff of boundaries for a field investigation.	•
	100 County Road 258, Liberty Hill, TX 78642 of the CR 258 and US-183 intersection.	2. The site is located on the southeast corner
8.	Attachment A - Road Map. A road map sho project site is attached. The map clearly sh	
9.	Attachment B - USGS Quadrangle Map. A Quadrangle Map (Scale: 1" = 2000') is attac	
	Project site boundaries.USGS Quadrangle Name(s).	
10.	Attachment C - Project Narrative. A detailed project is attached. The project description contains, at a minimum, the following detail	is consistent throughout the application and
	 ✓ 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): <u>35.10</u> Acres
Total disturbed area: 2.28 Acres
14. Estimated projected population: <u>20</u>
15. The amount and type of impervious cover expected after construction is complete is shown

Table 1 - Impervious Cover

below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	492	÷ 43,560 =	0.01
Parking	0	÷ 43,560 =	0
Other paved surfaces	237,762	÷ 43,560 =	5.46
Total Impervious Cover	238,254	÷ 43,560 =	5.47

Total Impervious Cover $\underline{5.47}$ ÷ Total Acreage $\underline{35.10}$ X 100 = $\underline{15.58}$ % 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.

For Road Projects Only Complete questions 18 - 23 if this application is exclusively for a road project. N/A
N/A N/A
40 Time of analogy
18. Type of project:
 TXDOT road project. County road or roads built to county specifications. City thoroughfare or roads to be dedicated to a municipality. Street or road providing access to private driveways.
19. Type of pavement or road surface to be used:
Concrete Asphaltic concrete pavement Other:
20. Right of Way (R.O.W.):
Length of R.O.W.: feet. Width of R.O.W.: feet. $L \times W = $ 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. \times N/A 26. Wastewater will be disposed of by: On-Site Sewage Facility (OSSF/Septic Tank): Attachment F - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities. | Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285. | | Sewage Collection System (Sewer Lines): The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is: Existing. Proposed. N/A Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons. \times N/A

Table 2 - Tanks and Substance Storage

27. Tanks and substance stored:

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

AST Number	Size (Gall	ons)	St	ored	Tank N	Material	
4							
5							
		1		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 - Second	lary Containment	:					
Length (L)(Ft.)	Width(W)(Ft.)	Height (H)(Ft.)	L x W x H = (Ft.	3) (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 							

Substance to be

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. \square The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = <u>Varies</u> '.
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 Panel 48491C0245F, dated December 20, 2019 and FEMA Panel 48491C0275E, dated September 26, 2008. 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. \(\sum \) Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
41. \int 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.
Pe	ermanent Best Management Practices (BMPs)
Pra	ctices and measures that will be used during and after construction is completed.
47.	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 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

	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 multifamily 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.	. X 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.	. X 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.
\boxtimes	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.
\boxtimes	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.
\boxtimes	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
-	consibility for Maintenance of Permanent BMPs and sures 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 10 of 11

	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.
Adm	ninistrative 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

FIRM TX. REG. #F-10308

K:\CAD\033-016 Lauren Concrete - Liberty Hill\4-CAD\EXHIBITS\033-016 Road Map.dwg, Layout1, 8/8/2023 1:26:10 PM, DWG To PDF.pc3, 1:1, W-P,Inc., JCL

ATTACHMENT "B" USGS QUADRANGLE MAP

K:\CAD\033-016 Lauren Concrete - Liberty Hill\4-CAD\EXHIBITS\033-016 USGS-Edwards Recharge Map.dwg, Layout1, 8/8/2023 1:27:21 PM, DWG To PDF.pc3, 1:1, W-P,Inc., JCL

ATTACHMENT "C"

PROJECT NARRATIVE

We are submitting a Contributing Zone Plan (CZP) for a ± 35.10 acre tract of land located at 100 County Road 258, Liberty Hill, Texas 78642. The site is located within the extraterritorial jurisdiction of Liberty Hill and the Edward's Aquifer Contributing Zone.

The existing ± 35.10 acre commercial site contains two properties, both owned by Klatt Properties, LLC. (Tax ID: R022837 & R022838). An existing batch concrete plant is located on-site utilizing only a fraction of the site (<5.0 acres). The existing \pm 35.10 acre site contains a total of \pm 4.84 ac (13.79%) of impervious cover.

The proposed project was triggered by the expansion and realignment of U.S. Highway 183. The expansion condemned a portion of the original property and converted it into public right of way. As a result, the existing access driveway for the batch concrete plant was forced to be relocated \pm 360 feet to the East. The proposed development will include: a concrete driveway, concrete access drive, driveway culvert, and minor grading. The proposed \pm 35.10 acre site will contain a total of \pm 5.47 acres (15.58%) of impervious cover.

We are requesting a 20% or less Impervious Cover Waiver. Given that the project is not voluntary and the total impervious cover for the site is less than 20% impervious cover. The owner and operator (Klatt Properties, LLC) are considered a small business. Therefore, no new permanent BMPs are proposed for the project.

It should be noted, the application fee value is derived from a metes and bounds prepared for the limits of construction area. This area is defined by 2.10 acres within the property boundary and an additional 0.18 acres within the right-of-way. Therefore, the total limits of construction is approximately \pm 2.28 acres. The 2.28 acres was utilized to determine the application fee value. The metes and bounds have been included directly behind this sheet.

All referenced material is attached directly behind this page. Construction plans are being submitted in conjunction with the Contributing Zone Plan (CZP).

LAUREN CONCRETE PLANT 7 TSS CALCULATIONS

(In Accordance with TCEQ Regulations: RG-348)

Required Load Reduction (L_M) - Total Project Area:

Eq 3.2 $L_m = 27.2$ (A)

32.0	[in]
35.10	[ac]
4.84	[ac]
5.47	[ac]
0.63	[ac]
13.79	[%]
15.58	[%]
	_
548	[lbs]
	35.10 4.84 5.47 0.63 13.79 15.58

METES AND BOUNDS DESCRIPTION

FOR A 2.098 ACRE TRACT OF LAND SITUATED IN THE JOHN B. ROBINSON SURVEY, ABSTRACT NO. 521, WILLIAMSON COUNTY, TEXAS, AND BEING OUT OF THE REMNANT PORTION OF THE CALLED 38.7425 ACRE TRACT OF LAND CONVEYED TO KLATT PROPERTIES, LP, RECORDED IN DOCUMENT NO. 2007009843 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS. SAID 2.098 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING at a TxDOT Type II monument found monumenting the northeast corner of the called 3.646 acre tract of land (Parcel No. 3) described in a Possession and Use Agreement for Transportation Purposes by and between Central Texas Regional Mobility Authority and Klatt Properties, LLC, recorded in Document No. 2020142498 of the Official Public Records of Williamson County, Texas and the northwest corner of said remnant portion of the 38.7425 acre Klatt Properties, LP tract, same being on the south boundary line of the called 1.073 acre tract of land (Tract 2), conveyed to Williamson County, Texas, recorded in Document No. 2003042282 of the Official Public Records of Williamson County, Texas, same being on the east right-of-way line of U.S. Highway 183 (Variable width right-of-way), same being on the south right-of-way line of County Road 258 (variable width right-of-way), from which a 60D nail found monumenting an angle point on the east boundary line of said 3.646 acre Parcel No. 3 and being on the west boundary line of said remnant portion of the 38.7425 acre Klatt Properties, LP tract, same being on said east right-of-way line of U.S. Highway 183, bears S 09°45'02" E passing at a distance of 924.24 feet an iron rod found with aluminum cap marked "TXDOT ACCESS DENIAL POINT" 0.12 feet west of this line, in all a total distance of 978.53 feet:

THENCE, with the north boundary line of said remnant portion of the 38.7425 acre Klatt Properties, LP tract and said south right-of-way line of County Road 258, in part with said south boundary line of the 1.073 acre Williamson County, Texas tract and in part with the south boundary line of the called 8,578 square foot tract of land (Tract 1) conveyed to Williamson County, Texas in said Document No. 2003042282, the following three (3) courses and distances:

- 1. With a curve to the left an arc length of 126.47 feet, said curve having a radius of 918.07 feet, a delta angle of 7°53'35" and a chord which bears N 54°31'09" E for a distance of 126.37 feet to a calculated point on the end of this curve;
- 2. N 49°55'43" E passing at a distance of 61.02 feet a 1/2" bent iron rod found monumenting the southeast corner of said 1.073 acre Williamson County, Texas tract and the southwest corner of said 8,578 square foot Williamson County, Texas tract, in all a total distance of 149.99 feet to a calculated point on the beginning of a curve to the right, from which and iron rod found with cap marked "HAYNE CONSULTING" bears S 35°19'34" E for a distance of 1.51 feet;
- 3. With said curve to the right an arc length of 59.52 feet, said curve having a radius of 954.46 feet a delta angle of 3°34'23" and a chord which bears N 51°48'08" E for

a distance of 59.51 feet to a calculated point for the northwest corner and **POINT OF BEGINNING** hereof;

THENCE, with a curve to the right an arc length of **226.46 feet**, said curve having a radius of **954.46 feet**, a delta angle of **13°35'40"** and a chord which bears **N 60°23'10" E** for a distance of **225.93 feet** to an iron rod found with cap marked "WILLIAMSON COUNTY" monumenting the end of this curve, from which a 1/2" iron rod found monumenting a point of curvature on the north boundary line of the called 1.061 acre tract of land conveyed to Williamson County, Texas, recorded in Document No. 2003092381 of the Official Public Records of Williamson County, Texas, same being on the south boundary line of the remnant portion of the called 94.35 acre tract of land conveyed to Zennie Wey, recorded in Document No. 2021149399 of the Official Public Records of Williamson County, Texas, same being on the north right-of-way line of said County Road 258, bears N 22°38'53" W for a distance of 79.58 feet;

THENCE, **N** 67°08'54" **E** with said north boundary line of the remnant portion of the 38.7425 acre Klatt Properties, LP tract and said south right-of-way line of County Road 258, for a distance of 17.62 feet to a calculated point for the northeast corner hereof, from which an iron rod found with cap marked "WILLIAMSON COUNTY" monumenting an angle point on said north boundary line of the remnant portion of the 38.7425 acre Klatt Properties, LP tract and said south right-of-way line of County Road 258, bears N 67°08'54" E for a distance of 4.14 feet and N 66°48'49" E for a distance of 266.91 feet;

THENCE, through the interior of said remnant portion of the 38.7425 acre Klatt Properties, LP tract, the following twenty-two (22) courses and distances:

- 1. **S 23°10'19" E** for a distance of **1.77 feet** to a calculated point;
- 2. S 66°49'41" W for a distance of 21.00 feet to a calculated point;
- 3. S 23°10'19" E for a distance of 134.75 feet to a calculated point;
- 4. S 20°18'35" E for a distance of 100.12 feet to a calculated point;
- 5. **S 23°10'19"** E for a distance of **124.24 feet** to a calculated point on the beginning of a curve to the right;
- 6. With said curve to the right an arc length of **346.82 feet**, said curve having a radius of **220.00 feet**, a delta angle of **90°19'25"** and a chord which bears **S 21°59'23"** W for a distance of **312.00 feet** to a calculated point on the end of this curve, for the southeast corner hereof;
- 7. N 68°24'25" W for a distance of 19.24 feet to a calculated point;
- 8. N 25°18'56" W for a distance of 11.12 feet to a calculated point;
- 9. S 75°18'37" W for a distance of 25.40 feet to a calculated point;

- 10. **S 06°32'30"** E for a distance of **24.27 feet** to a calculated point;
- 11. **S 79°16'02" W** for a distance of **24.19 feet** to a calculated point for the southwest corner hereof;
- 12. N 10°43'58" W for a distance of 133.00 feet to a calculated point;
- 13. N 79°16'02" E for a distance of 10.00 feet to a calculated point;
- 14. N 10°35'05" W for a distance of 19.88 feet to a calculated point;
- 15. N 10°02'10" E for a distance of 42.66 feet to a calculated point;
- 16. N 32°02'09" E for a distance of 45.66 feet to a calculated point;
- 17. N 45°26'44" E for a distance of 42.17 feet to a calculated point;
- 18. N 57°42'17" E for a distance of 74.08 feet to a calculated point;
- 19. N 23°13'01" W for a distance of 99.81 feet to a calculated point;
- 20. N 55°37'59" W for a distance of 88.45 feet to a calculated point;
- 21. N 54°23'52" W for a distance of 81.87 feet to a calculated point;
- 22. N 61°30'01" W for a distance of 82.46 feet to the POINT OF BEGINNING hereof and containing 2.098 acres of land more or less.

Bearing Basis: NAD-83, Texas Central Zone (4203) State Plane System. Distances shown hereon are surface distances based on a combined surface adjustment factor or 1.00012.

A drawing has been prepared to accompany this metes and bounds description.

◇ DIAMOND SURVEYING, INC.

116 SKYLINE ROAD, GEORGETOWN, TX 78628 (512) 931-3100

T.B.P.E.L.S. FIRM NUMBER 10006900

November 28, 2023

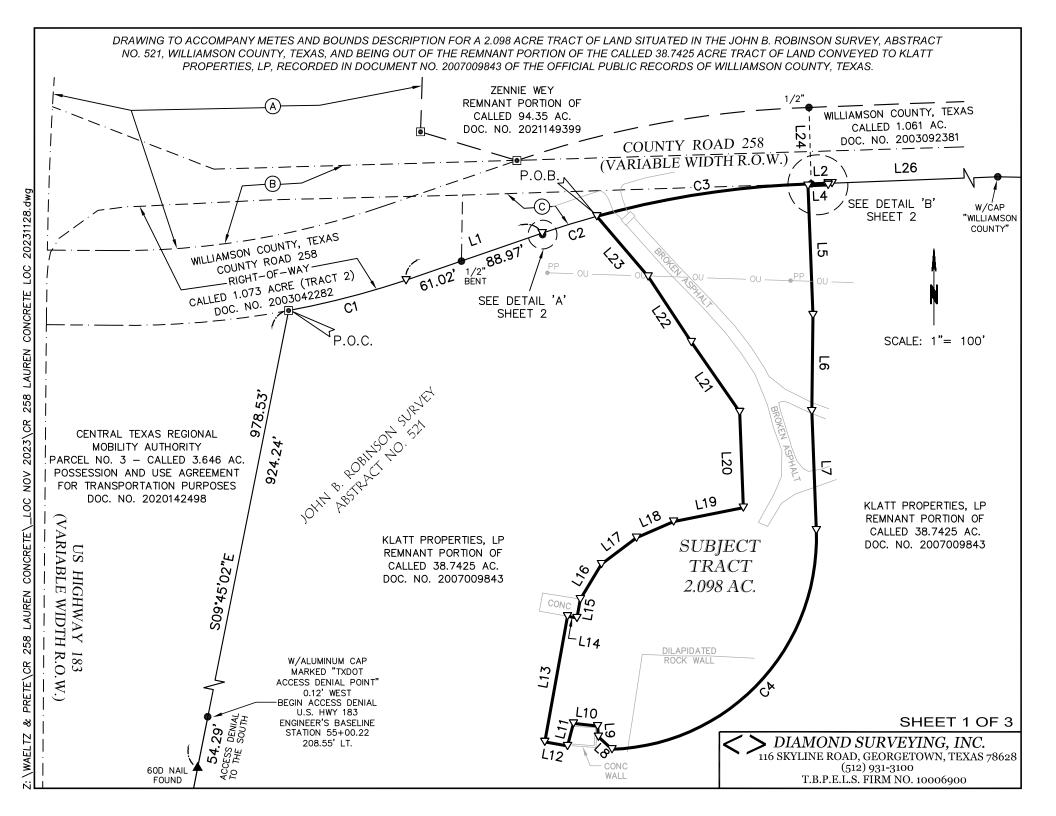
SHANE SHAFER, R.P.L.S. NO. 5281

DATE

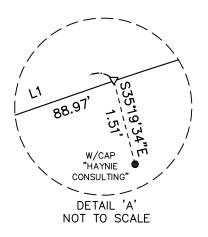
SHANE SHAFER

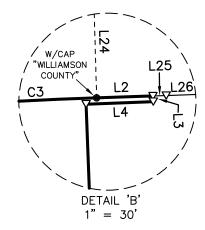
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DRAWING TO ACCOMPANY METES AND BOUNDS DESCRIPTION FOR A 2.098 ACRE TRACT OF LAND SITUATED IN THE JOHN B. ROBINSON SURVEY, ABSTRACT NO. 521, WILLIAMSON COUNTY, TEXAS, AND BEING OUT OF THE REMNANT PORTION OF THE CALLED 38.7425 ACRE TRACT OF LAND CONVEYED TO KLATT PROPERTIES, LP, RECORDED IN DOCUMENT NO. 2007009843 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.





CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	918.07	126.47'	7*53'35"	N54°31'09"E	126.37'
C2	954.46'	59.52'	3*34'23"	N51°48'08"E	59.51'
C3	954.46'	226.46'	13*35'40"	N60°23'10"E	225.93'
C4	220.00'	346.82'	90"19'25"	S21°59'23"W	312.00'

RECORD DEED INFORMATION

(A) CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY
PARCEL NO. 1 -CALLED 14.824 AC.
US HIGHWAY 183 PHASE 3
RIGHT-OF-WAY
DOC. NO. 2020097902

B CHING RUTH HSU CHANG AND HUSBAND, PHILIP CHANG AN UNDIVIDED 80%) AND NANCY LAI (UNDIVIDED 20%) QUIT CLAIM DEED COUNTY ROAD 258 R.O.W. CALLED 0.792 AC. DOC. NO. 2004002066

© WILLIAMSON COUNTY, TEXAS
CALLED 8,578 SQ. FT (TRACT 1)
DOC. NO. 2003042282

<u>LEGEND</u>				
•	IRON ROD FOUND			
A	NAIL FOUND			
•	TXDOT TYPE II MONUMENT FOUND			
▽	CALCULATED POINT			
A	RECORD DEED INFORMATION			
	- R.O.W. DEED LINE			
R.O.W.	RIGHT-OF-WAY			
P.O.C.	POINT OF COMMENCEMENT			
P.O.B.	POINT OF BEGINNING			

LINE TABLE				
LINE	BEARING	DISTANCE		
L1	N49 ° 55'43"E	149.99'		
L2	N67°08'54"E	17.62'		
L3	S23°10'19"E	1.77'		
L4	S66°49'41"W	21.00'		
L5	S2310'19"E	134.75'		
L6	S20°18'35"E	100.12'		
L7	S23°10'19"E	124.24'		
L8	N68°24'25"W	19.24'		
L9	N25°18'56"W	11.12'		
L10	S75°18'37"W	25.40'		
L11	S06°32'30"E	24.27		
L12	S7916'02"W	24.19'		
L13	N10°43'58"W	133.00'		
L14	N79°16'02"E	10.00'		
L15	N10'35'05"W	19.88'		
L16	N10°02'10"E	42.66'		
L17	N32°02'09"E	45.66'		
L18	N45°26'44"E	42.17'		
L19	N57°42'17"E	74.08'		
L20	N23°13'01"W	99.81'		
L21	N55'37'59"W	88.45'		
L22	N54°23'52"W	81.87'		
L23	N61°30'01"W	82.46'		
L24	N22'38'53"W	79.58'		
L25	N67°08'54"E	4.14'		
L26	N66°48'49"E	266.91'		

SHEET 2 OF 3



DIAMOND SURVEYING, INC.

116 SKYLINE ROAD, GEORGETOWN, TEXAS 78628 (512) 931-3100 T.B.P.E.L.S. FIRM NO. 10006900 DRAWING TO ACCOMPANY METES AND BOUNDS DESCRIPTION FOR A 2.098 ACRE TRACT OF LAND SITUATED IN THE JOHN B. ROBINSON SURVEY, ABSTRACT NO. 521, WILLIAMSON COUNTY, TEXAS, AND BEING OUT OF THE REMNANT PORTION OF THE CALLED 38.7425 ACRE TRACT OF LAND CONVEYED TO KLATT PROPERTIES, LP, RECORDED IN DOCUMENT NO. 2007009843 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.

NOTES:

- 1) BEARING BASIS: NAD-83, TEXAS CENTRAL ZONE (4203) STATE PLANE SYSTEM. DISTANCES SHOWN HEREON ARE SURFACE DISTANCES BASED ON A COMBINED SURFACE ADJUSTMENT FACTOR OF 1,00012
- 2) ALL DOCUMENTS LISTED HEREON ARE RECORDED IN THE OFFICE OF THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.
- 3) THE TRACT SHOWN HEREON LIES WITH IN ZONE 'X' (NO SCREEN) AREAS OF MINIMAL FLOOD HAZARD, ACCORDING TO THE FLOOD INSURANCE RATE MAP NO. 48491C0245F, WITH AN EFFECTIVE DATE OF DECEMBER 20, 2019.
- 4) THIS SURVEY WAS MADE WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR POLICY. THERE MAY BE EASEMENTS AND/OR RESTRICTIONS NOT SHOWN HEREON WHICH MAY AFFECT THE SUBJECT TRACT.
- 5) NOT ALL IMPROVEMENTS WERE LOCATED AND THE IMPROVEMENTS SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY. THIS SURVEY IS NOT INTENDED TO BE USED AS A LAND TITLE SURVEY.

N□VEMBER 28, 2023

SHANE SHAFER, R.P.L.S. NO. 5281

DATE



SHEET 3 OF 3

ATTACHMENT "D"

FACTORS AFFECTING SURFACE WATER QUALITY

Factors that could affect the quality of surface and ground water are the parking and use of motor vehicles on site. This includes the emission of certain hydrocarbon based substances as well as the tracking of silt. In addition, the maintenance of lawn or landscape areas could also affect the quality of surface and ground water through runoff of chemical fertilizers or pesticides.

ATTACHMENT "E"

VOLUME AND CHARACTER OF STORMWATER

It is expected that the character of surface and ground water run-off would be consistent with the development of a commercial site; analysis has been completed incorporating the ultimate development of the property, which will include . Constituents would include hydrocarbon based product residues, silt, pesticides, and chemicals resulting from vehicular emissions and landscape maintenance.

The expected volume of run-off was based on the Rational method. This was calculated using "C" factors, which are based on impervious cover and the nature of surfaces over which run-off water flows. These calculations are presented in the attachment directly behind this page and in the attached construction plans.

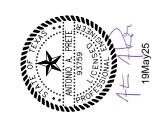
The stormwater quality for the site was determined using "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices". The results from these calculations are presented directly behind this page.

EXISTING CONDITIONS DRAINAGE TABLE (RATIONAL METHOD - ATLAS 14):

		l
O ₁₀₀	142.61	
Q ₅₀	116.92	
Q ₂₅ [cfs]	96.44	
Q ₁₀	72.86	
Q ₅	57.67	
O ₂	42.59	
l ₁₀₀ [in/hr]	7.70	
lso [in/hr]	6.85	
1 ₂₅ [in/hr]	6.04	
I ₁₀ [in/hr]	5.02	
l _s (in/hrì	4.30	
l ₂ (in/hri	3.46	
C ₁₀₀	0.53	
C_{50}	0.49	
C_{25}	0.45	
C ₁₀	0.38 0.41	
O _s	0.38	
S ²	0.35 0.	
ESTIMATED		
_ T Min 1	22.00	
AREA	35.11	35.11
ESTIMATI SUB-BASIN AREA T _o IMPERV DESIGNATION Jacres min 1 +1-196,1	EX-1	

PROPOSED CONDITIONS DRAINAGE TABLE (RATIONAL METHOD - ATLAS 14):

	Q 100	[cts]	144.61	
	O 50	[cts]	118.66	
	Q ₂₅	[cfs]	97.94	
	Q 010	[cts]	74.08	
	ą	[cts]	58.70	
	Q 2	[cts]	43.40	
	100	[in/hr]	7.70	
	l ₅₀	[in/hr]	6.85	
	125	[in/hr]	6.04	
	10	[in/hr]	5.02	
	-12	[in/hr]	4.30	
	-2	[in/hr]	3.46	
	C ₁₀₀		0.53	
	ပိ		0.49	
	C_{25}		0.46	
	C ₅ C ₁₀		0.42	
	ပ်		0.39	
	ပိ		0.36	
ESTIMATED	IMPERV.	[%] -/+	15.3	
	ř	[min.]	22.00	
		[acres]	35.11	35.11
	SUB-BASIN AREA	DESIGNATION [acres] [min.]	PROP-1 35.11	





WAELTZ & PRETE, INC.
CIVIL ENGINEERS
STIN AM GRINESBLVD.
ROUND ROCK TX 78665
HG 12 505 89533
FIRM TX REG. #F. 10308

ATTACHMENT "F"

SUITABILITY LETTER FROM AUTHORIZED AGENT

There are no On-Site Sewage Facilities proposed for this project.

ATTACHMENT "I"

20% or LESS IMPERVIOUS COVER WAIVER

The existing ± 35.10 acre commercial site contains two properties, both owned by Klatt Properties, LLC. (Tax ID: R022837 & R022838). An existing batch concrete plant is located on-site utilizing only a fraction of the site (<5.0 acres). The existing \pm 35.10 acre site contains a total of \pm 4.84 ac (13.79%) of impervious cover.

The proposed project was triggered by the expansion and realignment of U.S. Highway 183. The expansion condemned a portion of the original property and converted it into public right of way. As a result, the existing access driveway for the batch concrete plant was forced to be relocated \pm 360 feet to the East. The proposed development will include: a concrete driveway, concrete access drive, driveway culvert, and minor grading. The proposed \pm 35.10 acre site will contain a total of \pm 5.47 acres (15.58%) of impervious cover.

We are requesting a 20% or less Impervious Cover Waiver. Given that the project is not voluntary and the total impervious cover for the site is less than 20% impervious cover. The owner and operator (Klatt Properties, LLC) are considered a small business. Therefore, no new permanent BMPs are proposed for the project.

ATTACHMENT "J"

BMPs FOR UPGRADIENT STORMWATER

The upgradient stormwater will be handled and routed around the site by the US-183 improvements. Therefore, no BMP's for upgradient stormwater are proposed.

ATTACHMENT "K"

BMPs FOR ON-SITE STORMWATER

This project is seeking a waiver to permanent on-site BMP's based on the proposed impervious cover being 20% or less. Therefore, no permanent BMP's are proposed for this development. Reference Attachment "I"

ATTACHMENT "L"

BMPs FOR SURFACE STREAMS

There are no surface streams located within the limits of this project. Therefore, no BMP's for surface streams are proposed.

ATTACHMENT "M"

CONSTRUCTION PLANS

The	construction	plans	have	been	submitted	in	conjunction	with	the	Contributing	Zone
Plan							-			_	

ATTACHMENT "N"

INSPECTION, MAINTENANCE, REPAIR, & RETROFIT PLAN

This project is seeking a waiver to permanent on-site BMP's based on the proposed impervious cover being 20% or less. Therefore, no permanent BMP's are proposed for this development. Reference Attachment "I"

ATTACHMENT "O"

PILOT-SCALE FIELD TESTING PLAN

Not applicable for this project.

