# CONTRUBUTING ZONE PLAN (CZP) FOR

# GOODWILL LIBERTY HILL 110 BRONCE BLVD. LIBERTY HILL, TEXAS 78642

Prepared for:

**CSW BRONCO, LP** 

Kevin Hunter
1703 W. 5<sup>th</sup> Street Suite 850
Austin, Texas 78703

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**

- Edwards Aquifer applications must be deemed administratively complete before a technical review can
  begin. To be considered administratively complete, the application must contain completed forms and
  attachments, provide the requested information, and meet all the site plan requirements. The submitted
  application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the
  original application, and half-size sets with the additional copies.
  - To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: <a href="http://www.tceq.texas.gov/field/eapp">http://www.tceq.texas.gov/field/eapp</a>.
- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.
  - An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.
- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

### **Technical Review**

- 1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
- 2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

- clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.
- 3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.
- 4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

## **Mid-Review Modifications**

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: Goodwill Liberty Hill				2. Regulated Entity No.:					
3. Customer Name: CSW Bronco, LP				4. Customer No.:					
5. Project Type: (Please circle/check one)	Please circle/check one)  Plan Type:  WATHARD   CZP   CCC   LIST   AST   1		Extension		Exception				
6. Plan Type: (Please circle/check one)			EXP	EXT	Technical Clarification	Optional Enhanced Measures			
7. Land Use: (Please circle/check one)	eck one) Residential Non-residential		tial	<b>8. Site (acres):</b> 3.00		3.00			
9. Application Fee:	ee: \$4,000 <b>10. Permanent</b>			nent I	BMP(s): Batch Detention Pond		Detention Pond		
11. SCS (Linear Ft.):	n/s	a	12. AST/UST (No			o. Tar	Tanks):		n/a
3. County: Williamson 14. Watershed:					South Fork San Gabriel River				

## **Application Distribution**

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

http://www.tceq.texas.gov/assets/public/compliance/field\_ops/eapp/EAPP%2oGWCD%2omap.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 ParkFlorenceGeorgetownJerrellLeanderLiberty HillPflugerville√_Round Rock		

San Antonio Region						
County:	Bexar	Comal	Kinney	Medina	Uvalde	
Original (1 req.)	_	_	_		_	
Region (1 req.)	_					
County(ies)	_					
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde	
City(ies) Jurisdiction	Castle 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 <del>Customer</del> /Authorized Agent  ← ←	04/14/2023			
Signature of <del>Customer</del> /Authorized Agent	Date			

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

## **Contributing Zone Plan Application**

**Texas Commission on Environmental Quality** 

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

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

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

## Signature

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

Print Name of Customer/Agent: Anton	nio A. Prete, P.E.
Date: 04/14/2023	

Signature of Customer/Agent:

4t 4R	
Regulated Fr	ntity Name: Goodwill Liberty Hill

Regulated Entity Name: Goodwill Liberty Hill

## **Project Information**

1. County: Williamson

2. Stream Basin: South Fork San Gabriel River

3. Groundwater Conservation District (if applicable): \_\_\_\_\_\_

4. Customer (Applicant):

Contact Person: Kevin Hunter

Entity: CSW Bronco, LP

Mailing Address: <u>1703 W. 5<sup>th</sup> Street Suite 850</u>

City, State: Austin, Texas Zip: <u>78703</u> Telephone: (512) 751-3944 Fax: \_\_\_\_\_

Email Address: khunter@cswdevelopment.com

5.	Age	ent/Representative (If any):
	Ent Ma City Tel	ntact Person: Antonio A. Prete ,P.E.  city: Waeltz & Prete, Inc  illing Address: 211 N. A.W. Grimes Blvd.  y, State: Round Rock, Texas  ephone: (512) 505-8953  ail Address: tony@w-pinc.com
6.	Pro	ject Location:
		The project site is located inside the city limits of <u>Liberty Hill</u> .  The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of  The project site is not located within any city's limits or ETJ.
7.		The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.
		110 Bronco Blvd. Liberty Hil Texas 78642. This site is located to the Northeast of an existing Sonic & Dominos store and South west of a private neighborhood located along the East side of Bronco Blvd.
8.		<b>Attachment A - Road Map</b> . A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.
9.		Attachment B - USGS Quadrangle Map. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) clearly show:
		<ul><li>☑ Project site boundaries.</li><li>☑ USGS Quadrangle Name(s).</li></ul>
10	. 🖂	<b>Attachment C - Project Narrative</b> . A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:
		Area of the site  Offsite areas  Impervious cover  Permanent BMP(s)  Proposed site use  Site history  Previous development  Area(s) to be demolished
11.	Exi	sting project site conditions are noted below:
		Existing commercial site

<ul> <li>Existing paved and/or unpaved roads</li> <li>Undeveloped (Cleared)</li> <li>Undeveloped (Undisturbed/Not cleared)</li> <li>Other:</li> </ul>					
12. The type of project i	s:				
=	Residential: # of Lots: Residential: # of Living Unit Equivalents: Commercial Industrial				
13. Total project area (s	ize of site): <u>3.00</u> Acres				
Total disturbed area	: <u>3.45</u> Acres				
14. Estimated projected	population: 100				
15. The amount and typ below:	e of impervious cover ex	pected after constructio	on is complete is shown		
Table 1 - Impervious	Cover				
Impervious Cover of			_		
Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres		
Proposed Project Structures/Rooftops	<b>Sq. Ft.</b> 25,000	<b>Sq. Ft./Acre</b> ÷ 43,560 =	<b>Acres</b> 0.57		
Proposed Project	-	<u> </u>			
Proposed Project Structures/Rooftops	25,000	÷ 43,560 =	0.57		
Proposed Project  Structures/Rooftops  Parking	25,000 68,400	÷ 43,560 = ÷ 43,560 =	0.57 1.57		
Proposed Project  Structures/Rooftops  Parking  Other paved surfaces  Total Impervious Cover  Total Impervious Cover  16. Attachment D - I factors that coul	25,000 68,400 5,045	÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  O X 100 = 75.33% Imperentation A detail allity is attached. If applied to the second of the seco	0.57 1.57 0.12 2.26  rvious Cover iled description of all licable, this includes the		
Proposed Project  Structures/Rooftops  Parking  Other paved surfaces  Total Impervious Cover  Total Impervious Cover  16. Attachment D - I factors that coul location and des construction.	25,000 68,400 5,045 98,445  2.26 ÷ Total Acreage 3.0 Factors Affecting Surface d affect surface water qu	÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  OO X 100 = 75.33% Imperentation of the company of t	0.57 1.57 0.12 2.26  rvious Cover iled description of all licable, this includes the ial activity other than		
Proposed Project  Structures/Rooftops  Parking  Other paved surfaces  Total Impervious Cover  Total Impervious Cover  16. Attachment D - I factors that coul location and des construction.	25,000 68,400 5,045 98,445  2.26 ÷ Total Acreage 3.0 Factors Affecting Surface d affect surface water queription of any discharge ials as defined by 30 TAC	÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  OO X 100 = 75.33% Imperentation of the company of t	0.57 1.57 0.12 2.26  rvious Cover iled description of all licable, this includes the ial activity other than		
Proposed Project  Structures/Rooftops  Parking  Other paved surfaces  Total Impervious Cover  Total Impervious Cover  16. Attachment D - I factors that coul location and des construction.  17. Only inert mater  For Road Proje	25,000 68,400 5,045 98,445  2.26 ÷ Total Acreage 3.0 Factors Affecting Surface d affect surface water queription of any discharge ials as defined by 30 TAC	÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  ÷ 43,560 =  O X 100 = 75.33% Imperentation of the second se	0.57 1.57 0.12 2.26  Evious Cover iled description of all licable, this includes the ial activity other than I material.		

18. Type of project:
<ul> <li>TXDOT road project.</li> <li>County road or roads built to county specifications.</li> <li>City thoroughfare or roads to be dedicated to a municipality.</li> <li>Street or road providing access to private driveways.</li> </ul>
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. $L \times W = Ft^2 \div 43,560 Ft^2/Acre = acres.$
21. Pavement Area:
Length of pavement area: feet.  Width of pavement area: feet.  L x W = Ft² ÷ 43,560 Ft²/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 runof coefficient of the site for both pre-construction and post-construction conditions.
Wastewater to be generated by the Proposed Project
<ul> <li>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.</li> <li>N/A</li> </ul>

26. Wastewater will be	disposed of by:		
On-Site Sewage	Facility (OSSF/Septic Tai	ոk)։	
will be used licensing aut the land is so the requirer relating to C	to treat and dispose of the thority's (authorized age uitable for the use of prinents for on-site sewage Pacilities. It is project/development stem will be designed by	m Authorized Agent. An the wastewater from this nt) written approval is attivate sewage facilities and facilities as specified und is at least one (1) acre (4) a licensed professional ed installer in compliance were several educations.	site. The appropriate tached. It states that will meet or exceed der 30 TAC Chapter 285  3,560 square feet) in ngineer or registered
		: ne wastewater to the Liberty Hill Wastewate	<del> `                                 </del>
Existing. Proposed.			
□ N/A			
Gallons Complete questions 27 greater than or equal t  N/A  27. Tanks and substance	o 500 gallons.	des the installation of AS	T(s) with volume(s)
Table 2 - Tanks and	Substance Storage		
AST Number	Size (Gallons)	Substance to be Stored	Tank Material
1			
2			
3			
4			
5			
		<b>Tot</b> s nent structure that is size sity of the system. For fac	•

-	stem, the containm umulative storage c		ed to capture one and ns.	d one-half (1 1/2)
for providing		nment are proposed	ent Methods. Alternd. Specifications sho	
29. Inside dimensi	ons and capacity of	containment structi	ure(s):	
Table 3 - Second	dary Containment	:		
Length (L)(Ft.)	Width(W)(Ft.)	Height (H)(Ft.)	L x W x H = (Ft3)	Gallons
			To	tal: Gallons
Some of the structure.  The piping The piping The contain substance(	e piping to dispense will be aboveground will be underground ment area must be s) being stored. The	rs or equipment wild d d constructed of and e proposed containr	side the containment Il extend outside the in a material imperv ment structure will be	containment rious to the e constructed of:
<del></del>	<b>t H - AST Containm</b> nt structure is attacl		ings. A scaled drawir following:	ng of the
Interna Tanks cl Piping c	· -	=	wall and floor thickne collection of any spi	•
storage tar		•	or collection and recontrolled drainage a	• •
<u> </u>	vent of a spill, any s 24 hours of the spill	-	oved from the contain operly.	nment structure

	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 Pl	an Requirements
tems 34 -	46 must be included on the Site Plan.
34. 🔀 The	e Site Plan must have a minimum scale of 1" = 400'.
Site	e Plan Scale: 1" = <u>Varies</u> '.
35. 100-ye	ar floodplain boundaries:
is s No The 10	me part(s) of the project site is located within the 100-year floodplain. The floodplain hown and labeled. part of the project site is located within the 100-year floodplain. 0-year floodplain boundaries are based on the following specific (including date of al) sources(s): FEMA Panel 48491C04485E, dated December 20, 2019.
apı	e layout of the development is shown with existing and finished contours at propriate, but not greater than ten-foot contour intervals. Lots, recreation centers, ldings, roads, etc. are shown on the site plan.
gre fro	e layout of the development is shown with existing contours at appropriate, but not eater than ten-foot contour intervals. Finished topographic contours will not differ m the existing topographic configuration and are not shown. Lots, recreation nters, buildings, roads, etc. are shown on the site plan.
37. 🔀 A d	rainage plan showing all paths of drainage from the site to surface streams.
38. 🔀 The	e drainage patterns and approximate slopes anticipated after major grading activities.
39. 🔀 Are	eas of soil disturbance and areas which will not be disturbed.
	rations of major structural and nonstructural controls. These are the temporary and rmanent best management practices.
41. 🔀 Loc	cations where soil stabilization practices are expected to occur.
42. 🗌 Sur	face waters (including wetlands).
$\boxtimes$ N/A	A
43. 🗌 Loc	cations where stormwater discharges to surface water.
∑ The	ere will be no discharges to surface water.
14. 🗌 Ter	mporary aboveground storage tank facilities.
∑ Ter	nporary aboveground storage tank facilities will not be located on this site.

45.	Permanent aboveground storage tank facilities.
$\geq$	Permanent aboveground storage tank facilities will not be located on this site.
46. 🔀	Legal boundaries of the site are shown.
Per	manent Best Management Practices (BMPs)
Practi	ces and measures that will be used during and after construction is completed.
47. 🗵	Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
	N/A
48. <u> </u>	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.
	<ul> <li>The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.</li> <li>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:</li> </ul>
	] 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
les pe pe wl Ap	here a site is used for low density single-family residential development and has 20 % or as impervious cover, other permanent BMPs are not required. This exemption from ermanent BMPs must be recorded in the county deed records, with a notice that if the ercent impervious cover increases above 20% or land use changes, the exemption for the hole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to oplication Processing and Approval), may no longer apply and the property owner must outify the appropriate regional office of these changes.
	<ul> <li>□ The site will be used for low density single-family residential development and has 20% or less impervious cover.</li> <li>□ The site will be used for low density single-family residential development but has more than 20% impervious cover.</li> <li>□ The site will not be used for low density single-family residential development.</li> </ul>

fai im re- ind th- an	the executive director may waive the requirement for other permanent BMPs for multimily residential developments, schools, or small business sites where 20% or less spervious cover is used at the site. This exemption from permanent BMPs must be corded in the county deed records, with a notice that if the percent impervious cover creases above 20% or land use changes, the exemption for the whole site as described in e property boundaries required by 30 TAC §213.4(g) (relating to Application Processing d Approval), may no longer apply and the property owner must notify the appropriate gional office of these changes.
	<ul> <li>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.</li> <li>□ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.</li> <li>□ The site will not be used for multi-family residential developments, schools, or small</li> </ul>
52. 🔀	business sites.  Attachment J - BMPs for Upgradient Stormwater.
	<ul> <li>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.</li> <li>No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.</li> <li>✓ 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.</li> </ul>
53. 🔀	Attachment K - BMPs for On-site Stormwater.
	<ul> <li>✓ 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.</li> <li>✓ Permanent BMPs or measures are not required to prevent pollution of surface wate or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.</li> </ul>
54.	Attachment L - BMPs for Surface Streams. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.
$\geq$	] N/A
55. 🔀	Attachment M - Construction Plans. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are

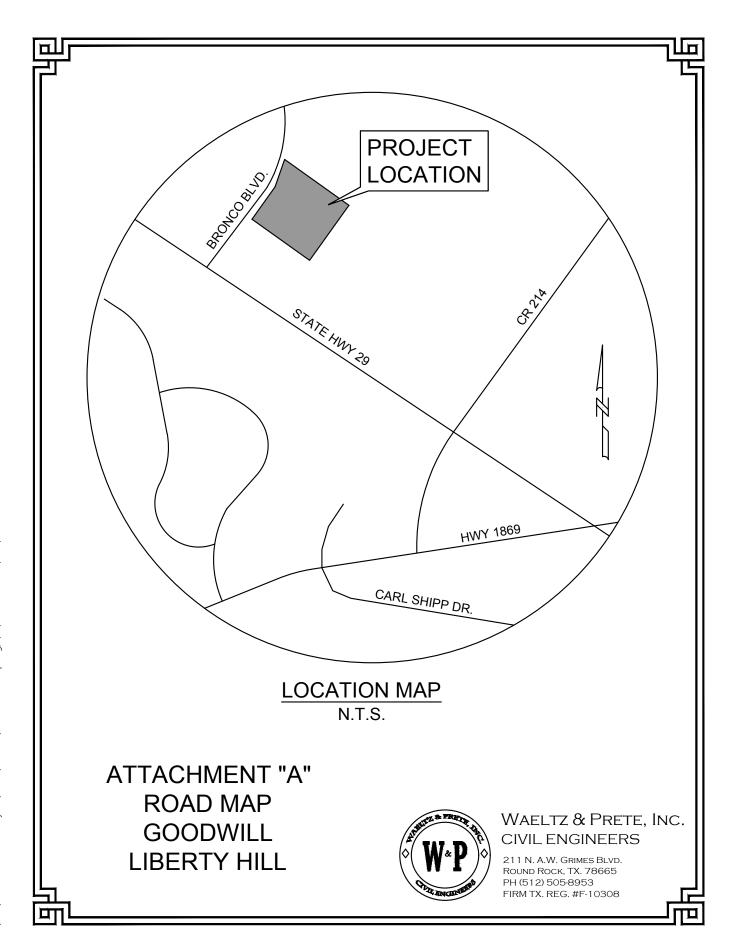
attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.	
□ N/A	
56. Attachment N - Inspection, Maintenance, Repair and Retrofit Plan. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:	
<ul> <li>☑ Prepared and certified by the engineer designing the permanent BMPs and measures</li> <li>☑ Signed by the owner or responsible party</li> <li>☑ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.</li> <li>☑ Contains a discussion of record keeping procedures</li> </ul>	
□ 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 f pilot-scale field testing is attached.	or
⊠ N/A	
58. Attachment P - Measures for Minimizing Surface Stream Contamination. A descript 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 cause by the regulated activity, which increase erosion that result in water quality degradation.	n n
⊠ N/A	
Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.	
59. The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing ownership is transferred.	ne
60. A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development.	

or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

## **Administrative Information**

51. X	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.
52. <u>×</u>	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.
53.	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.
$\boxtimes$	The Temporary Stormwater Section (TCEQ-0602) is included with the application.

# ATTACHMENT "A" ROAD MAP



# ATTACHMENT "B" USGS QUADRANGLE MAP

## ATTACHMENT "C"

## PROJECT NARRATIVE

We are submitting a Contributing Zone Plan (CZP) for a 3.00 acre site. The site is located at 110 Bronco Blvd. Liberty Hill, Texas 78642. The site lies within the Edward's Aquifer Contributing Zone. Therefore, Water Quality Best Management Practices (BMP's) are required for the site.

The existing 3.00 acre site has a total existing impervious cover of  $\pm 0.00$  acres (0.00%). The existing site is undeveloped and has been previously cleared.

The proposed development will consist of constructing a 25,000 SF building, driveways, pavement, sidewalks, storm sewer systems with water quality treatment (Batch Detention Pond), water & wastewater services, grading, along with landscaping and irrigation. These site improvements are intended to be permitted with this (CZP) submittal.

Outlined on the Water Quality Summary sheet (sheet C-19) of the Goodwill Liberty Hill plan set submitted in conjunction with this application. Water quality basin WQ-1 and WQ-2 outline the limits of proposed construction. WQ-1 contains a total of 3.23 acres with a total impervious cover of 2.55 acres (78.95%) of that 2.55 acres approximately 0.36 acres contains existing impervious cover. WQ-1 will be treated by the proposed Batch Detention Pond. WQ-2 contains a total of 0.19 acres with a total impervious cover of 0.13 acres (68.42%). WQ-2 impervious cover will be accounted for by overtreatment from the proposed Batch Detention Pond. In total 3.42 acres with 2.68 acres of impervious cover will be treated by the proposed Batch Detention Pond.

The proposed impervious cover will require a total of 2,019 lbs. of 80% TSS removal. To remove the required 80% TSS a Batch Detention Pond will be utilized.

The Batch Detention Pond will be located on the east side of the development and treat storm water from WQ-1 ( $\pm 3.23$  acres) containing a total of  $\pm 2.55$  acres of impervious cover. Additionally, by utilizing overtreatment the Batch Detention Pond will account for treatment of stormwater from WQ-2 ( $\pm 0.19$  acres) containing a total of  $\pm 0.13$  acres of impervious cover. The Batch Detention Pond will have the capacity to remove a total of 2,580 lbs. of TSS, which exceeds the required 80% TSS removal. The design for the Batch Detention Pond follows the TCEQ "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices" design criteria.

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

# OVERALL BATCH DETENTION TSS REMOVAL CALCULATIONS

(In Accordance with TCEQ Regulations: RG-348)

## Required Load Reduction (L<sub>M</sub>)- Total Project Area:

Eq 3.2  $L_m = 28.9 (A_N * P)$ 

	Williamson	
Average Annual Precipitation	32.0	[in]
Total project area included in the plan	3.42	[ac]
= Predevelopment impervious area	0.36	[ac]
= Postdevelopment impervious area	2.68	[ac]
= Area of the net increase of impervious area	2.32	[ac]
= Fraction of impervious cover (Pre Development)	10.53	[%]
= Fraction of impervious cover (Post Development)	78.36	[%]
	<ul> <li>= Average Annual Precipitation</li> <li>= Total project area included in the plan</li> <li>= Predevelopment impervious area</li> <li>= Postdevelopment impervious area</li> <li>= Area of the net increase of impervious area</li> <li>= Fraction of impervious cover (Pre Development)</li> <li>= Fraction of impervious cover (Post Development)</li> </ul>	= Average Annual Precipitation 32.0  = Total project area included in the plan 3.42  = Predevelopment impervious area 0.36  = Postdevelopment impervious area 2.68  = Area of the net increase of impervious area 2.32  = Fraction of impervious cover (Pre Development) 10.53

L<sub>M</sub> = Req'd TSS removal (80% of Increase)

## 2,019 [lbs]

## Load Removed by BMP (LR):

Eq 3.8  $L_R = (BMP Eff) * P (A_1 * 34.6 + A_P * 0.54)$ 

A <sub>tot-sub</sub> = Total area treated in the BMP subbasin	3.23	[ac]
A <sub>I</sub> = Impervious area proposed in BMP subbasin	2.55	[ac]
A <sub>p</sub> = Pervious area remainaing in the BMP subbasin	0.68	[ac]
IC = Impervious cover (Post Development)	78.95	[%]
BMP Type =	Batch Detent	ion
BMP Eff = BMP TSS Removal Efficiency	0.91	

L<sub>R</sub> = TSS Load Removed From Subbasin by BMP

2,580	[lbś]
2,500	Linal

## Fraction of Annual Runoff to Treat the subbasin (F):

Eq 3.9  $F = L_M / \Sigma L_R$ 

Desired  $L_M$  = Req'd TSS removal (80% of Increase typical) 2,019 [lbs]  $L_R$  = Load removed from each BMP 2,580 [lbs]

F = Fraction of the Annual Rainfall treated by BMP

## 0.78

## Water Quality Volume Required (WQV<sub>req</sub>):

Eq 3.10 WQV = d \* Rv \* A  
Eq 3.11 
$$R_v = 1.72(IC)^3 - 1.97(IC)^2 + 1.23(IC) + .02$$
  
 $WQV_{rea} = WQV + S$ 

F = Fraction of the Annual Rainfall treated by BMP	0.78	
d = Rainfall Depth required to capture	1.00 ~	[in]
A = Portion of Site contributing to BMP	3.23	[ac]
IC = Fraction of Impervious Cover	0.79	
R <sub>v</sub> = Runoff Coefficient	0.61	

WQV = Water quality volume	7,147	[ft <sup>3</sup> ]
S = 20% Increase for Sediment Storage	1,429	[ft <sup>3</sup> ]
WQV <sub>req</sub> = Water quality volume required (With 20% increase)	8,576	[ft <sup>3</sup> ]

## 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 A retail building. 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):

Q <sub>100</sub> [cfs]	25.35	25.35
Q <sub>25</sub> [cfs]	16.77	16.77
Q <sub>10</sub> [cfs]	12.47	12.47
Q <sub>2</sub> [cfs]	7.08	7.08
1 <sub>100</sub> [in/hr]	13.15	
l <sub>25</sub> [in/hr]	10.08	
l <sub>10</sub> [in/hr]	8.25	
l <sub>2</sub> [in/hr]	5.51	
C <sub>100</sub>	0.51	
$C_{25}$	0.44	
O <sub>10</sub>	0.40	
$C_2$	0.34	
ESTIMATED IMPERV. +/- [%]	10	
T <sub>c</sub> [min.]	7.5	
AREA [acres]	3.78	3.78
SUB-BASIN AREA DESIGNATION [acres]	EX-1	

<sup>\*</sup> NOTE: THE PERCIPITATION FREQUENCY ARE DERIVED FROM THE NOAA ATLAS-14 VOLUME 11 VERSION 2 POINT PERCIPITATION FREQUENCY WEBSITE.

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

	Q <sub>100</sub>	[cts]	3.23	2.82	2.82	6.25	3.63	19.63	1.64	4.97	44.99
	$Q_{25}$	[cts]	2.21	1.95	1.95	4.34	2.51	13.77	1.09	3.25	31.07
	Q <sub>10</sub>	[cts]	1.71	1.50	1.50	3.32	1.93	10.62	0.80	2.43	23.81
	ď	[cts]	1.01	06.0	06.0	2.00	1.16	6.40	0.44	1.39	14.21
	100	[in/hr]	14.60	14.60	14.60	14.60	14.60	14.60	14.60	14.60	
	125	[in/hr]	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	
	110	[in/hr]	9.17	9.17	9.17	9.17	9.17	9.17	9.17	9.17	
	12	[in/hr]	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	
	C <sub>100</sub>		0.82	0.92	0.92	0.84	0.92	0.94	0.45	0.54	
	$C_{25}$		0.73	0.83	0.83	0.76	0.83	0.86	0.39	0.46	
	٠ 10		0.69	0.78	0.78	0.71	0.78	0.81	0.35	0.42	
	S		0.61	0.70	0.70	0.64	0.70	0.73	0.29	0.36	
ESTIMATED	IMPERV.	[%] -/+	70	06	06	75	06	92	0	15	
	۲	[min.]	2.0	5.0	5.0	5.0	20.0	5.0	2 20	5.0	
	AREA	[acres]	0.27	0.21	0.21	0.51	0.27	1.43	0.25	0.63	3 78
	<b>SUB-BASIN</b>	DESIGNATION [acres]	DA-1	DA-2	DA-3	DA-4	DA-5	DA-6	DA-7	0S-1	

<sup>\*</sup> NOTE: THE PERCIPITATION FREQUENCY ARE DERIVED FROM THE NOAA ATLAS-14 VOLUME 11 VERSION 2 POINT PERCIPITATION FREQUENCY WEBSITE.



## 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

This project is not seeking an impervious cover waiver.

## ATTACHMENT "J"

## **BMPs FOR UPGRADIENT STORMWATER**

There is no storm water originating up gradient that is running through the proposed project.

## ATTACHMENT "K"

## BMPs FOR ON-SITE STORMWATER

Storm water from this project will be treated by the following Best Management Practice (BMP).

The Batch Detention Pond will be located on the east side of the development and treat storm water from WQ-1 ( $\pm 3.23$  acres) containing a total of  $\pm 2.55$  acres of impervious cover. Additionally, by utilizing overtreatment the Batch Detention Pond will account for treatment of stormwater from WQ-2 ( $\pm 0.19$  acres) containing a total of  $\pm 0.13$  acres of impervious cover. The Batch Detention Pond will have the capacity to remove a total of 2,580 lbs. of TSS, which exceeds the required 80% TSS removal. The design for the Batch Detention Pond follows the TCEQ "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices" design criteria.

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

# OVERALL BATCH DETENTION TSS REMOVAL CALCULATIONS

(In Accordance with TCEQ Regulations: RG-348)

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L<sub>M</sub> = Req'd TSS removal (80% of Increase)

## 2,019 [lbs]

## Load Removed by BMP (LR):

Eq 3.8  $L_R = (BMP Eff) * P (A_1 * 34.6 + A_P * 0.54)$ 

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IC = Impervious cover (Post Development)	78.95	[%]
BMP Type =	<b>Batch Detention</b>	
BMP Eff = BMP TSS Removal Efficiency	0.91	

L<sub>R</sub> = TSS Load Removed From Subbasin by BMP

2,580	[lbś]
2,500	Linal

## Fraction of Annual Runoff to Treat the subbasin (F):

Eq 3.9  $F = L_M / \Sigma L_R$ 

Desired  $L_M$  = Req'd TSS removal (80% of Increase typical) 2,019 [lbs]  $L_R$  = Load removed from each BMP 2,580 [lbs]

F = Fraction of the Annual Rainfall treated by BMP

## 0.78

## Water Quality Volume Required (WQV<sub>req</sub>):

Eq 3.10 WQV = d \* Rv \* A  
Eq 3.11 
$$R_v = 1.72(IC)^3 - 1.97(IC)^2 + 1.23(IC) + .02$$
  
 $WQV_{rea} = WQV + S$ 

F = Fraction of the Annual Rainfall treated by BMP	0.78	
d = Rainfall Depth required to capture	1.00 ~	[in]
A = Portion of Site contributing to BMP	3.23	[ac]
IC = Fraction of Impervious Cover	0.79	
R <sub>v</sub> = Runoff Coefficient	0.61	

WQV = Water quality volume	7,147	[ft <sup>3</sup> ]
S = 20% Increase for Sediment Storage	1,429	[ft <sup>3</sup> ]
WQV <sub>req</sub> = Water quality volume required (With 20% increase)	8,576	[ft <sup>3</sup> ]

## ATTACHMENT "L"

## **BMPs FOR SURFACE STREAMS**

There is no surface water, groundwater, or stormwater originating upgradient from the site that runs across the site. All upgradient stormwater is directed around the site.

## ATTACHMENT "M"

## **CONSTRUCTION PLANS**

The constructions plans have been attached as part of this submittal. The design calculations, treatment summary, and specifications for the proposed Batch Detention Pond are attached directly behind this page.

# Special Specification 7130 Batch Detention Pond



## 1. Description

Furnish, install, test, and make fully operational a Batch Detention Pond Control System as specified below or an engineer approved equal with appurtenances included hereafter at designated locations as shown on the plans. Approved equal equipment shall provide the same functionality and monitoring functions as the equipment specified below. Ensure the equipment, design, and construction use the latest available techniques with a minimum number of different parts, subassemblies, circuits, cards, and modules to maximize standardization and commonality.

For each solar power system located at each project site submit electrical load calculations, structural load calculations, drawings, and details. Include the structural connection details for solar panels, control panel, and battery enclosure to poles. Structural calculations shall be sealed by a licensed structural engineer in the state of Texas. Provide equipment data sheets, details, and specifications.

## 2. Materials

Provide all materials necessary for the installation of a Detention Pond Control System. Provide materials that comply with the details shown on the plans, the requirements of this Item, and the pertinent requirements of the following items:

- Item 416, "Drilled Shaft Foundation"
- Item 421, "Hydraulic Cement Concrete"
- Item 440, "Reinforcement for Concrete"
- Item 442, "Metal for Structures"
- Item 445, "Galvanizing"
- Item 449, "Anchor Bolts"
- Item 465, "Junction Boxes, Manholes and Inlets"
- Item 618 "Conduit"
- Item 620, "Electrical Conductors"
- Item 624, "Ground Boxes"
- Item 687, "Pedestal Pole Assemblies"

## 3. Equipment

Provide labor, equipment and materials to employ solar-generated, battery-backed power for the assigned field equipment specified in the plans, or as directed. Install all equipment, including batteries and solar charge controller, in a suitably sized enclosure or enclosures.

Size the enclosure to house the solar controller, batteries, and lightning protection equipment. Furnish a solar powered system that supplies and maintains 100% continuous and intermittent electrical loads for up to 24 hr. per day with autonomy of 3.6 days. Provide system as described in the plans, and generally consisting of the following:

- Photovoltaic (PV) modules with mounts or racks, and mounting brackets for affixing the modules to a pole as shown on the plans. Two year manufacturer's material and workmanship and twelve year 90% minimum power output warranties. Provide adjustable tilt mounts that can be repositioned to an appropriate angle to maximize seasonal solar radiation.
- 12 VDC sealed, valve-regulated, absorbed glass mat (AGM), maintenance-free batteries
- One toggle-type power switch or overcurrent protection device for emergency shutoff, and external conduit, wiring cable and conductors (as recommended by the supplier) between the following:
  - Photovoltaic module to controller panel
  - Battery interconnect and batteries to controller panel, and wiring between components in cabinet.

Pre-set the equipment, optimize photovoltaic module direction, and configure hardware components to allow automatic operation. Furnish and install a fully operational assembly with all cabling and terminations matched to support the selected components. Use the component sizing chart, Table 1 shown below to size the individual components (PV modules, batteries, etc.) based on the planned electrical load and days autonomy:

	COUNT	VDC	UNIT POWER (W)	HOURS PER DAY	TOTAL POWER (W-hr)
In-Situ, Inc. LevelTROLL 500 (Measuring)	1	12	0.048	0.0003	0.0000144
In-Situ, Inc. LevelTROLL 500 (Sleep Mode)	1	12	0.00216	23.9997	0.052
ISCO Signature Base Meter	1	12	1.628	24	39.072
Remote Hand Station	1	24	0.72	24	17.280
Control Valve	1	24	360	.025	9.000
				TOTAL	65.404

Table 1 Solar Power System Component Load Requirements

3.1. **PV Modules**. Supply and install the appropriate number and size of PV modules needed to meet the minimum power requirements shown in Table 1 or as required by the plans. Use photo voltaic USA (PVUSA) test conditions (PTC) ratings.

Supply industrial grade, mono-crystalline or poly-crystalline type solar modules. Consumer grade modules are not acceptable. Ensure that the PV modules meet the following minimum requirements:

- Minimum output voltage of 12 VDC.
- Minimum area efficiency rating of 9.4%.
- Include an ultraviolet (UV) resistant, Ingress Protection (IP) 65 rated junction box providing wire termination for 8-14 AWG wiring with the PV module.
- Hail impact resistance up to 1 in. diameter at 50 mi. per hr.
- UL 1703 listing.

Ensure PV modules, regardless of wattage size, shares common mounting holes for mounting so that a single mounting structure will accommodate the entire module line.

PV modules may be wired in "strings" of panels wired in series, which are then wired in parallel to other strings. Ensure that the open circuit voltage of any single string of PV modules does not exceed 127 V.

Construct PV modules with a tempered glass surface and an industrial grade anodized aluminum frame that completely surrounds and seals the module laminate. Ensure construction is consistent with the demands of installation near humid salt air environments.

Design and construct the photovoltaic module mounting assembly of galvanized steel (ASTM A-153 Class A) or aluminum. The mounting assembly must be of adequate design and strength to provide a means of securely attaching the PV module frame to a pole. Provide a mounting assembly capable of 360° horizontal orientation with a means of locking the bracket at an inscribed angular position about the pole. Ensure the mounting assembly is designed and installed to prevent module re-positioning during 110 mph wind conditions.

Label all PV modules with open-circuit voltage, operating (maximum power) voltage, maximum permissible voltage, operating (maximum power) current, short-circuit current, and maximum power.

Provide a warning label on all DC junction boxes warning that the active parts inside the boxes are fed by a PV array and may still be energized after isolation.

Mark each PV system disconnect as such. NEC 690.13(B).

3.2. **Solar Control Panel.** This panel shall contain the solar controller equipment, batteries, and block (plug) valve controls within the same or multiple enclosures. The enclosure or enclosures shall be pole-mounted, NEMA 3R, lockable, and 304 stainless steel construction. Provide a double flanged cabinet door opening. Provide cabinet with a Corbin style #2 lock with a keyhole cover as an integral part of the door and 2 keys. Provide cabinet with provisions to hold the door open at approximately 90° and 120° positions.

Provide louvers on each side of the cabinet to allow adequate cooling of the electronic components and to prevent the accumulation of gases. Provide screen vents that prevent entry of insects.

Provide an aluminum back panel in the lower compartment with a thickness of 0.125 in. Size the back panel to provide adequate space for the control electronics and terminal strips. Equip the cabinet with at least two shelves of a minimum thickness of 0.125 in, with a 1 in. x 3 in. cutout in the back of the shelves for cable run. Ensure that the shelves are capable of supporting design battery weight. Provide a rubber mat installed on each shelf that supports the batteries and two 1/8 in. drain holes located in the bottom of the cabinet at opposite corners. Provide a minimum of 2 in. of separation from the top of the battery posts to the bottom of the next shelf. Equip the cabinet with all necessary mounting equipment and hardware. Configure the cabinet for pole mounting using two aluminum "U" channel mounting brackets with stainless steel reinforcing plates on the inside of the cabinet. Include a 0.25 in. aluminum reinforcing plate mounted in the bottom of the cabinet. The supplier shall be Amerseco Solar as provided by C.C. Lynch & Associates, Inc., 1-800-333-2252, or engineer approved equal.

**Solar Controller.** The solar controller shall be capable of providing continuous 24 VDC power to the control valve and 12 VDC power to the LevelTROLL and Signature Base Station for the worst anticipated available daylight. The Controller shall be capable of operating in temperatures ranging from -40°C to 60°C and a humidity of 5% to 95% non-condensing. The Controller shall be a complete turn-key packaged system integrated by a single provider. The Controller supplier shall be regularly engaged in fabricating controllers of this type for a minimum of 5 years. The Contractor shall provide a list of Controller supplier(s) for approval. For calculating the daylight availability, the system design shall be based on the central Texas area with a useful minimum daily solar exposure of 4.19 hours.

- 3.3. **Batteries.** Provide maintenance free, spill proof, AGM batteries with the following minimum characteristics:
  - 12 VDC,
  - 80% allowable depth of discharge (DOD),

- rated for a minimum of 2,000 recharge cycles, and
- capacity rated at 77°F, 100 hr. discharge rate.

Supply appropriate number of batteries to ensure the minimum total amp-hours meets or exceeds the value in Table 1, as described in the plans, when wired in series. Label, with a UV resistant system, the battery bank with maximum operating voltage, equalization voltage, and polarity.

Arrange the system components so that all battery terminals are guarded and adequate working space is provided per (NEC) 690.71(B)(2) and (NEC)480.9.

Install current-limiting fuses on battery output circuits per (NEC) 690.71(C).

Provide overcurrent protection for the battery circuit conductors in conformance with (NEC) 690.9(A) and (NEC) 240.

Use battery interconnections with #4 AWG or larger flexible cables that are listed for hard-service use and are moisture resistant

3.4. Control Valve Motor Operator Controller. The control valve motor operator controller shall include timing and logic functions to control the basin plug valve based on sensing the presence of water in a pipe with an In-Situ, Inc. LevelTROLL 500 pressure transducer. The controller shall operate at 12VDC and shall include three wires that are internally connected to isolated relay contacts rated for 30 amps wired as a common, normally open, and normally closed. The controller shall poll the pressure transducer via MODBUS or SDI-12 at user selectable intervals and shall close the relay when water has been detected above a threshold for 12 hours. The pressure transducer shall be in "sleep mode" when not being polled in order to conserve power. The controller display shall be capable of a keypress timeout function in order to conserve power. The relay shall be opened when the water level detected by the pressure transducer drops below the threshold. The controller shall be capable of logging data internally which can be retrieved by USB thumb drive, laptop, cell modem, or Ethernet modem. The controller shall be model Teledyne ISCO Signature Base Station with a TIENet 304 Contact Output Card, and SPA 999 30 Amp alarm contacts. The pressure transducer shall be an In-Situ, Inc. LevelTROLL 500 (5 PSIG)). The LevelTROLL 500 shall be supplied with an NPT adapter and ISCO RuggedCable. Refer to plans for RuggedCable lengths.

The basin plug valve controls shall include the controls for the plug valve and the pressure transducer to detect water in the pipe. These controls shall contain, but not necessarily limited to, the control valve motor operator controller, relay box, terminal blocks, and control valve remote hand station. Configure controller to operate as diagrammed on the drawings.

3.5. **Remote Hand Station:** Provide a Remote Hand Station (RHS) to locally control the basin plug valve from solar control panel. The RHS shall be suitable for remote connection to an electric actuator up to 100m (330ft) distance, include local control facilities, a backlit LCD display and terminals for communication highway connection to the host actuator housed within a self-contained, double-sealed enclosure.

In order to maintain the integrity of the enclosure, setting of the actuator torque levels, position limits and configuration of the indication contacts etc. shall be carried out without the removal of any covers via a Bluetooth® wireless interface. Sufficient commissioning tools shall be provided with the actuators and must meet the enclosure protection and certification levels of the actuator and remote hand station. Commissioning tools shall not form an integral part of the actuator and must be removable for secure storage / authorized release. In addition, provision shall be made for the protection of configured actuator settings by a means independent of access to the commissioning tool. Provision shall be made to disable Bluetooth® communications or only allow a Bluetooth® connection initiated by an Infra-Red command for maximum security.

The RHS shall be suitable for indoor and outdoor use. The unit shall be capable of functioning in an ambient temperature ranging from -50°C (-58°F) to 70°C (158°F), up to 100% relative humidity. Actuators for

hazardous area applications shall meet the area classification, gas group and surface temperature requirements specified in data sheet.

RHS enclosure shall be O-ring sealed, watertight to IP66/IP68 7m for 72hrs, NEMA 4, 6. The internal electrical elements of the actuator shall be protected from ingress of moisture and dust when the terminal cover is removed for site for cabling, the terminal compartment having the same ingress protection rating as the actuator with the terminal cover removed. The RHS enclosure shall allow for temporary site storage without the need for electrical supply connection. All external fasteners shall be plated stainless steel. The use of un-plated stainless steel or steel fasteners is not permitted.

The RHS shall incorporate local controls for Open, Close and Stop and a Local/Stop/Remote mode selector switch lockable in any one of the following three positions: local control only, stop (no electrical operation), remote control plus local stop only. It shall be possible to select maintained or non-maintained local control. The local controls shall be arranged so that the direction of valve travel can be reversed without the necessity of stopping the actuator. Provision should be made to enable control arbitration between the RHS and the connected actuator. The local controls and display shall be rotatable through increments of 90 degrees to suit mounting orientation and access.

Power for the RHS shall be provided from the actuator and shall run in the same cable as the interconnecting communication. Independent power is not acceptable. Communication between the RHS and actuator should be based on a high-speed CAN bus technology.

The RHS display shall include a dedicated numeric/symbol digital position indicator displaying valve position from fully open to fully close in 0.1% increments. Valve closed and open positions shall be indicated by symbols showing valve position in relation to the pipework to ensure that valve status is clearly interpreted. With power connected, the display shall be backlit to enhance contrast at all ambient light levels and shall be legible from a distance of at least 5m (16ft). Red, green, and yellow LEDs corresponding to open, closed and intermediate valve positions shall be included on the RHS display when power is switched on. The yellow LED should also be fully programmable for on/off, blinker and fault indication. The RHS display shall include a fully configurable dot-matrix display element with a minimum pixel resolution of 168 x 132 to display operational, alarm, configuration and graphical datalogger information. The text display shall be selectable between English and other languages such as: Spanish, German, French, and Italian. Provision shall be made to upload a different language without removal of any covers or using specialized tools not provided as standard with the actuator. Datalogger graphical displays should as a minimum be able to display log and trend graphs on the local LCD for the following:

- Torque versus Position
- Number of Starts versus Position
- Number of starts per hour
- Average temperature

The display shall be capable of indicating 4 different home-screens of the following configuration:

- Position and status
- Position and torque (analogue)
- Position and torque (digital)
- Position and demand (positioning)

Provision shall be made for the addition of an optional environmental cover to protect the display from high levels of UV radiation or abrasive materials.

The local controls and display shall be rotatable through increments of 90 degrees to suit valve and actuator orientation. A vandal-proof cover should be available to prevent un-authorized operation and to protect the LCD and window from damage.

Facilities shall be provided for monitoring actuator operation and availability directly from the RHS. Actuator datalogger information shall be accessed via non-intrusive Bluetooth® communication via the RHS and data displayed on the LCD. Sufficient standard intrinsically safe tools shall be provided for downloading datalogger and actuator configuration files from the actuators and subsequent uploading to a PC. The actuator manufacturer shall supply PC software to enable datalogger files to be viewed and analyzed

A terminal compartment shall be provided to enable interconnecting cables to be terminated without the removal of the main electronics cover. The terminal compartment shall be separated from the inner electrical components of the actuator by means of a watertight seal. All wiring supplied as part of the RHS to be contained within the main enclosure for physical and environmental protection.

A durable anodized aluminum nameplate shall be affixed to the RHS housing and contain all relevant serial and approval information.

- 3.6. **Future Cellular Modem and Antenna.** Provide provisions in solar control panel system for a future cellar modem The Modem shall be FCC approved and approved for CDMA networks such as Verizon. The modem shall be integral to the Teledyne ISCO Signature Base Station.
- 3.7. **End User Interface**. Provide provisions to allow for future offsite access and control of the Signature Base Station, at a minimum it shall be capable of remote access through cellular modem for online editing, email messaging via SMTP for statuses and alarms, remote monitoring and programming, and read/write data table access. In addition, the Signature Base Station shall have a MODBUS RS-485 output using ASCII or RTU transmission coding.
- 3.8. **Batch Detention Outlet Structure.** An outlet structure with duel hatch entry hatch for access shall be furnished and installed. The structure shall contain, but not necessarily limited to, 6" motor operated eccentric plug valve, 6" manual eccentric plug valve, connectors, pipe supports, pressure transducer, piping, conduit and a NEMA 4X junction box.
- 3.9. **Perforated Riser Column and Outlet Pipe with Trash Rack.** A perforated riser column shall be connected to an outlet pipe and installed with a trash rack as shown in the plans.
- 3.10. **Vertical Sediment Depth Marker.** A PVC pipe with wing channel post as shown in plans.

#### 3.11. **Grounding.**

Ungrounded Systems. Include disconnects, overcurrent protection, and ground-fault protection. Provide equipment that is listed for use with ungrounded systems per NEC 690.35.

Module Grounding Connectivity. Provide module connections such that removal of a module does not interrupt a grounded conductor to another PV source circuit per NEC 620.49).

Ground-Fault Protection. Provide ground fault protection for grounded arrays per NEC 690.5.

PV System Grounding. Provide one grounded DC conductor for two-wire PV systems operating above 50 V per NEC 690.41.

Single Point. Provide DC grounding at a single point on the PV output circuit per NEC 690.42.

Equipment Grounding. Ground non-current-carrying metal components, including module frames, mounting structures, equipment, conduit, and boxes per NEC 690.43.

Equipment Grounding Conductors. Route equipment conductors with PV circuit conductors per NEC 690.43.

Equipment Grounding Conductor Size. If the array has ground fault protection, size the grounding conductor according to NEC 250.122. If not, size the grounding conductor to handle at least twice the derated circuit conductor ampacity per NEC 690.45.

Grounding Electrode Systems. Ground the AC system according to NEC 250.50 through 250.60. Ground the DC system according to NEC 250.166 through 250.169, and NEC 690.47.

Common Grounding. If the system includes both AC and DC systems, bond the grounding electrodes together. Size the bonding conductor for the larger of the AC and DC requirements per NEC 690.47(C).

3.12. **Disconnects**. Provide disconnects to disconnect equipment (batteries, solar controllers, etc.) from all ungrounded conductors of all power sources per NEC 690.15.

For fuses that are energized from both directions, provide disconnects to independently disconnect the fuse from all sources of power.

Provide disconnects to open all ungrounded conductors which are readily accessible, externally operated, have ON/OFF indications, and have appropriate interrupt ratings. Manually operated switches and circuit breakers are allowed to fulfill these requirements per NEC 690.17.