ATTACHMENT "P"

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

No surface streams are located within the limits of this project.

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: Antonio A. Prete, P.E.

Date: 05/19/2025

Signature of Customer/Agent:

4= 46

Regulated Entity Name: Lauren Concrete Plant 7

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: <u>Fuel storage</u> and use

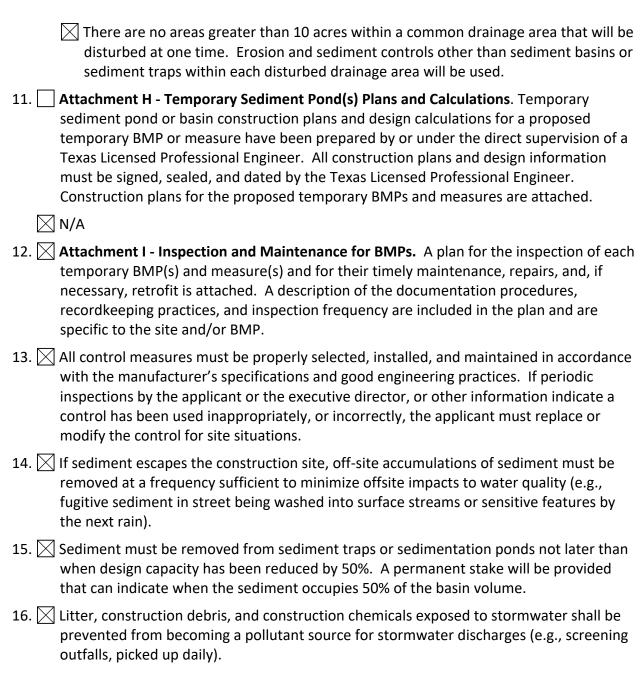
These fuels and/or hazardous substances will be stored in:

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.
Se	equence 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:
Te	emporary Best Management Practices (TBMPs)
sta cor bas	osion control examples: tree protection, interceptor swales, level spreaders, outlet oblilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized onstruction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment sins. Please refer to the Technical Guidance Manual for guidelines and specifications. All uctural 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
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.



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

1.4.16 Spill Prevention and Control

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

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

Education

- (1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.
- (2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- (3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- (4) Establish a continuing education program to indoctrinate new employees.
- (5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- (1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- (2) Store hazardous materials and wastes in covered containers and protect from vandalism.
- (3) Place a stockpile of spill cleanup materials where it will be readily accessible.
- (4) Train employees in spill prevention and cleanup.

- (5) Designate responsible individuals to oversee and enforce control measures.
- (6) Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.
- (7) Do not bury or wash spills with water.
- (8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the revisions in applicable BMPs.
- (9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
- (10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- (11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- (12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

- (1) Clean up leaks and spills immediately.
- (2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
- (3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

- (2) Use absorbent materials on small spills rather than hosing down or burying the spill.
- (3) Absorbent materials should be promptly removed and disposed of properly.
- (4) Follow the practice below for a minor spill:
- (5) Contain the spread of the spill.
- (6) Recover spilled materials.
- (7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

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

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

- (2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
- (3) Notification should first be made by telephone and followed up with a written report.
- (4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
- (5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: https://www.tceq.texas.gov/response/serc/state-emergency-response-commission

ATTACHMENT "B"

POTENTIAL SOURCES OF CONTAMINATION

Potential sources of contamination from this site include hydrocarbon residue, emissions from vehicles, asphaltic products used for paved surfaces, and tracking of silt onto paved surfaces by construction equipment.

ATTACHMENT "C"

SEQUENCE OF MAJOR ACTIVITIES

Activity	<u>Area</u>
Install Erosion Controls	± 2.28 ac (Limits of Construction)
Clearing / Grubbing	± 2.28 ac (Limits of Construction)
Fill / Excavation (Grading)	± 2.28 ac (Limits of Construction)
Utility Installation	± 0.00 ac
Paving / Infrastructure	± 0.72 ac
Revegetation	± 2.28 ac (Limits of Construction)

NOTE: There are no common drainage areas containing more than 10 acres of disturb area.

ATTACHMENT "D"

TEMPORARY BEST MANAGEMENT PRACTICES & MEASURES

The TBMP's are to be installed prior to any site activities and will be in place for all sequenced activities. This includes the placement of temporary stabilized construction entrance, concrete washout area, and silt fencing on the down gradient side of the site to prevent any silted run-off to water surfaces and to prevent any erosion or disturbance to vegetation.

Post construction of improvements and prior to project acceptance, the limits of disturbance shall be revegetated.

ATTACHMENT "E"

REQUEST TO TEMPORARILY SEAL A FEATURE

A request to temporarily seal a feature is not being made.

ATTACHMENT "F"

STRUCTURAL PRACTICES

This includes the placement of a stabilized construction entrance, concrete truck washout area, silt fencing and natural vegetated filter strip (50' minimum width) on the down gradient side of the site to prevent any silted run-off to water surfaces and to prevent any erosion or disturbance to vegetation.

ATTACHMENT "G"

DRAINAGE AREA MAP

A drainage area map has been included as part of the construction plans, which has been submitted with this Contributing Zone Plan (CZP).

ATTACHMENT "H"

TEMPORARY SEDIMENT POND(S) PLANS & CALCULATIONS

There are no common drainage areas containing more than 10 acres of disturbed area. Therefore, a temporary sediment pond is not required for this project

ATTACHMENT "I"

INSPECTION & MAINTENANCE FOR BMPs

SILT FENCES:

Weekly: Accumulated silt shall be removed when it reaches a depth of 6 inches. Silt shall be

disposed of in an approved site and in such a manner as to not contribute to additional siltation. Repair and replace any damaged section resulting from construction activity or

other cases.

After Rainfall: Fences shall be checked for structural damage from stormwater flows immediately after a

significant (≥ 0.5 inch) rainfall as soon as ground conditions make fences accessible (usually within 24 hours). Should there be prolonged rainfall, inspections should be conducted without vehicles and temporary repairs made until equipment can be brought in without major surface damage. Remove accumulated silt when depth reaches 6 inches

and dispose of as indicated in Weekly maintenance.

Adjust fence configuration if necessary after rainfall event to accommodate conditions

defined by stormwater flows.

STABILIZED CONSTRUCTION ENTRANCE:

Weekly: The entrance shall be maintained in a condition which will prevent tracking or flowing of

sediment onto public roadways. If necessary, top dress with additional stone and repair

and/or cleanout any measures used to trap sediment.

After Rainfall: Immediately after a significant rainfall (≥ 0.5 inch), as soon as ground conditions make

stabilized construction entrance accessible (usually within 24 hours), the same inspection

and maintenance procedures for the weekly requirements shall be performed.

CONCRETE TRUCK WASHOUT:

Daily: The washout lining and sidewalls shall be inspected for damages and leaks. Repair and

replace any damages resulting from construction activity or other cases. Ensure the washout area does not exceed 75% capacity. If 75% capacity is exceeded, the wash water should be vacuumed off or allowed to evaporate to avoid overflows. Once the remaining cementitious solids have hardened, they shall be removed and recycled.

Before Rainfall: Prior to a heavy rainfall, the washout's liquid level should be lowered or the washout area

should be covered.

After Rainfall: Immediately after a significant rainfall (≥ 0.5 inch), as soon as ground conditions are

accessible (usually within 24 hours), the same inspection and maintenance procedures for

the daily requirements shall be performed.

RECORD KEEPING:

Project superintendent shall have a log for entering site inspections for both weekly and rainfall events. Results of inspections including damage and recommended repairs shall be noted, along with inspection personnel data and date of remedial action taken.

ATTACHMENT "J"

SCHEDULE OF INTERIM & PERMANENT SOIL STABLIZATION PRACTICES

Interim soil stabilization shall be instituted whenever an area has been disturbed and there is a lapse of twenty-one consecutive days when no construction activities have occurred on that location or if any area is not scheduled for final construction activities to occur later than twenty-one days after last disturbance.

Post final grading, permanent soil stabilization shall occur at the first practical opportunity after the completion of construction activities in an area (Within fourteen days). Records must be kept as to when each soil stabilization measure was instituted in each area.

Hydro-mulch shall be utilized for permanent soil stabilization, unless otherwise noted. Reference erosion & sedimentation notes and details in the construction plans.

Application Fee Form

Texas Commission on Environmental Quality Name of Proposed Regulated Entity: <u>Lauren Concrete Plant 7</u> Regulated Entity Location: 100 CR 258 Liberty Hill, Texas 78642					
Name of Customer: Klatt Properti	es, LP				
Contact Person: <u>Ryan Bartholome</u> Customar Reference Number (if is		ne:			
Customer Reference Number (if is Regulated Entity Reference Numb		12070			
Austin Regional Office (3373)	Der (II 1330ed).NN <u>10433</u>	<u> </u>			
Hays	Travis	⊠w	illiamson		
San Antonio Regional Office (336					
Bexar	Medina	□ Uv	valde		
Comal	Kinney				
Application fees must be paid by	check, certified check,	or money order, payab	le to the Texas		
Commission on Environmental Q		• • • •			
form must be submitted with yo					
X Austin Regional Office		an Antonio Regional O	ffice		
Mailed to: TCEQ - Cashier		Overnight Delivery to: 1	TCEQ - Cashier		
Revenues Section	1	.2100 Park 35 Circle			
Mail Code 214	E	Building A, 3rd Floor			
P.O. Box 13088	A	Austin, TX 78753			
Austin, TX 78711-3088 (512)239-0357					
Site Location (Check All That App	ly):				
Recharge Zone	Contributing Zone	Transi	tion Zone		
Type of Pla	n	Size	Fee Due		
Water Pollution Abatement Plan,	-				
Plan: One Single Family Residenti	-	Acres	\$		
Water Pollution Abatement Plan,	_	A	*		
Plan: Multiple Single Family Resid		Acres	\$		
Water Pollution Abatement Plan, Plan: Non-residential	Contributing Zone	(LOC) 2.28 Acres	\$ 4,000		
Sewage Collection System		L.F.	\$ 4,000		
Lift Stations without sewer lines		Acres	\$		
Underground or Aboveground Sto	orage Tank Facility	Tanks	\$		
Piping System(s)(only)		Each	\$		
Exception		Each	\$		
Extension of Time		Each	\$		
Signature:					

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	\$1,500
	5 < 10	\$3,000
	10 < 40	\$4,000
	40 < 100	\$6,500
	100 < 500	\$8,000
	≥ 500	\$10,000
Non-residential (Commercial, industrial, institutional,	< 1	\$3,000
multi-family residential, schools, and other sites	1 < 5	\$4,000
where regulated activities will occur)	5 < 10	\$5,000
	10 < 40	\$6,500
	40 < 100	\$8,000
	≥ 100	\$10,000

Organized Sewage Collection Systems and Modifications

organized berrage concernor by sterns and	· ······	
	Cost per Linear	Minimum Fee-
Project	Foot	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

Agent Authorization Form

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

	Effective June 1, 1999
ı	yan Bartholomen
	Print Name
	CEO
	Title - Owner/President/Other
of	Klatt Properties UC
	Corporation/Partnership/Entity Name
have authorized	Antonio A. Prete, P.E.
	Print Name of Agent/Engineer
of	Waeltz & Prete, Inc.
	Print Name of Firm

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

I also understand that:

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

SIGNATURE PAGE:

Applicant's Signature	men	5 15 2005 Date
THE STATE OF Texas	§	
County of Williamon §		
BEFORE ME, the undersigned auth to me to be the person whose nam me that (s)he executed same for the	e is subscribed to the	foregoing instrument, and acknowledged to
GIVEN under my hand and seal of o	office on this 15th day	of May , 2025
	140 L	
	NOTARY PUBLIC	
KURT D HOLMAN Notary ID #128125704 My Commission Expires February 28, 2026	Typed or Printed Nam	me of Notary
COP	MY COMMISSION E	- VDIDEO 1/24/2020
	IVIT COMINISSION E	APIRES. A COLOR



TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

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ECTION	II: Cu	stomer Info	ormation									
4. General C	ustomer l	nformation	5. Effective Da	ate for Cus	stomer	Informa	ation (Jpdate	es (mm/dd/yyyy)			
✓ 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 Custo	mer Nai	ne submitted	here may be	updated	l auto	matica	lly ba	ased	on what is cu	rrent and	active with the	
Texas Sec	retary o	f State (SOS)	or Texas Cor	nptrollei	r of Pu	ıblic A	ccou	nts (CPA).			
6. Customer	Legal Na	me (If an individua	al, print last name fi	rst: eg: Doe	, John)		<u>If ne</u>	ew Cus	stomer, enter previ	ious Custom	er below:	
 Klatt Prop	erties, I	_P										
7. TX SOS/C				Tax ID (11 digits)				edera 2825	I Tax ID (9 digits)	10. DUNS Number (if applicable)		
11. Type of (Customer	: 🛛 Corporat	ion		Individu	ıal		Partnership: ☐ General ☑ Limited				
		County 🔲 Federal [☐ State ☐ Other		Sole Pr	oprietor	ship		Other:			
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14. Custome	er Role (Pr	oposed or Actual)	– as it relates to the	e Regulated	Entity li	sted on ti	his forn	n. Pleas	se check one of the	following:		
⊠Owner □Occupatio	onal Licens	Opera	itor onsible Party			Operato y Cleanu		licant	☐Other:			
	4503 F	River Wood (Ct									
15. Mailing Address:												
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						bartry	an@	gma	il.com			
18. Telephor	ne Numbe	r	19	9. Extensi	on or C	ode			20. Fax Numbe	r (if applicat	ole)	
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TCEQ-10400 (04/15) Page 1 of 2

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35. E-Mail	Address:				bartryan@gma			n@gmail.	com				
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TCEQ-10400 (04/15) Page 2 of 2

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Signature:

Date:

05/19/2025

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DESIGN PROFESSIONALS:

CIVIL ENGINEER / APPLICANT:

ANTONIO A. PRETE, P.E. WAELTZ & PRETE, INC. 211 N. A.W. GRIMES BLVD. ROUND ROCK, TEXAS 78665 PH: (512) 505-8953 EMAIL: tony@w-pinc.com

LAUREN CONCRETE LIBERTY HILL DRIVEWAY RELOCATION

AW0521 ROBINSON, J.B. SUR., ACRES 36.7452 & AW0521 ROBINSON, J.B. SUR., ACRES 2.0

100 COUNTY ROAD 258 LIBERTY HILL, TX 78642

MAY 2025 CR 258 PROJECT LOCATION LOCATION MAP NTS

know what's below.
Call before you dig.

IMPERVIOUS COVER

	EXISTING	PROPOSED
PUBLIC SIDEWALK, STREETS, CURB & GUTTER	0 SF	0 SF
BUILDING FOOTPRINT (WITHIN LIMITS OF LOTS ONLY)	492 SF	492 SF
PARKING, PRIVATE SIDEWALK (WITHIN LIMITS OF LOT ONLY)	210,377 SF	233,448 SF
TOTAL	210,869 SF	233,940 SF (5.37 AC)
TOTAL AREA OF DISTURBANCE (LOC)		99,129 SF (2.28 AC)

SUBMITTAL DATE TRACKING TABLE:

SUBMITTAL TYPE DATE SUBMITTED DATE RETURNED

PRE-SUBMITTAL MEETING ---- ----

SUBMITTAL #1

APPROVAL

NOTES:

- 1. THESE PLANS ARE NOT TO BE CONSIDERED FINAL FOR CONSTRUCTION UNTIL ACCEPTED BY THE COUNTY. CHANGES MAY BE REQUIRED PRIOR TO APPROVAL.
- 2. NO PORTION OF THIS SITE IS WITHIN THE FEMA 1% ANNUAL CHANCE FLOODPLAIN, PER PANEL NUMBERS 48491C0245F, DATED DECEMBER 20, 2019, AND 48491C0275E, DATED SEPTEMBER 26, 2008.
- 3. THIS SITE IS LOCATED WITHIN THE EDWARD'S AQUIFER CONTRIBUTING ZONE. THIS PROJECT WILL DISTURB LESS THAN 5 ACRES AND IS NOT PART OF ANY LARGER DEVELOPMENT WITH POTENTIAL TO DISTURB CUMULATIVELY FIVE OR MORE ACRES. THEREFORE, NO WATER QUALITY TREATMENT IS REQUIRED.
- 4. ALL SIGNAGE WILL REQUIRE A SEPARATE SIGN PERMIT. APPROVAL OF A SITE DEVELOPMENT PERMIT OR BUILDING PERMIT DOES NOT CONSTITUTE APPROVAL OF SIGNAGE.
- 5. NO ON-SITE DETENTION REQUIRED. THIS SITE IS LESS THAN 20% IMPERVIOUS COVER. PER WILLIAMSON COUNTY SUBDIVISION REGULATION B11.1.3, DETENTION NOT REQUIRED. THERE ARE NO IDENTIFIABLE ADVERSE IMPACTS DOWN STREAM.
- 6. THE CONTRACTOR SHALL OBTAIN A "NOTICE OF PROPOSED INSTALLATION OF UTILITY LINE" PERMIT FROM WILLIAMSON COUNTY FOR ANY WORK PERFORMED IN THE EXISTING COUNTY RIGHT-OF-WAY (DRIVEWAY APRON, WATER MAIN TIE-IN, ETC.). THIS PERMIT APPLICATION WILL REQUIRE A LIABILITY AGREEMENT, A CONSTRUCTION COST ESTIMATE FOR WORK WITHIN THE RIGHT-OF-WAY INCLUDING PAVEMENT REPAIR (IF NEEDED), A PERFORMANCE BOND, CONSTRUCTION PLANS, AND, IF NECESSARY, A TRAFFIC CONTROL PLAN. AN INSPECTION FEE, AND A PRE-CONSTRUCTION MEETING MAY ALSO BE REQUIRED, DEPENDING ON THE SCOPE OF WORK. THE PERMIT WILL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER AND MUST ALSO BE APPROVED BY THE WILLIAMSON COUNTY COMMISSIONERS COURT IF ANY ROAD CLOSURE IS INVOLVED.

JOB NO.: 033-016

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF LIBERTY HILL MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

CERTIFICATE OF COMPLIANCE NO. 2023-942 COC:

DRIVEWAY PERMIT NO. 2023-836 DP:

FOR WILLIAMSON COUNTY DATE

OWNER:

KLATT PROPERTIES LP 4503 RIVER WOOD CT, AUSTIN, TEXAS 78731 P.O.C.: RYAN BARTHOLOMEW EMAIL: bartryan@gmail.com

ENGINEER:



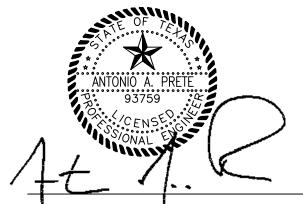
SHEET INDEX

SHT. No.	DESCRIPTION
C-1	COVER SHEET
C-2	GENERAL NOTES
C-3	EXISTING SURVEY (1 OF 3)
C-4	EXISTING SURVEY (2 OF 3)
C-5	EXISTING SURVEY (3 OF 3)
C-6	OVERALL ESC & DEMO PLAN
C-7	PLAN & PROFILE (1 OF 2)
C-8	PLAN & PROFILE (2 OF 2)
C-9	CULVERT 'A' DRAINAGE AREA MAP
C-10	CULVERT 'A' PLAN, PROFILE & CALCS
C-11	DRAINAGE AREA MAP
C-12	DETAILS
C-13	WINGWALL DETAILS
C-14	METAL BEAM GUARD FENCE DETAILS
C-15	MOW STRIP DETAILS
C-16	TXDOT BARRICADE AND CONSTRUCTION (1 OF 12)
C-17	TXDOT BARRICADE AND CONSTRUCTION (2 OF 12)
C-18	TXDOT BARRICADE AND CONSTRUCTION (3 OF 12)
C-19	TXDOT BARRICADE AND CONSTRUCTION (4 OF 12)
C-20	TXDOT BARRICADE AND CONSTRUCTION (5 OF 12)
C-21	TXDOT BARRICADE AND CONSTRUCTION (6 OF 12)
C-22	TXDOT BARRICADE AND CONSTRUCTION (7 OF 12)
C-23	TXDOT BARRICADE AND CONSTRUCTION (8 OF 12)
C-24	TXDOT BARRICADE AND CONSTRUCTION (9 OF 12)
C-25	TXDOT BARRICADE AND CONSTRUCTION (10 OF 12)
C-26	TXDOT BARRICADE AND CONSTRUCTION (11 OF 12)
C-27	TXDOT BARRICADE AND CONSTRUCTION (12 OF 12)
C-28	TRAFFIC CONTROL PLAN

STATE OF TEXAS

COUNTY OF WILLIAMSON

I, ANTONIO A. PRETE, P.E., DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE SUBDIVISION AND BUILDING REGULATION ORDINANCES AND STORMWATER DRAINAGE POLICY ADOPTED BY THE CITY OF LIBERTY HILL, TEXAS.



ANTONIO A. PRETE, P.E. STATE OF TEXAS #93759 15May 2

REVISIONS:

No. Date Revision ACC. DATE

GENERAL NOTES:

- 1. All construction shall be in accordance with the City of Round Rock Standard Specifications Manual.
- 2. Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not planned for destruction or removal that are damaged or removed shall be repaired or replaced at his expense.
- 3. The Contractor shall verify all depths and locations of existing utilities prior to any construction. Any discrepancies with the construction plans found in the field shall be brought immediately to the attention of the Engineer who shall be responsible for revising the plans are appropriate.
- 4. Manhole frames, covers, valves, cleanouts, etc. shall be raised to finished grade prior to final paving construction.
- 5. The Contractor shall give the City of Liberty Hill 48 hours notice before beginning each phase of construction. Telephone (512)548-5519 (Development Services Office)
- 6. All areas disturbed or exposed during construction shall be revegetated in accordance with the plans and specifications. Revegetation of all disturbed or exposed areas shall consist of sodding or seeding, at the Contractor's option. However, the type of revegetation must equal or exceed the type of vegetation present before construction.
- 7. Prior to any construction, the Engineer shall convene a preconstruction conference between the City of Liberty Hill, himself, the Contractor, other utility companies, any affected parties and any other entity the City or Engineer may require.
- The Contractor and the Engineer shall keep accurate records of all construction that deviates from the plans. The Engineer shall furnish the City of Liberty Hill accurate "As-Built" drawings following completion of all construction. These "As-Built" drawings shall meet with the satisfaction of the Engineering and Development Services Department prior to final acceptance.
- 9. The Liberty Hill City Council shall not be petitioned for acceptance until all necessary easement documents have been signed and recorded.
- 10. When construction is being carried out within easements, the Contractor shall confine his work to within the permanent and any temporary easements. Prior to final acceptance, the Contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the City Engineer.
- 11. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.
- 12. Available benchmarks that may be utilized for the construction of this project are described as follows: (See Sheet C-4)

TRENCH SAFETY NOTES:

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

- 2 In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.
- 3 If trench safety system details were not provided in the plans because trenches were anticipated to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted to the City of Liberty Hill.

STREET AND DRAINAGE NOTES:

- 1. All testing shall be done by an independent laboratory at the Owner's expense. Any retesting shall be paid for by the Contractor. A City inspector shall be present during all tests. Testing shall be coordinated with the City inspector and he shall be given a minimum of 24 hours notice prior to any testing. Telephone (512)778-5449 (Public Works).
- 2. Backfill behind the curb shall be compacted to obtain a minimum of 95% maximum density to within 3" of top of curb. Material used shall be primarily granular with no rocks larger than 6" in the greatest dimension. The remaining 3" shall be clean topsoil free from all clods and suitable for sustaining plant life.
- Depth of cover for all crossings under pavement including gas, electric, telephone, cable tv, water services, etc., shall be a minimum of 30" below subgrade.
- 4. Street rights-of-way shall be graded at a slope of 1/4" per foot toward the curb unless otherwise indicated. However, in no case shall the width of right-of-way at 1/4" per foot slope be less than 10 feet unless a specific request for an alternate grading scheme is made to and accepted by the City of Liberty Hill Engineering and Development Services Department.
- Barricades built to City of Liberty Hill standards shall be constructed on all dead-end streets and as necessary during construction to maintain job and public safety.
- All R.C.P. shall be minimum class III.
- 7. The subgrade material for the streets shown herein was tested by: Raba Kistner Consultants, Inc. (28 MAY 2021)

And the paving sections designed in accordance with the current City of Round Rock design criteria. The paving sections are to be constructed as follows: (See Sheet C-17)

- The Geotechnical Engineer shall inspect the subgrade for compliance with the design assumptions made during preparation of the Soils Report. Any adjustments that are required shall be made through revision of the construction plans.
- Where PI's are over 20, subgrades must be stabilized utilizing a method acceptable to the City Engineer. The Geotechnical Engineer shall recommend an appropriate subgrade stabilization if sulfates are determined to be present.
- All weather driving surface capable of supporting 80,000 lbs fire apparatus shall be in

place prior to delivery and on site storage of combustibles.

WATER AND WASTEWATER NOTES:

- 1. Pipe material for water mains shall be PVC (AWWA C-900, min. class 200), or Ductile Iron (AWWA C-100, min. class 200). Water services (2" or less) shall be polyethylene tubing (black, 200 psi, DR 9).
- Pipe material for pressure wastewater mains shall be PVC (AWWA C-900, min. class 150), SDR 26 Higher Pressure Rated or Ductile Iron (AWWA C-100, min. class 200). Pipe material for gravity wastewater mains shall be PVC (ASTM D2241 or D3034, max. DR-26), Ductile Iron (AWWA C-100, min. class 200).
- 3. Unless otherwise accepted by the City Engineer, depth of cover for all lines out of the pavement shall be 42" min., and depth of cover for all lines under pavement shall be a min. of 30" below subgrade.
- All fire hydrant leads shall be ductile iron pipe (AWWA C-100, min. class 200).
- 5. All iron pipe and fittings shall be wrapped with minimum 8-mil polyethylene and sealed with duct tape or equal accepted by the City Engineer.
- The Contractor shall contact Public Works Department at (512)778-5449 to coordinate utility tie-ins and notify him at least 48 hours prior to connecting to existing lines.
- All manholes shall be concrete with cast iron ring and cover. All manholes located outside of the pavement shall have bolted covers. Tapping of fiberglass manholes shall not be allowed.
- The Contractor must obtain a bulk water permit or purchase and install a water meter for all water used during construction. A copy of this permit must be carried at all times by all who use water.
- Line flushing or any activity using a large quantity of water must be scheduled with Public Works department, telephone (512)778-5449.
- 10. The Contractor, at his expense, shall perform sterilization of all potable water lines constructed and shall provide all equipment (including test gauges), supplies (including concentrated chlorine disinfecting material), and necessary labor required for the sterilization procedure. The sterilization procedure shall be monitored by City of Liberty Hill personnel. Water samples will be collected by the City of Liberty Hill to verify each treated line has attained an initial chlorine concentration of 50 ppm. Where means of flushing is necessary, the Contractor, at his expense, shall provide flushing devices and remove said devices prior to final acceptance by the City of Liberty Hill.
- 11. Sampling taps shall be brought up to 3 feet above grade and shall be easily accessible for City personnel. At the Contractor's request, and in his presence, samples for bacteriological testing will be collected by the City of Liberty Hill not less than 24 hours after the treated line has been flushed of the concentrated chlorine solution and charged with water approved by the City. The Contractor shall supply a check or money order, payable to the City of Liberty Hill, to cover the fee charged for testing each water sample. City of Liberty Hill fee amounts may be obtained by calling the Development Services Office at (512)548-5519.
- 12. The Contractor, at his expense, shall perform

quality testing for all wastewater pipe installed and pressure pipe hydrostatic testing of all water lines constructed and shall provide all equipment (including pumps and gauges), supplies and labor necessary to perform the tests. Quality and pressure testing shall be monitored by City of Liberty Hill personnel.