#### 4. Construction

- 4.1. **Installation.** Provide equipment that utilizes the latest available techniques for design and construction with a minimum number of parts, subassemblies, and modules to maximize standardization and commonality.
- 4.2. **System Configuration.** Configure and fully integrate the equipment to provide a fully operational system.
- 4.3. **General.** Furnish and install all materials, including support, calibration and test equipment, to ensure an operating and functional solar power system. Install power and data cables, power grounding and lightning suppression systems. Prior to beginning installation, inspect each site to verify suitability of the design for installation, grounding and lightning protection. Provide written documentation to the Engineer for approval prior to installation.
- 4.4. Configure and setup the solar power system to assure connection and electric power delivery to the field equipment as indicated in the plans. Locate and mount all equipment as detailed in the plans and as directed by the Engineer.
- 4.5. **Wiring.** Provide wiring that meets the requirements of the NEC. Provide wires that are cut to proper length before assembly. Provide cable slacks to facilitate removal and replacement of assemblies, panels, and modules. It is not acceptable to "double-back" wire to take up slack. Lace wires neatly with nylon lacing or plastic straps. Secure cables with clamps. Provide service loops at connections.
- 4.6. Size all conductors for a de-rated ampacity of at least 125% of the maximum currents calculated. De-rating factors include high ambient temperatures and number of conductors run together within a conduit or cable, per NEC 690.8(B), 310.15(B) and 310.16. Single-conductor cables in sizes 16 AWG and 18 AWG are permitted for module interconnections if they meet the ampacity requirements.

4.7. Protect all conductors operating at more than 30 V and installed in readily accessible locations with conduit, per NEC 690.31(A).

Provide conductors rated for 194°F (90°C) and wet service per NEC 690.31(B).

Run PV source- and output-circuit conductors separately from conductors of other systems per NEC 690.31(B).

Color code all wiring. Mark grounded conductors white or gray. Use green, green/yellow or bare grounding conductors, per NEC 310.12.

Provide strain relief or conduit on all conductors per NEC 300.4.

- 4.8. **Poles.** Mount all PV units and cabinets on poles as shown on plans Provide poles as shown on plans for the height specified. Coordinate location of PV system pole with location of batch outlet structure. Ensure poles are located a maximum of 100m (330ft) from batch outlet structure.
- 4.9. **Testing.** Perform testing in accordance with, Special Specification 6005, "Testing, Training, Documentation, Final Acceptance, and Warranty. Test the system at the factory and in the field to assure proper function operation.

#### ATTACHMENT "N"

## INSPECTION, MAINTENANCE, REPAIR, & RETROFIT PLAN

#### Maintenance Plan and Schedule for Best Management Practices (Batch Detention)

#### **Batch Detention:**

Inspections:

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

Mowing:

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

Litter & Debris Removal:

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

**Erosion control:** 

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

**Nuisance Control:** 

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

#### Structural Repairs & Replacement:

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

Sediment Removal:

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

Logic Controller:

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

Record Keeping:

During construction the project superintendent shall have a log for entering site inspections for all regular and rainfall events. Results of inspections, including damage and any recommended remedial action, shall be noted along with inspection personnel data and date of completion of any action. The log shall be made available for review by TCEQ, if requested. "Proper" disposal of accumulated silt shall be accomplished following TCEQ and Local Authority guidelines and specifications.

Responsible Party for Maintenance:

Name: Kevin Hunter, Manager of CSW Manager, LLC, its GP

CSW Bronco, LP

Entity: \_ Address:

1703 W. 5<sup>th</sup> St. Suite 850 Austin, Texas 78703

CSW Bronco, LP

Signature of Responsible Party:

Printed Name of Responsible Party:

Kevin Hunter, Manager of CSW Manager, LLC, its GP

# ATTACHMENT "O" -

# PILOT-SCALE FIELD TESTING PLAN

Not applicable for this project. The BMP was designed using the "Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs".

# ATTACHMENT "P"

# MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

No surface streams are located on 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: 04/14/2023
Signature of Customer/Agent:
1t 12

Regulated Entity Name: Goodwill Liberty Hill

# **Project Information**

# **Potential Sources of Contamination**

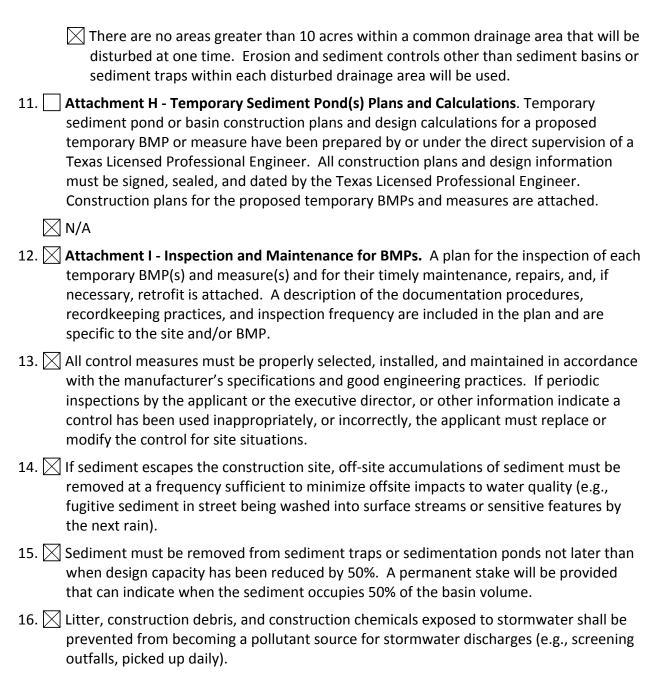
Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1.	Fuels for construction equipment and hazardous substances which will be used during construction:
	The following fuels and/or hazardous substances will be stored on the site:
	These fuels and/or hazardous substances will be stored in:
	Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

	<ul> <li>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.</li> <li>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.</li> </ul>
	igotimes 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.
	<ul> <li>For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.</li> <li>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.</li> </ul>
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 coi ba:	osion control examples: tree protection, interceptor swales, level spreaders, outlet abilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized instruction 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.
	<ul> <li>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.</li> <li>☑ There will be no temporary sealing of naturally-occurring sensitive features on the site.</li> </ul>
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:
	<ul> <li>For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.</li> <li>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.</li> </ul>
	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: <a href="https://www.tceq.texas.gov/response/serc/state-emergency-response-commission">https://www.tceq.texas.gov/response/serc/state-emergency-response-commission</a>

# 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	± 3.45 ac (Limits of Construction)
Clearing / Grubbing	± 3.45 ac (Limits of Construction)
Fill / Excavation (Grading)	± 3.45 ac (Limits of Construction)
Utility Installation	± 0.50 ac
Paving / Infrastructure	± 2.26 ac
Revegetation	± 3.45 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 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 temporary inlet protection, stabilized construction entrance, concrete truck washout area, rock berms, 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.

# 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 disturb area. Therefore, a temporary sediment pond is not required for this project

### ATTACHMENT "I"

#### **INSPECTION & MAINTENANCE FOR BMPs**

#### SILT FENCES, ROCK BERMS, & INLET PROTECTION:

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

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

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.

Reference erosion & sedimentation notes and detail in the construction plans.

# **Application Fee Form**

#### **Texas Commission on Environmental Quality** Name of Proposed Regulated Entity: Goodwill Liberty Hill Regulated Entity Location: 110 Bronco Blvd. Liberty Hill, Texas 78642 Name of Customer: CSW Bronco, LP Contact Person: Kevin Hunter Phone: (512) 751-3944 Customer Reference Number (if issued):CN Regulated Entity Reference Number (if issued):RN \_\_\_\_\_ **Austin Regional Office (3373)** Travis X Williamson Havs San Antonio Regional Office (3362) Medina Uvalde Bexar Comal Kinney Application fees must be paid by check, certified check, or money order, payable to the Texas Commission on Environmental Quality. Your canceled check will serve as your receipt. This form must be submitted with your fee payment. This payment is being submitted to: X Austin Regional Office San Antonio Regional Office Mailed to: TCEQ - Cashier Overnight Delivery to: TCEQ - Cashier Revenues Section 12100 Park 35 Circle Mail Code 214 Building A, 3rd Floor P.O. Box 13088 Austin, TX 78753 Austin, TX 78711-3088 (512)239-0357 Site Location (Check All That Apply): Recharge Zone Contributing Zone **Transition Zone** Type of Plan Size Fee Due Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling Acres Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks Acres Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential 3.00 Acres | \$ 4,000 Sewage Collection System L.F. | \$ Lift Stations without sewer lines Acres | \$ Underground or Aboveground Storage Tank Facility Tanks | \$ Piping System(s)(only) Each | \$ Each | \$ Exception **Extension of Time** Each | \$ Date: 04/14/2023

# **Application Fee Schedule**

**Texas Commission on Environmental Quality** 

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

## Water Pollution Abatement Plans and Modifications

**Contributing Zone Plans and Modifications** 

	Project Area in	
Project	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

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

# Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

**Exception Requests** 

Project	Fee
Exception Request	\$500

**Extension of Time Requests** 

Project	Fee
Extension of Time Request	\$150

#### **Agent Authorization Form**

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

1	Kevin Hunter
	Print Name
	Manager of CSW Manager, LLC , HS GP Title - Owner/President/Other
	Title - Owner/President/Other
of	CSW Bronco, LP
340.0	Corporation/Partnership/Entity Name
have author	
	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.
- 2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- 5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

## SIGNATURE PAGE:

Notary ID 132239433

Applicant's Signature		
THE STATE OF Texas §		
County of §		
to me to be the person whose name	ority, on this day personally appeared <u>Kevin Hunter</u> known is subscribed to the foregoing instrument, and acknowledged to purpose and consideration therein expressed.	
GIVEN under my hand and seal of o	ffice on this <u>15</u> day of <u>March</u> , <u>2023</u> .	
	NOTARY PUBLIC	
STEPHANIE MONTEMAYOR Notary Public, State of Texas Comm. Expires 11-05-2023	Stephanie Montemay or Typed or Printed Name of Notary	

MY COMMISSION EXPIRES: 11/5/23

# **Owner Authorization Form**

for Required Signature for submitting and signing an application for an Edwards Aquifer Protection Plan (Plan) and conducting regulated activities in accordance with an approved Plan.

Texas Commission on Environmental Quality Edwards Aquifer Protection Program Relating to the Edwards Aquifer Rules of

Relating to the Edwards Aquifer Rules of Title 30 of the Texas Administrative Code (30 TAC), Chapter 213 Effective June 1, 1999

Land	Owner	Auth	orizo	tion
I AARICA	INVIEL	AMINI	H IZ.LA	

I, William B. Hinckley of Lookout Partners, LP  Land Owner Name (Individual) Firm (applicable to Legal Entities)
am the Owner of Record or Title Holder of the property located at:
Lot 1, Sundance Squee Section 2, Cab. BB, Std. 146 (Legal description of the property referenced in the application)
and being duly authorized under 30 TAC § 213.4(c)(2) and § 213.4(d)(1) or § 213.23(c)(2) and § 213.23(d) to submit and sign an application for a Plan, do hereby authorize:
(Applicant Name / Plan Holder (Legal Entity or Individual))
(Applicant Name / Plan Holder (Legal Entity or Individual))
to conduct:
Construction activities outlined in Construction plans. (Attached With this Submitted) (Description of the proposed regulated activities)
on the property described above or at:
(If applicable to a precise location for the authorized regulated activities)
Land Owner Acknowledgement
I, William R. Hingkley of Lookout Partners, LP  Land Owner Name (Individual) Firm (applicable to Legal Entities)
understand that while

is responsible for compliance with the approved or conditionally approved Plan and any special conditions of the approved Plan through all phases of Plan implementation,

I, William R. Hinkley of Lookout Partners, LP  Land Owner Name (Individual) Firm (applicable to Legal Entities)	
as Owner of Record or Title Holder of the property described above, I am ultimately responsible for ensuring that compliance with the approved or conditionally approved Plan and any special conditions of the approved Plan, through all phases of Plan implementation, is achieved even if the responsibility for compliance and the right to possess and control of the property referenced in the application has been contractually assumed by another legal entity.	
I, William R. Hinckless of Lookout Partners, LP  Land Owner Name (Individual) Firm (applicable to Legal Entities)	
further understand that any failure to comply with any condition of the Executive Director's approval is a violation and is subject to administrative rule or orders and penalties as provided under 30 TAC § 213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.	
Land Owner Signature  Land Owner Signature  THE STATE OF § Texas  Date	
County of § Williamson	
BEFORE ME, the undersigned authority, on this day personally appeared known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.	
GIVEN under my hand and seal of office on this 23rd day of March 2	2013
KELLY ATKIN My Notary ID # 130040659 Expires December 2, 2026  Typed or Printed Name of Notary	
MY COMMISSION EXPIRES: 12-2-26	
Attached: (Mark all that apply)	
Lease Agreement Signed Contract Deed Recorded Easement	
Other legally binding document	3

TCEQ-XXXXX

Applicant Acknowledgement
Applicant Name (Individual) of CSW Bronco, LP  Firm (applicable to Legal Entities)
Land Owner Name (Legal Entity or Individual)
Applicant Name (Legal Entity or Individual)
with the right to possess and control the property referenced in the Edwards Aquifer Protection Plan (Plan).
understand that
approved Plan and any special conditions of the approved Plan through all phases of Plan implementation. I further understand that failure to comply with any condition of the Executive Director's approval is a violation and is subject to administrative rule or orders and penalties as provided under § 213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.  Applicant Signature  Sy:  Applicant Signature  Levin Hunke, Manager  Date
Applicant Signature Levin Hunkr, Manager Date
THE STATE OF § Texas
BEFORE ME, the undersigned authority, on this day personally appeared known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.
CINDY KOHLER NOTARY PUBLIC  Comm. Expires 11-09-2024 Notary ID 11315864  CINDY KOHLER NOTARY PUBLIC  Cindy Kohler  Tymed or Printed Name of Notary

MY COMMISSION EXPIRES: 11.09.2024



# **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**

		<b>01 W1</b> 1111011	10001011								
		sion (If other is	•				•				
New Pe     Ne	rmit, Regis	tration or Authori	zation (Core Dat	ta Form sh	ould be su	ıbmitte	d with	the pr	ogram application	n.)	
	'	ata Form should		th the rene	wal form)		Othe				
2. Customer	Referenc	e Number <i>(if is</i> s	•	Follow this		OII	. Reg	ulated	Entity Reference	ce Number	(if issued)
CN				for CN or R Central	N numbers Registry**	<u>in</u>	RN				
SECTION	II: Cu	stomer Info	rmation								
4. General C	ustomer	nformation	5. Effective D	ate for Cu	stomer In	format	ion U	pdate	s (mm/dd/yyyy)		
New Cus	tomer		Up	date to Cu	stomer Inf	formati	on		Change in	Regulated I	Entity Ownership
		me (Verifiable wi									
			-	-			•			rrent and	active with the
Texas Sec	retary o	f State (SOS)	or Texas Co	mptrolle	r of Pub	lic Ac	cour	nts (C	CPA).		
6. Customer	Legal Na	<b>me</b> (If an individua	l, print last name f	irst: eg: Doe	e, John)		<u>If ne</u>	w Cust	tomer, enter previ	ous Custome	er below:
CSW Bro	nco, LP										
7. TX SOS/C	_	Number	8. TX State Ta		its)		9. Fe	ederal	Tax ID (9 digits)	10. DUN	S Number (if applicable)
08049423	04		320885089	919				1			
11. Type of	Customer	:   Corporati	on		Individual			Part	nership: 🗌 Gener	al 🛭 Limited	
Government:	☐ City ☐	County 🗌 Federal [	☐ State ☐ Other		Sole Prop	orietors	hip		Other:		
<b>12. Number</b>	of Employ  21-100	/ees 101-250	<u>251-500</u>	☐ 501 a	ınd higher		13. I		endently Owned	and Opera	ted?
14. Custome	er Role (Pr	oposed or Actual) -	- as it relates to th	e Regulated	l Entity liste	ed on thi	is form.	. Pleas	e check one of the	following:	
⊠Owner		☐ Opera	tor		Owner & O	perato	r				
Occupation	1	•	onsible Party	□ V	oluntary C	Cleanup	Appli	icant	☐Other:		
45 84 111	1703 V	W. 5 <sup>th</sup> street S	Suite 850								
15. Mailing Address:											
	City	Austin		State	TX	ZI	P ′	7870	3	ZIP + 4	
16. Country	Mailing In	formation (if outs	ide USA)	•	1	7. E-M	ail Ad	dress	(if applicable)		
					k	hunte	er@c	eswde	evelopment.c	com	
18. Telephoi	ne Numbe	r	1	9. Extensi	on or Co	de			20. Fax Numbe	<b>r</b> (if applical	ole)
(512)75	51-3944								( ) -		
SECTION	III: R	egulated En	tity Inforn	nation							
		_	-		tv" is selec	cted he	low th	is form	n should be accor	mpanied by	a permit application)
✓ New Regulation	_	•	to Regulated En		-				Entity Information	•	- p z approacion)
		<del></del>							•		dards (removal
•		ndings such		•							,
22. Regulate	d Entity N	ame (Enter name	of the site where t	he regulated	d action is t	aking pl	ace.)				
Goodwill	Liberty	Hill									

TCEQ-10400 (04/15) Page 1 of 2

23. Street Address of		110 Bronco Blvd.												
the Regulated Entity:														
(No PO Boxes)		City Liberty H		Till	State	ТХ	ζ ZIP		78642		ZIP + 4			
24. County		William							, , ,					
			ter Physical L	ocatio	on Descriptio	n if no	street	address is	prov	ded.				
25. Description to Physical Location														
26. Nearest City									State		Nea	rest ZIP Code		
27. Latitude (N)	In Decim	al:	30.6723				28. Lo	ngitude (W	) In	Decimal:	97.9176			
Degrees		Minutes		Seco			Degrees			Minutes		Seconds		
30		2	40		20.6			97			55	3.4		
29. Primary SIC C	ode (4 digi	its) <b>30.</b>	Secondary SI	C Cod	de (4 digits)		Primary 6 digits)	NAICS Co	de	<b>32. S</b> (5 or 6	econdary NA digits)	ICS Code		
5932		83.	31			453	310			624.	310			
33. What is the Pr	imary Bu	siness of t	this entity?	(Do not	repeat the SIC o	r NAICS	description	on.)						
Retail/Sale of	Used G	Goods												
0.4 84 22						1	10 Bror	nco Blvd.						
34. Mailing Address:	1													
Addiess.		City	Liberty H	lill	State	7	гх	ZIP		78642	ZIP + 4			
35. E-Mail A	ddress:					khunt	er@csv	vdevelopm	ent.c	om				
36.	Telephon	ne Number		1	37. Extensi	on or (	Code		3	8. Fax Num	ber <i>(if applic</i>	able)		
	( 512 ) 75	1-7944								(	) -			
<b>39. TCEQ Programs</b> form. See the Core Data	and ID N	lumbers Ch	neck all Program	s and v	write in the perr	mits/regi	stration	numbers that	will b	e affected by	the updates su	bmitted on this		
Dam Safety	1 01111 11130	Districts	additional guidal	_	Edwards Aquif	er		Emissions I	nvento	ory Air	☐ Industrial H	azardous Waste		
				-						,				
☐ Municipal Solid \	Waste	☐ New Sou	urce Review Air		OSSF			Petroleum S	Storag	e Tank	☐ PWS			
Sludge		☐ Storm W	/ater		Title V Air			Tires			Used Oil			
				<del> </del>										
☐ Voluntary Clean	up	☐ Waste W	Vater	<u>  L</u>	Wastewater Ag	gricultur	e <u>L</u>	Water Right	S		Other:			
SECTION IV	. Duan	auau Ind	foumation											
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<u>'</u>		Prete, P		44 5.	Ml		41. Ti		esid	ent				
42. Telephone Num		43. Ext./	Code	44. Fa	x Number			E-Mail Addr						
(512)505-8953		11		(	) -		ton	y@w-pin	c.cc	om				
<b>SECTION V:</b>														
<b>46.</b> By my signature signature authority to identified in field 39.														
Company:	Waeltz &	Prete, Inc.				Job 1	Γitle:	Presiden	t					
		A. Prete, P.E	Ξ.							one: (	512 ) 505-89	53		
Signature:	4± 46	<u></u>							Dat	ì	)4/14/2			

TCEQ-10400 (04/15) Page 2 of 2

Date:

Signature:

# SITE DEVELOPMENT PLANS FOR: GOODWILL LIBERTY HILL

# **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

**IMPERVIOUS COVER** 

CURB & GUTTER

TOTAL

**BUILDING FOOTPRINT** 

PUBLIC SIDEWALK, STREETS,

(WITHIN LIMITS OF LOT ONLY)

PARKING, PRIVATE SIDEWALK (WITHIN LIMITS OF LOT ONLY)

LANDSCAPE ARCHITECT:

BRADLEY T. JONES, PLA **ECOLAND DESIGN GROUP** 2800 IH 35 SUITE 120 AUSTIN, TEXAS 78704 PH: (512) 556-0313

EMAIL: bjones@ecolanddesigngroup.com

**EXISTING** 

ARCHITECT:

**PROPOSED** 

150,125 SF (3.45 AC.)

JENNIFER TULLIS, AIA **NOACK LITTLE** 220 INDISTRIAL BLVD. SUITE 101 AUSTIN, TEXAS 78745 PH: (512) 851-1900 EMAIL: jennifer@noacklittle.com

S9073 - SUNDANCE SQUARE, SECTION 2, LOT 1 (3.0089 ACRES)

110 BRONCO BLVD. LIBERTY HILL, TEXAS 78642 **APRIL**, 2023 CITY OF LIBERTY HILL PROJECT NO. -

25,000 SF 73,445 SF 98,445 SF (2.26 AC.)

SUBMITTAL DATE TRACKING TABLE:

JOB NO.: 073-024

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

TOTAL AREA OF DISTURBANCE (LOC)

SUBMITTAL TYPE DATE SUBMITTED DATE RETURNED 14 APRIL 2023 SUBMITTAL #1

# NOTES:

ENGINEER.

- 1. THESE PLANS ARE NOT TO BE CONSIDERED FINAL FOR CONSTRUCTION UNTIL ACCEPTED BY THE CITY. CHANGES MAY BE REQUIRED PRIOR TO APPROVAL
- 2. NO PORTION OF THIS SITE IS WITHIN THE FEMA 1% ANNUAL CHANCE FLOODPLAIN, HOWEVER A PORTION OF THIS TRACT LIES WITHIN ZONE 'X' AREAS OF MINIMAL FLOOD HAZARD PER PANEL NUMBER 48491C0485E, DATED DECEMBER 20, 2019
- 3. THIS SITE IS LOCATED WITHIN THE EDWARD'S AQUIFER CONTRIBUTING ZONE. WATER QUALITY TREATMENT IS REQUIRED FOR THIS DEVELOPMENT.
- 4. ALL SIGNAGE WILL REQUIRE A SEPARATE SIGN PERMIT. APPROVAL OF A SITE DEVELOPMENT PERMIT OR BUILDING PERMIT DOES NOT CONSTITUTE APPROVAL OF SIGNAGE.

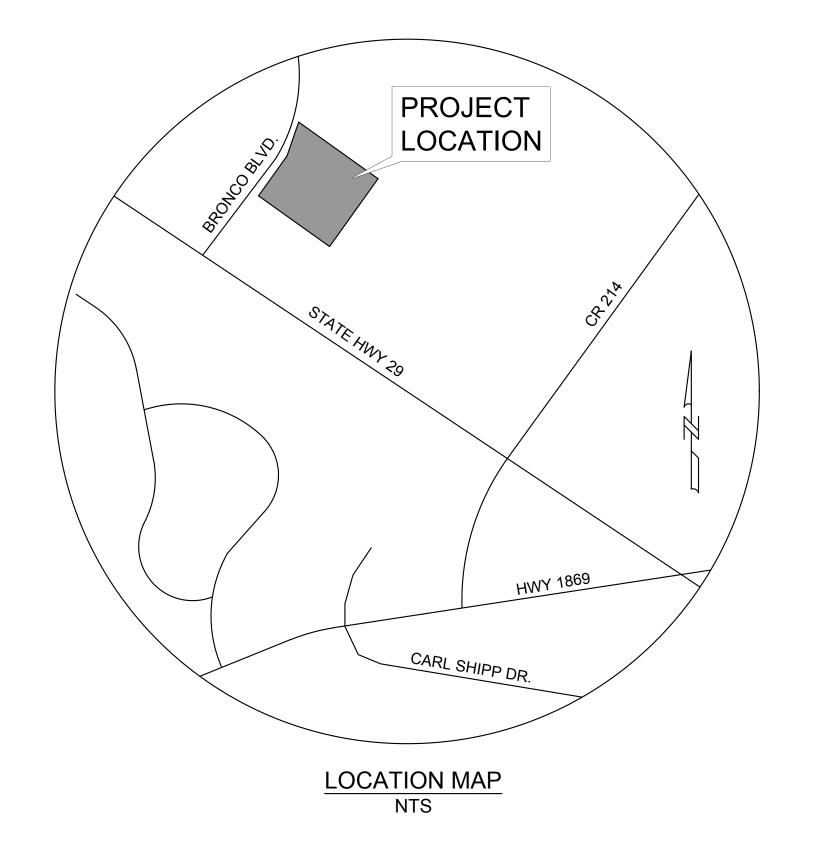
TCEQ PERMIT #

SWPPP PERMIT #

RECORDED PLAT DOC#

ACCEPTED FOR CONSTRUCTION:

DATE





# SHEET INDEX

3111. I <b>N</b> 0.	DESCRIPTION
C-1	COVER SHEET
C-2	PLAT SHEET (1 OF 2)
C-3	PLAT SHEET (2 OF 2)
C-4	NOTE SHEET (1 OF 2)
C-5	NOTE SHEET (2 OF 2)
C-6	<b>EXISTING CONDITIONS &amp; DEMOLITION PLAN</b>
C-7	EROSION/ SEDIMENTATION CONTROL PLAN
C-8	SITE & DIMENSIONAL CONTROL PLAN
C-9	UTILITY PLAN
C-10	WASTEWATER PROFILE
C-11	WASTEWATER PROFILE
C-12	STORM SEWER PROFILE (1 OF 2)
C-13	STORM SEWER PROFILE (2 OF 2)
C-14	HYDRAULIC DATA
C-15	PAVING, STRIPING, & SIGNAGE PLAN
C-16	GRADING PLAN
C-17	EXISTING DRAINAGE AREA MAP
C-18	PROPOSED DRAINAGE AREA MAP
C-19	WATER QUALITY SUMMARY
C-20	WATER QUALITY CALCULATIONS
C-21	BATCH DETENTION POND PLAN
C-22	BATCH DETENTION POND DETAILS (1 OF 3)
C-23	BATCH DETENTION POND DETAILS (2 OF 3)
C-24	BATCH DETENTION POND DETAILS (3 OF 3)
C-25	BATCH DETENTION POND CALCULATIONS
C-26	ESC DETAILS
C-27	SITE DETAILS (1 OF 3)
C-28	SITE DETAILS (2 OF 3)
C-29	SITE DETAILS (3 OF 3)
C-30	STORM SEWER DETAILS
C-31	UTILITY DETAILS (1 OF 2)
L1-L2	LANDSCAPE PLANS & DETAILS

DESCRIPTION

# STATE OF TEXAS

SHT. No.

# 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.



ANTÔNIO A. PRETE, P.E. STATE OF TEXAS #93759 14 April 23

DATE

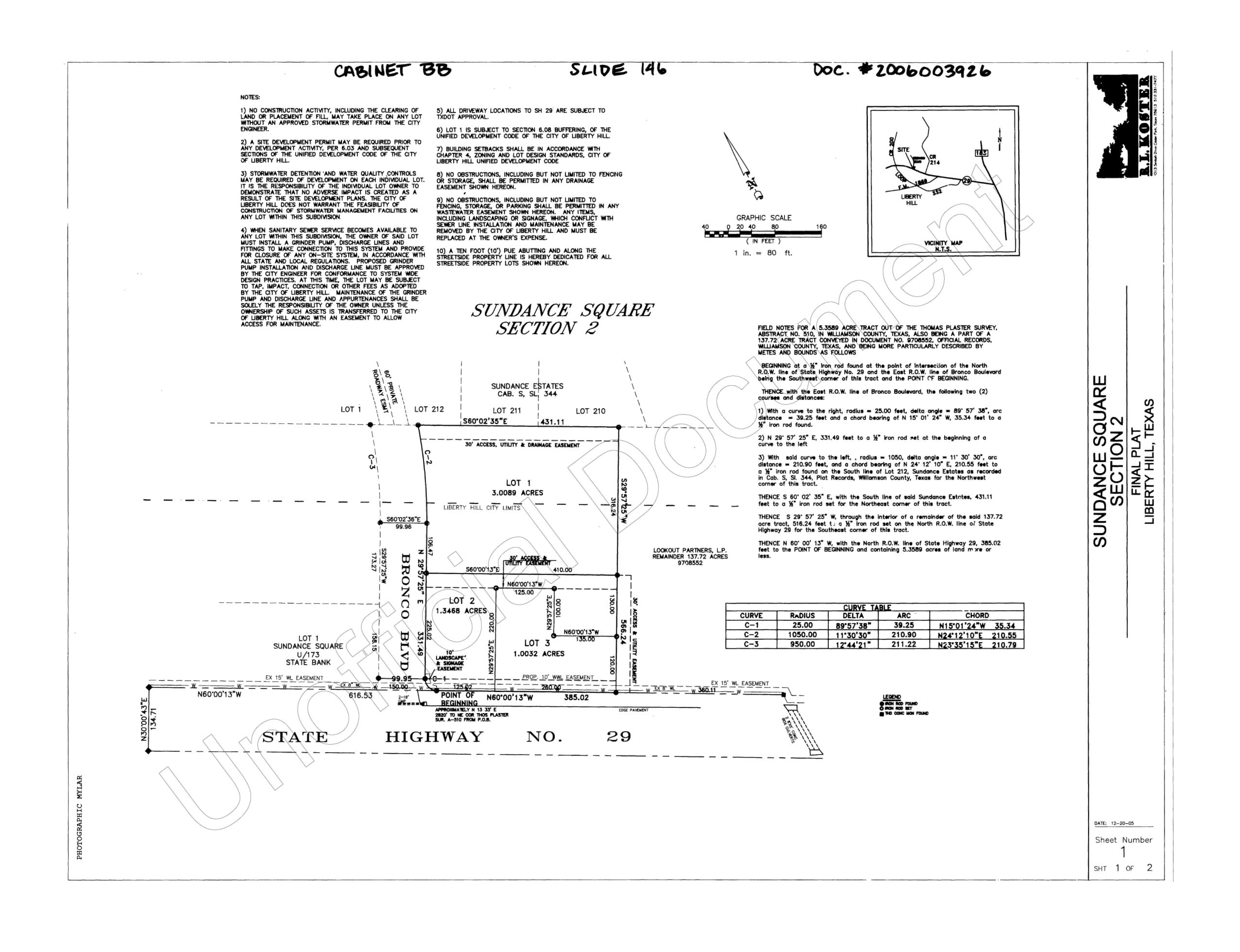
OWNER: **ENGINEER:** 

**KEVIN HUNTER** CSW BRONCO, LP 1703 W. 5th STREET SUITE 850 AUSTIN, TEXAS 78703 PH: (512) 751-3944 EMAIL: khunter@cswdevelopment.com

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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

No.	Date	Revision	ACC.	DATI



W&P. COLUMN ENGINEERS

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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

PROJ

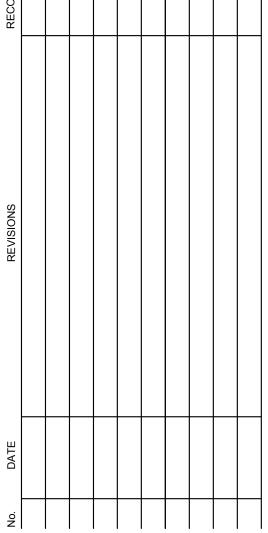
GOODWILL LIBERTY HILL

110 BRONCO BLVD.

С

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP
DRAWN: JRW DATE: 4/14/2023



SHEET TIT

PLAT SHEET (1 OF 2)

PROJECT N

073-024
COLH PROJECT NO.:

SHEET NO

12-20-05

I, Kathy Clark, City Administrator of the City of tiberty Hill, Texas, under the authority

granted me in Section 2.03.02.A of the Unified Development Code, in accordance with the

of record with the County Clerk of Williamson County, Texas.

I, JOHN DOERFLER, COUNTY JUDGE OF WILLIAMSON COUNTY, TEXAS, DO HEREBY

THE SURVEYOR'S CERTIFICATE APPEARING HEREON, KNOWN AS CIERRA SPRINGS

HAVING BEEN DULY PRESENTED TO THE COMMISSIONERS COURT OF WILLIAMSON COUNTY, TEXAS AND BY SAID COURT WAS DULY CONSIDERED, WAS ON THIS DAY

PROPERTY RECORDS OF THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

C. DOERFLER, COUNTY JUDGE, WILLIAMSON COUNTY, TEXAS

WASTEWATER WILL BE PROVIDED BY ON-SITE SEWAGE FACILITIES (D.S.S.F.),

1) WATER WILL BE PROVIDED BY LIBERTY HILL WATER SUPPLY CORP.

CERTIFY THAT THIS MAP OR PLAT, WITH WRITTEN FIELD NOTES SHOWN HEREON, AND

APPROVED, AND SAID PLAT IS AUTHORIZED TO BE REGISTERED AND RECORDED IN THE

2) O.S.S.F. MUST BE DESIGNED BY A PEGISTERED PROFESSIONAL ENGINEER OR REGISTERED

3) NO STRUCTURE OR LAND ON THIS BLUELINE SHALL HEREAFTER BE LOCATED OR ALTERED

WITHOUT FIRST SUBMITTING A CERTIFICATE OF COMPLIANCE APPLICATION FORM TO THE

I, HERMAN W. CRICHTON, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT

THE PROPERTY MADE BY ME OR MADE UNDER MY SUPERVISION, MADE ON THE

FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP, F.I.R.M. PANEL NO

481079 0100 C AS PREPARED FOR WILLIAMSON COUNTY, TEXAS, DATED SEPT. 27,

IN APPROVING THIS PLAT BY THE COMMISSIONERS COURT OF WILLIAMSON COUNTY, TEXAS IT IS UNDERSTOOD THAT THE BUILDING OF ALL STREETS, ROADS OR OTHER PUBLIC THOROUGHFARES

ACCORDANCE WITH PLANS AND SPECIFICATIONS PRESCRIBED BY THE COMMISSIONERS COURT OF

WILLIAMSON COUNTY, TEXAS. SAID COMMISSIONERS' COURT ASSUMES NO OBLIGATION TO BUILD

SUBDIVISION, OTHER THAN THOSE DRAINING OR PROTECTING THE ROAD SYSTEM AND STREETS. THE COUNTY ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF REPRESENTATIONS BY

OTHER PARTIES ON THIS PLAT. FLOOD PLAIN DATA IN PARTICULAR, MAY CHANGE DEPENDING ON SUBSEQUENT DEVELOPMENT. IT IS FURTHER UNDERSTOOD THAT THE OWNERS OF THE TRACT

OF LAND COVERED BY THIS PLAT MUST INSTALL AT THEIR OWN EXPENSE ALL TRAFFIC

CONTROL DEVICES AND SIGNAGE THAT MAY BE REQUIRED BEFORE THE STREETS IN THE SUBDIVISION HAVE FINALLY BEEN ACCEPTED FOR MAINTENANCE BY THE COUNTY.

APPROVED FOR 911 SERVICE THIS 42 DAY OF January , 2006.

ANY OF THE STREETS, ROADS, OR OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT, OR IN CONSTRUCTING ANY BRIDGES OR TRAINAGE IMPROVEMENTS IN CONNECTION THEREWITH. THE COUNTY WILL ASSUME NO RESPONSIBILITY FOR DRAINAGE WAYS OR EASEMENTS IN THE

AND ANY BRIDGES OR CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED, IS THE

RESPONSIBILITY OF THE OWNER OF THIS TRACT OF LAND COVERED BY THIS PLAT IN

GROUND, NO LOT WITHIN THIS SUBDIVISION IS ENCROACHED BY ANY SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100 YEAR FLOOD AS IDENTIFIED BY THE

THIS PLAT IS TRUE AND CORRECT, AND WAS PREPARED FROM AN ACTUAL SURVEY

Kathy Clark, City Administrator

STATE OF TEXAS: COUNTY OF WILLIAMSON:

HEALTH DEPARTMENT NOTES:

SURVEYOR'S CERTIFICATE

HERMAN CRICHTON, R.P.L.S. 4046

CRICHTON & ASSOCIATES, INC.

WILLIAMSON COUNTY COMMISSIONER'S COURT APPROVAL

107 N. LAMPASAS ROUND ROCK, TEXAS 78664

512-244-3395

Texas Local Government Code 212.0065, do hereby certify this plat as approved for filing

SUNDANCE SQUARE SECTION 2

STATE	OF	TEX/	NS.
COUNT	Y O	F WIL	LIAMS

THAT LOOKOUT PARTNERS, L.P. WITH ITS HOME OFFICE IN HOUSTON, TEXAS, BEING OWNER OF THAT CERTAIN 5.3589 ACRE TRACT OF LAND OUT OF THOMAS PLASTER SURVEY, ABSTRACT NO. 510, IN WILLIAMSON COUNTY, TEXAS, BEING A PART OF A 137.72 ACRE TRACT CONVEYED IN DOCUMENT NO. 9708552, OF THE WILLIAMSON COUNTY, TEXAS, OFFICIAL RECORDS, DO HEREBY SUBDIVIDE SAID 5.3589 ACRE TRACT IN ACCORDANCE WITH THE ATTACHED MAP OR PLAT TO BE KNOWN AS "SUNDANCE SQUARE, SECTION 2" SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS HERETOFORE GRANTED AND DO HEREBY DEDICATE TO THE PUBLIC

LOOKOUT PARTNERS, L.P. BY LOOKOUT GROUP, INC. WILLIAM R. HINCKLEY, PRESIDENT 2370 RICE BLVD. SUITE 200 HOUSTON, TEXAS 77005

STATE OF TEXAS COUNTY OF WILLIAMSON

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED WILLIAM R. HINKLEY, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME IN THE

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS THE 21 DAY OF \_\_\_\_\_\_, 2005, A.D. BARBARA A. SMITH MY COMMISSION EXPIRES 12-7-08

, ROBERT KOSTER, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS SUBDIVISION IS IN THE EDWARDS AQUIFER CONTRIBUTING ZONE. NO CONSTRUCTION IN THE SUBDIVISION MAY BEGIN UNTIL THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) HAS APPROVED, IN WRITING, THE WATER POLLUTION

ABATEMENT PLAN (WPAP). TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT CEDAR PARK, WILLIAMSON COUNTY, TEXAS.

THIS 21 DAY OF 2005. REGISTERED PROFESSIONAL ENGINEER NO. 84499 STATE OF TEXAS

BASED UPON THE ABOVE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER REVIEW OF THE PLAT AS REPRESENTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLIES WITH THE REQUIREMENTS OF EDWARDS AQUIFER REGULATIONS AND WILLIAMSON COUNTY ON-SITE-SEWAGE FACILITY REGULATIONS. THIS CERTIFICATION IS MADE SOLELY UPON SUCH REPRESENTATIONS AND SHOULD NOT BE RELIED UPON FOR VERIFICATIONS OF THE FACTS ALLEGED. THE WILLIAMSON COUNTY AND CITIES HEALTH DISTRICT AND WILLIAMSON COUNTY DISCLAIMS ANY RESPONSIBILITY TO ANY MEMBER OF THE PUBLIC FOR INDEPENDENT VERIFICATION OF THE REPRESENTATIONS. FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED WITHIN IT.

12/22/05 Director of Environmental Services

1) TOTAL ACREAGE: 5.3589 ACRES

2) NO. OF LOTS: 3

3) SMALLEST LOT: 1.0032 ACRES

4) PROPOSED USE: COMMERCIAL

5) OWNER: LOOKOUT PARTNERS, L.P.

6) SURVEYOR: CRICHTON AND ASSOCIATES

7) ENGINEER: ROBERT KOSTER

8) IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATION SHOULD BE BUILT AT LEAST ONE FOOT ABOVE THE SURROUNDING GROUND AND THE GROUND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF 1/2 INCH PER FOOT FOR A DISTANCE OF AT LEAST 10 FEET.

9) MAINTENANCE OF DRAINAGE EASEMENTS SHALL BE THE RESPONSIBILITY OF THE PROPERTY

TO) THE OWNER UNDERSTANDS THAT IT IS THE RESPONSIBILITY OF THE OWNER, NOT THE CITY OR COUNTY TO ASSURE COMPLIANCE WITH THE PROVISIONS OF ALL APPLICABLE STATE, FEDERAL, AND LOCAL LAWS AND REGULATIONS RELATING TO THE ENVIRONMENT, INCLUDING, BUT NOT LIMITED TO THE ENDANGERED SPECIES ACT, STATE AQUIFER REGULATIONS, AND MUNICIPAL WATERSHED ORDINANCES

11) ALL DRIVEWAYS SHALL BE "DIP TYPE"

13) NO BUILDINGS, FENCES, LANDSCAPING OR OTHER STRUCTURES AND /OR OBSTRUCTIONS ARE PERMITTED WITHIN THE DRAINAGE EASEMENTS SHOWN.

14) PROPERTY OWNER SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY REGULATORY AUTHORITIES.

15) ALL EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER

16) NO STRUCTURE OR LAND ON THIS BLUE LINE SURVEY SHALL HEREAFTER BE LOCATED OR ALTERED WITHOUT FIRST SUBMITTING A CERTIFICATE OF COMPLIANCE APPLICATION FORM TO THE WILLIAMSON COUNTY FLOOD PLAIN ADMINISTRATOR.

STATE OF TEXAS: COUNTY OF WILLIAMSON:

I, NANCY RISTER, CLERK OF THE COUNTY COURT, WITHIN AND FOR THE COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION, WAS FILED FOR RECORD IN MY OFFICE ON

THE 17TH DAY OF JANUARY, 2006 A.D., AT 2:59 O'CLOCK PM., AND DULY RECORDED THIS THE 18TH DAY OF JANUARY , 2006 A.D., AT

9:43 O'CLOCK, A.M. IN THE PLAT RECORDS OF SAID COUNTY IN CABINET BB , SLIDES 146 AND 147.

WITNESS MY HAND AND SEAL OF THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS, THE LAST DATE WRITTEN ABOVE. NANCY RISTER, CLERK, COUNTY COURT, OF WILLIAMSON COUNTY, TEXAS

BY: Reul H. Davis





UNDANCE SQUARE SECTION 2 FINAL PLAT LIBERTY HILL, TEXAS

DATE: 12-20-05 Sheet Number SHT 2 OF 2

GOODWILL LIBERTY HILL

WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665

PH (512) 505-8953

FIRM TX. REG. #F-10308

110 BRONCO BLVD.

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP DRAWN: <u>JRW</u> DATE: <u>4/14/2023</u>

PLAT SHEET (2 OF 2)

**COLH PROJECT NO.:** 

SHEET NO.:

#### City of Round Rock Standard Construction Notes Dated May 05, 2006 (Adopted by City of Liberty Hill)

#### **GENERAL NOTES:**

- 1. All construction shall be in accordance with the City of Liberty Hill 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.
- 8. The Contractor and the Engineer shall keep accurate records of all construction that deviates from the plans. The Engineer shall furnish the City of Liberty Hill accurate "As-Built" drawings following completion of all construction. These "As-Built" drawings shall meet with the satisfaction of the 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-6)

#### 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.

- 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.
- 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.
- 3. 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.
- 5. 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.
- 6. All R.C.P. shall be minimum class III.
- 7. The subgrade material for the streets shown herein was tested by: Professional Services Industries, Inc. dated 23 Jan 2023

And the paving sections designed in accordance with the current City of Liberty Hill design criteria. The paving sections are to be constructed as follows: (See Sheet C-15)

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.

- 8. 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.
- 9. 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).
- Unless otherwise accepted by the City Engineer, depth of cover for all lines out of the pavement shall be 42" min., and depth of cover for all lines under pavement shall be a min. of 30" below subgrade.
- 4. All fire hydrant leads shall be ductile iron pipe (AWWA C-100, min. class 200).
- 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.
- 6. 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.
- 8. 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.
- 9. 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.

- 13. 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.
- 14. 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:

water service "W" on top of curb

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.

- 17. Contact City of Liberty Hill Development Services Office at (512)548-5519 for assistance in obtaining existing water and wastewater locations.
- 18. 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.
- 19. 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:

Sieve Size Percent Retained By Weight

1/2" 0 3/8" 0-2 #4 40-85 #10 95-100

- 20. 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.
- 21. 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:

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

<u>Uniform Traffic Control Devices for Streets and</u> 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.
- 2. All slopes shall be sodded or seeded with approved grass, grass mixtures or ground cover suitable to the area and season in which they are applied.
- 3. Silt fences, rock berms, sedimentation basins and similarly recognized techniques and materials shall be employed during construction to prevent point source sedimentation loading of downstream facilities. Such installation shall be regularly inspected by the City of Liberty Hill for effectiveness. Additional measures may be required if, in the opinion of the City Engineer, they are warranted.
- 4. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the Engineer. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the Engineer.
- . 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.

BOT = BOTTOM

DET = DETENTION

D/S = DOWNSPOUT

DI = DUCTILE IRON

ESMT = EASEMENT

FH = FIRE HYDRANT

FG = FINISHED GROUND

EX = EXISTING

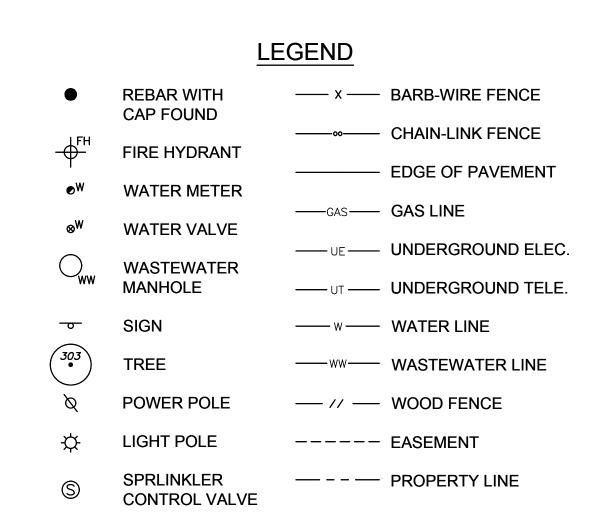
FL = FLOWLINE

CNC = TOP OF CONCRETE

CL = CLASS

#### ABBREVIATIONS:

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



**BENCHMARK** 

BM #1

W&P

CHARLES AND THE PROPERTY OF THE PROPERTY

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJECT

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP

DRAWN: JRW DATE: 4/14/2023

DATE REVISIONS RECOMID

SHEET TITLE:

(1 OF 2)

NOTE SHEET

PROJECT NO.:

073-024

COLH PROJECT NO.:

SDP -

SHEET NO.:

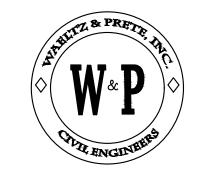
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.(AD\073-024 Goodwill Liberty Hill\4-CAD\PLANS\073-024 GEN-NOTES.dwg, 4/14/2023 11:05:09 A

#### Texas Commission on Environmental Quality Contributing Zone Plan General Construction Notes

TCEQ-0596 (Rev. July 15, 2015)

- 1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any ground disturbance or construction activities. This notice must include:
  - The name of the approved project;
  - The activity start date; and
  - The contact information of the prime contractor.
- 2. All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan (CZP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on-site.
- 3. No hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.
- 4. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.
- 5. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.
- 6. Sediment must be removed from the sediment traps or sedimentation basins when it occupies 50% of the basin's design capacity.
- 7. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.
- 8. All excavated material that will be stored on-site must have proper E&S controls.
- 9. If portions of the site will have a cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.
- 10. The following records should be maintained and made available to the TCEQ upon request:
  - The dates when major grading activities occur;
  - The dates when construction activities temporarily or permanently cease on a portion of the site; and
  - The dates when stabilization measures are initiated.
- 11. The holder of any approved CZP must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
- A. Any physical or operational modification of any best management practices (BMPs) or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
- B. Any change in the nature or character of the regulated activity from that which was originally approved;
- C. Any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer; or
- Any development of land previously identified as undeveloped in the approved contributing zone plan.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJECT

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP
DRAWN: JRW DATE: 4/14/2023

RECOM'D					
REVISIONS					
DATE					
No.					