- The Contractor shall coordinate testing with the City of Liberty Hill Inspector and provide no less than 24 hours notice prior to performing sterilization, quality testing or pressure testing.
- The Contractor shall not open or close any valves unless authorized by the City.
- 15. All valve boxes and covers shall be cast iron.
- 16. All water service, wastewater service and valve locations shall be appropriately marked as follows:

"W" on top of curb water service

wastewater service "S" on top of curb

valve "V" on face of curb

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

- Contact City of Liberty Hill Development Services Office at (512)548-5519 for assistance in obtaining existing water and wastewater locations.
- The City of Liberty Hill Fire Department shall be notified 48 hours prior to testing of any building sprinkler piping in order that the Fire Department may monitor such testing.
- Sand, as described in Specification item 510 pipe, shall not be used as bedding for water and wastewater lines. Acceptable bedding materials are pipe bedding stone, pea gravel and in lieu of sand, a naturally occurring or manufactured stone material conforming to ASTM C33 for stone quality and meeting the following gradation specification:

Percent Retained By Weight

1/2" 3/8" 0-2 40-85 95-100 #10

- The Contractor is hereby notified that connecting to, shutting down, or terminating existing utility lines may have to occur at off-peak hours. Such hours are usually outside normal working hours and possibly between 12 a.m. and 6 a.m.
- All wastewater construction shall be in accordance with the Texas Commission on Environmental Quality (TCEQ) Regulations, 30 TAC Chapter 213 and 317, as applicable. Whenever TCEQ and City of Round Rock Specifications conflict, the more stringent shall apply.

TRAFFIC MARKING NOTES:

- Any methods, street markings and signage necessary for warning motorists, warning pedestrians or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.
- All pavement markings, markers, paint, traffic buttons, traffic controls and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and, the Texas Manual of

Uniform Traffic Control Devices for Streets and Highways, latest editions.

EROSION AND SEDIMENTATION **CONTROL NOTES:**

- Erosion control measures, site work and restoration work shall be in accordance with the City of Round Rock Erosion and Sedimentation Control Ordinance.
- All slopes shall be sodded or seeded with approved grass, grass mixtures or ground cover suitable to the area and season in which they are applied.
- Silt fences, rock berms, sedimentation basins and similarly recognized techniques and materials shall be employed during construction to prevent point source sedimentation loading of downstream facilities. Such installation shall be regularly inspected by the City of Liberty Hill for effectiveness. Additional measures may be required if, in the opinion of the City Engineer, they are warranted.
- 4. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the Engineer. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the
- All mud, dirt, rocks, debris, etc., spilled, tracked or otherwise deposited on existing paved streets, drives and areas used by the public shall be cleaned up immediately.
- All disturbed areas shall be revegetated.

CNC = TOP OF CONCRETE

BOT = BOTTOM

CL = CLASS

ABBREVIATIONS:

DET = DETENTION D/S = DOWNSPOUT DI = DUCTILE IRON ESMT = EASEMENT EX = EXISTING FG = FINISHED GROUND FH = FIRE HYDRANT FL = FLOWLINE FPS = FEET PER SECOND FLG = FLANGE GB = GRADE BREAK GV = GATE VALVE **HPT = HIGHPOINT** LOC = LIMITS OF CONSTRUCTION LPT = LOW POINT MH = MANHOLE MJ = MECHANICAL JOINT NG = NATURAL GROUND PAV = TOP OF PAVEMENT PDWF = PEAK DRY WEATHER FLOW PWWF = PEAK WET WEATHER FLOW PROP = PROPOSED PVC = POLYVINYL CHLORIDE REF = REFERENCE RS = RESILIENT SEAT SCH = SCHEDULE SF = SILT FENCE SLAB = TOP OF SLAB SS = STORM SEWER SSL = STORM SEWER LINE SW = TOP OF SIDEWALK TC = TOP OF CURB TG = TOP OF GRATE TOF = TOP OF FOOTING TOI = TOP OF INLET TOW = TOP OF WALL TP = TREE PROTECTION TR = TOP OF MANHOLE RIM TYP = TYPICAL WL = WATER LINE WQ = WATER QUALITY WSE = WATER SURFACE ELEVATION WTR = WATER WWL = WASTEWATER LINE WWMH = WASTEWATER MANHOLE

LEGEND

REBAR WITH — X — BARB-WIRE FENCE CAP FOUND ----- CHAIN-LINK FENCE FIRE HYDRANT ———— EDGE OF PAVEMENT WATER METER ——GAS — GAS LINE WATER VALVE ——UE — UNDERGROUND ELEC.

WASTEWATER **MANHOLE**

—— UT —— UNDERGROUND TELE. SIGN — w— WATER LINE 303 TREE

— // — WOOD FENCE

— - - — PROPERTY LINE

---- EASEMENT

POWER POLE LIGHT POLE

SPRLINKLER (S) **CONTROL VALVE BENCHMARK**

BM #1

WAELTZ & PRETE, INC.

CIVIL ENGINEERS 211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL **DRIVEWAY RELOCATION**

> 100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: JCL DATE: 5/20/2025

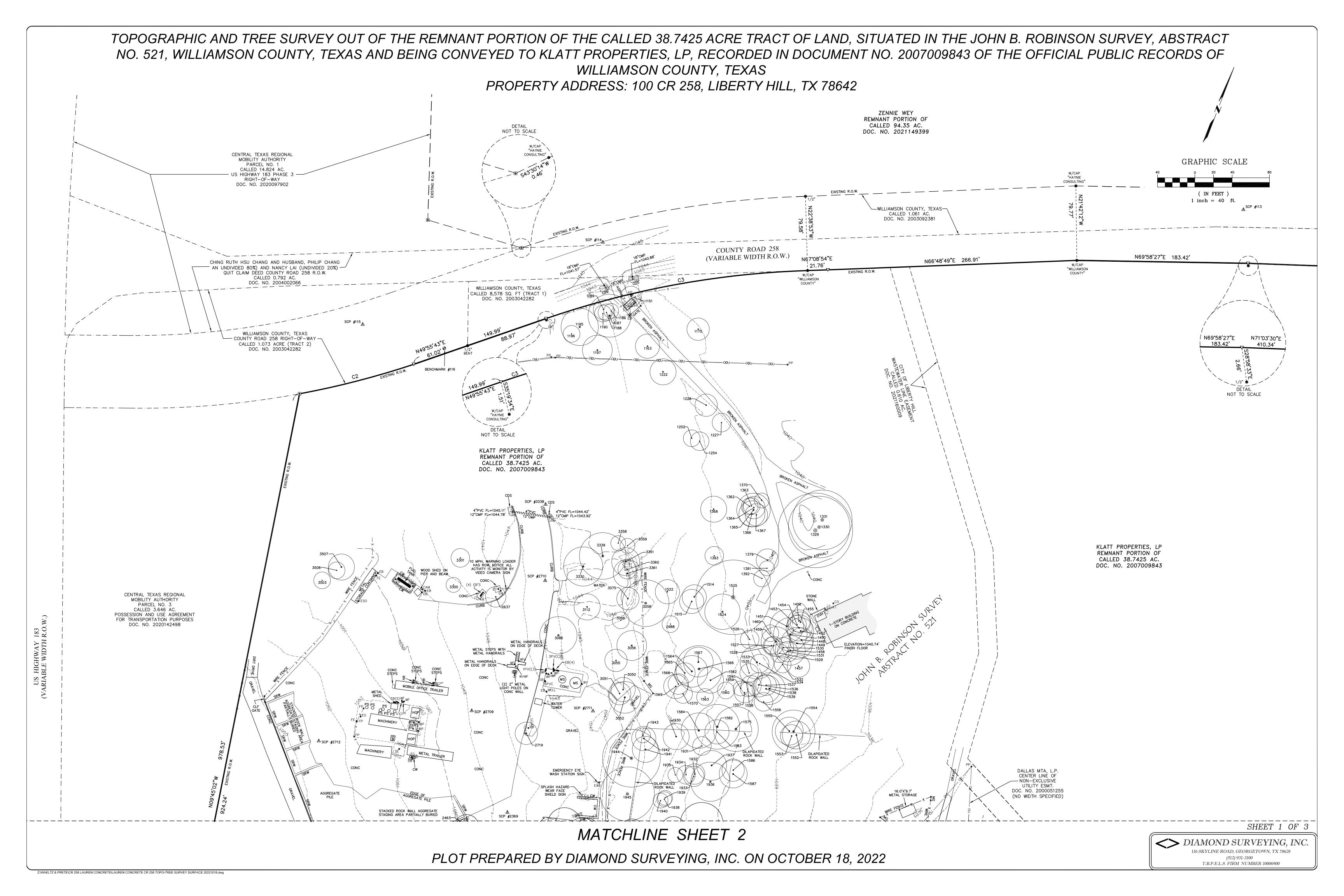
SHEET TITLE: **GENERAL**

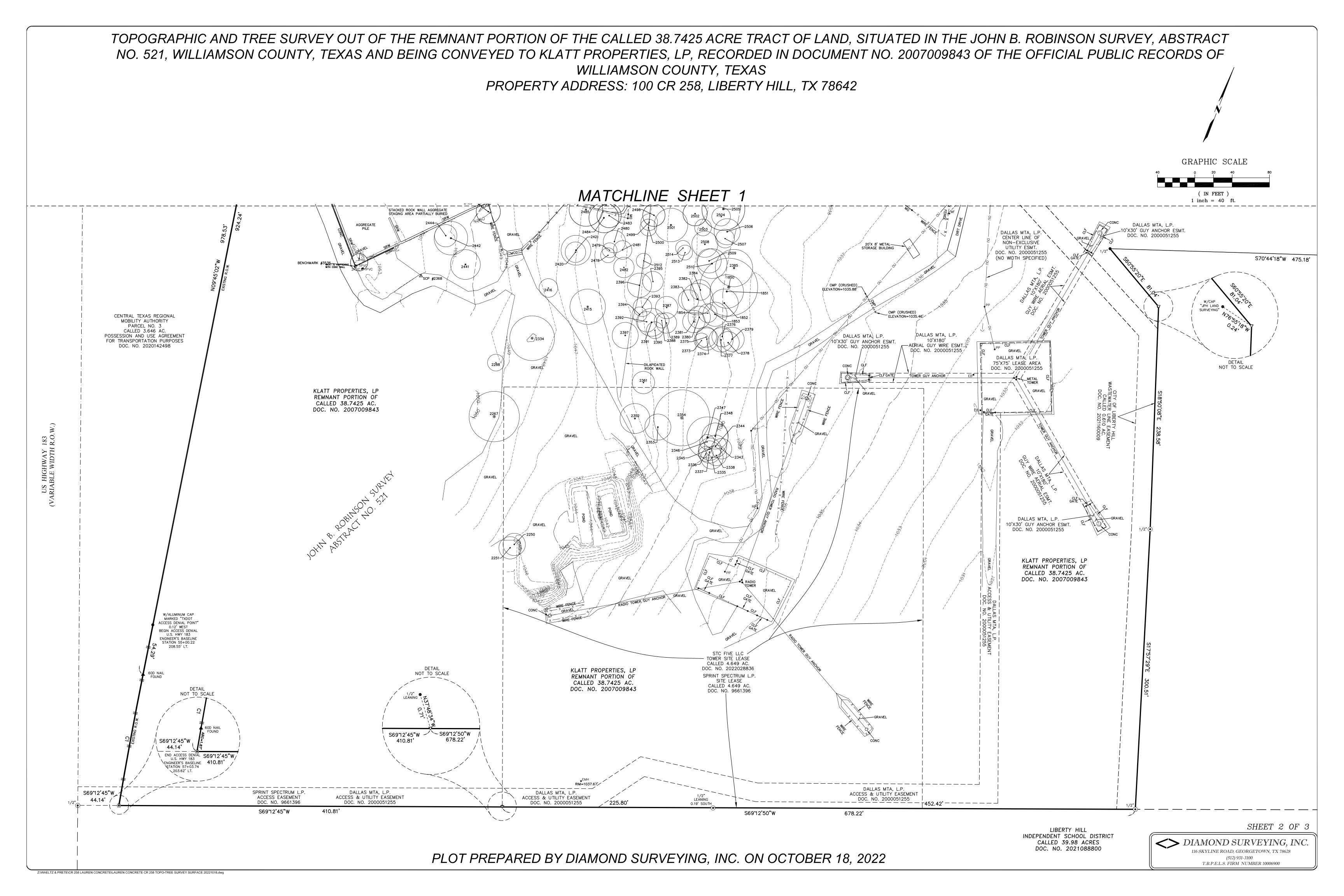
NOTES

WP PROJECT NO.:

033-016

SHEET NO.:





TOPOGRAPHIC AND TREE SURVEY OUT OF THE REMNANT PORTION OF THE CALLED 38.7425 ACRE TRACT OF LAND, SITUATED IN THE JOHN B. ROBINSON SURVEY, ABSTRACT NO. 521, WILLIAMSON COUNTY, TEXAS AND BEING CONVEYED TO KLATT PROPERTIES, LP, RECORDED IN DOCUMENT NO. 2007009843 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS

PROPERTY ADDRESS: 100 CR 258, LIBERTY HILL, TX 78642

SURVEY CONTROL:

	(SURFACE COO	RDINATES)		
PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
113	10215425.95	3069492.46	1045.06	PK NAÏL SET
114	10215147.31	3068864.22	1045.36	PK NAIL SET
115	10214972.97	3068655.55	1048.12	PK NAIL SET
2368	10214420.45	3068909.63	1051.95	60D NAIL SET
2369	10214540.47	3068987.67	1049.20	COTTON GIN SPINDLE SET
2709	10214628.41	3068912.93	1048.87	COTTON GIN SPINDLE SET
2710	10214786.82	3068936.50	1046.13	PK NAIL SET
2711	10214674.71	3069034.36	1046.82	COTTON GIN SPINDLE SET
2712	10214539.46	3068771.57	1052.49	PK NAIL SET
3338	10214863.21	3068907.59	1046.55	IRON ROD SET CAPPED "SURVEY CONTROL"

BENCHMARK 116: PK NAIL SET ON SOUTHEAST CORNER OF CONCRETE CULVERT ON THE SOUTH SIDE OF COUNTY ROAD 258, EAST OF LAUREN CONCRETE ENTRANCE. SURFACE COORDINATES:

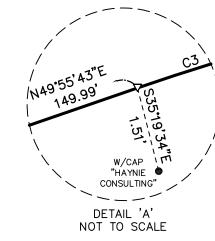
N=10214980.46 E=3068746.35 ELEVATION=1046.43

ELEVATION= 1053.38

BENCHMARK 3536; PK NAIL SET IN 6"CONCRETE WALL ON SOUTH END OF CONCRETE PLANT WORK AREA ON THE NORTH SIDE OF THE GRAVEL DRIVE THAT IS ALONG THE WEST PLANT AREA. SURFACE COORDINATES; N=10214405.08 E= 3068840.35

VERTICAL DATUM: NAVD-88 (GEOID 2012A) PER LEICA VRS (SMARTNET) GPS NETWORK, HELD CONTROL POINT #113 (ELEVATION=1045.06'), ALL OTHER CONTROL POINT ELEVATIONS ARE BASED ON CONVENTIONAL LEVELING METHODS.

			CURVE TABLE		
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	4800.00'	142.67'	1*42'11"	N10°33'15"W	142.67'
C2	918.07	126.47'	7*53'35"	N54°31'09"E	126.37'
C3	954.46'	285.99'	17°10'03"	N58 * 35'59"E	284.92'



UTILITY LOCATE NOTE:					
TEXAS811 TICKET NO. 2277631076	ISSUED:	OCTOBER	03,	2022	2: 27 PM
MEMBERS			ME	MBER	RESPONSE

CCTXC = SPECTRUM

FIT = FIBERLIGHT LLC

GEO = CITY OF GEORGETOWN TX

P79 = PEDERNALES ELECTRIC COOPERATIVE INC.

TXS1 = AT&T

CLEAR-SCL

CLEAR-ELECTRIC, FIBER, SEWER AND WATER

NOTES:

1) BEARING BASIS: NAD-83, TEXAS CENTRAL ZONE (4203) STATE PLANE SYSTEM. DISTANCES SHOWN HEREON ARE SURFACE DISTANCES BASED ON A COMBINED SURFACE ADJUSTMENT FACTOR OF 1.00012

2) ALL DOCUMENTS LISTED HEREON ARE RECORDED IN THE OFFICE OF THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

3) THE TRACT SHOWN HEREON LIES WITH IN ZONE 'X' (NO SCREEN) AREAS OF MINIMAL FLOOD HAZARD, ACCORDING TO THE FLOOD INSURANCE RATE MAP NO. 48491C0245F, WITH AN EFFECTIVE DATE OF DECEMBER 20, 2019.

4) THIS SURVEY WAS MADE WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR POLICY. THERE MAY BE EASEMENTS AND/OR RESTRICTIONS NOT SHOWN HEREON WHICH MAY AFFECT THE SUBJECT TRACT.

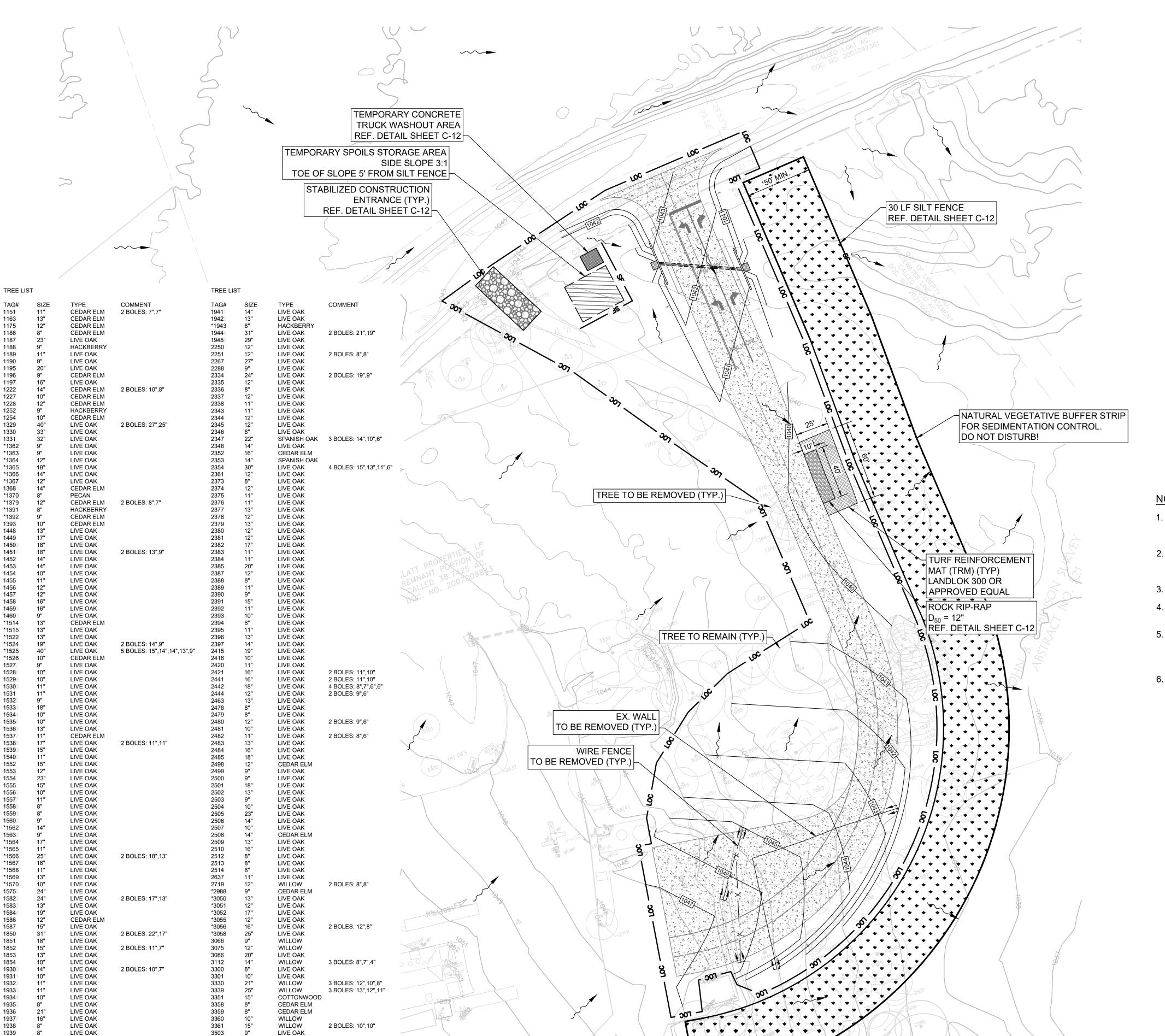
5) THE BOUNDARY LINES SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY. THIS SURVEY IS NOT INTENDED TO BE USED AS A LAND TITLE SURVEY.

Z:\WAELTZ & PRETE\CR 258 LAUREN CONCRETE\LAUREN CONCRETE CR 258 TOPO-TREE SURVEY SURFACE 20221018.dwg

TREE LIS	ST				Т	REE LIS	Т			
TAG#	SIZE	TYPE	COMMENT			AG#	SIZE	TYPE	COMMENT	
1151	11"	CEDAR ELM	2 BOLES:	7",7"	1	941	14"	LIVE OAK		
1163 1175	13" 12"	CEDAR ELM CEDAR ELM				942 943	13" 8"	LIVE OAK HACKBERRY		
1186	8"	CEDAR ELM			1	944	31"	LIVE OAK	2 BOLES:	21",19"
1187 1188	23" 9"	LIVE OAK HACKBERRY				945 250	29" 12"	LIVE OAK LIVE OAK		
1189	11" 9"	LIVE OAK			2	251	12" 27"	LIVE OAK	2 BOLES:	8",8"
1190 1195	20"	LIVE OAK LIVE OAK				267 288	27 9"	LIVE OAK LIVE OAK		
1196 1197	9" 16"	CEDAR ELM LIVE OAK				334 335	24" 12"	LIVE OAK LIVE OAK	2 BOLES:	19",9"
1222	14"	CEDAR ELM	2 BOLES:	10",8"	2	336	8"	LIVE OAK		
1227 1228	10" 12"	CEDAR ELM CEDAR ELM				337 338	12" 11"	LIVE OAK LIVE OAK		
1252	9"	HACKBERRY			2	343	11"	LIVE OAK		
1254 1329	10" 40"	CEDAR ELM LIVE OAK	2 BOLES:	27" 25"		344 345	12" 12"	LIVE OAK LIVE OAK		
1330	33"	LIVE OAK	Z DOLLS.	27 ,20	2	346	8"	LIVE OAK		
1331 1362	32" 9"	LIVE OAK LIVE OAK				347 348	22" 14"	SPANISH OAK LIVE OAK	3 BOLES:	14",10",6"
1363	9"	LIVE OAK			2	352	16"	CEDAR ELM		
1364 1365	12" 18"	LIVE OAK LIVE OAK				353 354	14" 30"	SPANISH OAK LIVE OAK	4 BOLES:	15",13",11",6"
1366	14"	LIVE OAK			2	361	12"	LIVE OAK	, 50220,	
1367 1368	12" 14"	LIVE OAK CEDAR ELM				373 374	8" 12"	LIVE OAK LIVE OAK		
1370	8"	PECAN		- 11 - 11	2	375	11"	LIVE OAK		
1379 1391	12" 8"	CEDAR ELM HACKBERRY	2 BOLES:	8",7"		376 377	11" 13"	LIVE OAK LIVE OAK		
1392	9"	CEDAR ELM			2	378	12"	LIVE OAK		
1393 1448	10" 13"	CEDAR ELM LIVE OAK				379 380	13" 12"	LIVE OAK LIVE OAK		
1449	17"	LIVE OAK			2	381	12"	LIVE OAK		
1450 1451	18" 18"	LIVE OAK LIVE OAK	2 BOLES:	1.3" 9"		382 383	17 " 11"	LIVE OAK LIVE OAK		
1452	14"	LIVE OAK	2 50220.	,,,	2	384	11"	LIVE OAK		
1453 1454	14" 10"	LIVE OAK LIVE OAK				385 387	20" 12"	LIVE OAK LIVE OAK		
1455	11"	LIVE OAK			2	388	8"	LIVE OAK		
1456 1457	12" 12"	LIVE OAK LIVE OAK				389 390	11" 9"	LIVE OAK LIVE OAK		
1458	16"	LIVE OAK			2	391	15"	LIVE OAK		
1459 1460	16" 9"	LIVE OAK LIVE OAK				392 393	11" 10"	LIVE OAK LIVE OAK		
1514	13"	CEDAR ELM			2	394	8"	LIVE OAK		
1515 1522	13" 13"	LIVE OAK LIVE OAK				395 396	11" 13"	LIVE OAK LIVE OAK		
1524	19"	LIVE OAK	2 BOLES:		2	397	14"	LIVE OAK		
1525 1526	40" 10"	LIVE OAK CEDAR ELM	5 BOLES:	15",14",14",13",9"		415 416	19" 10"	LIVE OAK LIVE OAK		
1527	9"	LIVE OAK			2	420	11"	LIVE OAK		
1528 1529	10" 10"	LIVE OAK LIVE OAK				421 441	16" 16"	LIVE OAK LIVE OAK	2 BOLES: 2 BOLES:	
1530	11"	LIVE OAK			2	442	18"	LIVE OAK	4 BOLES:	8",7",6",6"
1531 1532	11" 9"	LIVE OAK LIVE OAK				444 463	12" 13"	LIVE OAK LIVE OAK	2 BOLES:	9",6"
1533	18"	LIVE OAK			2	478	8"	LIVE OAK		
1534 1535	10" 10"	LIVE OAK LIVE OAK				479 480	8" 12"	LIVE OAK LIVE OAK	2 BOLES:	9" 6"
1536	13"	LIVE OAK			2	481	10"	LIVE OAK		
1537 1538	11" 17"	CEDAR ELM LIVE OAK	2 BOLES:	11".11"		482 483	11" 13"	LIVE OAK LIVE OAK	2 BOLES:	8",6"
1539	15"	LIVE OAK		··· •	2	484	16"	LIVE OAK		
1540 1552	11" 15"	LIVE OAK LIVE OAK				485 498	18" 12"	LIVE OAK CEDAR ELM		
1553	12"	LIVE OAK			2	499	9"	LIVE OAK		
1554 1555	23" 15"	LIVE OAK LIVE OAK				500 501	9" 18"	LIVE OAK LIVE OAK		
1556	10"	LIVE OAK			2	502	13 "	LIVE OAK		
1557 1558	11" 8"	LIVE OAK LIVE OAK				503 504	9" 10"	LIVE OAK LIVE OAK		
1559	8"	LIVE OAK				505	23"	LIVE OAK		
1560 1562	9" 14"	LIVE OAK LIVE OAK			2	506 507	14" 10"	LIVE OAK LIVE OAK		
1563 1564	9" 17"	LIVE OAK LIVE OAK			2	508 509	14" 13"	CEDAR ELM LIVE OAK		
1565	11"	LIVE OAK				510	16"	LIVE OAK		
1566 1567	25" 16"	LIVE OAK	2 BOLES:	18",13"		512 513	8" 8"	LIVE OAK		
1567 1568	11"	LIVE OAK LIVE OAK			2	514	8"	LIVE OAK LIVE OAK		
1569 1570	13" 10"	LIVE OAK LIVE OAK				637 719	11" 12"	LIVE OAK WILLOW	2 BOLES:	o" o"
1575	24"	LIVE OAK				988	9"	CEDAR ELM	Z BOLES.	0,0
1582 1583	24" 13"	LIVE OAK LIVE OAK	2 BOLES:	17",13"		050 051	13" 12"	LIVE OAK LIVE OAK		
1584	19"	LIVE OAK			3	052	17 "	LIVE OAK		
1586 1587	12" 15"	CEDAR ELM LIVE OAK				055 056	12" 16"	LIVE OAK LIVE OAK	2 BOLES:	12" 8"
1850	31"	LIVE OAK	2 BOLES:	22",17"	3	058	25"	LIVE OAK	Z DOLLO.	,
1851 1852	18" 15"	LIVE OAK LIVE OAK	2 BOLES:	11" 7"		066 075	9" 12"	WILLOW WILLOW		
1853	13"	LIVE OAK	Z DOLES:	11.97	3	086	20"	LIVE OAK		
1854 1930	10" 14"	LIVE OAK LIVE OAK	2 BOLES:	10" 7"		112 300	14" 8"	WILLOW LIVE OAK	3 BOLES:	8",7",4"
1931	10"	LIVE OAK	Z DOLES;	10 ,7	3	301	10"	LIVE OAK		
1932 1933	11" 11"	LIVE OAK LIVE OAK			3	330 339	21" 25"	WILLOW WILLOW		12",10",8" 13",12",11"
1934	10"	LIVE OAK			3	351	15"	COTTONWOOD	O DOLES:	۱۱, ۱۷ ,۱۱
1935 1936	8" 21"	LIVE OAK LIVE OAK			3	358 359	8" 8"	CEDAR ELM CEDAR ELM		
1937	16"	LIVE OAK			3	360	10"	WILLOW		
1938 1939	8" 8"	LIVE OAK LIVE OAK				361 503	15" 9"	WILLOW LIVE OAK	2 BOLES:	10",10"
1939	8"	LIVE OAK			3	507	14"	LIVE OAK		
					3	508	9"	LIVE OAK		