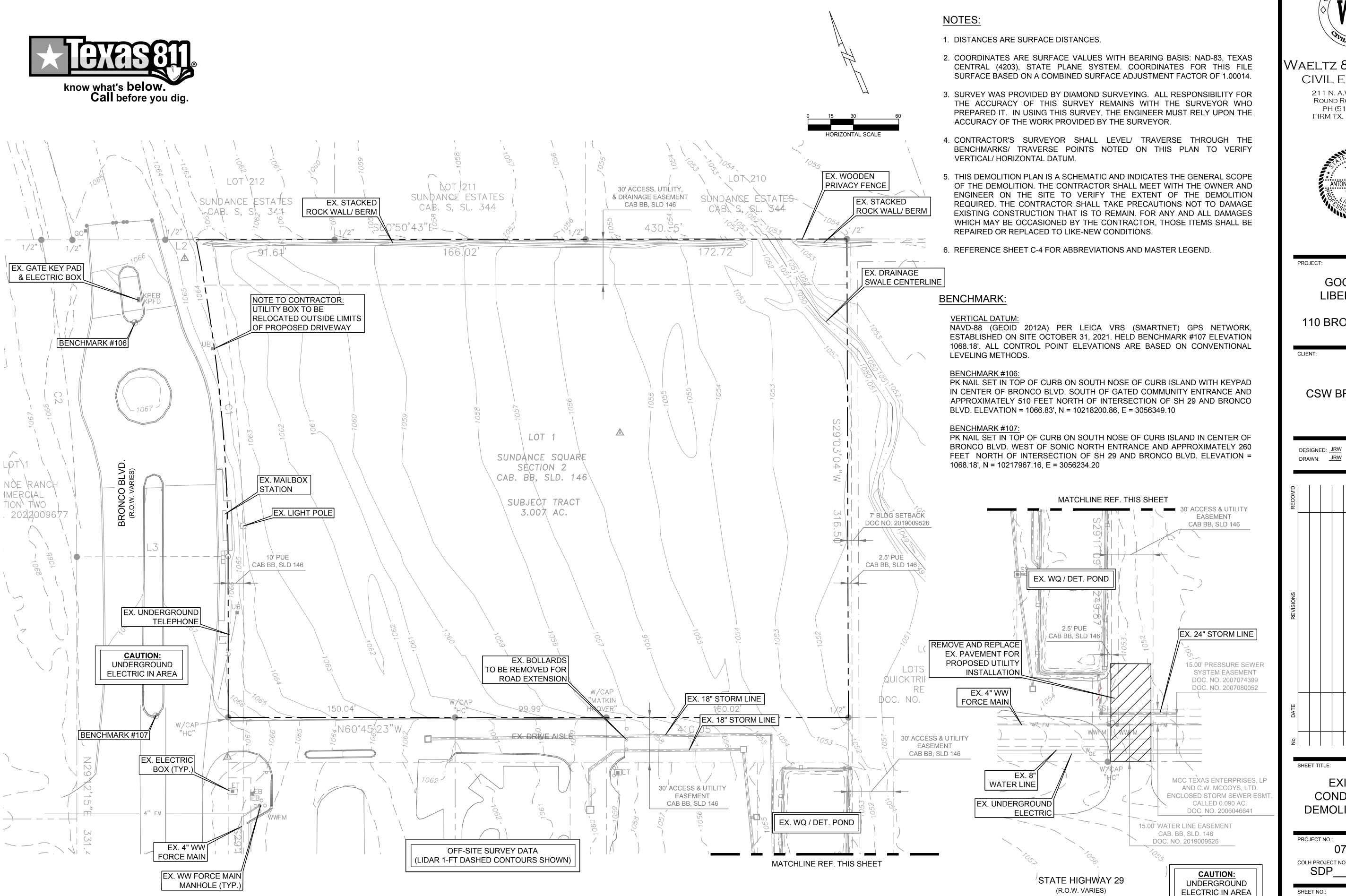
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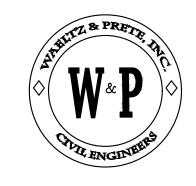
NOTE SHEET (2 OF 2)

PROJECT N

073-024 COLH PROJECT NO.:

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



GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CSW BRONCO, LP

APPROVED: AAP

DRAWN:	JRW	DATE:	4/14/2023
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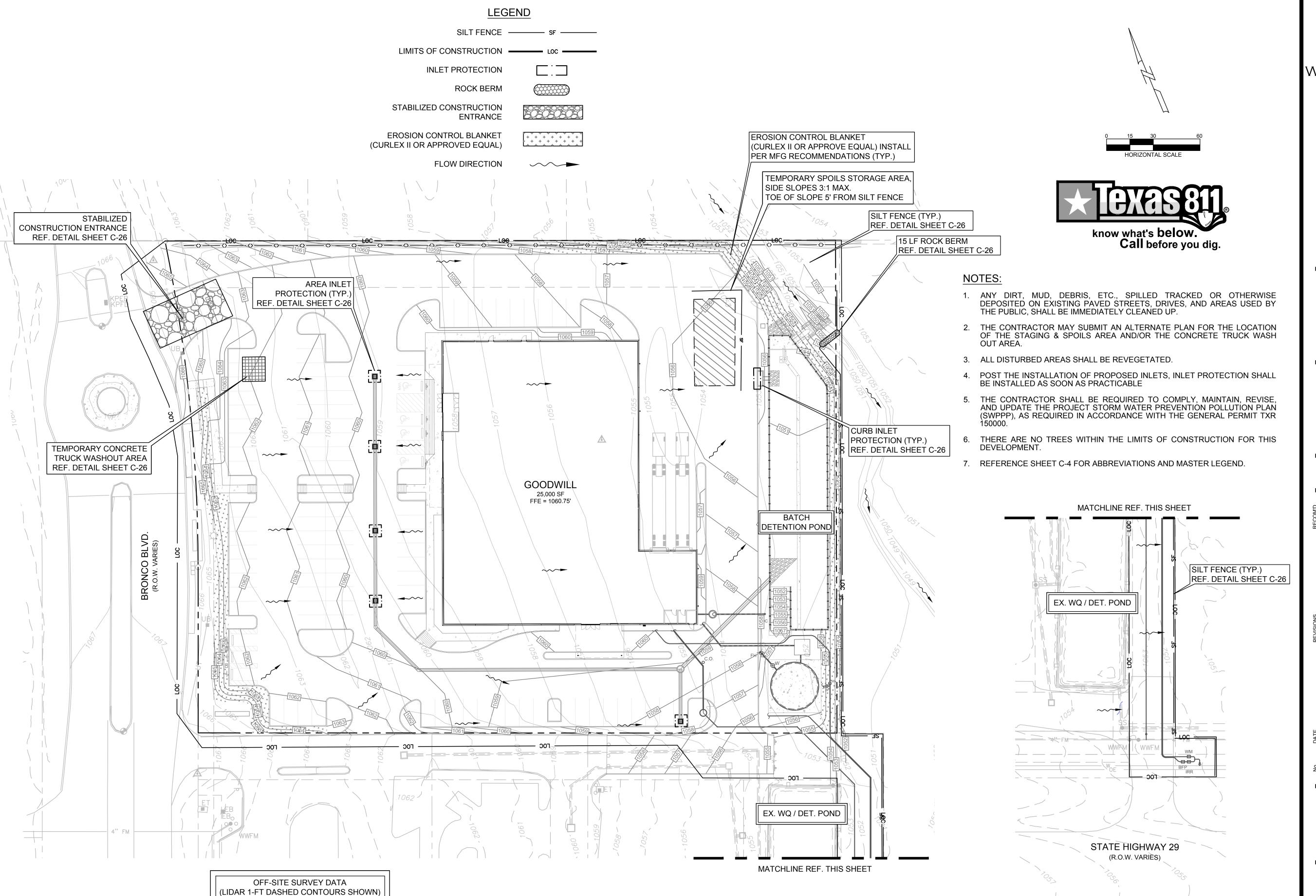
SHEET TITLE:

**EXISTING CONDITIONS & DEMOLITION PLAN** 

PROJECT NO.: 073-024

COLH PROJECT NO.:

SHEET NO.:



Wap Char ENGINEERS

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



\_\_\_\_

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

IENT:

CSW BRONCO, LP

DESIGNED: JRW DATE: 4/14/2023

GWOODH DATE: 4/14/2023

SHEET TITLE:

EROSION/ SEDIMENTATION CONTROL PLAN

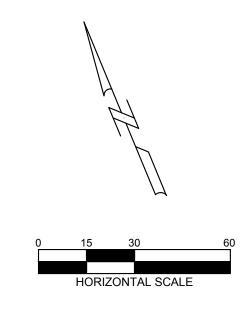
PROJECT NO.:

073-024

COLH PROJECT NO.:

SDP -

SHEET NO.:





#### LEGEND

DELINEATES ACCESSIBLE ROUTE .....

#### SITE PLAN INFORMATION:

LEGAL DESCRIPTION:

S9073 - SUNDANCE SQUARE, SECTION 2,

LOT 1, (3.0089 AC.)

SITE ADDRESS:

~BOC N:10218048.34

E:3056717.89

N:10218007.93

E:3056723.35

BATCH

DETENTION POND

PUMP HOUSE

70,315 GALLONS MIN.

FIRE SUPPRESSION

STORAGE TANK

(BY OTHERS)

∕−BOC N:10218148.60

E:3056537.40

5.00

BOC-

5.50 --

R40.00

∕− R15.00 *−*∕

9.00

N:10217876.23

E:3056401.67

N:10217874.59

E:3056396.74

N:10218086.77

E:3056523.15

9

4

BOC-

N:10217900.29

E:3056349.19

18.00 <del>| − 26.00 − | − 36.00 − | − 28.02 − | 18.00</del>

5.00

9.00

18.00

N:10218094.21

E:3056537.48

N:10218087.09 E:3056534.82

ACCESSIBLE RAMP (TYP.)

REF. DETAIL SHEET C-28

N:10217938.13

E:3056440.58

-BLDG CNR

N:10217926.34 E:3056445.43

GOODWILL

25,000 SF FFE = 1060.75'

4.00

25.00

\_\_\_EX.DRIVE AISLE +=-

└BLDG CNR

6' COMPATIBILITY FENCE

N:10218050.03

36.15

13.00

N:10217793.58

E:3056552.51

\_<del>\_\_\_\_\_\_</del>

BOC

N:10217788.84 E:3056548.28 \_ == -=- ==

∕− R10.00

∕-BOC

N:10217761.47

E:3056597.28

EX. WQ / DET. POND

5.50

E:3056617.03

REF. ARCH FOR DETAIL

NOTE TO CONTRACTOR:
CONTRACTOR TO PROVIDE TRAFFIC
CONTROL FOR CONSTRUCTION
WITHIN PUBLIC ROW

R15.00 -

BOC~ N:10218140.00

E:3056370.26

±8.50

WITHIN ISLAND

BLVC (RIES)

0 \$

BRONC (R.O.W.

CONC. PAVEMENT

REF. LANDSCAPE PLAN FOR IRRIGATION MODIFICATION

HEAVY DUTY PAVEMENT

R40.00 —

5.00

4.00

N:10217959.59

E:3056307.22

CONC. SIDEWALK

REF. DETAIL SHEET C-27

ELECTRIC VEHICLE

MONUMENT SIGN

(UNDER SEPARATE PERMIT)

CHARGING STATIONS

REF. DETAIL SHEET C-27

28.00

N:10218149.28

E:3056412.60

8

BOC~

N:10217924.27

E:3056317.25

BOC-

N:10218216.33 E:3056382.91

110 BRONCO BLVD.

PROPOSED USE: SITE ZONING:

RETAIL (GOODWILL)

OITE ZOMINO.

TYPE IIB

TYPE OF CONSTRUCTION: BUILDING OCCUPANCY:

R-2 (BUISNESS)

FIRE FLOW REQUIREMENT:

**BUILDING SET BACKS:** 

3,250 GPM (W/O FIRE SPRINKLER SYSTEM)

SIDE-7', REAR-15', FROM R.O.W.-25'

1,625 GPM (W/ FIRE SPRINKLER SYSTEM)

PROPOSED IMPERVIOUS COVER: 2.26 AC. (75.33%)

#### PARKING REQUIREMENTS:

RETAIL & WAREHOUSE:

1 SPACE PER 500 SF FOR WAREHOUSE (7,000 SF) = 14

1 SPACE PER 250 SF FOR RETAIL (18,000 SF) = 72

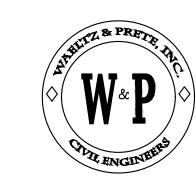
TOTAL PARKING REQUIRED = 86

#### PARKING PROVIDED:

STANDARD PARKING = 95
EV PARKING/CHARGING = 3
ACCESSIBLE PARKING (INCLUDES VAN ACCESSIBLE) = 4
TOTAL PARKING PROVIDED = 102

#### NOTES:

- 1. NO PORTION OF THIS SITE IS WITHIN THE FEMA 1% ANNUAL CHANCE FLOODPLAIN, HOWEVER A PORTION OF THIS TRACT LIES WITHIN ZONE 'X' AREAS OF MINIMAL FLOOD HAZARD PER PANEL NUMBER 48491C0485E, DATED DECEMBER 20, 2019
- 2. ALL PARKING CURB RETURNS ARE 3' RADII UNLESS OTHERWISE NOTED.
- 3. ALL SIDEWALK RAMP CURB RETURNS ARE 1' RADII UNLESS OTHERWISE NOTED.
- 4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 5. A 3 FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FIRE HYDRANTS.
- 6. TYPICAL PARKING SPACES SHALL BE 9' x 18' UNLESS OTHERWISE NOTED.
- 7. REFERENCE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS. DO NOT LAYOUT BUILDING / BUILDINGS BASED ON CIVIL DRAWINGS.
- 8. CONSTRUCTION STAKING SHALL BE PROVIDED BY THE CONTRACTOR.
- 9. ALL SIGNAGE WILL REQUIRE A SEPARATE SIGN PERMIT. APPROVAL OF A SITE DEVELOPMENT PERMIT OR BUILDING PERMIT DOES NOT CONSTITUTE APPROVAL OF SIGNAGE.
- 10. REFERENCE SHEET C-4 FOR ABBREVIATIONS AND MASTER LEGEND.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJECT:

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT

CSW BRONCO, LP

DRAWN: JRW DATE: 4/14/2023

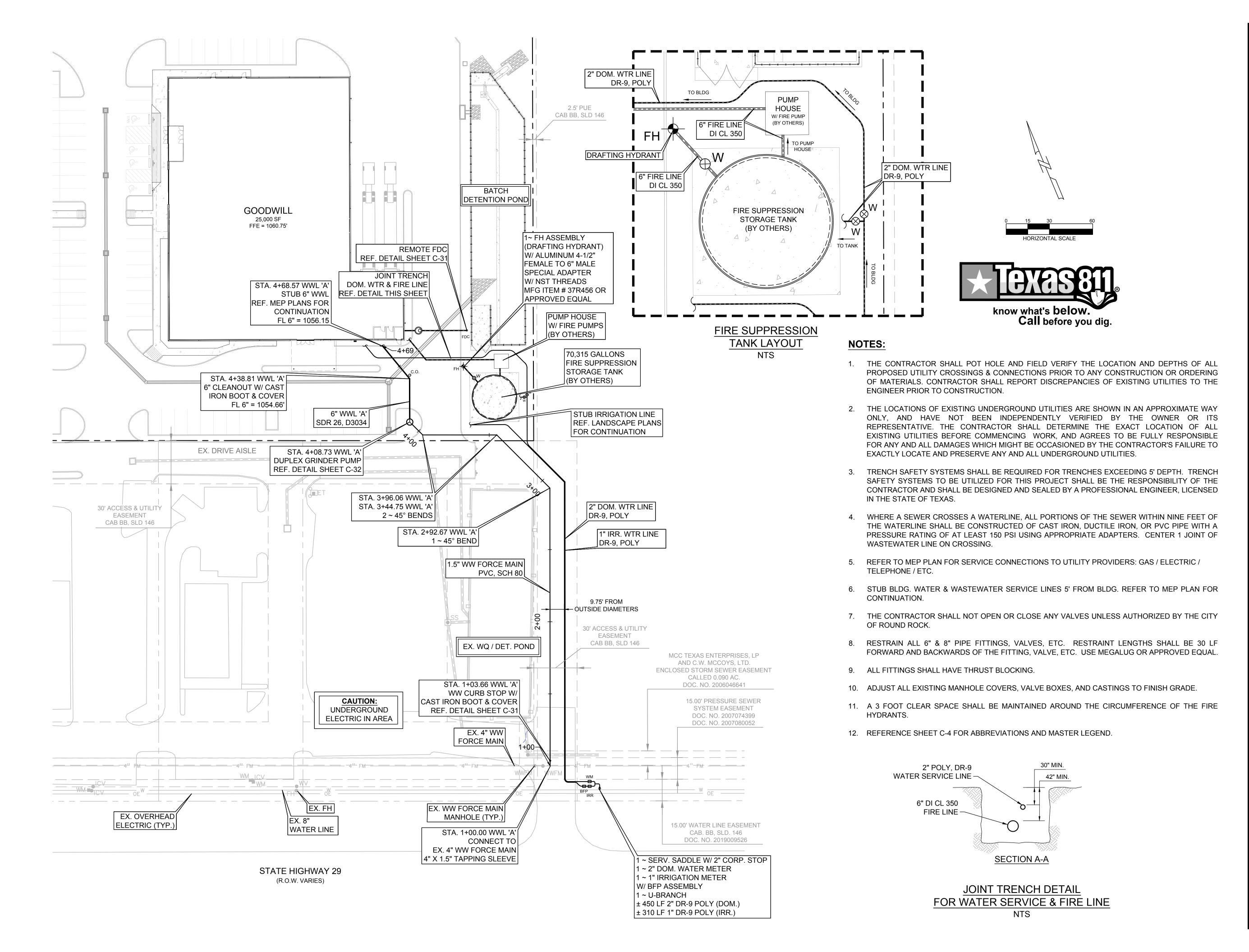
SHEET TITLE:

SITE & DIMENSIONAL CONTROL PLAN

PROJECT NO.: 073-024

COLH PROJECT NO.:

SHEET NO.:



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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



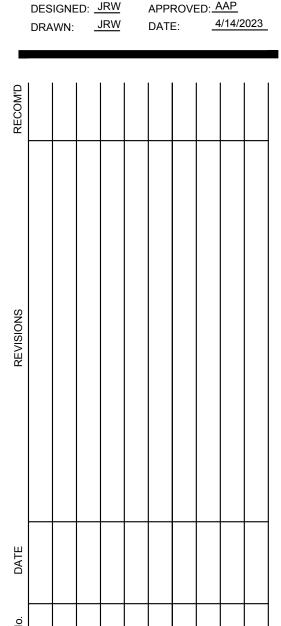
PPO IECT

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT:

CSW BRONCO, LP



SHEET TITLE:

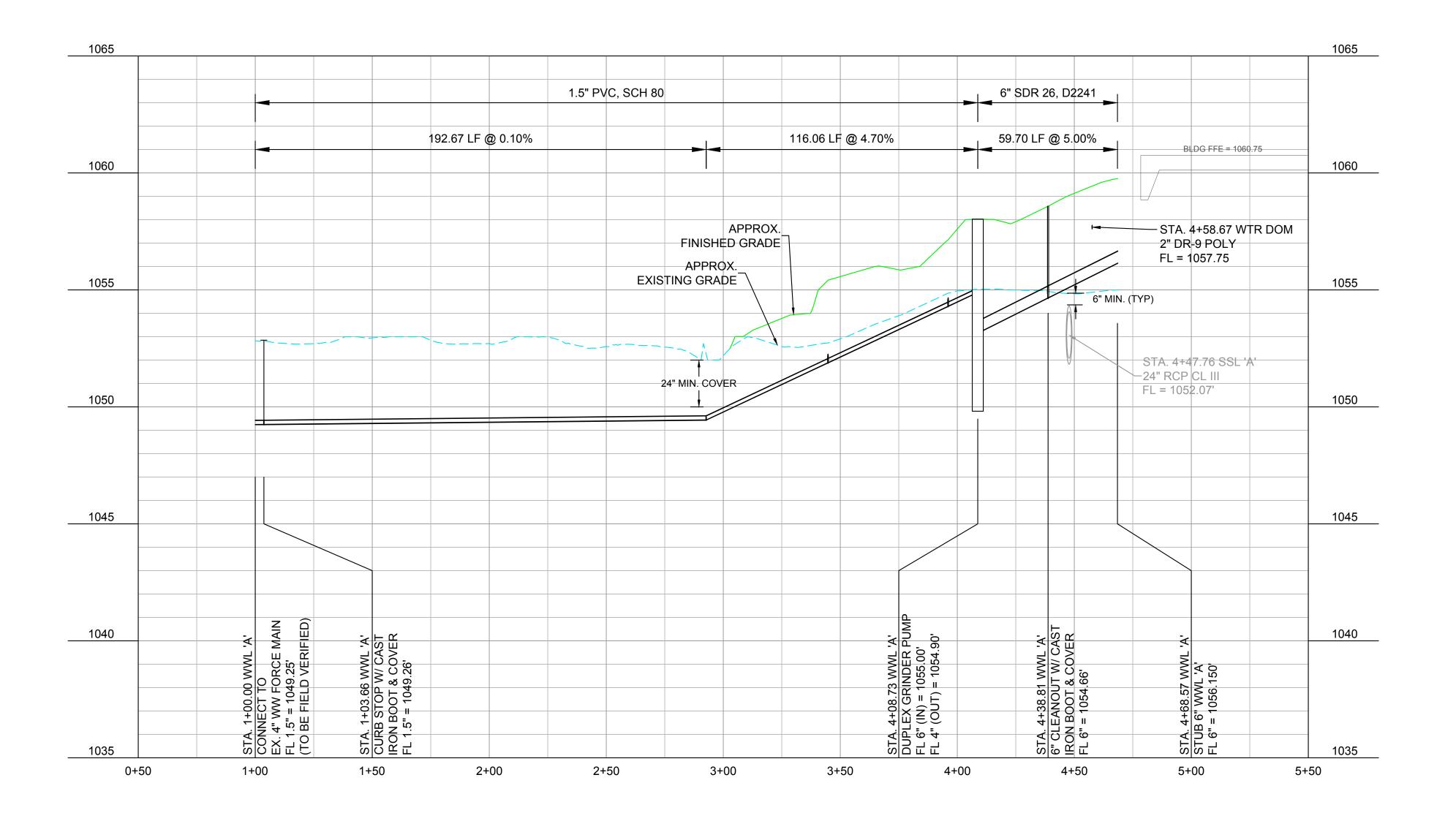
UTILITY PLAN (1 OF 2)

PROJECT NO.: 073-024

COLH PROJECT NO.:

SDP\_\_\_\_\_

SHEET NO.:



WASTEWATER LINE 'A' PROFILE

SCALE: HORZ. 1" = 30'

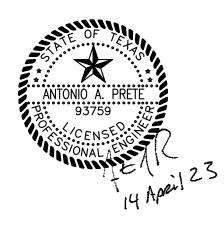
VERT. 1" = 3'

W&P

Cross ENGINEERS

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



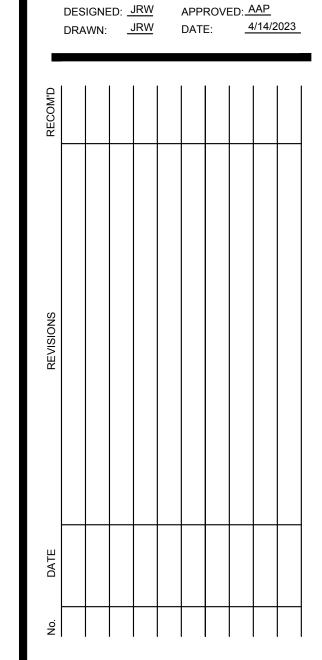
PROJEC

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CL

CSW BRONCO, LP



SHEET T

UTILITY PLAN (2 OF 2)

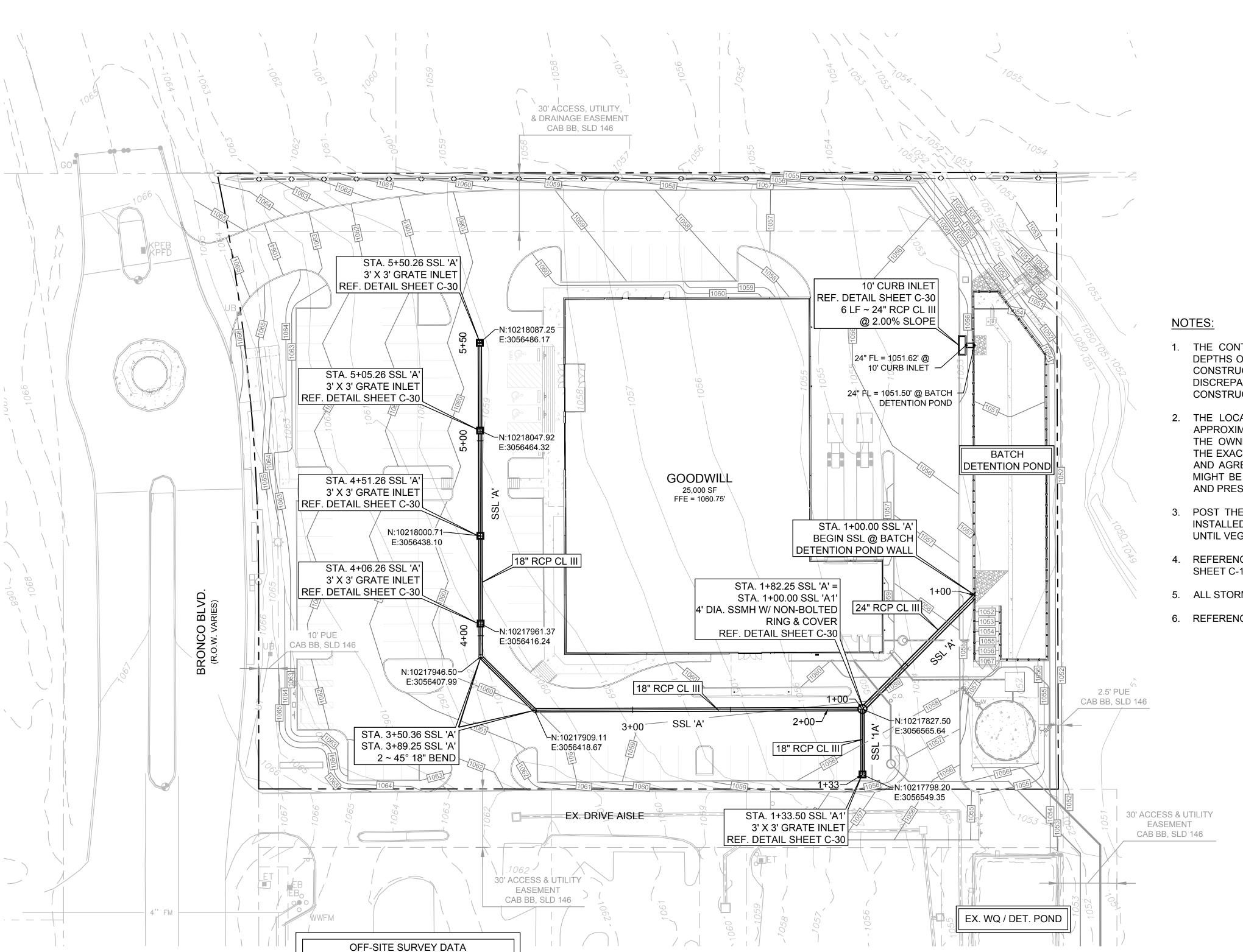
PROJECT NO.:

073-024

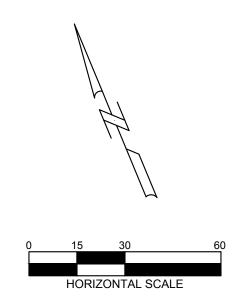
COLH PROJECT NO.:

SDP\_\_\_\_\_

SHEET NO.:

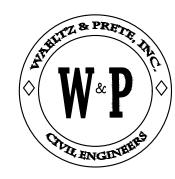


(LIDAR 1-FT DASHED CONTOURS SHOWN)



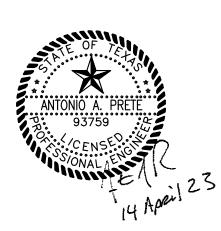


- THE CONTRACTOR SHALL POT HOLE AND FIELD VERIFY THE LOCATION AND DEPTHS OF ALL PROPOSED UTILITY CROSSINGS & CONNECTIONS PRIOR TO ANY CONSTRUCTION OR ORDERING OF MATERIALS. CONTRACTOR SHALL REPORT DISCREPANCIES OF EXISTING UTILITIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- 2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 3. POST THE INSTALLATION OF DRAINAGE INLETS, INLET PROTECTION SHALL BE INSTALLED AS SOON AS PRACTICAL, INLET PROTECTION SHALL REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED.
- 4. REFERENCE SHEET C-12 & C-13 FOR STORM SEWER PROFILES. REFERENCE SHEET C-14 FOR STORM SEWER CALCULATIONS.
- 5. ALL STORM SEWER BENDS AND WYES SHALL BE PREFABRICATED.
- 6. REFERENCE SHEET C-4 FOR ABBREVIATIONS AND MASTER LEGEND.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PPO IECT:

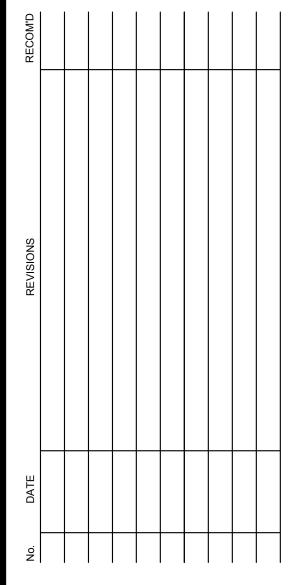
GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT:

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP
DRAWN: JRW DATE: 4/14/2023



SHEET TITLE:

SOTRM SEWER PLAN

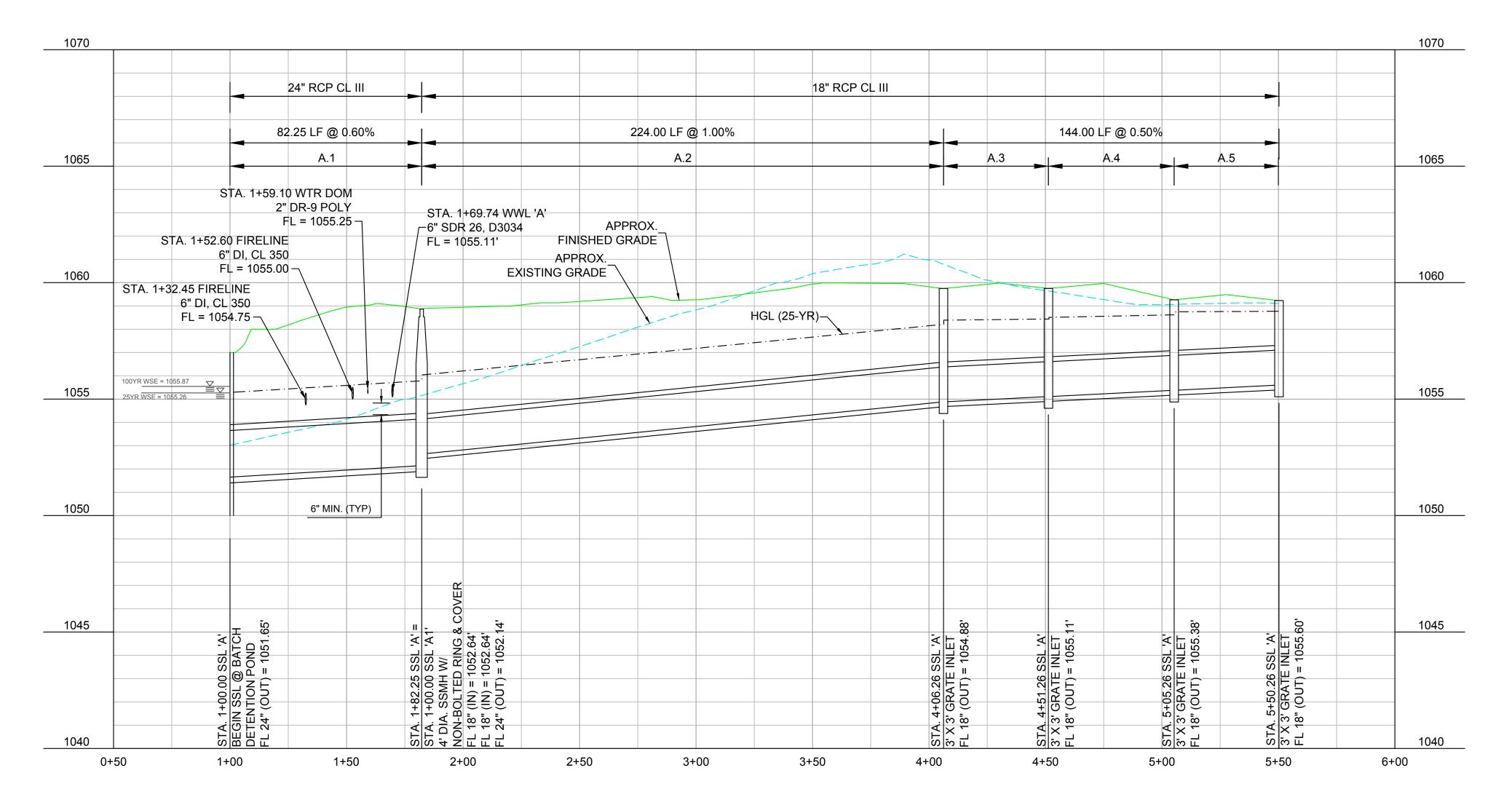
PROJECT N

073-024 COLH PROJECT NO.:

SHEET NO.:

#### NOTES:

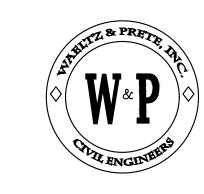
- 1. PRIOR TO CONSTRUCTING STORM SEWER LINE A MINIMUM OF 2' OF FILL EMBANKMENT SHALL BE PLACED ABOVE THE SOFFIT OF THE PIPE. ONCE COMPACTED, THE TRENCHING OPERATION MAY BEGIN.
- 2. REFERENCE SHEET C-14 FOR HYDRAULIC STORM SEWER CALCULATIONS.



STORM SEWER LINE 'A' PROFILE

SCALE: HORZ. 1" = 30'

VERT. 1" = 3'



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJEC

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIE

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP

DRAWN: JRW DATE: 4/14/2023

SHEET T

STORM SEWER PROFILE (1 OF 2)

PROJECT N

073-024

COLH PROJECT NO.:

SDP\_\_\_\_\_\_-

SHEET NO.:

## 1070 18" RCP CL III 33.50 LF @ 1.00% A1.1 1065 1065 APPROX. 1060 1060 FINISHED GRADE \_APPROX. EXISTING GRADE HGL (25-YR)— 1055 1055 1050 1050 1045 1045 1040 1040 0+50 1+50 2+00 1+00

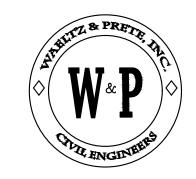
STORM SEWER LINE 'A1' PROFILE

SCALE: HORZ. 1" = 30'

VERT. 1" = 3'

#### NOTES:

- 1. PRIOR TO CONSTRUCTING STORM SEWER LINE A MINIMUM OF 2' OF FILL EMBANKMENT SHALL BE PLACED ABOVE THE SOFFIT OF THE PIPE. ONCE COMPACTED, THE TRENCHING OPERATION MAY BEGIN.
- 2. REFERENCE SHEET C-14 FOR HYDRAULIC STORM SEWER CALCULATIONS.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJECT

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIE

CSW BRONCO, LP

DESIGNED: JRW DATE: 4/14/2023

| DESIGNED: JRW DATE: 4/14/2023

SHEET T

STORM SEWER PROFILE (2 OF 2)

PROJECT NO.:

073-024

COLH PROJECT NO.:

SDP \_\_\_\_\_\_\_

#### STORM SEWER HYDRAULICS RESULTS TABLE:

#### 25 YR STORM EVENT:

LABEL [ID]	DIAMETER [in]	SYSTEM RATIONAL FLOW [cfs]	VELOCITY AVERAGE [ft/s]	INVERT DOWNSTREAM [ft]	DOWNSTREAM NODE	INVERT UPSTREAM [ft]	UPSTREAM NODE	SLOPE [ft/ft]	LENGTH [ft]	HYDRAULIC GRADE LINE [IN] [ft]	HYDRAULIC GRADE LINE [ft]
A.1	24	12.94	6.03	1051.65	BATCH DET.	1052.14	4' DIA SSMH	0.60	82.25	1053.01	1053.80
A.2	18	10.40	6.73	1051.64	4' DIA SSMH	1054.88	3' X 3' GRATE	1.00	24.00	1053.80	1056.07
A.3	18	6.06	4.08	1054.88	3' X 3' GRATE	1055.11	3' X 3' GRATE	0.50	45.00	1056.07	1056.18
A.4	18	4.16	2.86	1055.11	3' X 3' GRATE	1055.38	3' X 3' GRATE	0.50	54.00	1056.18	1056.32
A.5	18	2.21	1.74	1055.38	3' X 3' GRATE	1055.60	3' X 3' GRATE	0.50	45.00	1056.32	1056.48
A1.1	18	2.51	2.94	1051.64	4' DIA SSMH	1052.98	3' X 3' GRATE	1.00	33.50	1053.54	1053.87

#### 100 YR STORM EVENT:

LABEL		SYSTEM RATIONAL FLOW	VELOCITY AVERAGE	INVERT DOWNSTREAM	DOWNSTREAM NODE	INVERT UPSTREAM	UPSTREAM NODE	SLOPE	LENGTH	HYDRAULIC GRADE LINE [IN]	HYDRAULIC GRADE LINE
[ID]	[in]	[cfs]	[ft/s]	[ft]	NODE	[ft]	NODE	[ft/ft]	[ft]	[ft]	[ft]
A.1	24	18.75	7.09	1051.65	BATCH DET.	1052.14	4' DIA SSMH	0.60	82.25	1053.10	1053.95
A.2	18	15.12	7.45	1051.64	4' DIA SSMH	1054.88	3' X 3' GRATE	1.00	24.00	1053.95	1056.15
A.3	18	8.87	4.75	1054.88	3' X 3' GRATE	1055.11	3' X 3' GRATE	0.50	45.00	1057.28	1057.74
A.4	18	6.05	3.24	1055.11	3' X 3' GRATE	1055.38	3' X 3' GRATE	0.50	54.00	1057.74	1058.01
A.5	18	3.23	2.45	1055.38	3' X 3' GRATE	1055.60	3' X 3' GRATE	0.50	45.00	1058.01	1058.10
A1.1	18	3.63	3.46	1051.64	4' DIA SSMH	1052.98	3' X 3' GRATE	1.00	33.50	1053.80	1054.02

WAELTZ & PRETE, INC. CIVIL ENGINEERS

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



GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CSW BRONCO, LP

	ESIGNED: <u>.</u> RAWN: <u>.</u>	APPROVI DATE:	ED: <u>AAP</u> 4/14/2023
RECOM'D			
REVISIONS			

HYDRAULIC DATA

PROJECT NO.:

073-024

COLH PROJECT NO.:

SDP\_\_\_\_\_-

SHEET NO.:

C-14

#### LEGEND:

LIGHT DUTY

TYPICAL PARKING

SPACE STRIPING

CONC. SLAB FOR

(BY OTHERS)

3 ~ STREET END

BARRICADE MARKERS

REF. DETAIL SHEET C-28

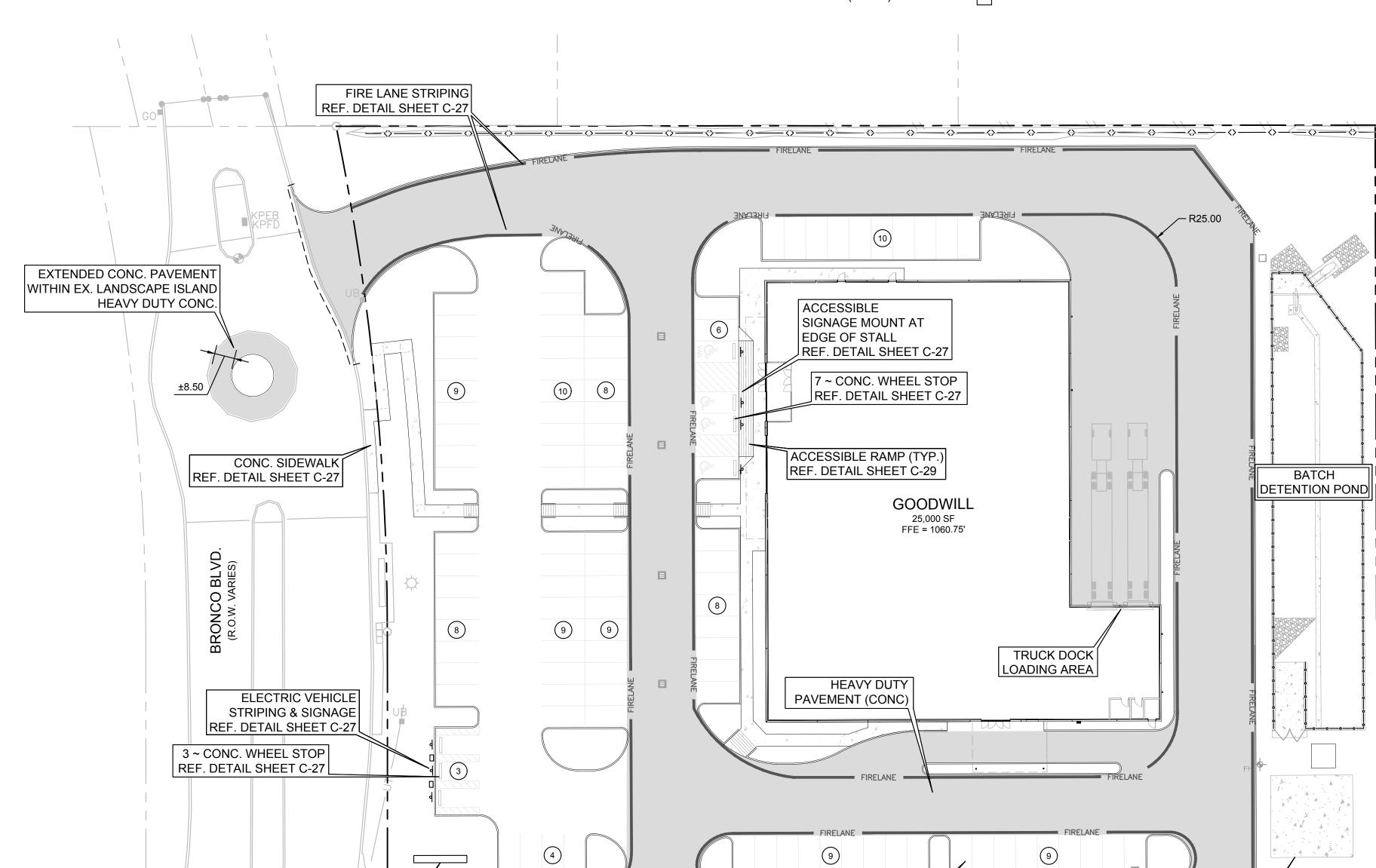
FIRE SUPPRESSION TANK

PAVEMENT (CONC)

REF. DETAIL SHEET C-27

HEAVY DUTY PAVEMENT (CONC)

LIGHT DUTY PAVEMENT (CONC)



MONUMENT SIGN

(UNDER SEPARATE PERMIT)

**CAUTION:** 

UNDERGROUND

ELECTRIC IN AREA

EX. DRIVE AISLE

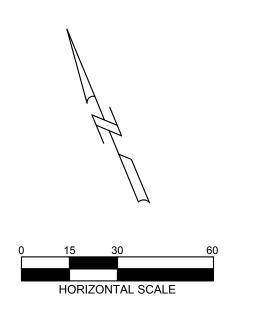
SAWCUT EX. PAVEMENT

REMOVE MIN. OF 1' EX. PAVEMENT

UNSATISFACTORY PAVEMENT

WHICHEVER IS GREATER (TYP.)

OR MIN. OF 1' PASSED THE EDGE OF





#### PAVEMENT SECTION RECOMMENDATIONS

RIGID PAVEMENT SECTION:	LIGHT	MEDIUM	HEAVY
JOINTED REINFORCED CONCRETE PAVEMENT 3600 PSI @ 28 DAYS	5.0"		6.5"
LIME STABILIZED SUBGRADE	8.0"		8.0"

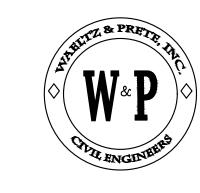
\*NOTE: ALTERNATIVE PAVEMENT SECTIONS ARE AVAILABLE PER GEOTECHNICAL REPORT STATED BELOW. COORDINATION BETWEEN OWNER, ENGINEER, & CONTRACTOR MUST BE CONDUCTED PRIOR TO ANY ALTERNATIVE PAVEMENT SECTIONS BEING UTILIZED, CONSTRUCTED, OR MATERIALS ORDERED.

#### NOTES:

. PAVEMENT SECTIONS WERE PREPARED BY PROFESSIONAL SERVICE INDUSTRIES, INC. THE CONSTRUCTION AND TESTING SHALL COMPLY WITH THEIR RECOMMENDATIONS FROM THE "PROPOSED GOODWILL RETAIL STORE" GEOTECHNICAL ENGINEERING REPORT.