<u>LEGEND</u> IRON ROD FOUND IRON PIPE FOUND TXDOT TYPE II MONUMENT FOUND CALCULATED POINT SURVEY CONTROL POINT BENCHMARK GAS PUMP EMERGENCY SHUT OFF ELECTRIC BOX/WATER PUMP STORAGE EQUIPMENT ELECTRIC GENERATOR ELECTRIC METER ELECTRIC TRANSFORMER POWER POLE DOWN GUY ELECTRIC BOX LIGHT POLE ELECTRIC MANHOLE FIRE EXTINGUISHER CAPPED WELL EYE WASH STATION WATER FAUCET WATER VALVE WATER VALVE / WATER FAUCET CLEAN OUT SIGN KEY PAD BOLLARD POST UTILITY VALVE •¹PVC 1" PVC RISER 2" PVC RISER 3" PVC RISER ●^{6PVC} 6" PVC RISER •FP 1" METAL FENCE POST •CAM CAMERA ON 3" METAL POLE EDGE OF PAVEMENT ---- OU ------ OVERHEAD UTILITY LINE ----- CHAIN LINK FENCE — × — × — × — WIRE FENCE HOP ELEVATED METAL HOPPER PS PLASTIC SILO MS METAL SILO HR HANDRAIL CG CATTLE GUARD ON CONCRETE CLF CHAIN LINK FENCE MG METAL GATE MCG METAL CATTLE GUARD CW CONCRETE WALL SRW STACKED ROCK WALL CDS CONCRETE DRAINAGE STRUCTURE CONC CONCRETE FL FLOWLINE CMP CORRUGATED METAL PIPE PVC POLYVINYL CHLORIDE PIPE R.O.W. RIGHT-OF-WAY SCP SURVEY CONTROL POINT

SHEET 3 OF 3



3507 3508

*TREE TO BE REMOVED

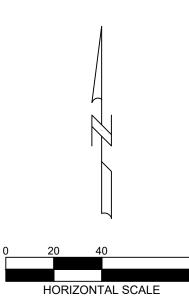
1940

*TREE TO BE REMOVED

LIVE OAK

LIVE OAK

LIVE OAK



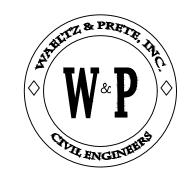
LEGEND

NOTES:

- 1. ANY DIRT, MUD, DEBRIS, ETC., SPILLED TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES, AND AREAS USED BY THE PUBLIC, SHALL BE IMMEDIATELY CLEANED UP.
- 2. THE CONTRACTOR MAY SUBMIT AN ALTERNATE PLAN FOR THE LOCATION OF THE STAGING & SPOILS AREA AND/OR THE CONCRETE TRUCK WASH OUT AREA.
- 3. ALL DISTURBED AREAS SHALL BE REVEGETATED.
- 4. POST THE INSTALLATION OF PROPOSED INLETS, INLET PROTECTION SHALL BE INSTALLED AS SOON AS PRACTICABLE
- 5. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY, MAINTAIN, REVISE, AND UPDATE THE PROJECT STORM WATER PREVENTION POLLUTION PLAN (SWPPP), AS REQUIRED IN ACCORDANCE WITH THE GENERAL PERMIT TXR 150000.
- 6. REFERENCE SHEET C-2 FOR ABBREVIATIONS AND MASTER LEGEND.

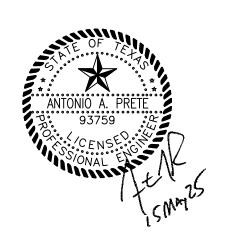
know what's below.

Call before you dig.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



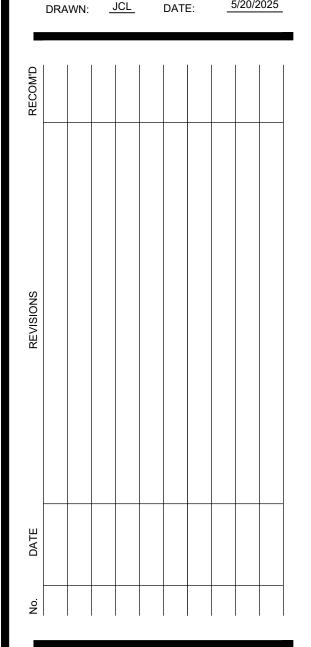
LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

100 CR 258, LIBERTY HILL, TX 78642

LIENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP



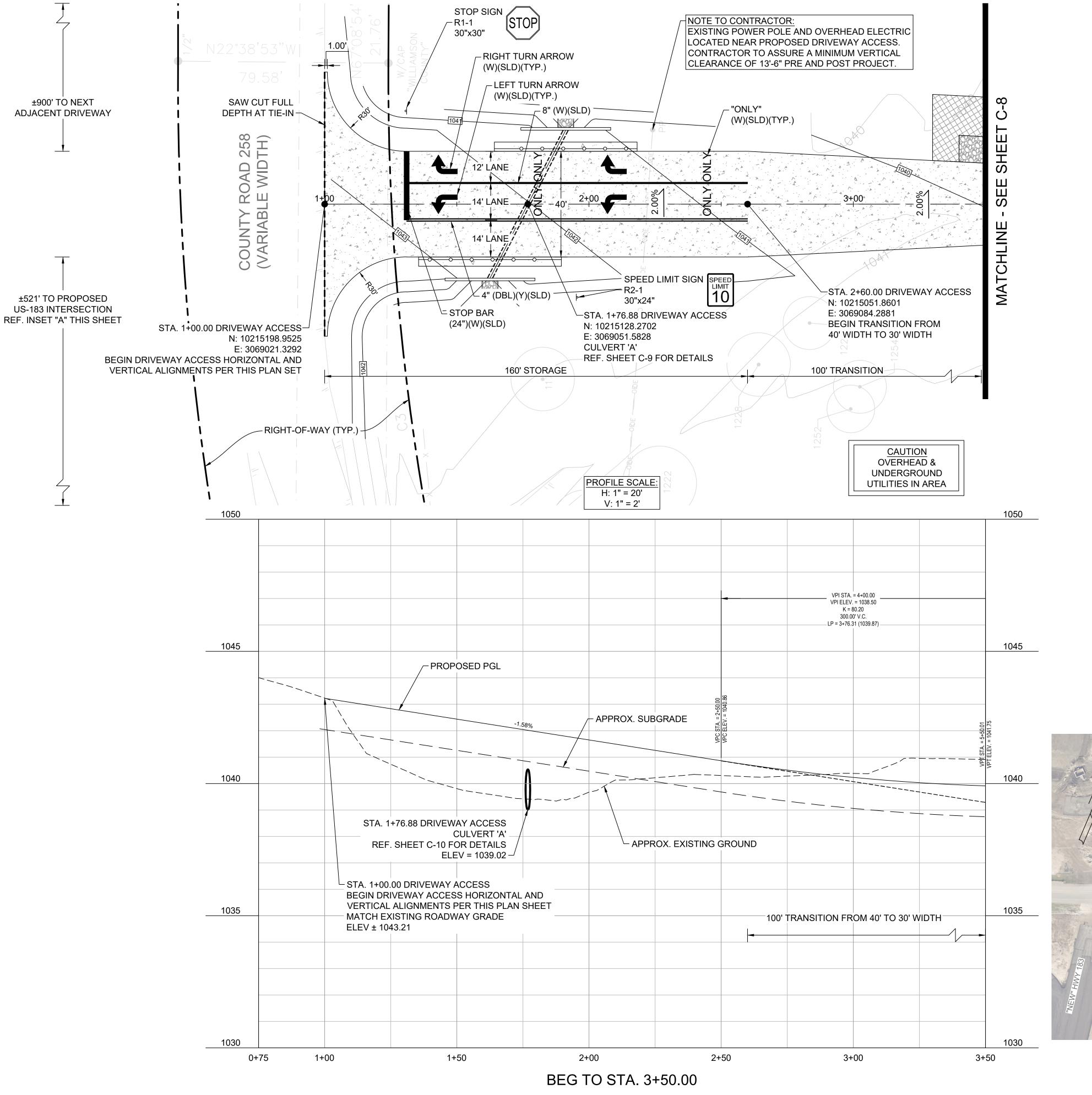
SHEET TITLE

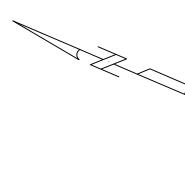
OVERALL ESC & DEMO PLAN

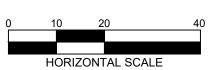
WP PROJECT NO.:

033-016

SHEET NO.:





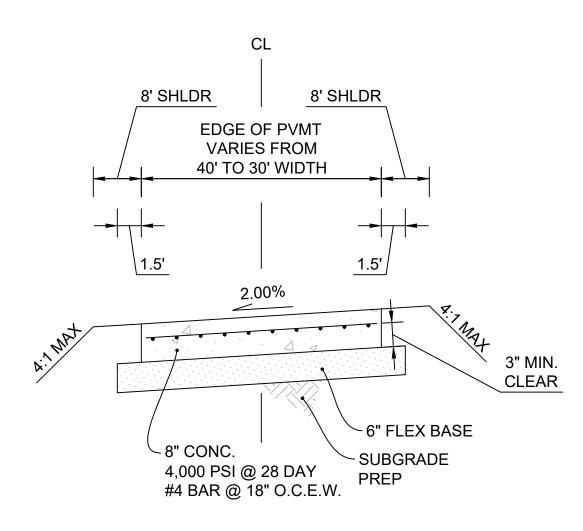


LEGEND

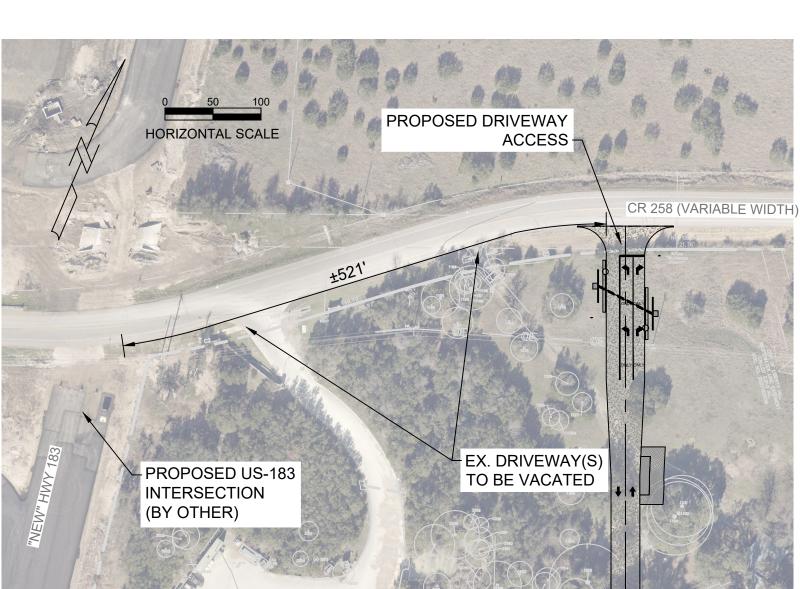
- PROPERTY LINE

NOTES:

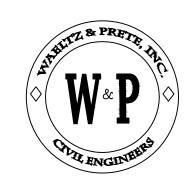
- 1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 2. CONSTRUCTION STAKING TO BE PROVIDED BY CONTRACTOR.
- 3. NO OVERHEAD OBSTRUCTIONS SHALL BE LOWER THAN 13'-6".
- 4. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.



TYPICAL SECTION NTS



INSET "A" 1" = 100'



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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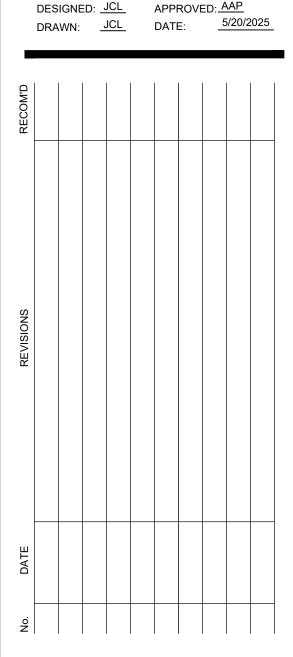


LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

100 CR 258, LIBERTY HILL, TX 78642

LIENT:

CHASCO CONSTRUCTORS



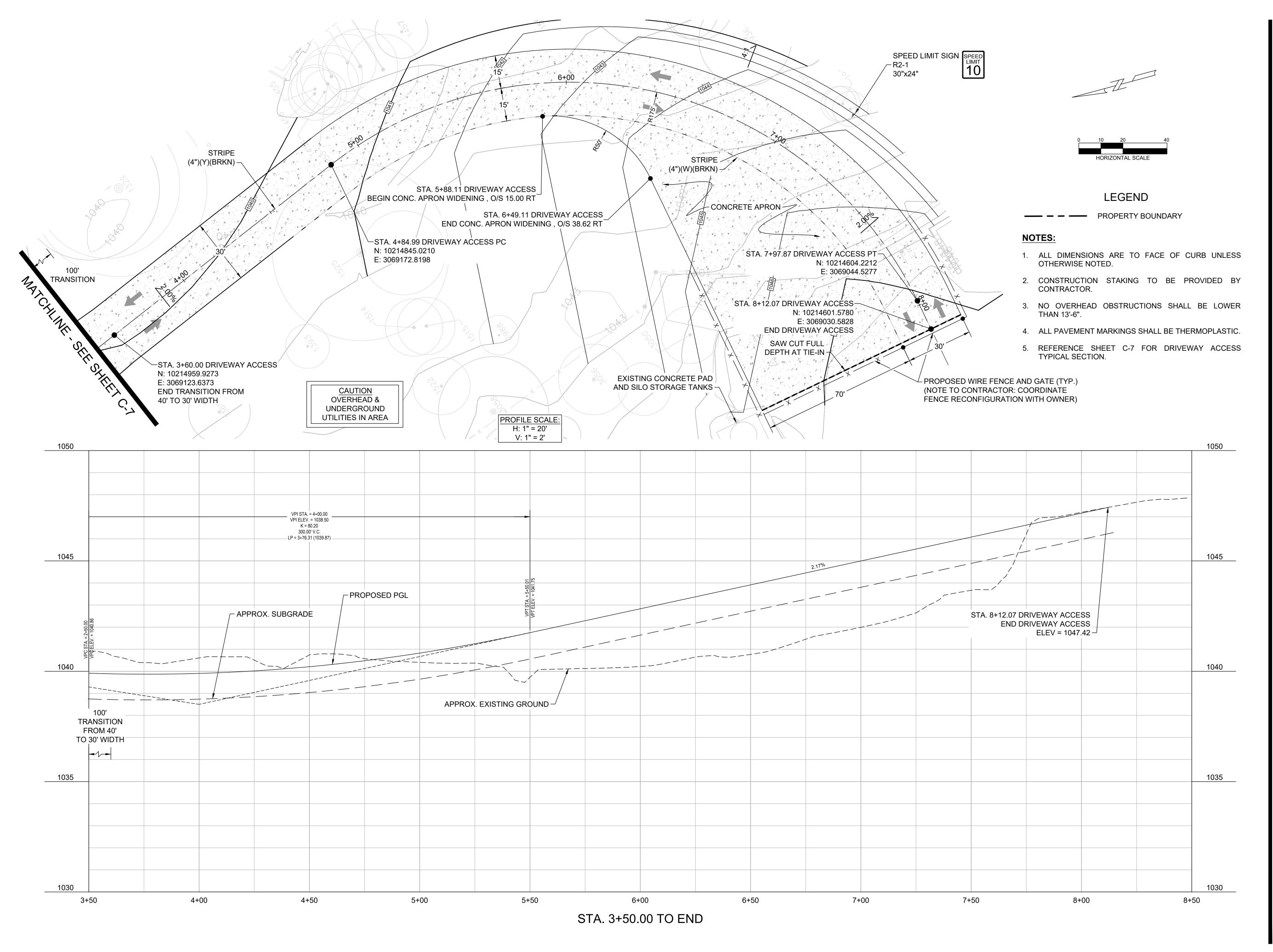
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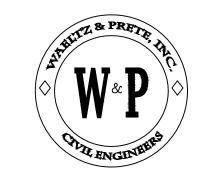
PLAN & PROFILE (1 OF 2)

WP PROJECT NO.:

033-016

SHEET NO.:





WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308

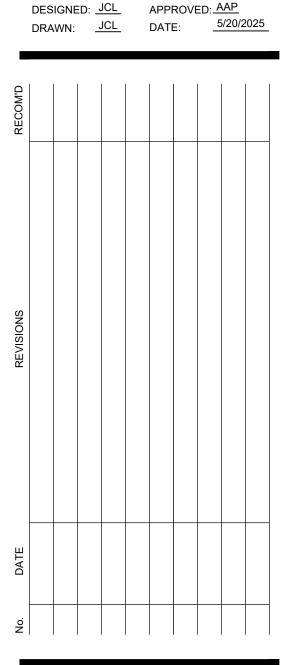


LAUREN CONCRETE -LIBERTY HILL DRIVEWAY RELOCATION

> 100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS



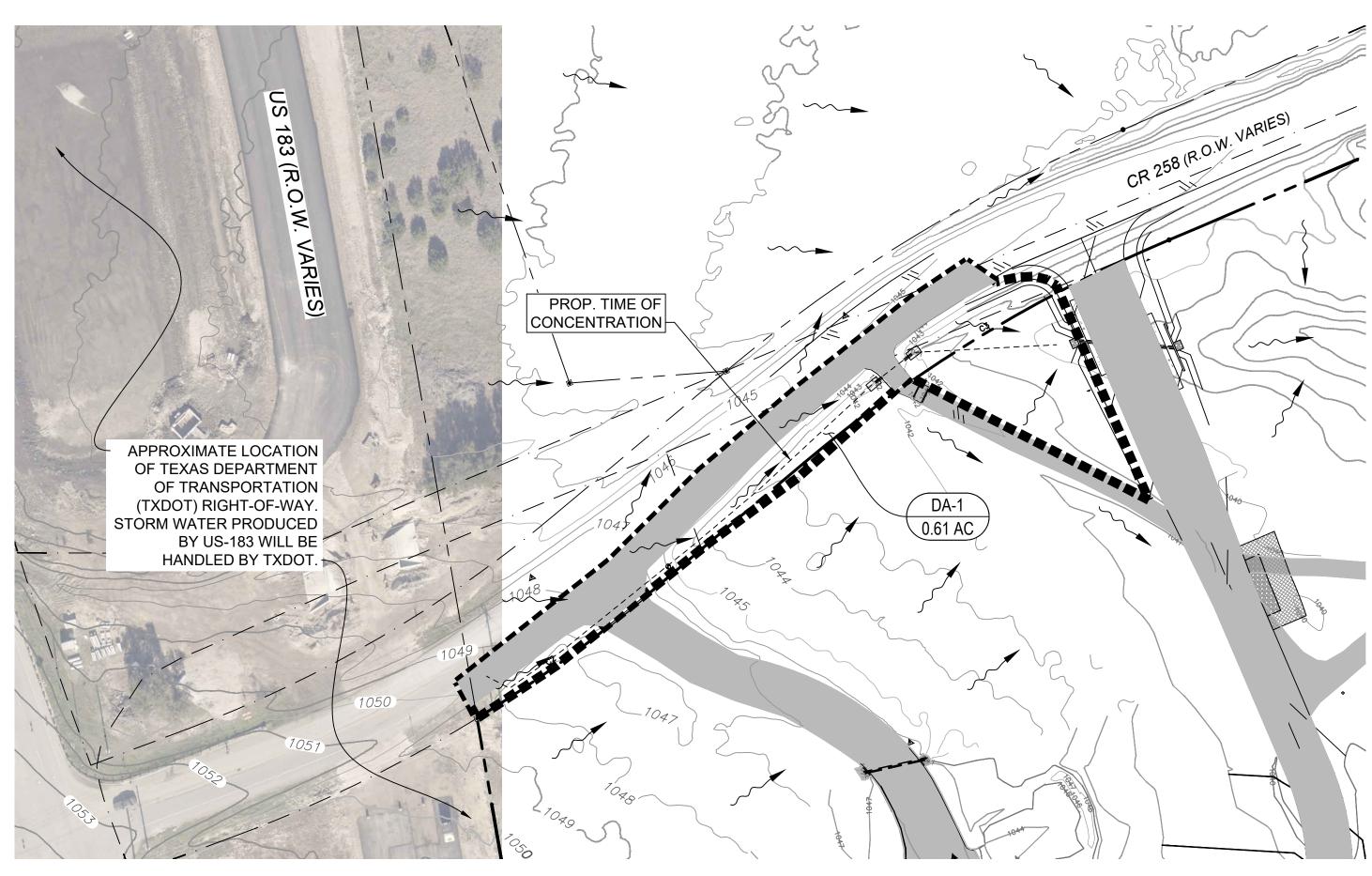
SHEET TITLE:

PLAN & PROFILE (2 OF 2)

WP PROJECT NO.:

033-016

SHEET NO



PROPOSED CONDITIONS

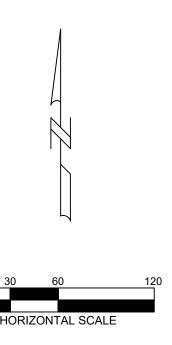
SCALE: 1" = 60'

OFF-SITE 1 FT CONTOURS & PARCEL BOUNDARIES
SHOWN WERE SOURCED FROM AVAILABLE
WILLIAMSON COUNTY GIS DATA

PROPOSED CONDITIONS DRAINAGE TABLE (RATIONAL METHOD - ATLAS 14):

ESTIMATED			
SUB-BASIN AREA T_c IMPERV. C_2 C_5	C_{10} C_{25} C_{50} C_{100}	l_2 l_5 l_{10}	l_{25} l_{50} l_{100} Q_2 Q_5 Q_{10} Q_{25} Q_{50} Q_{100}
DESIGNATION [acres] [min.] +/- [%]		[in/hr] [in/hr] [in/hr] [ir	in/hr] [in/hr] [in/hr] [cfs] [cfs] [cfs] [cfs] [cfs]
DA-1 0.61 5* 36.3 0.40 0.43	0.45 0.50 0.53 0.57	4.29 5.60 6.60 7	7.93 8.94 9.98 1.04 1.45 1.82 2.40 2.89 3.49

*Minimum Time of Concentration of 5 minutes used.