P.O.C.: TYLER DENNEY, P.E. PHONE NO.: (512) 491-0200

- 2. LIGHT DUTY PAVEMENT AREAS ARE DEFINED AS PARKING STALLS & HEAVY DUTY PAVEMENT AREAS ARE DEFINED AS DRIVE AISLES AND FIRE LANES.
- 3. CONCRETE PAVING SHALL HAVE TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS AT INTERVALS NOT EXCEEDING 12.5 FEET. DEPTH OF JOINTS SHALL BE AT LEAST 1/4 OF THE SLAB THICKNESS. THE JOINTS MUST BE SAW CUT AS SOON AS THE CONCRETE HAS HARDENED AND WILL NOT REAR OR RAVEL WHEN CUT, WITHIN 6-12 HOURS OF PLACEMENT.
- SUPPORT REINFORCEMENT STEEL WITH CHAIRS OF PRECAST CONCRETE BLOCKS ABOUT 1 INCH BELOW THE BOTTOM OF THE PLANNED CONTRACTION JOINTS.
- 5. PROVIDE LOAD TRANSFER AT THE INTERFACE BETWEEN AREAS OF CONCRETE PLACED AT DIFFERENT TIMES USING TIED AND KEYED CONSTRUCTION JOINTS. PLACE CONSTRUCTION JOINT AT PLANNED CONTRACTION JOINT LOCATIONS.
- 6. ALL JOINTS SHALL BE SEALED IN ACCORDANCE WITH CORR SPECIFICATION ITEM 360.
- 7. STAGE PAVEMENT CONSTRUCTION SUCH THAT CONSTRUCTION TRAFFIC, INCLUDING CONCRETE TRUCKS, DO NOT TRAVEL ON NEWLY PLACED CONCRETE PAVEMENT UNTIL THE CONCRETE ACHIEVES AT LEAST 75% OF THE DESIGN STRENGTH, USUALLY 7 DAYS.
- 3. CONCRETE JOINTING FOR SIDEWALKS SHALL MATCH THE ADJACENT CURB OR PAVEMENT JOINTING.
- . SIDEWALKS ADJACENT TO CURB AND GUTTERS SHALL BE DOWELED TO PREVENT DIFFERENTIAL MOVEMENT.
- 10. SIDEWALKS AT DOORWAY LOCATIONS SHALL BE DOWELED TO THE BUILDING FOUNDATION TO PREVENT DIFFERENTIAL MOVEMENT.
- 11. CURBS WITHIN THE LIMITS OF CONCRETE PAVEMENT SHALL BE MONOLITHICALLY POURED WITH PAVEMENT.
- 12. FIRE ACCESS ALL WEATHER SURFACE (CONCRETE OR ASHPALT) IS REQUIRED FOR FIRE APPARTUS ACCESS ROADS BEFORE GOING VERTICAL WITH OR BRINGING CONBUSTIBLE MATERIALS TO THE CONSTRUCTION SITE. MUST SUPPORT 75,000 POUNDS. HYDRANTS AT THE CONSTRUCTION SITE SHALL BE IN SERVICE.
- 13. REFERENCE SHEET C-4 FOR ABBREVIATIONS AND MASTER LEGEND.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PPO IECT:

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT

CSW BRONCO, LP

			ED: <u> </u>	JRW JRW	APPI DATI	ROVI		<u>AAP</u> 1/14/2	023	
	DRA	WN:		JIXVV	DAII	E.;	_	71-772	.020	
M'D										
RECOM'D										
SZ										
REVISIONS										
RE										
DATE										
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SHEET TITLE:

PAVING, STRIPING, & SIGNAGE PLAN

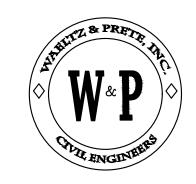
PROJECT NO.:

073-024 COLH PROJECT NO.:

SHEET NO.:

**LEGEND** NOTES: OFF-SITE SURVEY DATA 1. THE ACCESSIBLE ROUTE SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% RUNNING DELINEATES ACCESSIBLE ROUTE • • • • • • • • • • • • (LIDAR 1-FT DASHED CONTOURS SHOWN) SLOPE WITH THE EXCEPTION OF CURB RAMPS AND RAMP/ RAIL SECTIONS, WHICH SHALL NOT EXCEED 2% CROSS SLOPE NOR 8.33% RUNNING SLOPE. 2. REFERENCE SHEET C-4 FOR ABBREVIATIONS AND MASTER LEGEND. TC = -1056.70 EX. PAV = -±1066.10 1060.20 — 1061.70 TC = know what's below.

Call before you dig. **—** 1059.15 1064.00 GB TC = TC = -/ 1056.25 NG = **-** 1060.10 TC = 1060.60 — END LIMITS OF - BEGIN LIMITS OF MEET AND MATCH SIDEWALK TOEDOWN SIDEWALK TOEDOWN EX. PAVEMENT (TYP.) PAV = SIDEWALK TOEDOWN 1062.75 SW @ DOOR 1059,75 — REF. DETAIL SHEET C-28 PAV = = 1060.71 1060.10 1055.25 1.5% 3.0% EX. PAV = — TOI / TC = PAV = -±1066.00 1055.75 1060.60 1056.25 1059.50 1064.90 SW @ DOOR 1059.79 HPT\ = 1060.71 SW = -1665.05 ±1066.00 1059.50 TC = 1066.00 PAV = 1056.55 -1056.05 — 1060.60 GB – PAV = PAV = 1060.10 1059.71 1056.25 BATCH TC = -DETENTION POND GOODWILL 1056.55 25,000 SF | sw =\ -FFE = 1060.75' SW = **→ 10**60.75 \ 1062.00 1062.50 1060.25 TĠ = — 1060.50 1062.60 TC = 1057.25 PAV = 1059.55 — 2.0% 1056.75 HPT PAV = -/ 1056.75 PAVEMENT & SIDEWALK FLUSH PAV = - 1060.30 TAPER CURB FROM CONC @ DOOR = 1060.71 7 TAPER CURB FROM TC = TC = 6" TO 0" IN 3 LF 3.0% 1060.25  $\neg$ - 1062.60 6" TO 0" IN 3 LF FG = 1059,25 1055 - 1060.35 **/** 1060.30 PUMP HOUSE FFE = 1057.00 TC = -/ 1059.95 1060.25 1.0% 1056.35 CONC. SLAB FFE = 1056.50 — TC = 1060.60 TC = TC = -1060.10 └─ PAV = 1060.35 L TC = 1056.85 - TC = TC ≠ 1062.35 -1063.00  $\neg$ GB - TC = 1063.00 1058.20 MEET AND MATCH EX. PAVEMENT (TYP.) 1055.45 NOTE TO CONTRACTOR:
ADJUST EX. CONC. COVER
TO FINISHED GRADE



## WAELTZ & PRETE, INC. CIVIL ENGINEERS

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



PROJECT:

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT:

CSW BRONCO, LP

DATE: <u>4/14/2023</u>

RECOM'D						
REC						
REVISIONS						
DATE						
No.						

SHEET TITLE

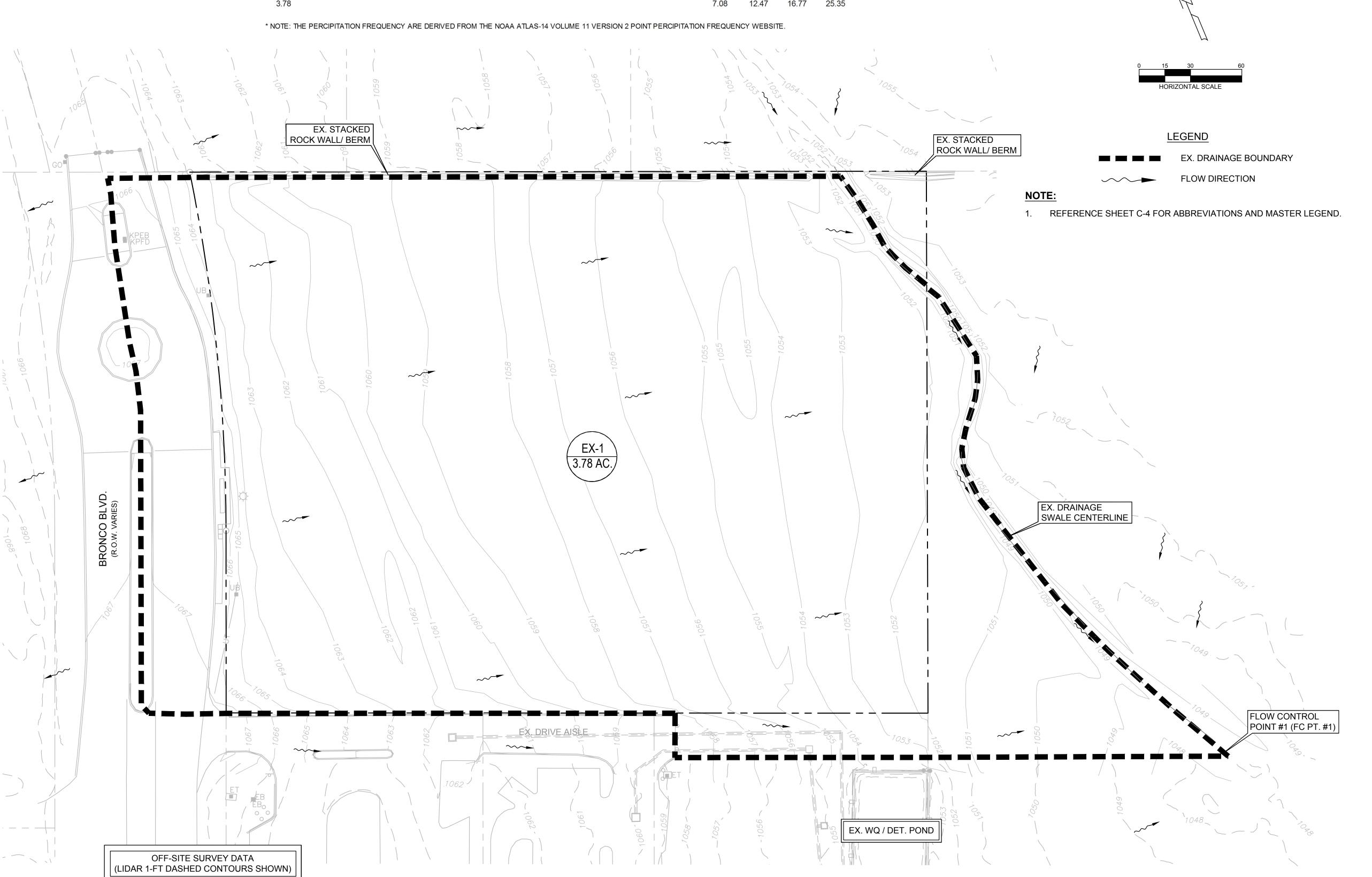
GRADING PLAN

PROJECT NO.: 073-024

COLH PROJECT NO.: SDP\_

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

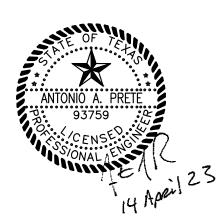
			ESTIMATED												
SUB-BASIN	AREA	$T_c$	IMPERV.	$C_2$	C <sub>10</sub>	$C_{25}$	$C_{100}$	$l_2$	I <sub>10</sub>	l <sub>25</sub>	I <sub>100</sub>	$Q_2$	$Q_{10}$	$Q_{25}$	$Q_{100}$
DESIGNATION	[acres]	[min.]	+/- [%]					[in/hr]	[in/hr]	[in/hr]	[in/hr]	[cfs]	[cfs]	[cfs]	[cfs]
EX-1	3.78	7.5	10	0.34	0.40	0.44	0.51	5.51	8.25	10.08	13.15	7.08	12.47	16.77	25.35
	2 70											7.00	10.47	16 77	25.25





WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJECT:

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT

CSW BRONCO, LP

 DESIGNED:
 JRW
 APPROVED:
 AAP

 DRAWN:
 JRW
 DATE:
 4/14/2023

RECOM'D						
REVISIONS						
REV						
DATE						
No.						

SHEET TITLE:

EXISTING DRAINAGE AREA MAP

PROJECT NO.:

073-024

COLH PROJECT NO.:

SDP\_\_\_\_-

SHEET NO.:

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

SUB-BASIN	AREA	T <sub>c</sub>	ESTIMATED IMPERV.	$C_2$	C <sub>10</sub>	C <sub>25</sub>	C <sub>100</sub>	lo	l. o	los	I <sub>100</sub>	$Q_2$	Q <sub>10</sub>	Q <sub>25</sub>	Q <sub>100</sub>
DESIGNATION		[min.]	+/- [%]	<b>O</b> <sub>2</sub>	<b>O</b> 10	25	0100	l <sub>2</sub> [in/hr]	l <sub>10</sub> [in/hr]	l <sub>25</sub> [in/hr]	[in/hr]	[cfs]	[cfs]	[cfs]	[cfs]
DA-1	0.27	5.0	70	0.61	0.69	0.73	0.82	6.13	9.17	11.20	14.60	1.01	1.71	2.21	3.23
DA-2	0.21	5.0	90	0.70	0.78	0.83	0.92	6.13	9.17	11.20	14.60	0.90	1.50	1.95	2.82
DA-3	0.21	5.0	90	0.70	0.78	0.83	0.92	6.13	9.17	11.20	14.60	0.90	1.50	1.95	2.82
DA-4	0.51	5.0	75	0.64	0.71	0.76	0.84	6.13	9.17	11.20	14.60	2.00	3.32	4.34	6.25
DA-5	0.27	5.0	90	0.70	0.78	0.83	0.92	6.13	9.17	11.20	14.60	1.16	1.93	2.51	3.63
DA-6	1.43	5.0	95	0.73	0.81	0.86	0.94	6.13	9.17	11.20	14.60	6.40	10.62	13.77	19.63
DA-7	0.25	5.0	0	0.29	0.35	0.39	0.45	6.13	9.17	11.20	14.60	0.44	0.80	1.09	1.64
OS-1	0.63	5.0	15	0.36	0.42	0.46	0.54	6.13	9.17	11.20	14.60	1.39	2.43	3.25	4.97
	2 70											14.21	22.91	21.07	44.00

DRAWN: <u>JRW</u> DATE: <u>4/14/2023</u>

WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665

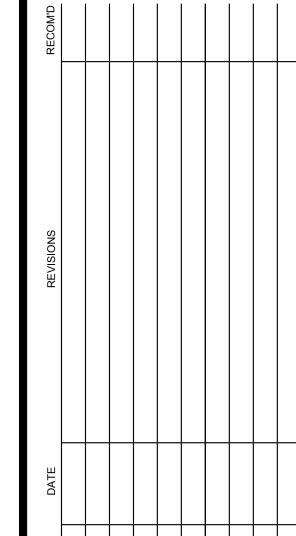
PH (512) 505-8953 FIRM TX. REG. #F-10308

GOODWILL

LIBERTY HILL

110 BRONCO BLVD.

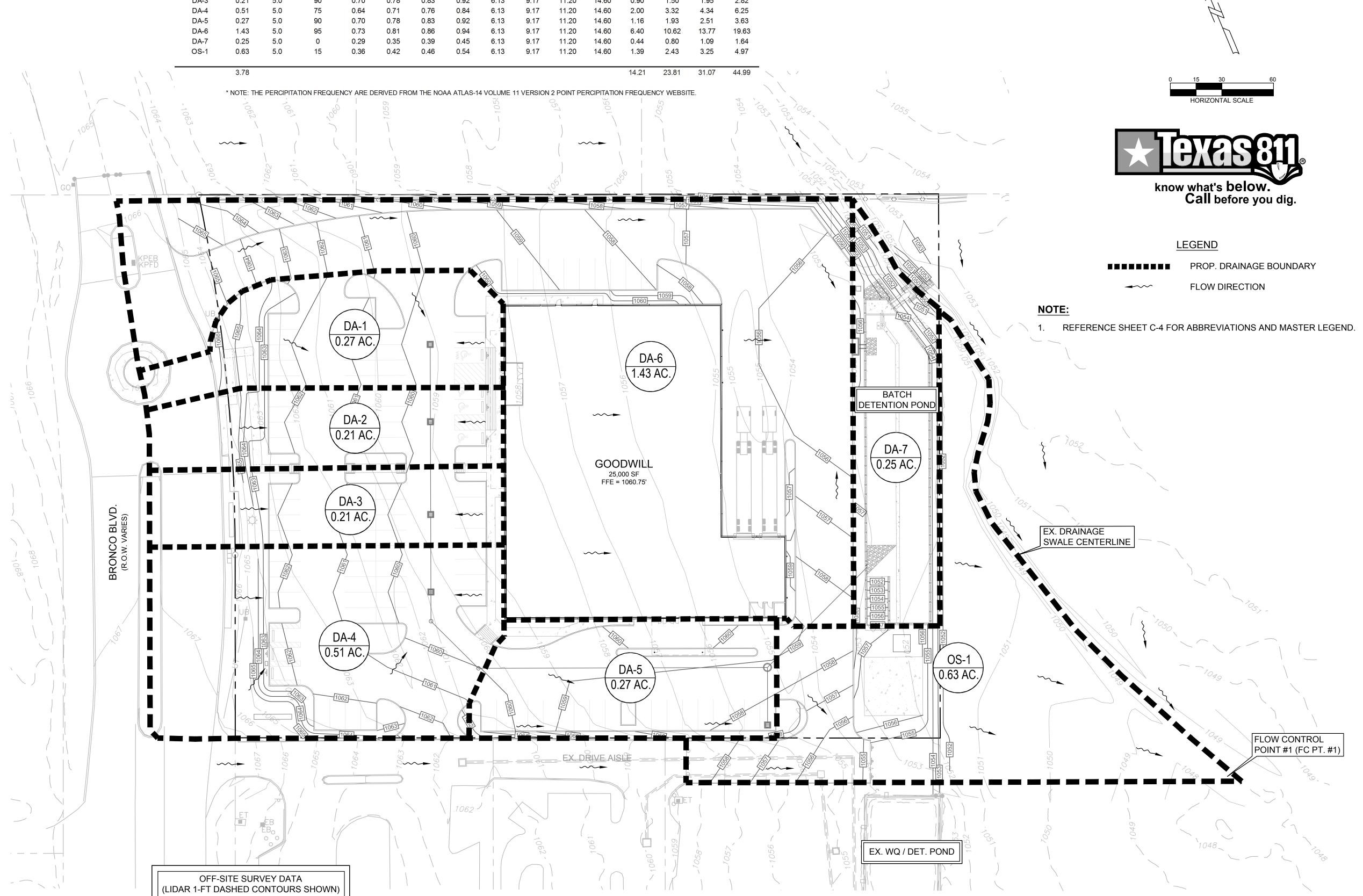
CSW BRONCO, LP

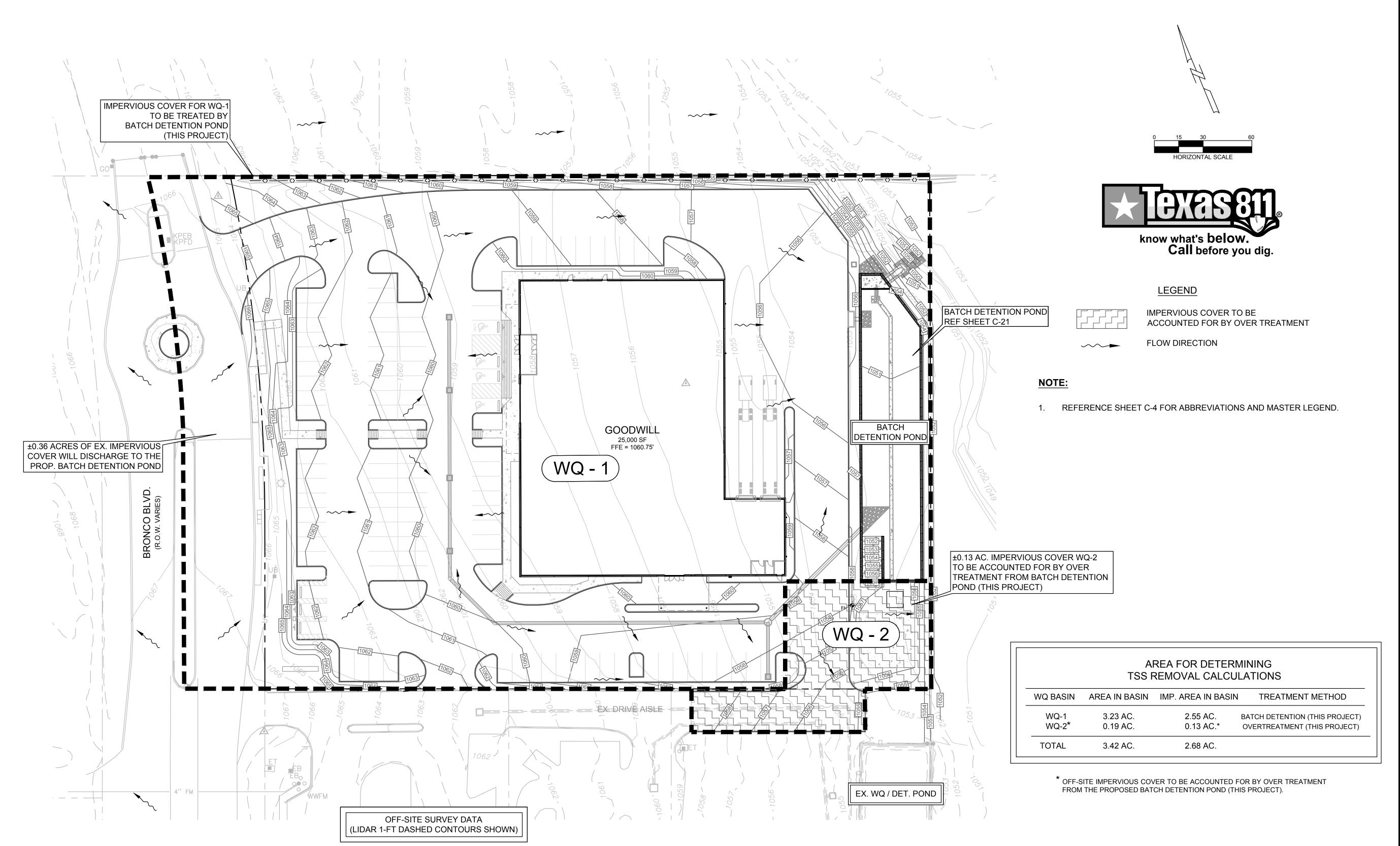


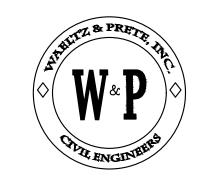
PROPOSED DRAINAGE AREA MAP

073-024 COLH PROJECT NO.:
SDP\_\_\_\_\_

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



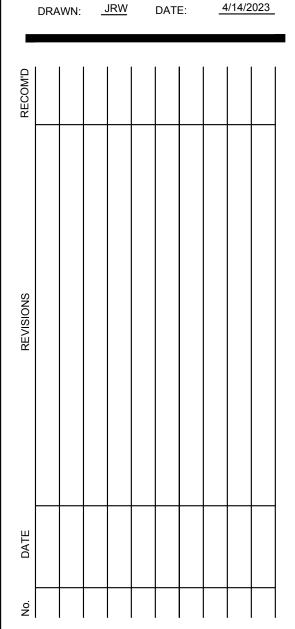
PROJECT

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT:

CSW BRONCO, LP



SHEET TITL

WATER QUALITY SUMMARY

PROJECT NO.:

073-024

SHEET NO.:

## OVERALL TSS REMOVAL CALCULATIONS IN ACCORDANCE WITH TCEQ REGULATIONS: RG-348

## Required Load Reduction (L<sub>M</sub>)- Total Project Area:

Eq 3.2 $L_m = 28.9 (A_N * P)$		
County =	Williamson	
P = Average Annual Precipitation	32.0	[in]
A <sub>tot-prj</sub> = Total project area included in the plan	3.42	[ac]
A <sub>pre</sub> = Predevelopment impervious area	0.36	[ac]
A <sub>post</sub> = Postdevelopment impervious area	2.68	[ac]
$A_N$ = Area of the net increase of impervious area	2.32	[ac]
IC <sub>pre</sub> = Fraction of impervious cover (Pre Development)	10.53	[%]
IC <sub>post</sub> = Fraction of impervious cover (Post Development)	78.36	[%]
L <sub>M</sub> = Req'd TSS removal ( <b>80%</b> of Increase)	2,019	[lbs]

## BATCH DETENTION POND REMOVAL CALCULATIONS

IN ACCORDANCE WITH TCEQ REGULATIONS: RG-348

#### Load Removed by BMP (L<sub>R</sub>):

#### Fraction of Annual Runoff to Treat the subbasin (F):

Eq 3.8  $L_R = (BMP Eff) * P (A_1*34.6 + A_P*0.54)$ 

Eq 3.9  $F = L_M / \sum L_R$ Desired  $L_M = \text{Req'd TSS removal (80\% of Increase typical)}$   $L_R = \text{Load removed from } \text{each BMP}$ 2,019 [lbs] F = Fraction of the Annual Rainfall treated by BMP0.78

#### Water Quality Volume Required (WQV<sub>req</sub>):

Eq 3.10 WQV = d \* Rv \* A

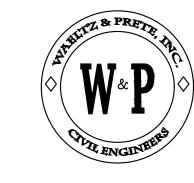
Eq 3.11  $R_v = 1.72(IC)^3 - 1.97(IC)^2 + 1.23(IC) + .02$   $WQV_{req} = WQV + S$  F = Fraction of the Annual Rainfall treated by BMP d = Rainfall Depth required to capture A = Portion of Site contributing to BMP IC = Fraction of Impervious Cover  $R_v = Runoff Coefficient$ 

WQV = Water quality volume7,147 [ft³]S = 20% Increase for Sediment Storage1,429 [ft³]WQV<sub>req</sub> = Water quality volume required (With 20% increase)8,576 [ft³]

0.78 1.00

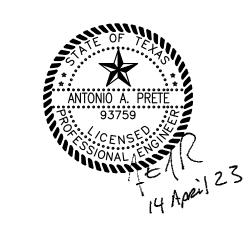
3.23

0.79 0.61 [ac]



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJECT

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIE

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP

DRAWN: JRW DATE: 4/14/2023

SHEET TITL

WATER QUALITY CALCULATIONS

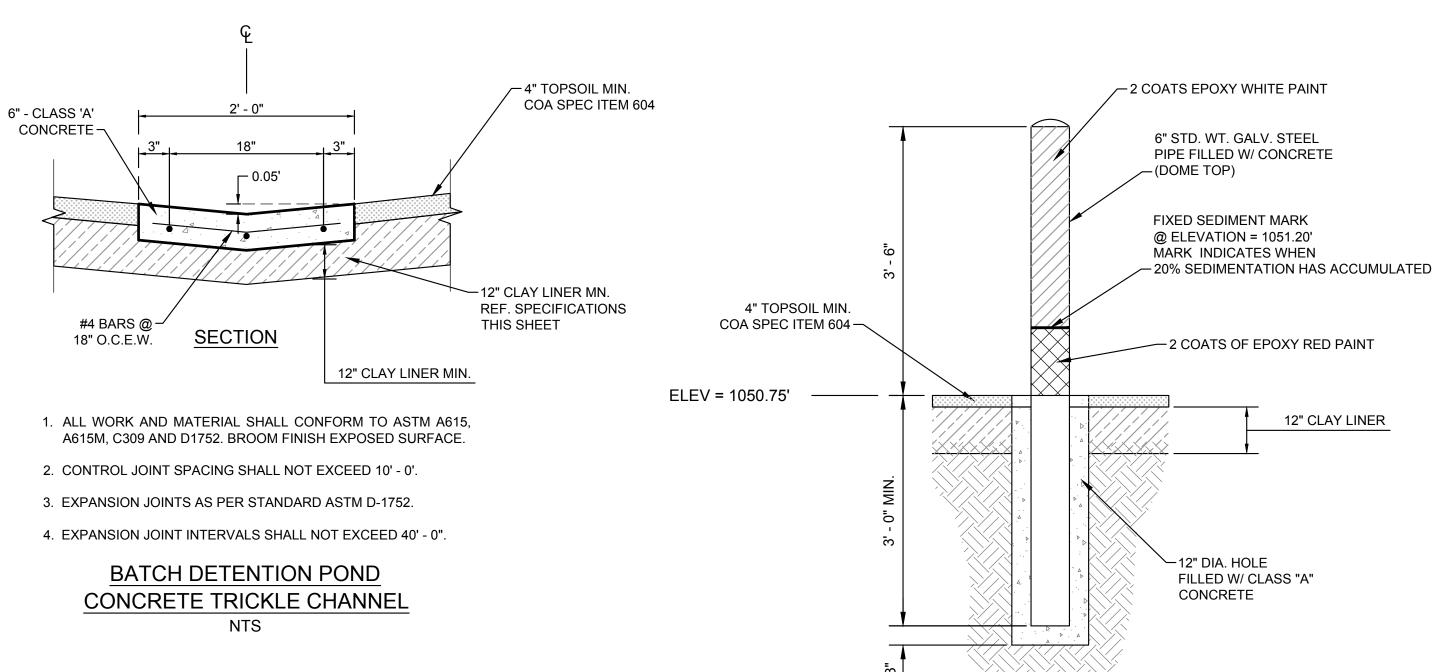
PROJECT NO.: 073-024

COLH PROJECT NO.:
SDP\_\_\_\_

SHEET NO.:

C-20

K:\CAD\073-024 Goodwill Liberty Hill\4-CAD\PLANS\073-024 WQ.dwg. 4/14/2023 11:07:12 AM, 1:1, JRW



NOTE:

12" CLAY LINER SHALL BE INSTALLED IN LIFTS NO GREATER THAN 6" AND AS RECOMMENDED BY A LICENSED GEOTECHNICAL ENGINEER AND SHALL BE KEPT MOIST AT ALL TIMES TO AVOID CRACKING. THE GEOTECHNICAL ENGINEER SHALL MONITOR THE INSTALLATION OF THE CLAY LINER AND TEST IT TO CERTIFY THAT IT WILL NOT LEAK. SPECIFICATIONS ARE LISTED ON THE SHEET.

know what's below.

Call before you dig.

- SEE SHEET C-24 FOR BATCH DETENTION POND CONTROLLER LOGIC AND BLOCK DIAGRAMS.
- CLEARLY VISIBLE ALARM SYSTEM TO BE PROVIDED WITH BATCH DETENTION CONTROLLER TO INDICATE SYSTEM MALFUNCTION. ALARM SYSTEM TO FEATURE SUNLIGHT VISIBLE LED ALARM LIGHT.
- SIGN TO BE POSTED WITH PHONE NUMBERS OF THE OWNER AND APPROPRIATE TCEQ REGIONAL OFFICE.
- SEE TXDOT SPECIAL SPECIFICATION 7130 FOR BATCH DETENTION MATERIAL, EQUIPMENT, AND CONSTRUCTION. A COPY OF TXDOT SPECIAL SPECIFICATION 7130 IS INCLUDED IN THE CONTRIBUTING ZONE PLAN FOR THIS DEVELOPMENT.

#### **CLAY LINER SPECIFICATIONS** FIXED CONCRETE SEDIMENT MARKER Specification Unit NTS

1 x 10 <sup>-6</sup>

Not less than 15

Not less than 30 Clay

Not less than 30 Clay

Cm/Sec

Property

of Clay

Permeability

Plasticity Index

Liquid Limit of Clay

Particles Passing

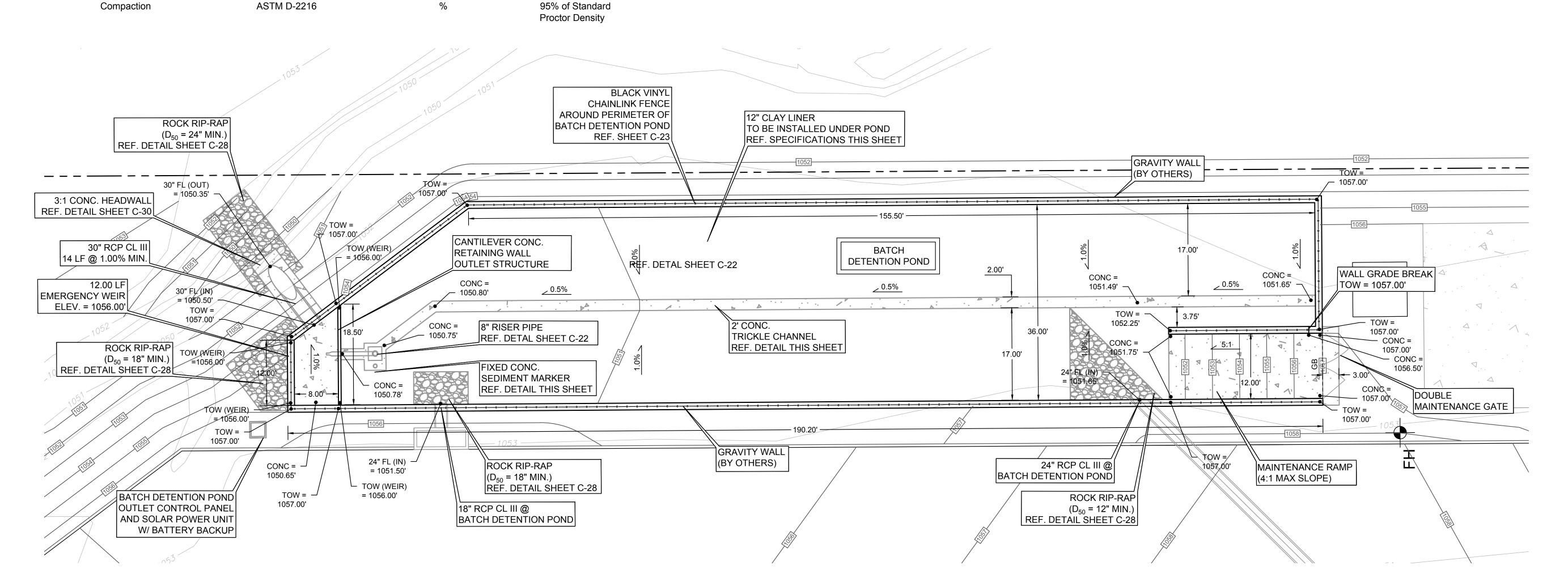
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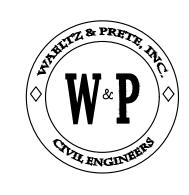
ASTM D-423 & D-424

ASTM D-2434

**ASTM D-2216** 

ASTM D-422





WAELTZ & PRETE, INC. CIVIL ENGINEERS

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

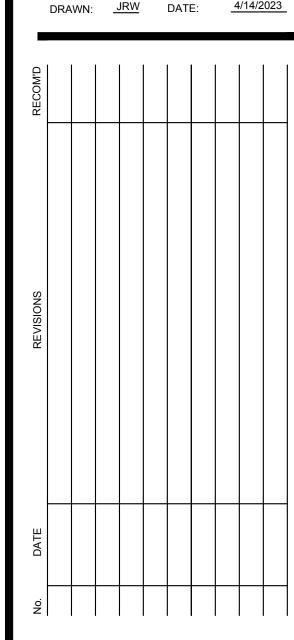


GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP



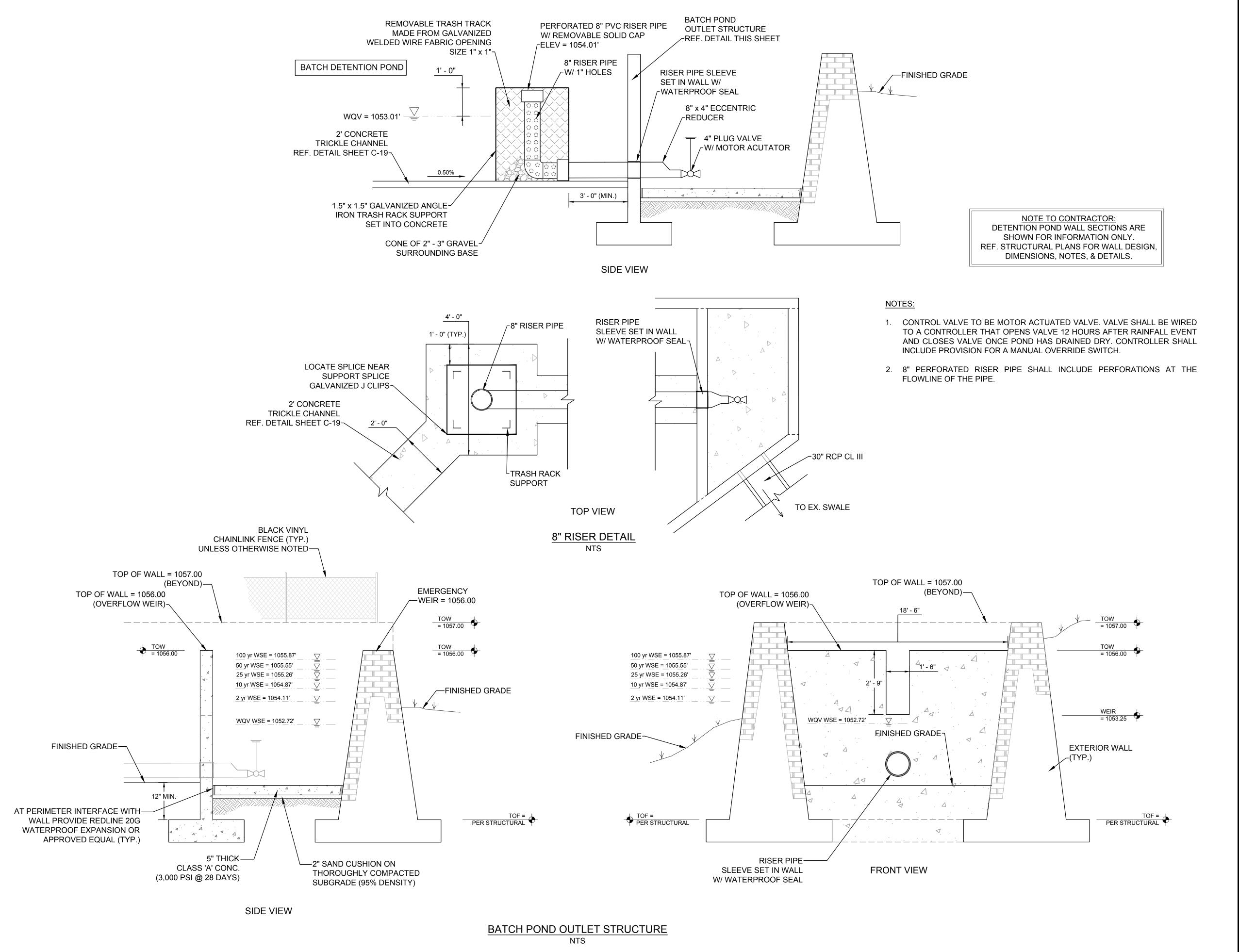
SHEET TITLE:

WATER QUALITY BATCH DETENTION

PROJECT NO.: 073-024

COLH PROJECT NO.:

SHEET NO.:



W&P. Charles Angineres

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



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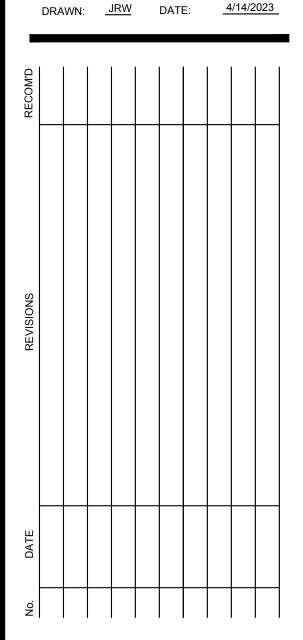
GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP

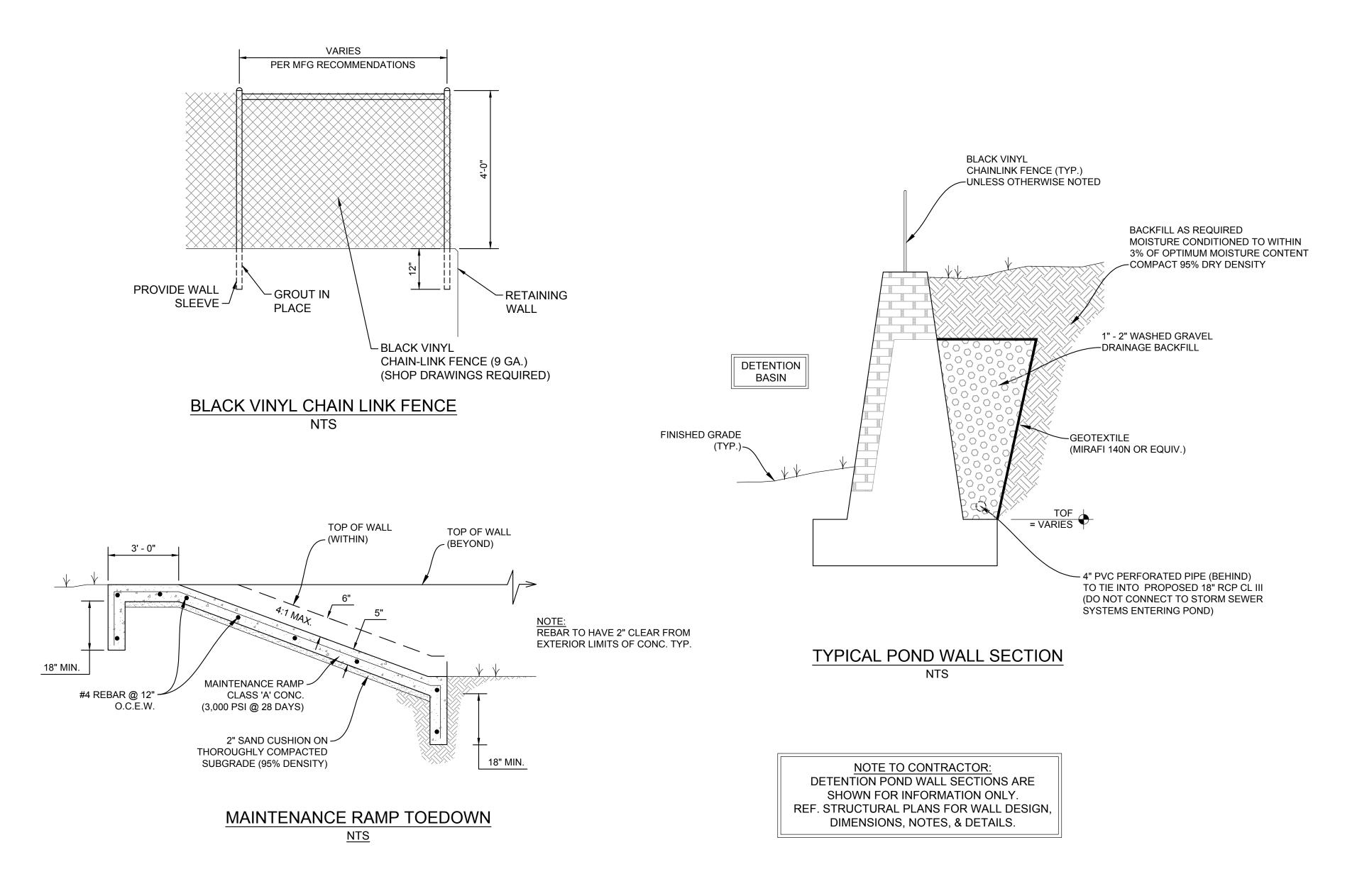


BATCH
DETENTION
POND DETAILS
(1 OF 3)

PROJECT NO.: 073-024

COLH PROJECT NO.:

SHEET NO.:



### BLACK VINYL CHAINLINK FENCE (TYP.) UNLESS OTHERWISE NOTED TOP OF WALL VARIES WITH AT PERIMETER INTERFACE WITH WALL SLOPE OF MAINTENANCE RAMP PROVIDE REDLINE 20G WATERPROOF REF. STRUCTURAL PLANS FOR -EXPANSION OR APPROVED EQUAL -NOTES AND DETAILS MAINTENANCE RAMP NOTE: PROVIDE TRANSVERSE CONTROL 6" MIN. — #4 REBAR @ 12" JOINTS @ 10' O.C. INTERVALS (MAX.) O.C.E.W. $\downarrow \downarrow \qquad \downarrow$ MAINTENANCE RAMP 2" SAND CUSHION ON -CLASS 'A' CONC.

MAINTENANCE RAMP

NTS

(3,000 PSI @ 28 DAYS)

THOROUGHLY COMPACTED

SUBGRADE (95% DENSITY)

# SEE NOTES \_ 2'-0" 3" (TYP)

SEE NOTES

SECTION

- 1. USE SAME NUMBER OF MATTES AS NORMAL WALL REINFORCING.
- 2. BAR SIZE TO BE SAME AS LARGEST DIAMETER BAR IN NORMAL

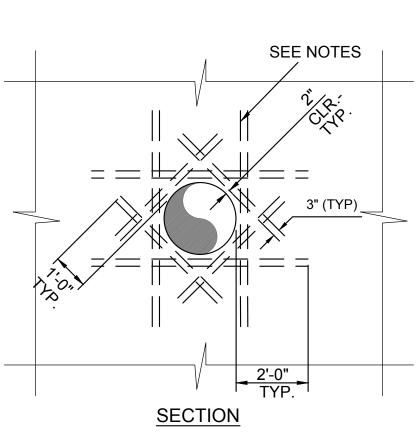
## EXTRA REINFORCEMENT AT OPENINGS

NTS

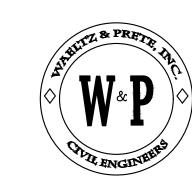
#### **RETAINING WALL NOTES & SPECIFICATIONS**

#### **GENERAL NOTES:**

- 1. ANY CONCRETE CONSTRUCTION OF THE RETAINING WALL SHALL COMPLY WITH THE CITY OF ROUND ROCK SPECIFICATIONS, SERIES 400, "CONCRETE STRUCTURES AND MISCELLANEOUS CONCRETE".
- THE CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCE FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS.
- JOB SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL, AT A MINIMUM, ADHERE TO OCCUPATIONAL SAFETY AND HEALTH (OSHA) REGULATIONS TO PROTECT PERSONNEL
- WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.
- OPTIONS ARE FOR THE CONTRACTOR'S CONVENIENCE, IF AN OPTION IS CHOSEN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES AND SHALL COORDINATE ALL DETAILS.
- WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, NOTES, AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
- CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE POND. MEASURES SHALL BE TAKEN TO PREVENT PONDING OF WATER WITHIN THE FOUNDATION AREA.
- FINAL SUBGRADE SHALL BE PROOFROLLED WITH A 15 TON PNEUMATIC ROLLER OR EQUIVALENT EQUIPMENT TO IDENTIFY WEAK AREAS. WEAK AREAS SHALL BE REMOVED AND REPLACED WITH SOILS WITH SIMILAR CLASSIFICATION, MOISTURE CONTENT AND DENSITY, AS THE ADJACENT IN-SITU SOILS EXPOSED LIMESTONE FILLED WITH CRUSHED LIMESTONE BASE MATERIAL. PRIOR TO FOOTING CONSTRUCTION