<u>LEGEND</u>

DRAINAGE AREA BOUNDARY

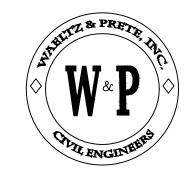
TIME OF CONCENTRATION

FLOW DIRECTION

EXISTING & PROPOSED IMPERVIOUS COVER

NOTES:

- 1. REFERENCE SHEET C-2 FOR ABBREVIATIONS AND MASTER LEGEND.
- CALCULATIONS SHOWN FOLLOW THE CITY OF ROUND ROCK DRAINAGE CRITERIA MANUAL WITH THE USE OF RAINFALL INTENSITY-DURATION-FREQUENCY COEFFICIENTS BASED ON NOAA ATLAS-14 RAINFALL DATA.
- 3. NO ON-SITE DETENTION REQUIRED. THIS SITE IS LESS THAN 20% IMPERVIOUS COVER. PER WILLIAMSON COUNTY SUBDIVISION REGULATION B11.1.3, DETENTION NOT REQUIRED. THERE ARE NO IDENTIFIABLE ADVERSE IMPACTS DOWN STREAM.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



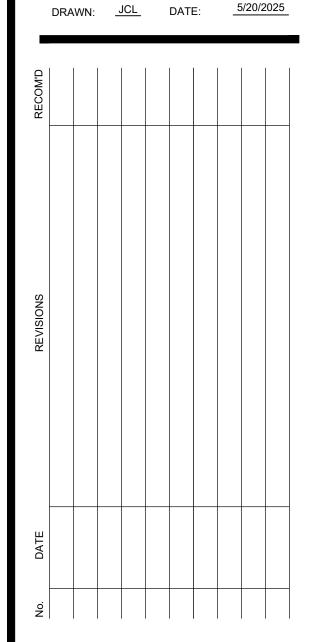
LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP



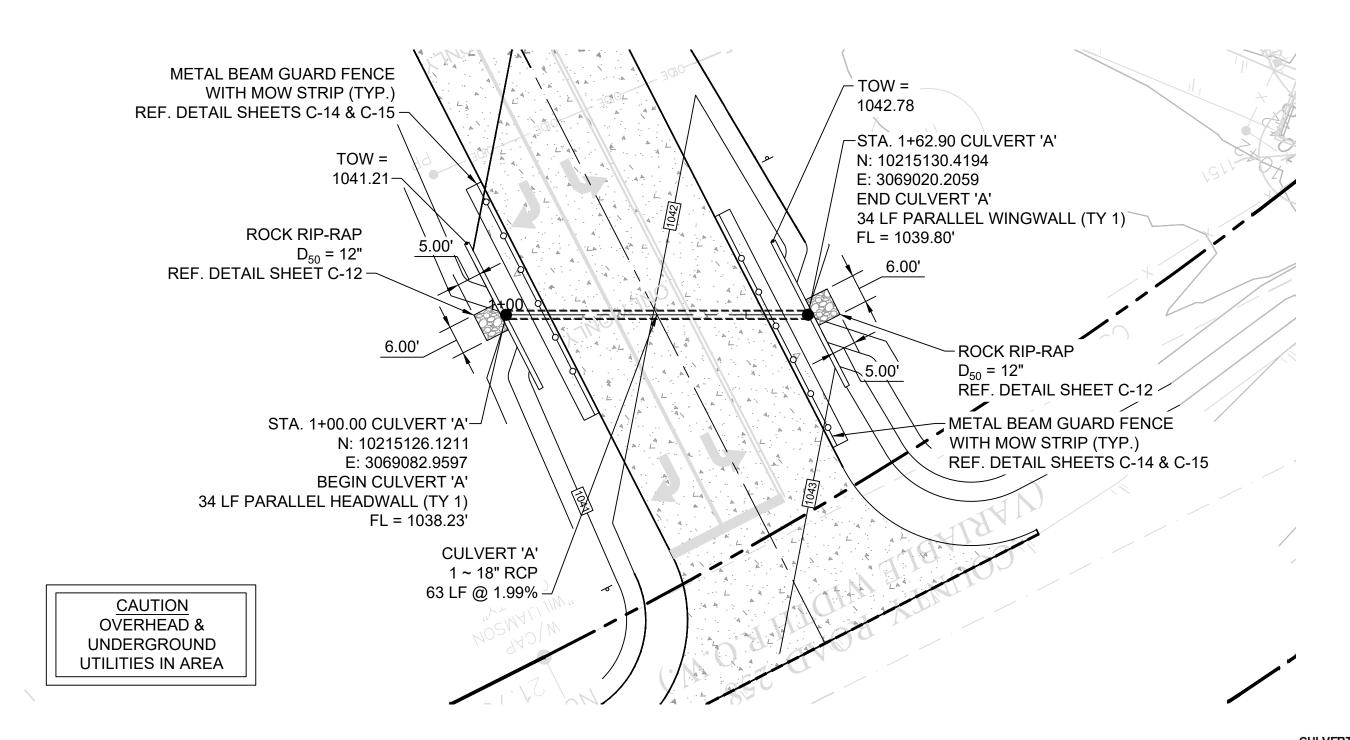
SHEET TITLE

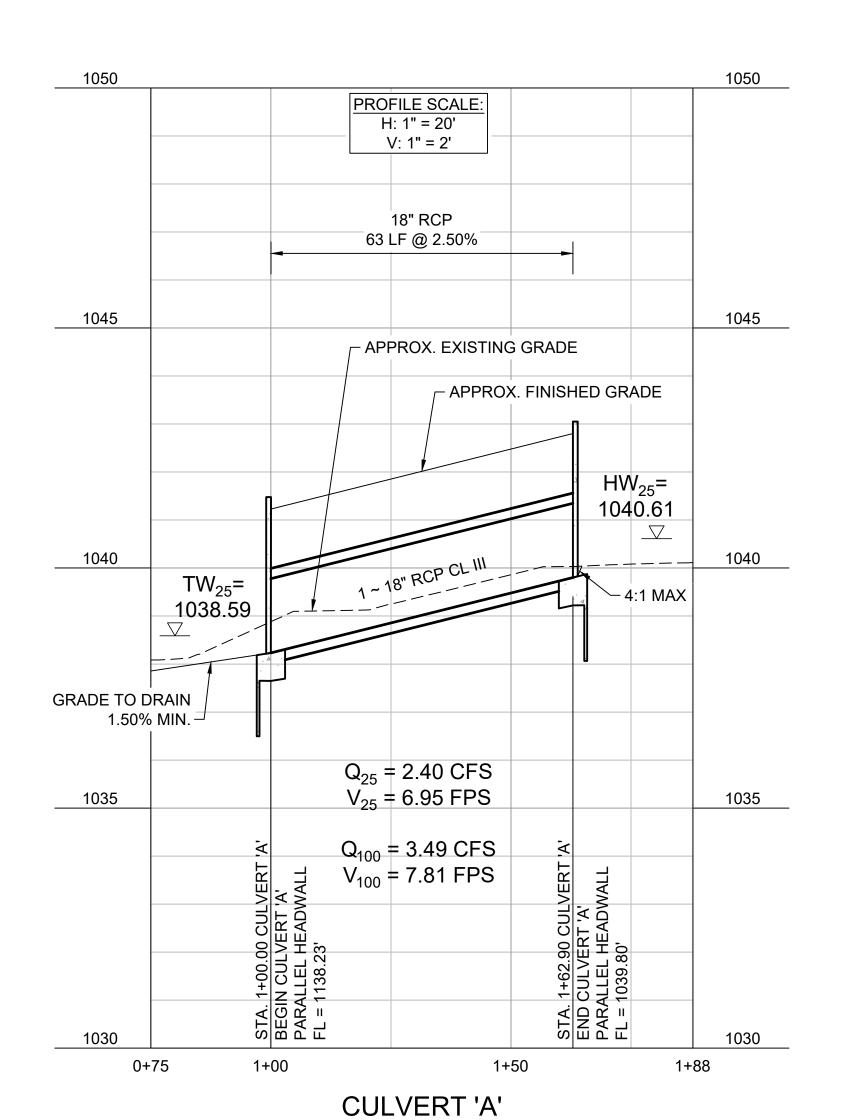
CULVERT 'A'
DRAINAGE AREA
MAP

WP PROJECT NO.:

033-016

SHEET NO.:





CULVERT ID: CULVERT 'A'

CULVERT DATA:

62.90 FT **INLET STATION:** BARREL SHAPE **INLET ELEVATION:** 1039.80 FT BARREL DIAM .: **OUTLET STATION:** 0.00 FT BARREL MATERIAL: 1038.23 FT OUTLET ELEVATION: BARREL MANNINGS'S N: NUMBER OF BARRELS: INLET TYPE: INLET EDGE CONDITION: INLET DEPRESSION:

OVERTOPPING PROFILE:

SITE DATA:

ROADWAY SURFACE: PAVED
IRREGULAR OVERTOPPING CROSS-SECTION COORDINATES:

COORD STA. ELEV.

1 0.00 1043.19
2 12.50 1043.00
3 25.00 1042.80
4 37.50 1042.60
5 50.00 1042.41

TAILWATER CHANNEL DATA:

TAILWATER CHANNEL OPTION: TRIANGULAR

BOTTOM WIDTH: -- FT

SIDE SLOPE: 10:1

CHANNEL SLOPE: 0.0150 FT/FT

CHANNEL MANNING'S N: 0.03

CHANNEL INVERT ELEVATION: 1038.23 FT

		WATER SURFACE				FROUDE
EVENT	FLOW	ELEVATION	DEPTH	VELOCITY	SHEAR	NUMBER
(YR)	(CFS)	(FT)	(FT)	(FT/S)	(PSF)	
2	1.04	1038.49	0.26	1.55	0.24	0.76
-	1.29	1038.51	0.28	1.63	0.26	0.77
-	1.53	1038.53	0.3	1.71	0.28	0.78
-	1.78	1038.55	0.32	1.77	0.3	0.78
-	2.02	1038.56	0.33	1.83	0.31	0.79
-	2.27	1038.58	0.35	1.88	0.32	0.8
25	2.40	1038.58	0.35	1.91	0.33	0.8
-	2.75	1038.6	0.37	1.98	0.35	0.81
-	3.00	1038.62	0.39	2.02	0.36	0.81
-	3.25	1038.63	0.4	2.06	0.37	0.81
100	3.49	1038.64	0.41	2.1	0.38	0.82

CIRCULAR

CONCRETE

NONE

1.5 FT

SQUARE EDGE W HEADWALL

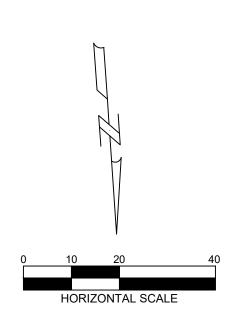
0.013

CONVENTIONAL

CULVERT SUMMARY TABLE:

			HEADWATE	INLET	OUTLET					<u> </u>		
	TOTAL	CULVERT	R	CONTROL	CONTROL		NORMAL	CRITICAL	OUTLET	TAILWATER	OUTLET	TAILWATER
EVENT	DISCHARGE	DISCHARGE	ELEVATION	DEPTH	DEPTH	FLOW TYPE	DEPTH	DEPTH	DEPTH	DEPTH	VELOCITY	VELOCITY
(YR)	(CFS)	(CFS)	(FT)	(FT)	(FT)		(FT)	(FT)	(FT)	(FT)	(FT/S)	(FT/S)
2	1.04	1.04	1040.31	0.51	0.0*	1-S2n	0.237	0.377	0.237	0.259	5.685	1.548
-	1.29	1.29	1040.37	0.572	0.0*	1-S2n	0.271	0.421	0.271	0.281	5.911	1.632
-	1.53	1.53	1040.43	0.63	0.0*	1-S2n	0.292	0.459	0.292	0.3	6.397	1.705
	1.78	1.78	1040.48	0.677	0.0*	1-S2n	0.312	0.497	0.32	0.317	6.632	1.77
-	2.02	2.02	1040.53	0.726	0.0*	1-S2n	0.333	0.533	0.342	0.332	6.587	1.828
-	2.27	2.27	1040.58	0.778	0.0*	1-S2n	0.353	0.564	0.363	0.347	6.82	1.881
25	2.40	2.40	1040.61	0.808	0.0*	1-S2n	0.365	0.582	0.373	0.355	6.953	1.908
-	2.75	2.75	1040.68	0.883	0.0*	1-S2n	0.394	0.628	0.401	0.373	7.243	1.975
-	3.00	3.00	1040.73	0.932	0.0*	1-S2n	0.414	0.658	0.419	0.386	7.446	2.018
-	3.25	3.25	1040.78	0.979	0.0*	1-S2n	0.429	0.686	0.436	0.397	7.654	2.058
100	3.49	3.49	1040.82	1.024	0.0*	1-S2n	0.444	0.713	0.454	0.408	7.805	2.096

*Full Flow Headwater elevation is below inlet invert.



LEGEND

PROPERTY BOUNDARY

NOTES:

* ANALYSIS - HY-8 (VER 7.3)

* ATLAS-14 UTILIZED

- 1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 2. CONSTRUCTION STAKING TO BE PROVIDED BY CONTRACTOR



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL DATE: 5/20/2025

QWOODJA

SNOISIANA

SNOI

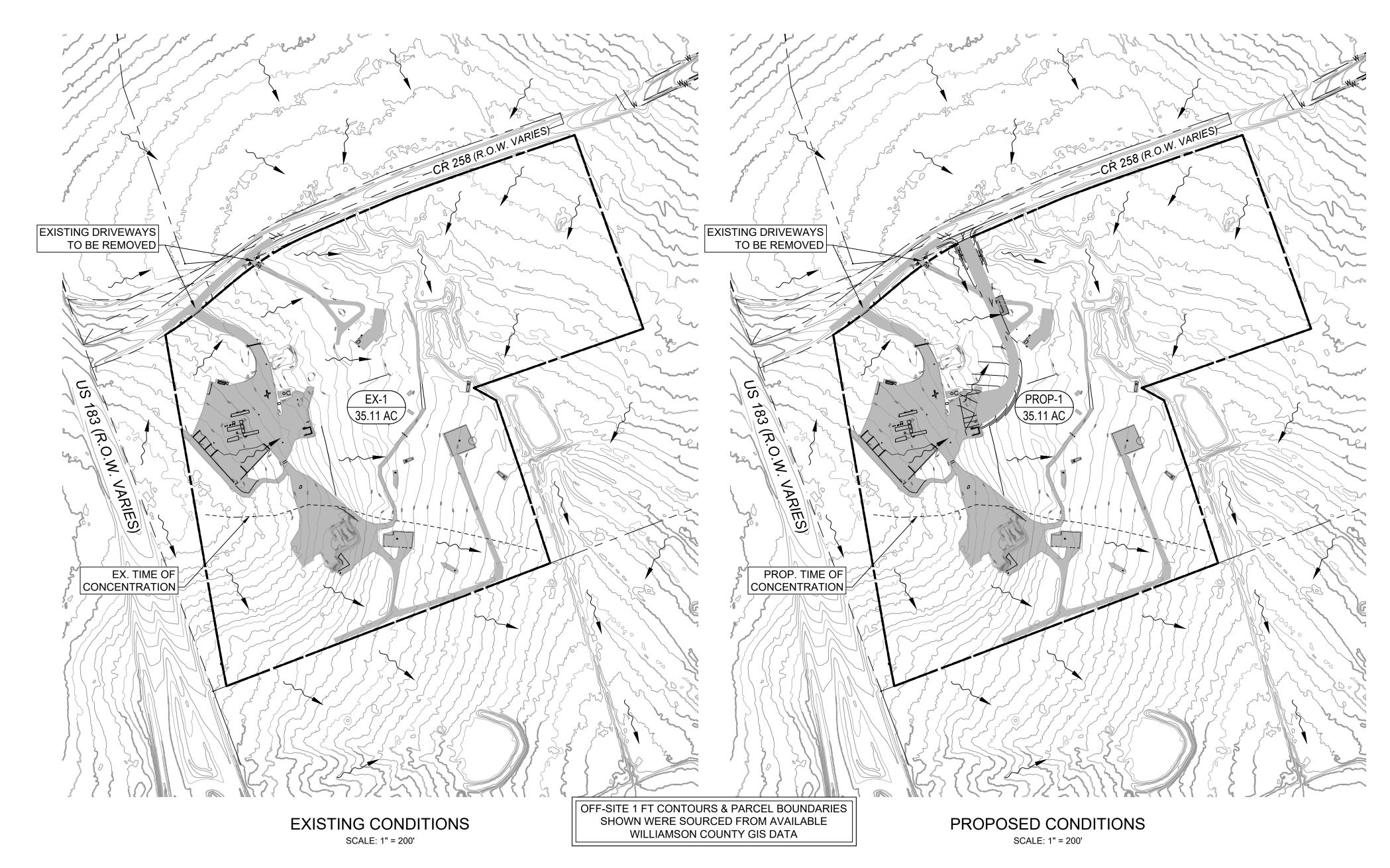
SHEET TITL

CULVERT 'A' PLAN, PROFILE & CALCS

WP PROJECT NO.:

033-016

T NO.:

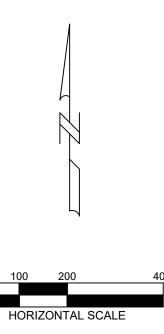


EXISTING CONDITIONS DRAINAGE TABLE (RATIONAL METHOD - ATLAS 14):

			ESTIMATED																		
SUB-BASIN	AREA	T_c	IMPERV.	C_2	C_5	C ₁₀	C ₂₅	C ₅₀	C ₁₀₀	I_2	l ₅	I ₁₀	l ₂₅	l ₅₀	I ₁₀₀	Q_2	Q_5	Q ₁₀	Q ₂₅	Q ₅₀	Q ₁₀₀
DESIGNATION	[acres]	[min.]	+/- [%]							[in/hr]	[in/hr]	[in/hr]	[in/hr]	[in/hr]	[in/hr]	[cfs]	[cfs]	[cfs]	[cfs]	[cfs]	[cfs]
EX-1	35.11	22.00	13.8	0.35	0.38	0.41	0.45	0.49	0.53	3.46	4.30	5.02	6.04	6.85	7.70	42.59	57.67	72.86	96.44	116.92	142.61
	35.11																				,

PROPOSED CONDITIONS DRAINAGE TABLE (RATIONAL METHOD - ATLAS 14):

			ESTIMATED																		
SUB-BASIN	AREA	T _c	IMPERV.	C_2	C_5	C ₁₀	C ₂₅	C ₅₀	C ₁₀₀		l ₅	I ₁₀	l ₂₅	l ₅₀	I ₁₀₀	Q_2	Q_5	Q_{10}	Q ₂₅	Q ₅₀	Q ₁₀₀
DESIGNATION	[acres]	[min.]	+/- [%]							[in/hr]	[in/hr]	[in/hr]	[in/hr]	[in/hr]	[in/hr]	[cfs]	[cfs]	[cfs]	[cfs]	[cfs]	[cfs]
PROP-1	35.11	22.00	15.3	0.36	0.39	0.42	0.46	0.49	0.53	3.46	4.30	5.02	6.04	6.85	7.70	43.40	58.70	74.08	97.94	118.66	144.61
	35.11																			•	



<u>LEGEND</u>

DRAINAGE AREA BOUNDARY

TIME OF CONCENTRATION

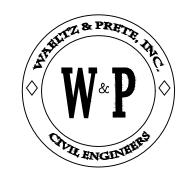
~~►

FLOW DIRECTION

EXISTING & PROPOSED IMPERVIOUS COVER

NOTES:

- REFERENCE SHEET C-2 FOR ABBREVIATIONS AND MASTER LEGEND.
- CALCULATIONS SHOWN FOLLOW THE CITY OF ROUND ROCK DRAINAGE CRITERIA MANUAL WITH THE USE OF RAINFALL INTENSITY-DURATION-FREQUENCY COEFFICIENTS BASED ON NOAA ATLAS-14 RAINFALL DATA.
- 3. NO ON-SITE DETENTION REQUIRED. THIS SITE IS LESS THAN 20% IMPERVIOUS COVER. PER WILLIAMSON COUNTY SUBDIVISION REGULATION B11.1.3, DETENTION NOT REQUIRED. THERE ARE NO IDENTIFIABLE ADVERSE IMPACTS DOWN STREAM.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL DRIVEWAY RELOCATION

> 100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: JCL DATE: 5/20/2025

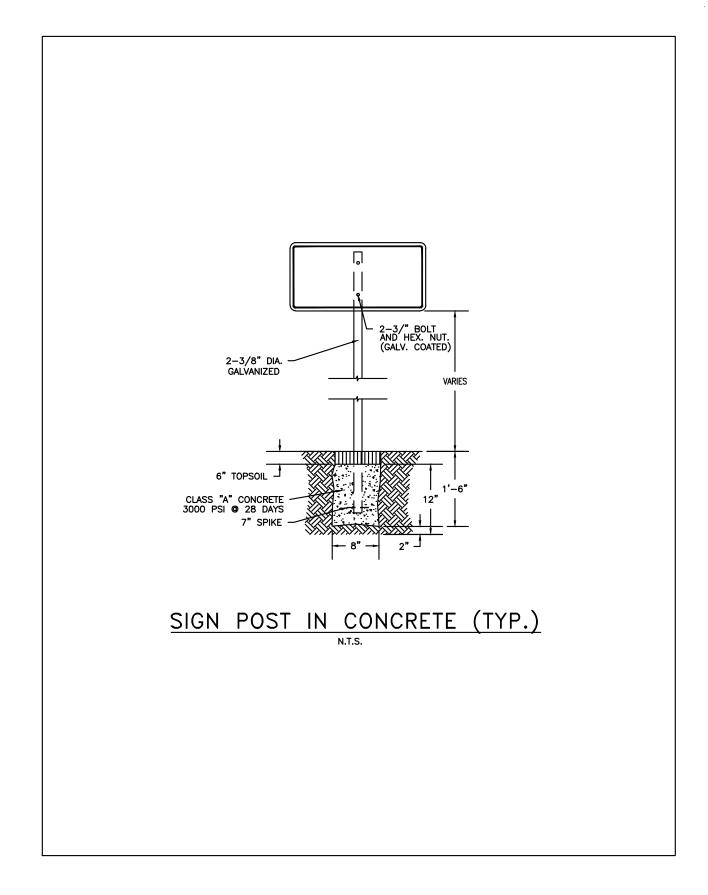
SHEET TI

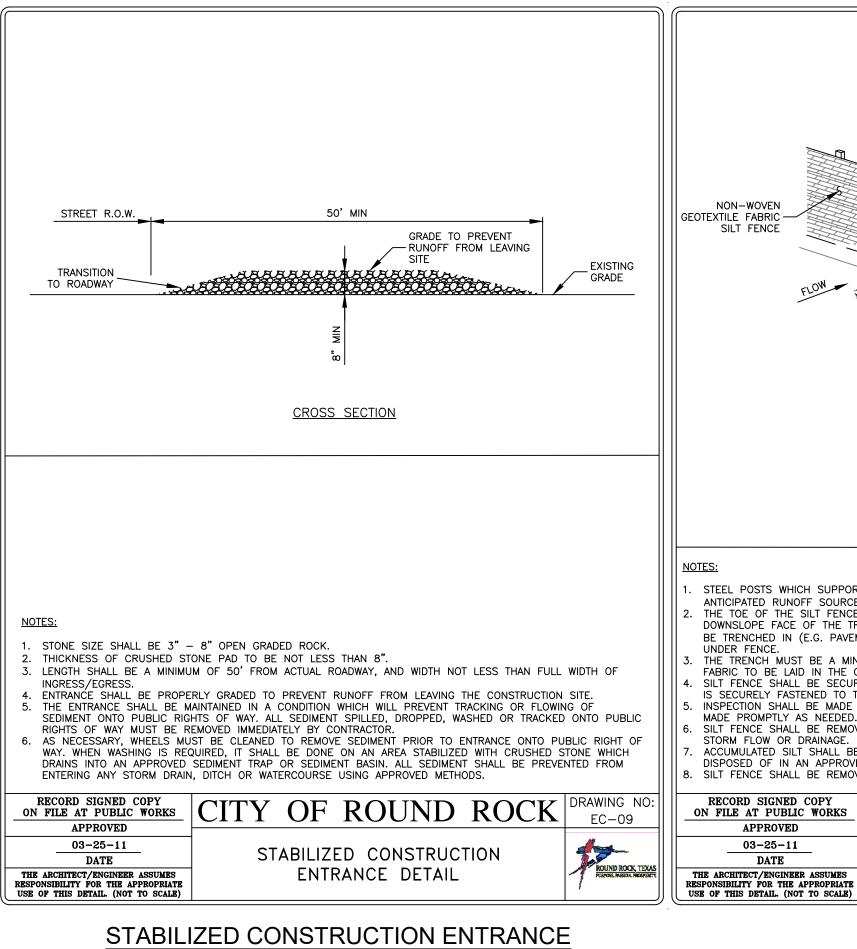
DRAINAGE AREA MAP

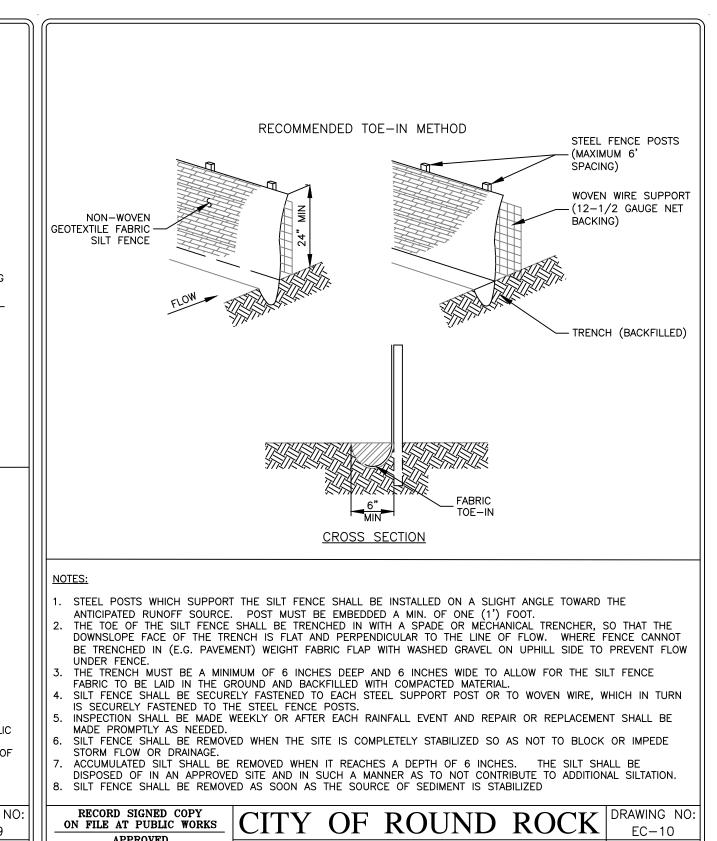
WP PROJECT NO.:

033-016

HEET NO.:



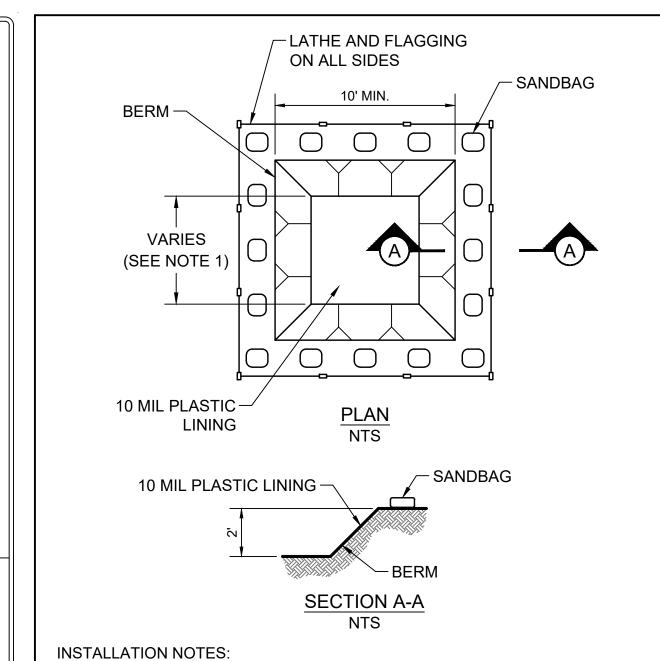




SILT FENCE DETAIL

SILT FENCE

NTS



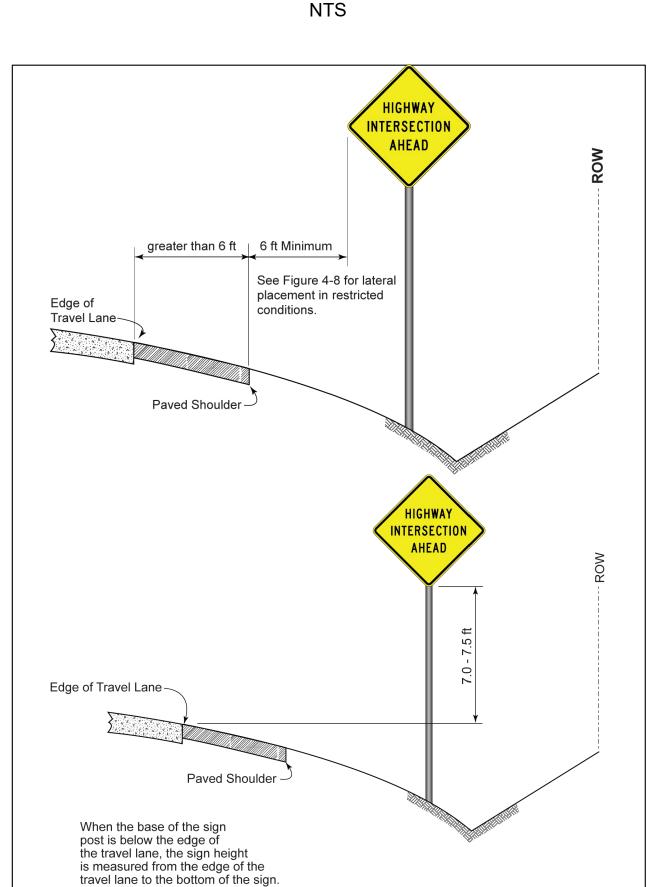
- 1. 10' MIN. OR AS REQUIRED TO CONTAIN WASTE CONCRETE. 2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE
- 3. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. 4. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

MAINTENANCE NOTES:

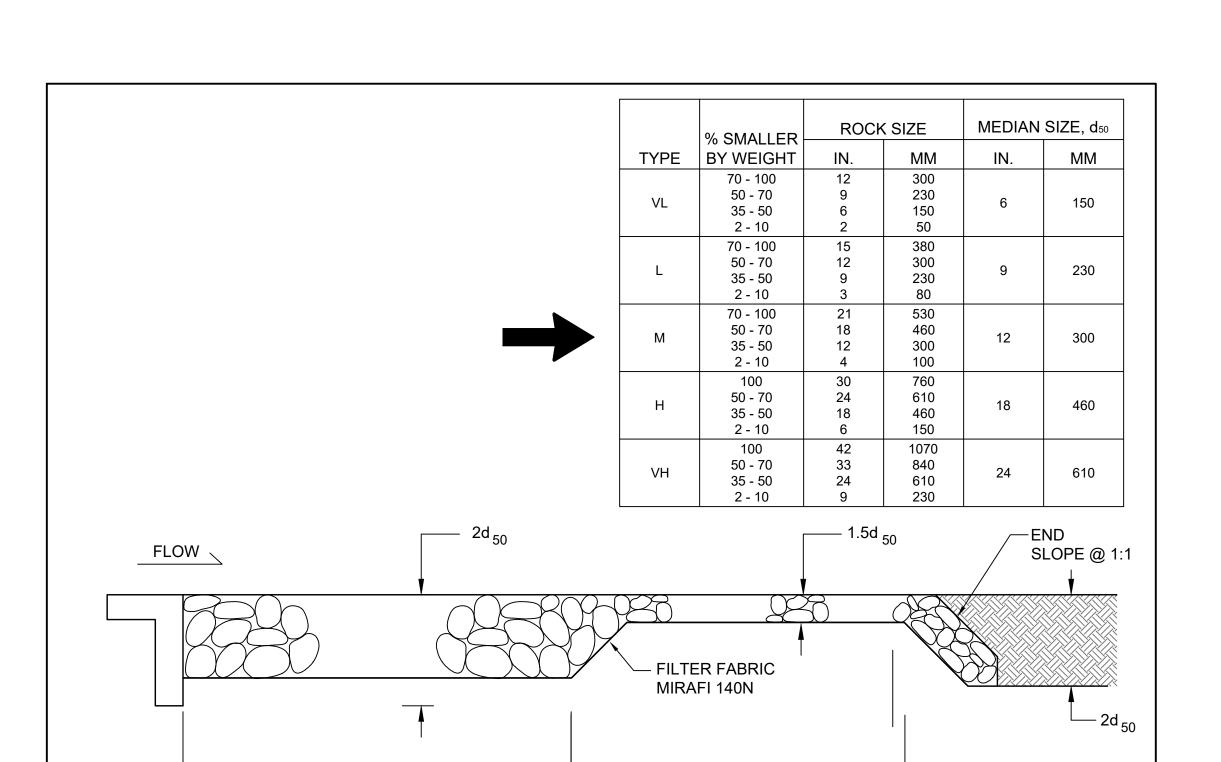
ROUND ROCK, TEXAS

- 1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- 2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
- 3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.
- 4. INSPECT WEEKLY, DURING AND AFTER EVERY STORM EVENT

SIGN POST MOUNTING







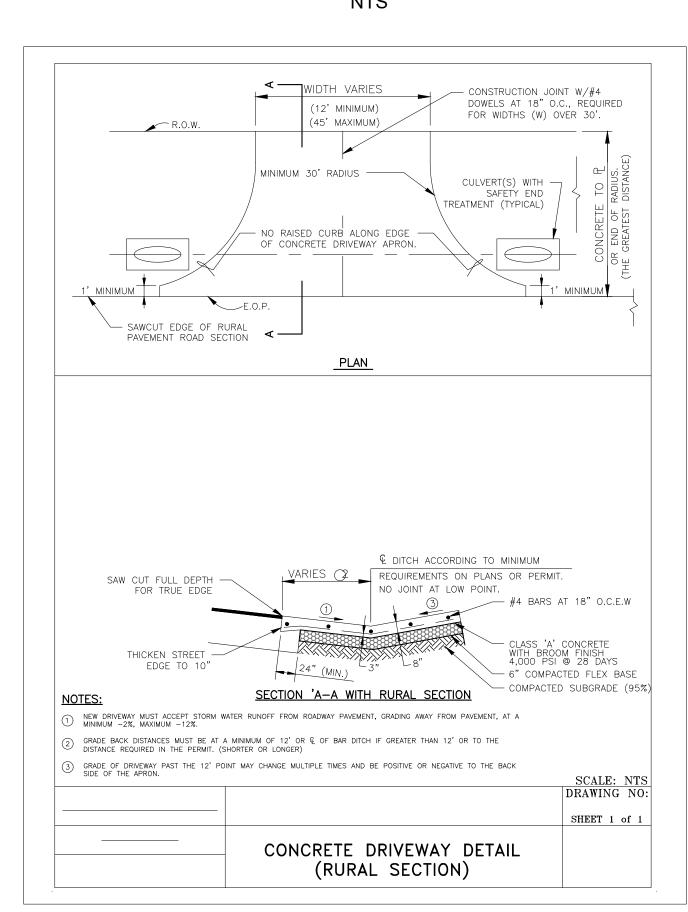
L/2

APPROVED

03-25-11

DATE

TEMPORARY CONCRETE TRUCK WASHOUT AREA



DRIVEWAY DETAIL **ROCK RIP-RAP** NTS NTS



WAELTZ & PRETE, INC.

CIVIL ENGINEERS

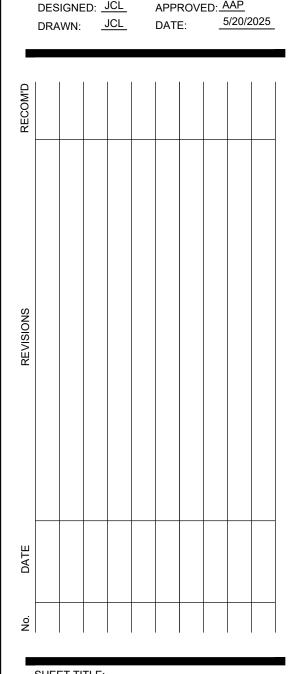
211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

PH (512) 505-8953

CHASCO **CONSTRUCTORS**

CLIENT:



SHEET TITLE:

DETAILS

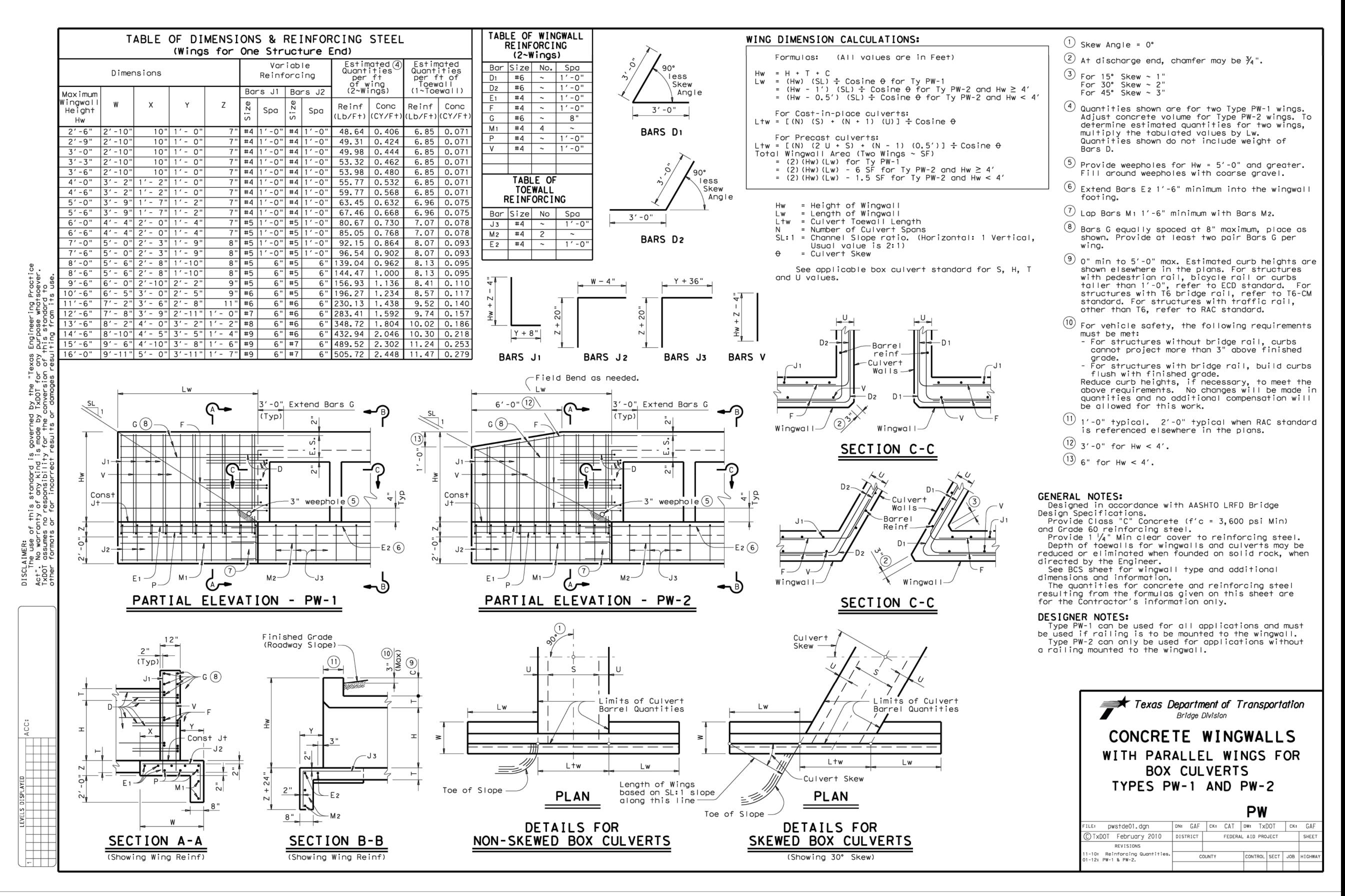
WP PROJECT NO.:

033-016

SHEET NO.: C-12

SIGN LATERAL PLACEMENT AND HEIGHT

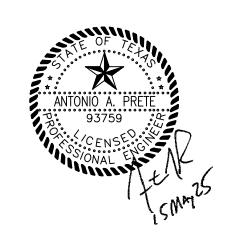
NTS



ON RIGINERES

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL DRIVEWAY RELOCATION

> 100 CR 258, LIBERTY HILL, TX 78642

CLIENT

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: JCL DATE: 5/20/2025

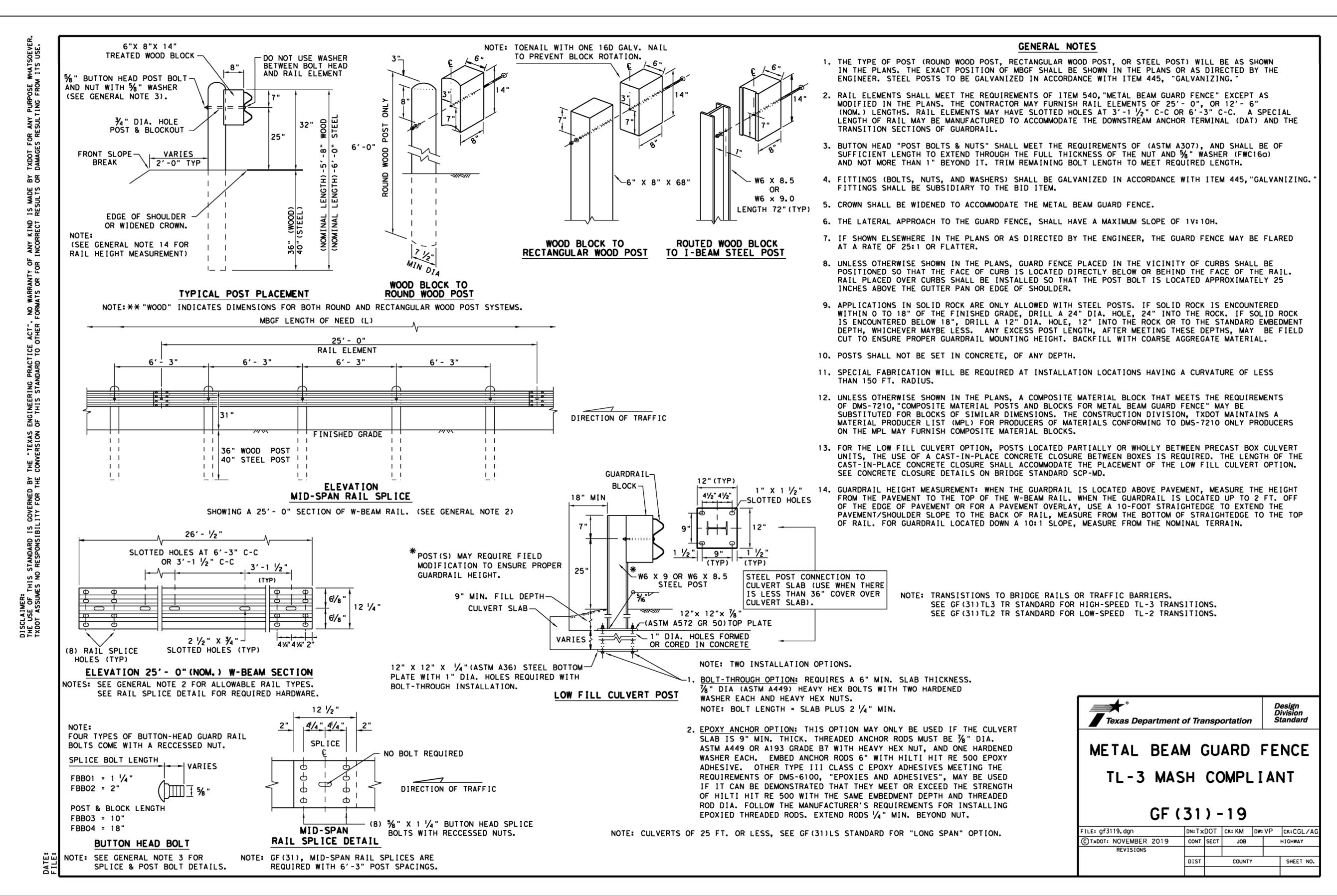
SHEET TITLE:

WINGWALL DETAILS

WP PROJECT NO.:

033-016

SHEET NO.:



Wa P. Charles Branchers

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

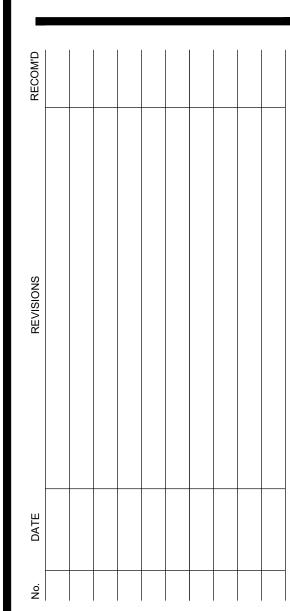
100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: <u>JCL</u> DATE:



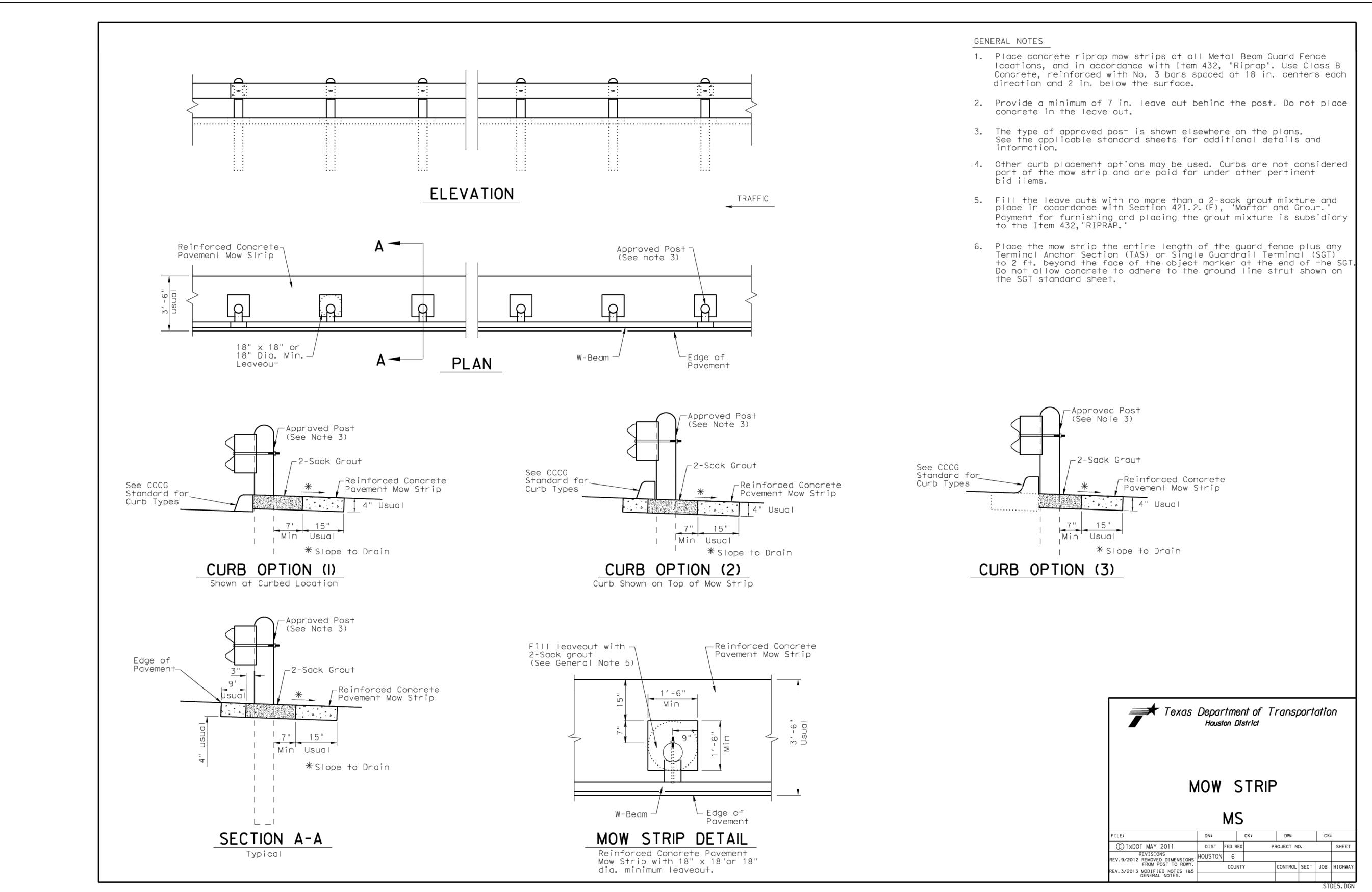
SHEET TITLE:

METAL BEAM GUARD FENCE DETAILS

WP PROJECT NO.:

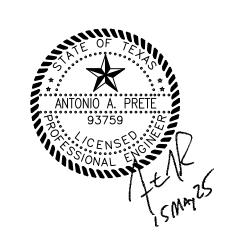
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SHEET NO.:



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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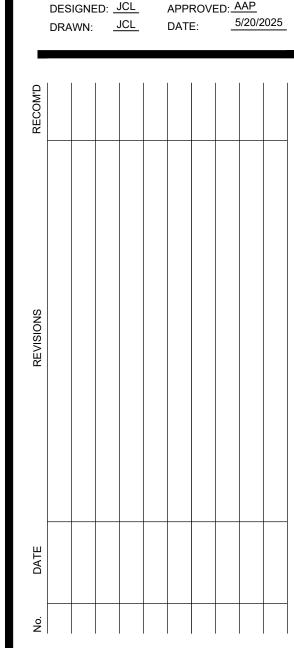


LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS



SHEET TITLE

MOW STRIP DETAILS

WP PROJECT NO.:

033-016

SHEET NO.:

BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

- 1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
- 2. The development and design of the Traffic Control Plan (TCP) is the responsibility of the Engineer.
- 3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.
- 4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.
- 5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.
- When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.
- 7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.
- 8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.
- The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.
- 10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices. CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plague shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES. CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.
- 11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.
- 12. The Engineer has the final decision on the location of all traffic control devices.
- 13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

- 1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.
- 2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

- 1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.
- 2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD) DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS) MATERIAL PRODUCER LIST (MPL) ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)" STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD) TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) TRAFFIC ENGINEERING STANDARD SHEETS

SHEET 1 OF 12 Texas Department of Transportation

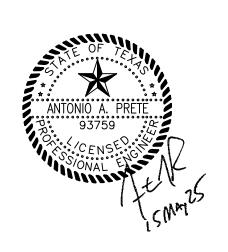
BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-21

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WAELTZ & PRETE, INC. CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX, 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL **DRIVEWAY RELOCATION**

> 100 CR 258, LIBERTY HILL, TX 78642

CHASCO CONSTRUCTORS

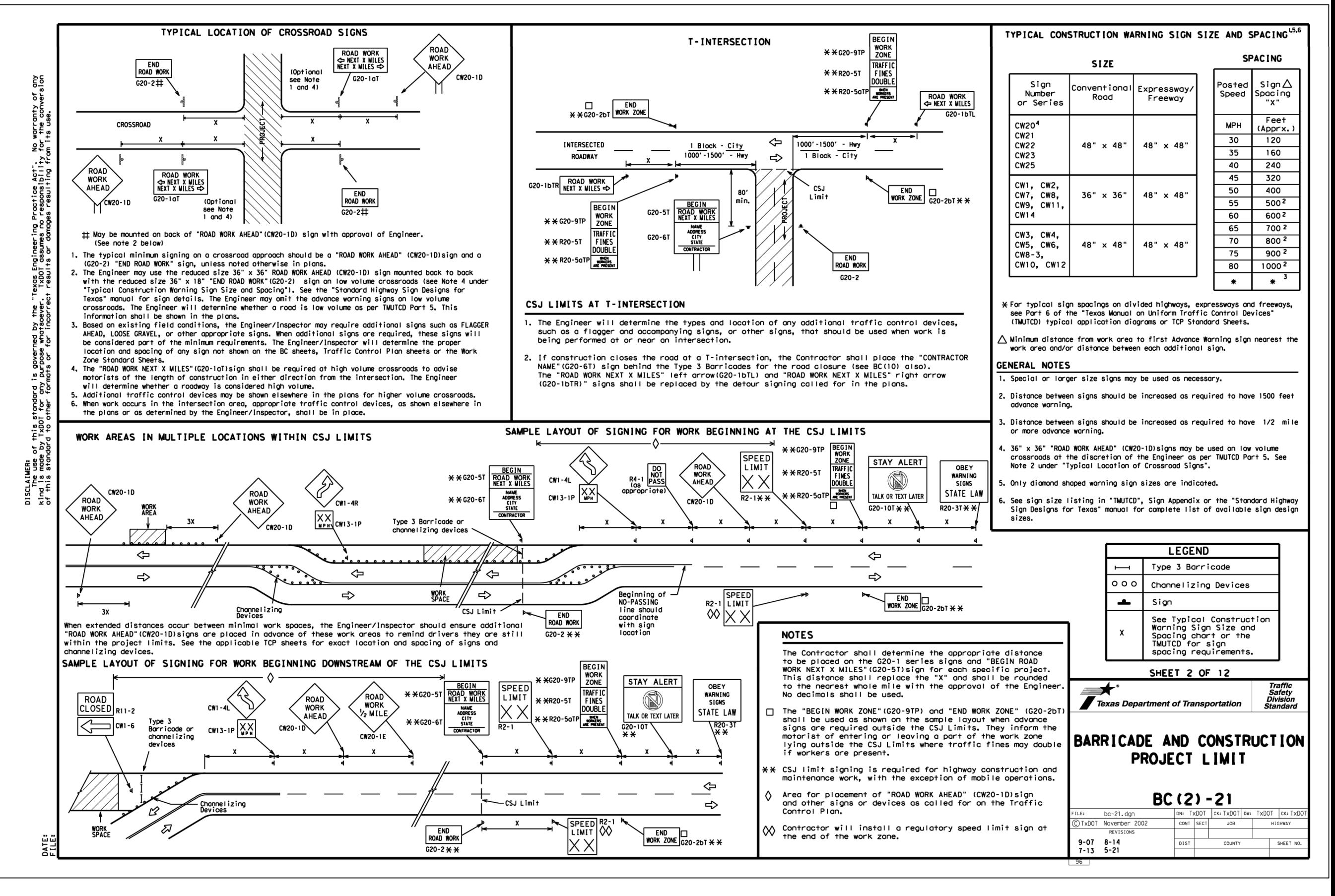
DESIGNED: JCL APPROVED: AAP

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TXDOT BARRICADE AND CONSTRUCTION (1 OF 12)

WP PROJECT NO.:

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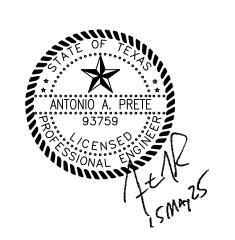


W&P

CHILLENGINEERS

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

100 CR 258, LIBERTY HILL, TX 78642

IENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: <u>JCL</u> DATE:

No. DATE REVISIONS RECOM'D

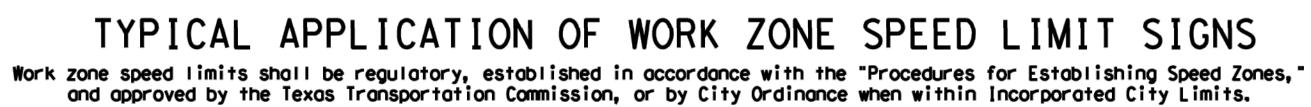
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TXDOT BARRICADE AND CONSTRUCTION (2 OF 12)

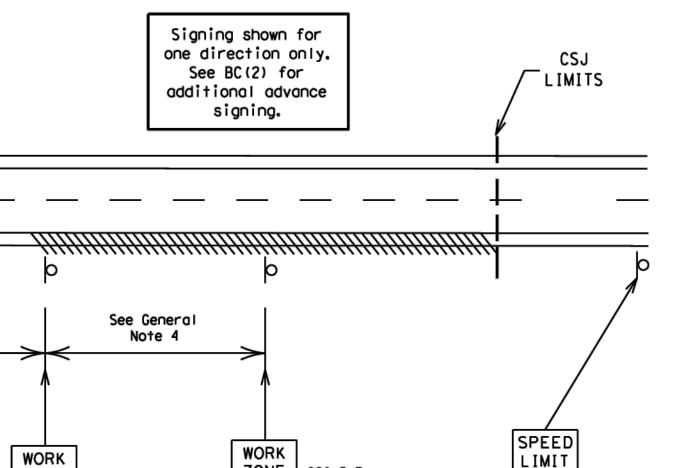
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Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.



LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

- a) rough road or damaged pavement surface
- b) substantial alteration of roadway geometrics (diversions)
- c) construction detours
- d) grade
- e) width
- f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered. (See Removing or Covering on BC(4)).

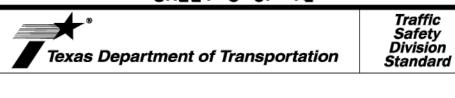
GENERAL NOTES

- 1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
- 2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
- 3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
- 4. Frequency of work zone speed limit signs should be:

35 mph and less 0.2 to 1 mile

- 5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
- 6. Fabrication, erection and maintenance of the "ADVANCE SPEED LIMIT" (CW3-5) sign, "WORK ZONE" (G20-5aP) plaque and the "SPEED LIMIT" (R2-1) signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
- 7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
- 8. Techniques that may help reduce traffic speeds include but are not limited to: A. Law enforcement.
- B. Flagger stationed next to sign.
- C. Portable changeable message sign (PCMS).
- D. Low-power (drone) radar transmitter.
- E. Speed monitor trailers or signs.
- 9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
- 10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

SHEET 3 OF 12



BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

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WP PROJECT NO.:

033-016

TXDOT BARRICADE

AND CONSTRUCTION

(3 OF 12)

Waeltz & Prete, Inc.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

PH (512) 505-8953

FIRM TX. REG. #F-10308

LAUREN CONCRETE -

LIBERTY HILL

DRIVEWAY RELOCATION

100 CR 258,

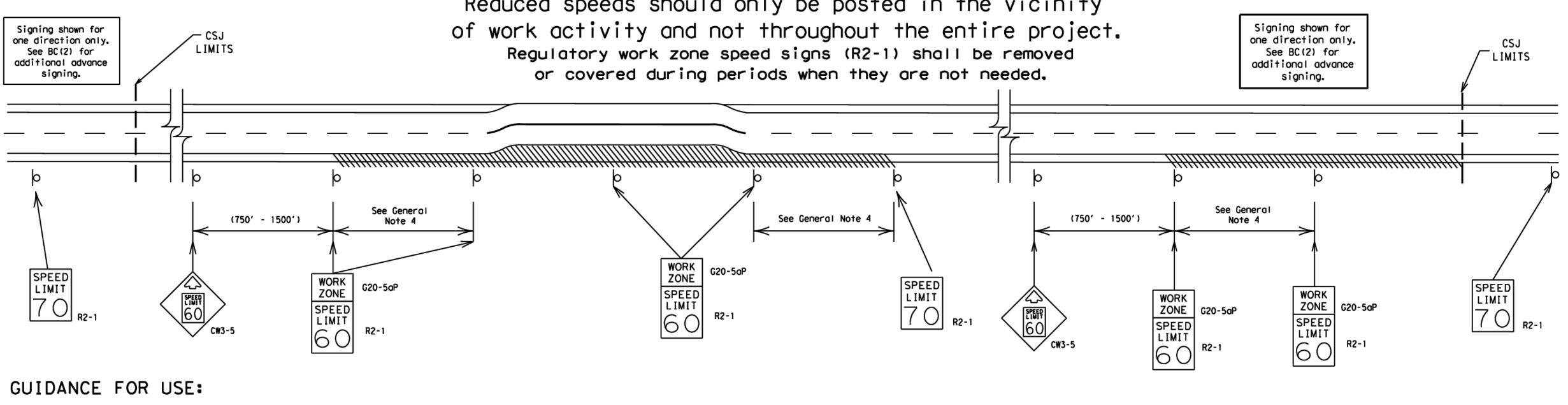
LIBERTY HILL, TX 78642

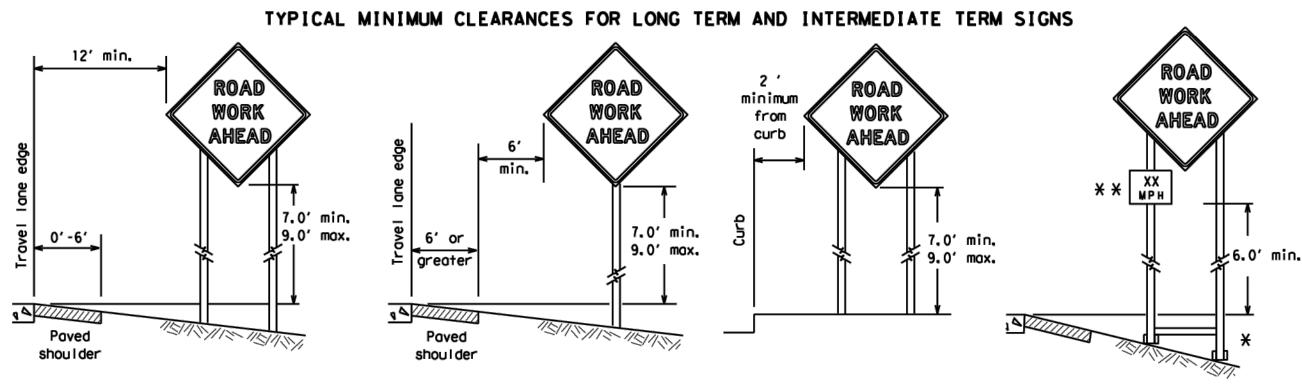
CHASCO

CONSTRUCTORS

DESIGNED: JCL

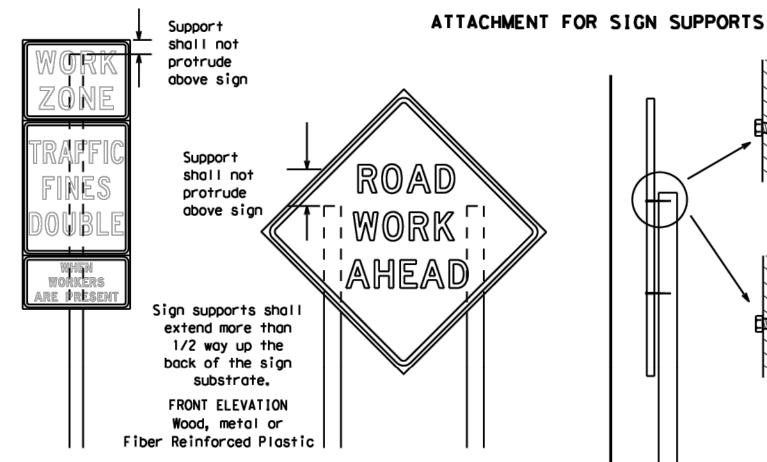
DRAWN: <u>JCL</u> DATE:





* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

** When plagues are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.



Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

- Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations. show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same. if not better route guidance as normally installed on a roadway without construction.
- When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
- When existing permanent signs are moved and relocated due to construction
- If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
- If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work
- Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

- Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
- Wooden sign posts shall be painted white.

Barricades shall NOT be used as sign supports.

- 4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone. 5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The
- Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
- The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets. The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
- The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
- 8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
- The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

<u>DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)</u>

- . The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
- a. Long-term stationary work that occupies a location more than 3 days.
- Intermediate-term stationary work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting
- c. Short-term stationary daytime work that occupies a location for more than 1 hour in a single daylight period.
- d. Short, duration work that occupies a location up to 1 hour. e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

- . The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
- 2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above
- the ground. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
- 4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
- Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.

"Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave. 3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

- 1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
- 2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background. 3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL} , shall be used for rigid signs with orange backgrounds.

I. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

- . When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
- 2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
- 3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
- 4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
- Burlap shall NOT be used to cover signs. 6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
- 7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.

- 2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
- 3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
- Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used. Rubber ballasts designed for channelizing devices should not be used for
- ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list. Sandbags shall only be placed along or laid over the base supports of the
- traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
- 8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

SHEET 4 OF 12

Texas Department of Transportation Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-21

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TXDOT BARRICADE AND CONSTRUCTION

WAELTZ & PRETE, INC.

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PH (512) 505-8953

FIRM TX. REG. #F-10308

LAUREN CONCRETE -

LIBERTY HILL

DRIVEWAY RELOCATION

100 CR 258,

LIBERTY HILL, TX 78642

CHASCO

CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: JCL DATE: 5/20/2025

CLIENT:

WP PROJECT NO .:

033-016

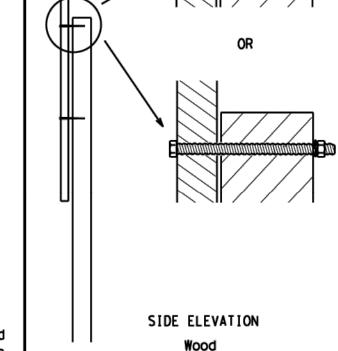
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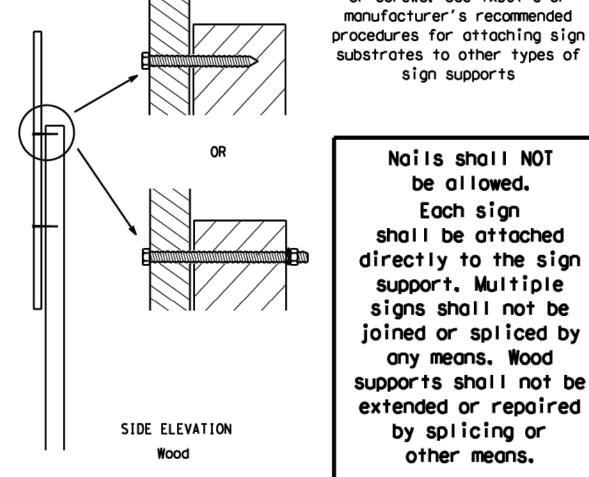
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STOP/SLOW PADDLES 1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24". 2. STOP/SLOW paddles shall be retroreflectorized when used at night. 3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign. 4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD. Background - Red Legend & Border - White USAGE COLOR

Legend & Border - Black SHEETING REQUIREMENTS (WHEN USED AT NIGHT) SIGN FACE MATERIAL TYPE B OR C SHEETING BACKGROUND RED TYPE BFL OR CFL SHEETING **BACKGROUND** ORANGE LEGEND & BORDER WHITE TYPE B OR C SHEETING LEGEND & BORDER BLACK ACRYLIC NON-REFLECTIVE FILM





Attachment to wooden supports

will be by bolts and nuts

or screws. Use TxDOT's or

manufacturer's recommended

substrates to other types of

sign supports

Nails shall NOT

be allowed.

Each sign

shall be attached

directly to the sign

support. Multiple

signs shall not be

joined or spliced by

any means. Wood

supports shall not be

extended or repaired

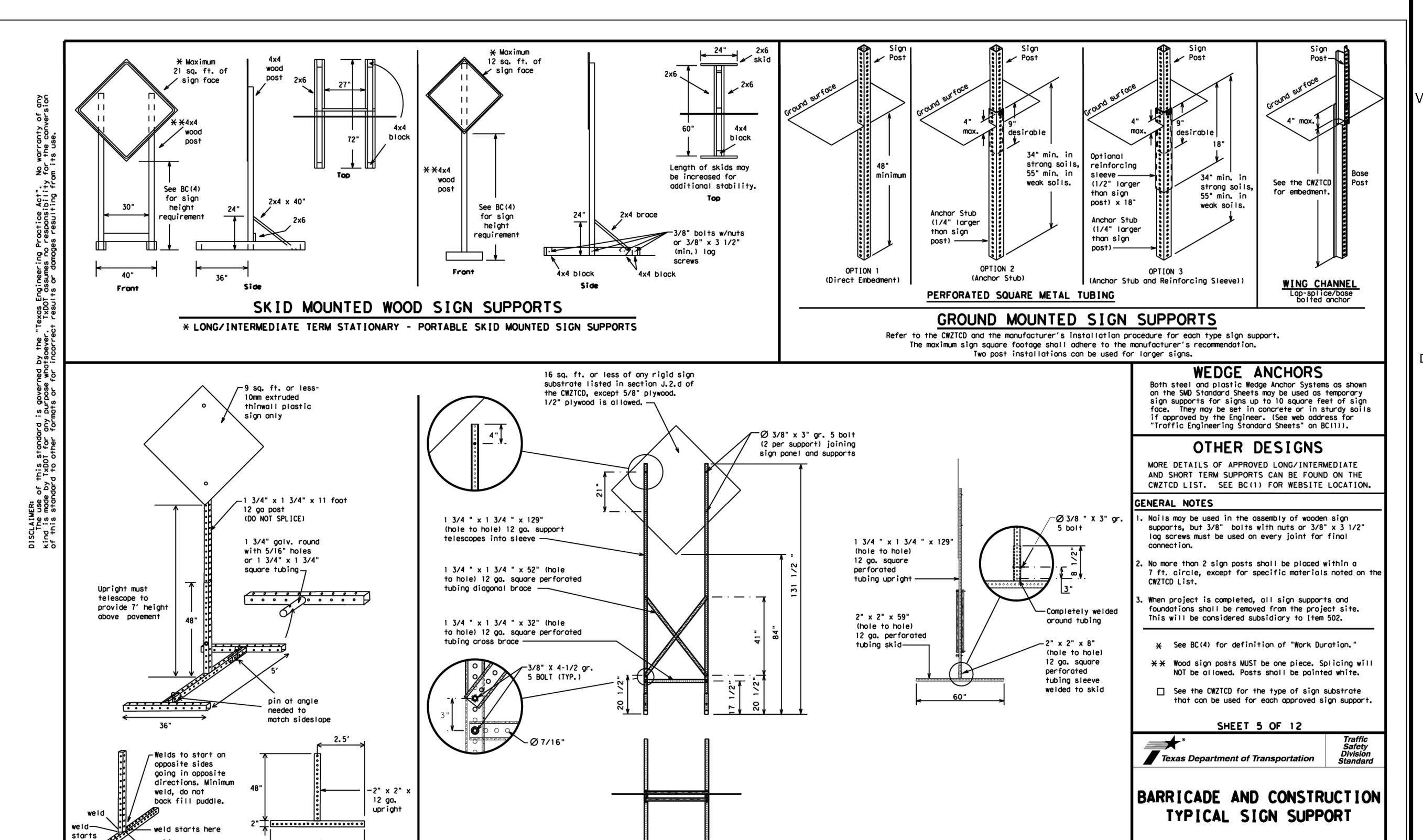
by splicing or

other means.

purposes, they shall be visible to motorists at all times.

should be paid for under the appropriate pay item for relocating existing signs.

Background - Orange



here

SINGLE LEG BASE Side View

SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

W&P

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211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



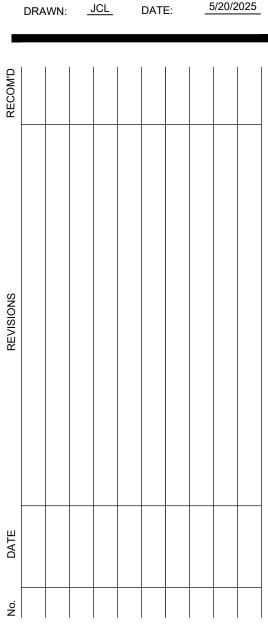
LAUREN CONCRETE LIBERTY HILL
DRIVEWAY RELOCATION

100 CR 258, LIBERTY HILL, TX 78642

IENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP



SHEET TITLE:

BC(5)-21

DIST

C)TxDOT November 2002

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7-13 5-21

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JOB

COUNTY

TXDOT BARRICADE AND CONSTRUCTION (5 OF 12)

WP PROJECT NO.:

033-016

SHEET NO.:

WHEN NOT IN USE. REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

- 1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
- 2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO,"
- Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
- 4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
- 5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
- 6. When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
- The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
- 8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
- 9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
- 10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
- 11. Do not use the word "Danger" in message. 12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT"
- on a PCMS. Drivers do not understand the message.
- 13. Do not display messages that scroll horizontally or vertically across the face of the sign.
- 14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
- 15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
- 16. Each line of text should be centered on the message board rather than left or right justified.
- 17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION	WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD	Major	MAJ
Alternate	ALT	Miles	MI
Avenue	AVE	Miles Per Hour	MPH
Best Route	BEST RTE	Minor	MNR
Boulevard	BLVD	Monday	MON
Bridge	BRDG	Normal	NORM
Cannot	CANT	North	N
Center	CTR	Northbound	(route) N
Construction Ahead	CONST AHD	Parking	PKING
CROSSING	XING	Road	RD
Detour Route	DETOUR RTE	Right Lane	RT LN
Do Not	DONT	Saturday	SAT
East	E	Service Road	SERV RD
Eastbound	(route) E	Shoulder	SHLDR
Emergency	EMER	Slippery	SL IP
Emergency Vehicle		South	S
Entrance, Enter	ENT	Southbound	(route) S
Express Lane	EXP LN	Speed	SPD
Expressway	EXPWY	Street	ST
XXXX Feet	XXXX FT	Sunday	SUN
Fog Ahead	FOG AHD	Telephone	PHONE
	FRWY, FWY	Temporary	TEMP
Freeway Freeway Blocked	FWY BLKD	Thursday	THURS
Friday	FRI	To Downtown	TO DWNTN
Hazardous Driving		Traffic	TRAF
Hazardous Material		Travelers	TRVLRS
	HOV	Tuesday	TUES
High-Occupancy Vehicle		Time Minutes	TIME MIN
	HWY	Upper Level	UPR LEVEL
Highway Hour(s)	HR, HRS	Vehicles (s)	VEH, VEHS
		Warning	WARN
Information	INFO	Wed∩esday	WED
It Is	ITS	Weight Limit	WT LIMIT
Junction	JCT	West	W
Left Loss	LFT	Westbound	(route) W
Left Lane	LFT LN	Wet Pavement	WET PVMT
Lane Closed	LN CLOSED	Will Not	WONT
Lower Level	LWR LEVEL		
Maintenance	MAINT		

Roadway

designation # IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

Other Condition List

MOGG/ EGI	ic / italip	0100010 2101	Officer Co	ı ıu ı	TION LIST
FREEW CLOSE X MIL	ED	FRONTAGE ROAD CLOSED	ROADWORK XXX FT		ROAD REPAIRS XXXX FT
ROAI CLOSE AT SH	ED	SHOULDER CLOSED XXX FT	FLAGGER XXXX FT		LANE NARROWS XXXX FT
ROAI CLSD FM XX	AT	RIGHT LN CLOSED XXX FT	RIGHT LN NARROWS XXXX FT		TWO-WAY TRAFFIC XX MILE
RIGHT LANE CLOSE	s	RIGHT X LANES OPEN	MERGING TRAFFIC XXXX FT		CONST TRAFFIC XXX FT
CENTE LANE CLOSE	<u> </u>	DAYTIME LANE CLOSURES	LOOSE GRAVEL XXXX FT		UNEVEN LANES XXXX FT
NIGH LANE CLOSUF	<u> </u>	I-XX SOUTH EXIT CLOSED	DETOUR X MILE		ROUGH ROAD XXXX FT
VARIO LANE CLOSE	s	EXIT XXX CLOSED X MILE	ROADWORK PAST SH XXXX		ROADWORK NEXT FRI-SUN
EXII CLOSE		RIGHT LN TO BE CLOSED	BUMP XXXX FT		US XXX EXIT X MILES
MALL DRIVEN CLOSE	VAY	X LANES CLOSED TUE - FRI	TRAFFIC SIGNAL XXXX FT		LANES SHIFT

X LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

Phase 2: Possible Component Lists

Action to Take/Effect on Travel Location Warning

	'Effect on Travel ist	Location List	Warning List	* * Advance Notice List
MERGE RIGHT	FORM X LINES RIGHT	AT FM XXXX	SPEED LIMIT XX MPH	TUE-FRI XX AM- X PM
DETOUR NEXT X EXITS	USE XXXXX RD EXIT	BEFORE RAILROAD CROSSING	MAXIMUM SPEED XX MPH	APR XX- XX X PM-X AM
USE EXIT XXX	USE EXIT I-XX NORTH	NEXT X MILES	MINIMUM SPEED XX MPH	BEGINS MONDAY
STAY ON US XXX SOUTH	USE I-XX E TO I-XX N	PAST US XXX EXIT	ADVISORY SPEED XX MPH	BEGINS MAY XX
TRUCKS USE US XXX N	WATCH FOR TRUCKS	XXXXXXX TO XXXXXXX	RIGHT LANE EXIT	MAY X-X XX PM - XX AM
WATCH FOR TRUCKS	EXPECT DELAYS	US XXX TO FM XXXX	USE CAUTION	NEXT FRI-SUN
EXPECT DELAYS	PREPARE TO STOP		DRIVE SAFELY	XX AM TO XX PM
REDUCE SPEED XXX FT	END SHOULDER USE		DRIVE WITH CARE	NEXT TUE AUG XX
USE OTHER ROUTES	WATCH FOR WORKERS			TONIGHT XX PM- XX AM
STAY	,	* 	ee Application Guidelin	es Note 6.

APPLICATION GUIDELINES

- Only 1 or 2 phases are to be used on a PCMS.
- 2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
- 3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phose Lists".
- 4. A Location Phase is necessary only if a distance or location
- is not included in the first phase selected. 5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases,
- and should be understandable by themselves. 6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

LANE

- The words RIGHT, LEFT and ALL can be interchanged as appropriate.
- 2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
- 3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
- 4. Highway names and numbers replaced as appropriate.
- 5. ROAD. HIGHWAY and FREEWAY can be interchanged as needed. 6. AHEAD may be used instead of distances if necessary.
- 7. FI and MI. MILE and MILES interchanged as appropriate. 8. AT, BEFORE and PAST interchanged as needed.
- 9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

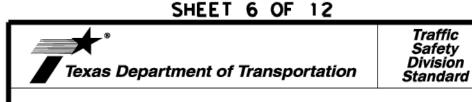
FULL MATRIX PCMS SIGNS

XXXXXXXX

BLVD

CLOSED

- 1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE" CHANGEABLE MESSAGE SIGNS" above.
- 2. When symbol signs, such as the "Flagger Symbol" (CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it
- shall maintain the legibility/visibility requirement listed above. 3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute
- for, or replace that sign. 4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.



BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC (6) -21

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© TxD0T	November 2002	CONT	SECT	JOB		н	IGHWAY
	REVISIONS						
9-07	8-14	DIST	<u> </u>	COUNTY			SHEET NO.
7-13	5-21						

TXDOT BARRICADE AND CONSTRUCTION (6 OF 12)

WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

PH (512) 505-8953

FIRM TX. REG. #F-10308

LAUREN CONCRETE -

LIBERTY HILL

DRIVEWAY RELOCATION

100 CR 258,

LIBERTY HILL, TX 78642

CHASCO

CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

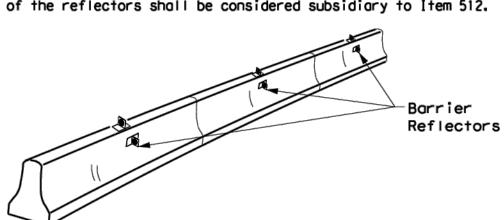
DRAWN: <u>JCL</u> DATE: <u>5/20/2025</u>

WP PROJECT NO.:

033-016

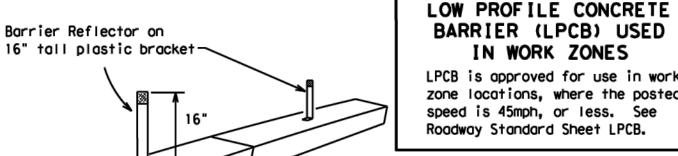
SHEET NO .:

- 1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
- 2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



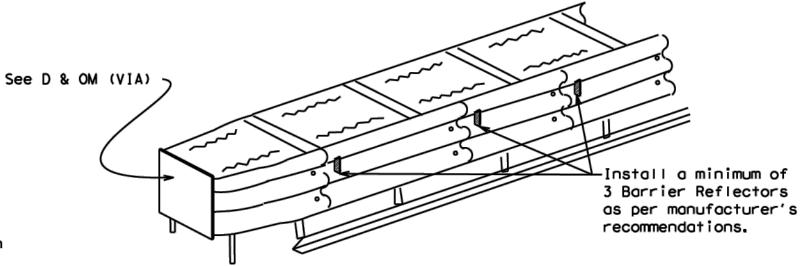
CONCRETE TRAFFIC BARRIER (CTB)

- 3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
- 4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional) while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
- 5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
- 6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
- 7. Maximum spacing of Barrier Reflectors is forty (40) feet.
- 8. Pavement markers or temporary flexible-reflective roadway marker tabs
- shall NOT be used as CTB delineation. 9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's
- 10. Missing or damaged Barrier Reflectors shall be replaced as directed
- 11. Single slope barriers shall be delineated as shown on the above detail.



LPCB is approved for use in work zone locations, where the posted speed is 45mph, or less. See Roadway Standard Sheet LPCB. Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

LOW PROFILE CONCRETE BARRIER (LPCB)

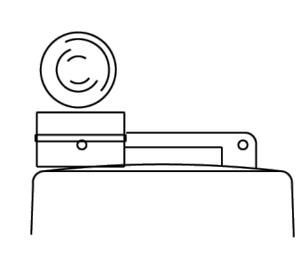


DELINEATION OF END TREATMENTS

END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet the apppropriate crashworthy standards as defined in the Manual for Assessing Safety Hardware (MASH). Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.

Warning reflector may be round or square. Must have a yellow

WARNING LIGHTS

- 1. Warning lights shall meet the requirements of the TMUTCD.
- 2. Warning lights shall NOT be installed on barricades.
- 3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B_{F_1} or C_{F_1} Sheeting meeting the requirements of Departmental Material Specification DMS-8300.
- 4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
- 5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices. 6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will
- certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights. 7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
- 8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

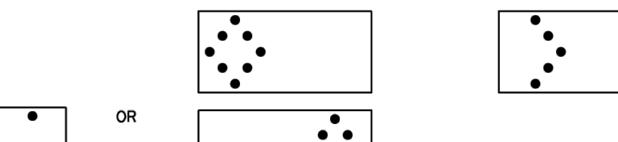
- 1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
- 2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
- 3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
- 4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
- 5. Type A. Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
- 6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
- 7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

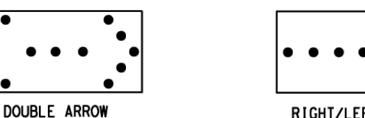
- 1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C. steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
- 2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed
- 3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
- 4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
- 5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it
- 6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
- 7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
- 8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
- 9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

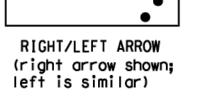
Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

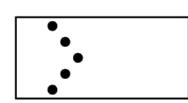
- 1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
- 2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
- 3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
- 4. The Flashing Arrow Board should be able to display the following symbols:

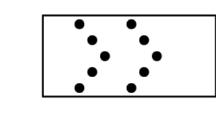


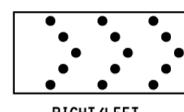












RIGHT/LEFT SEQUENTIAL CHEVRON (right chevron shown; left is similar)

- 5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
- 6. The straight line caution display is NOT ALLOWED.
- 7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
- 8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
- 9. The sequential arrow display is NOT ALLOWED.
- 10. The flashing arrow display is the TxDOT standard; however, the sequential chevron
- display may be used during daylight operations.
- 11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
- 12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic. 13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility,
- flash rate and dimming requirements on this sheet for the same size arrow.
- 14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS							
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE				
В	30 × 60	13	3/4 mile				
С	48 × 96	15	1 mile				

ATTENTION						
Flashing Arrow Boards						
shall be equipped with						
automatic dimming devices.						

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

SHEET 7 OF 12

BARRICADE AND CONSTRUCTION

Texas Department of Transportation

TRUCK-MOUNTED ATTENUATORS

- . Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
- 2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
- . Refer to the CWZTCD for a list of approved TMAs.
- in the plans.
- without adversely affecting the work performance. 5. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR 4. TMAs are required on freeways unless otherwise noted 5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure BC(7) - 21

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	REVISIONS							
	8-14	DIST		COUNTY			SHEET NO.	
7-13	5-21							

WP PROJECT NO.:

033-016

TXDOT BARRICADE

AND CONSTRUCTION

(7 OF 12)

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FIRM TX. REG. #F-10308

LAUREN CONCRETE -

LIBERTY HILL

DRIVEWAY RELOCATION

100 CR 258,

LIBERTY HILL, TX 78642

CHASCO

CONSTRUCTORS

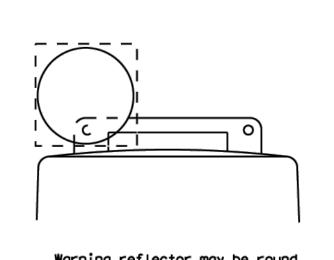
DESIGNED: JCL APPROVED: AAP

DRAWN: <u>JCL</u> DATE: <u>5/20/2025</u>

CLIENT:

SHEET NO .:

C-22



reflective surface area of at least 30 square inches

GENERAL NOTES

- 1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
- 2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections, one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
- 3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
- 4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- 5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
- 6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Pre-qualified plastic drums shall meet the following requirements:

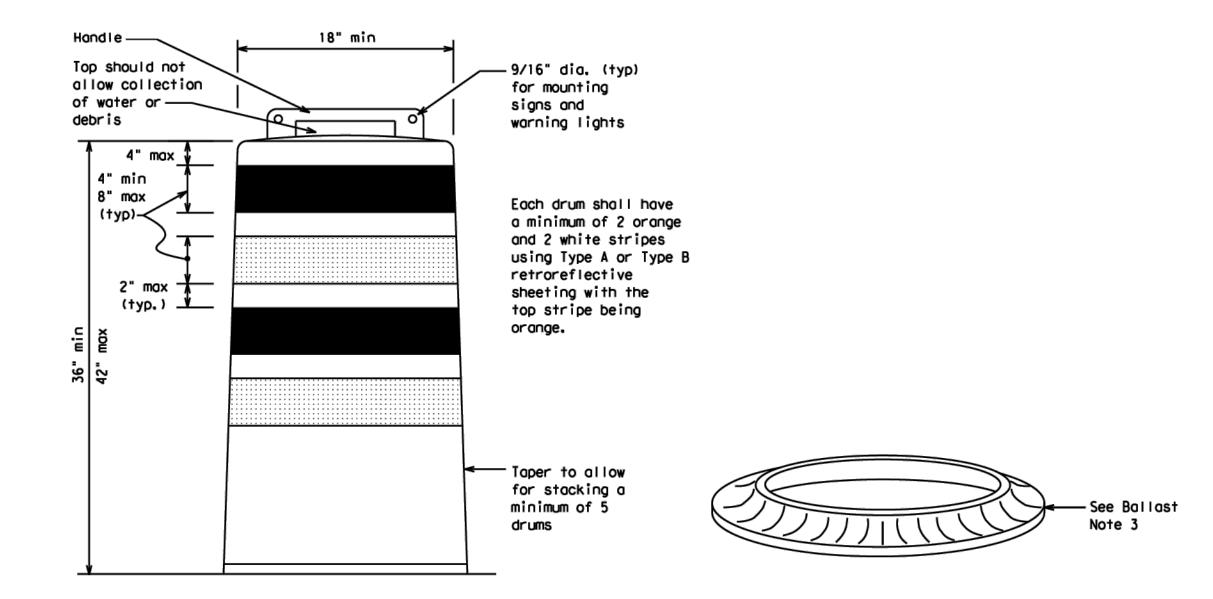
- 1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
- 2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
- 3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
- 4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
- 5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
- 6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in
- 7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
- 8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
- 9. Drum body shall have a maximum unballasted weight of 11 lbs.
- 10. Drum and base shall be marked with manufacturer's name and model number.

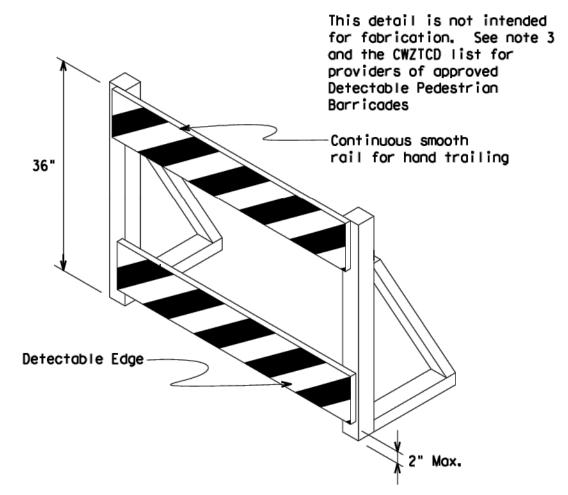
RETROREFLECTIVE SHEETING

- 1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300. "Sign Face Materials." Type A or Type B reflective sheeting shall be supplied unless otherwise specified
- 2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

BALLAST

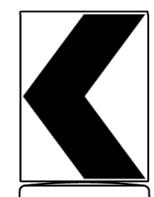
- 1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer, Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
- 2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
- 3. Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
- 4. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
- 5. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
- 6. Ballast shall not be placed on top of drums.
- 7. Adhesives may be used to secure base of drums to pavement.



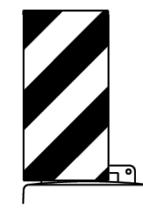


DETECTABLE PEDESTRIAN BARRICADES

- 1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Refer to WZ(BTS-2) for Pedestrian Control requirements for Sidewalk Diversions, Sidewalk Detours and Crosswalk Closures.
- 2. Where pedestrians with visual disabilities normally use the closed sidewalk, a Detectable Pedestrian Barricade shall be placed across the full width of the closed sidewalk instead of a Type 3 Barricade.
- 3. Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian
- 4. Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)" and should not be used as a control for pedestrian movements.
- 5. Warning lights shall not be attached to detectable pedestrian barricades.
- 6. Detectable pedestrian barricades should use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign (Maximum Sign Dimension) Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24" Vertical Panel mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

- 1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
- 2. Chevrons and other work zone signs with an orange background shall be manufactured with Type B_{FL} or Type C_{FL} Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
- 3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A or Type B. Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
- 4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
- 5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
- 6. Mounting bolts and nuts shall be fully engaged and adequately torqued, boits should not extend more than 1/2 inch beyond nuts.
- 7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations, they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
- 8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

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Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(8)-21

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WP PROJECT NO .:

033-016

TXDOT BARRICADE

AND CONSTRUCTION

(8 OF 12)

WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

PH (512) 505-8953

FIRM TX. REG. #F-10308

LAUREN CONCRETE -

LIBERTY HILL

DRIVEWAY RELOCATION

100 CR 258,

LIBERTY HILL, TX 78642

CHASCO

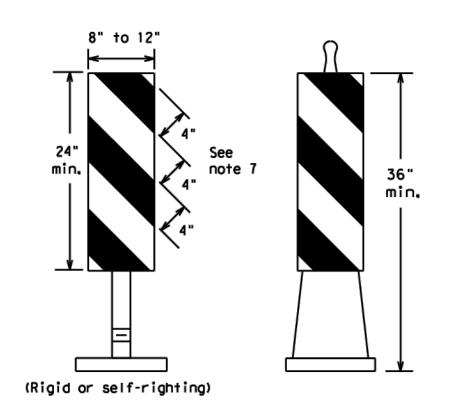
CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: JCL DATE: 5/20/2025

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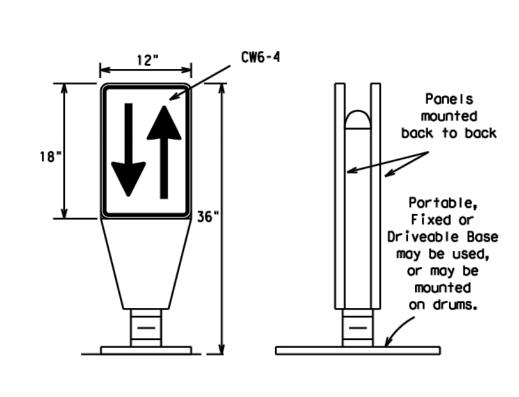


PORTABLE

1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.

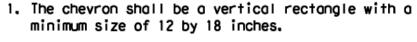
- 2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
- VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
- 4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
- Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List"
- 6. Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
- 7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.

VERTICAL PANELS (VPs)



- 1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind aust.
- 2. The OTLD may be used in combination with 42" cones or VPs.
- 3. Spacing between the OTLD shall not exceed 500 feet, 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
- 4. The OTLD shall be orange with a black nonreflective legend. Sheeting for the OTLD shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300. unless noted otherwise. The legend shall meet the requirements of DMS-8300.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)

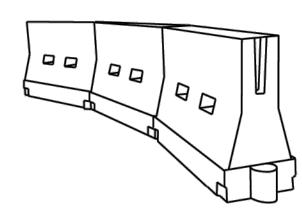


- 2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
- 3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
- 4. To be effective, the chevron should be visible for at least 500 feet.
- 5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type BFL or Type CFL conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
- 6. For Long Term Stationary use on tapers or transitions on freeways and divided highways, self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS

GENERAL NOTES

- 1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD),
- 2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
- 3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- 4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
- 5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
- 6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
- 7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.



LONGITUDINAL CHANNELIZING DEVICES (LCD)

Min.

Fixed Base w/ Approved Adhesive

(Driveoble Base, or Flexible

Support can be used)

- 1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
- 2. LCDs may be used instead of a line of cones or drums.
- 3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
- 4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
- 5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
- 6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10). Place reflective sheeting near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

- Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate Manual for Assessing Safety Hardware (MASH) crashworthiness requirements based on roadway speed and barrier application.
- 2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation
- or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings. 3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
- 4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length
- should be designed to optimize road user operations considering the available geometric conditions. 5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

Posted Speed	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices			
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	2	150'	165′	1801	30'	60′		
35	L = WS ²	205′	2251	245'	35′	70′		
40	60	265′	295'	3201	40'	80′		
45		450′	495′	540'	45′	90'		
50		5001	550′	600'	50°	100'		
55	L=WS	550′	605′	6601	55′	110'		
60	L - W 5	600'	660'	720′	60′	120'		
65		650′	715′	780′	65 <i>°</i>	130′		
70		7001	770′	840′	70′	140′		
75		750′	825′	900'	75'	150′		
80		800'	880'	960′	80′	160′		

*X Taper lengths have been rounded off. L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

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Texas Department of Transportation

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

Traffic Safety Division Standard

BC (9) -21

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WAELTZ & PRETE, INC. CIVIL ENGINEERS

> 211 N. A.W. GRIMES BLVD. ROUND ROCK, TX, 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL **DRIVEWAY RELOCATION**

> 100 CR 258, LIBERTY HILL, TX 78642

CHASCO **CONSTRUCTORS**

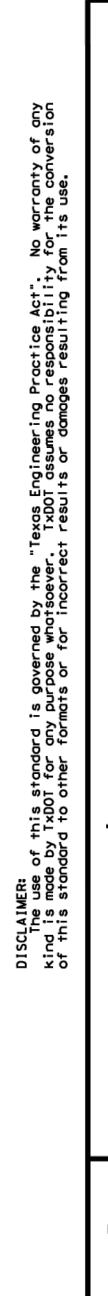
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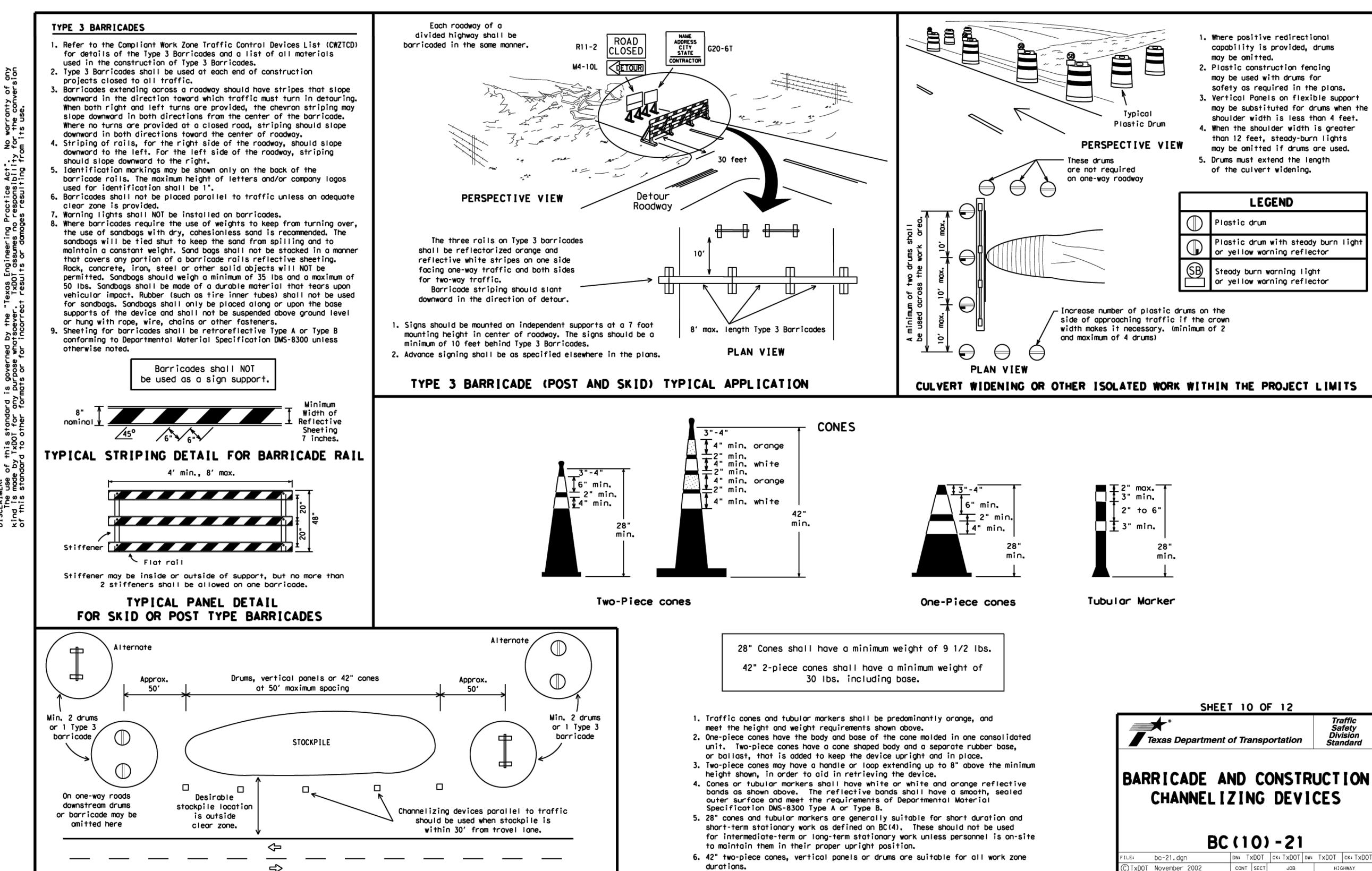
TXDOT BARRICADE AND CONSTRUCTION (9 OF 12)

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033-016

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7. Cones or tubular markers used on each project should be of the same size

and shape.

TRAFFIC CONTROL FOR MATERIAL STOCKPILES

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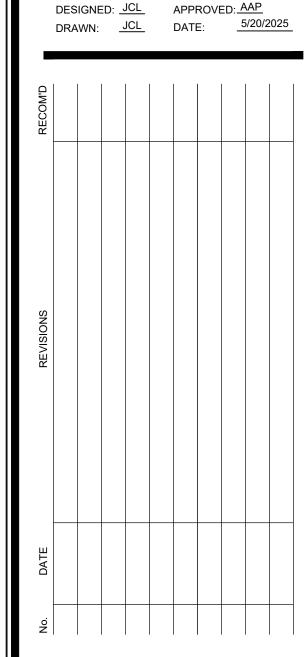
> 211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL DRIVEWAY RELOCATION

> 100 CR 258, LIBERTY HILL, TX 78642

CHASCO **CONSTRUCTORS**



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TXDOT BARRICADE AND CONSTRUCTION (10 OF 12)

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WORK ZONE PAVEMENT MARKINGS

GENERAL

- 1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
- 2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
- 3. Additional supplemental pavement marking details may be found in the plans or specifications.
- 4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
- 5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
- 6. When standard pavement markings are not in place and the roadway is opened to traffic. DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
- 7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

- 1. Raised pavement markers are to be placed according to the patterns on BC(12).
- 2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672. "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

- 1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
- 2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

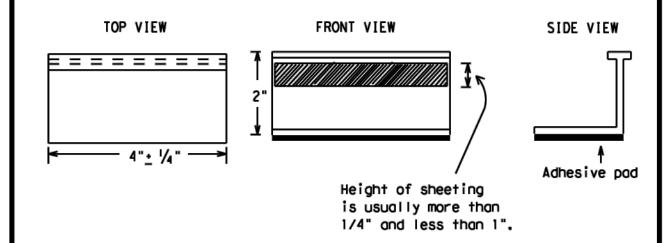
MAINTAINING WORK ZONE PAVEMENT MARKINGS

- 1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
- 2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
- 3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
- 4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

- 1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
- 2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
- 3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
- 4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
- 5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
- 6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
- 7. Over-painting of the markings SHALL NOT BE permitted.
- 8. Removal of raised pavement markers shall be as directed by the Engineer.
- 9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS, " unless otherwise stated in the plans.
- 10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

- 1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
- 2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the
 - A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
 - B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
- Small design variances may be noted between tab manufacturers.
- 4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

- 1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
- 2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
- butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.
- Guidemarks shall be designated as:

DEPARTMENTAL MATERIAL SPECIFICAT	TIONS
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

PH (512) 505-8953 FIRM TX. REG. #F-10308

WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

LAUREN CONCRETE -LIBERTY HILL DRIVEWAY RELOCATION

> 100 CR 258, LIBERTY HILL, TX 78642

CLIENT:

CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: <u>JCL</u> DATE: <u>5/20/2025</u>

TXDOT BARRICADE AND CONSTRUCTION (11 OF 12)

WP PROJECT NO .:

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SHEET NO .:

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3. Adhesive for guidemarks shall be bituminous material hot applied or

YELLOW - (two amber reflective surfaces with yellow body). WHITE - (one silver reflective surface with white body).

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Texas Department of Transportation

Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

DN: TXDOT CK: TXDOT DW: TXDOT CK: TXDOT bc-21.dgn C)TxDOT February 1998 CONT SECT JOB 2-98 9-07 5-21 DIST COUNTY 1-02 7-13 11-02 8-14

Waeltz & Prete, Inc. CIVIL ENGINEERS

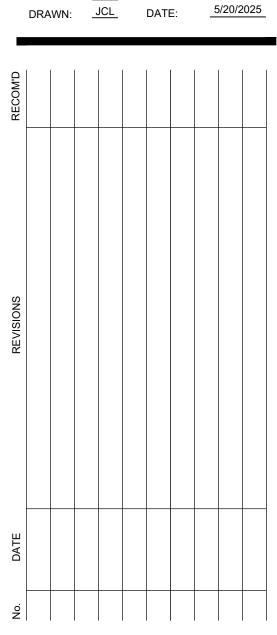
211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL **DRIVEWAY RELOCATION**

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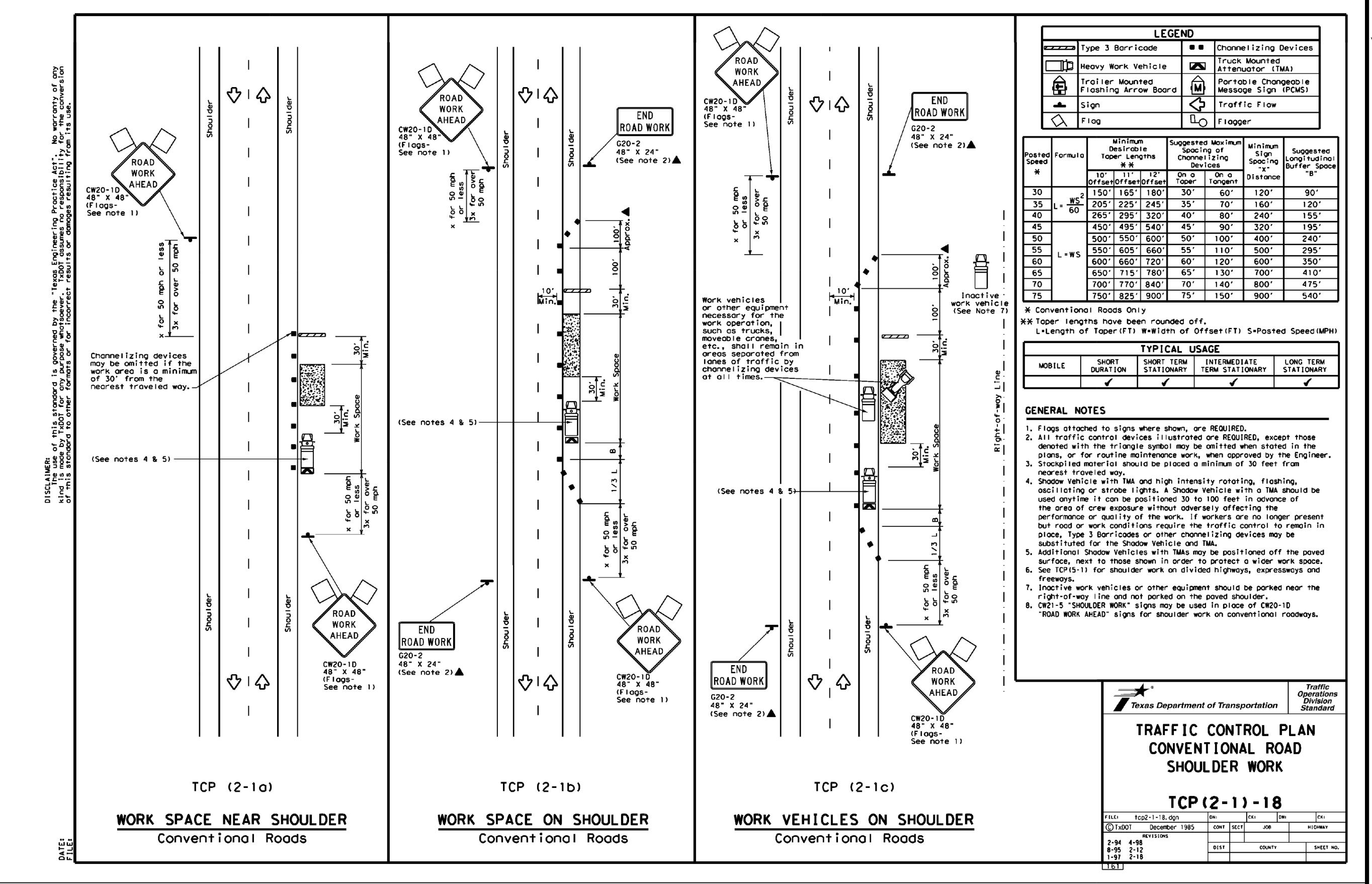
CHASCO **CONSTRUCTORS**

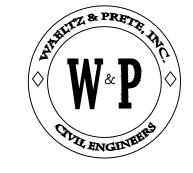


TXDOT BARRICADE AND CONSTRUCTION (12 OF 12)

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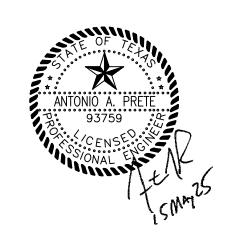
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211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



LAUREN CONCRETE -LIBERTY HILL DRIVEWAY RELOCATION

> 100 CR 258, LIBERTY HILL, TX 78642

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CHASCO CONSTRUCTORS

DESIGNED: JCL APPROVED: AAP

DRAWN: <u>JCL</u> DATE:

No. DATE REVISIONS RECOM'D

SHEET TITLE:

TRAFFIC CONTROL PLAN

WP PROJECT NO.:

033-016

SHEET NO.: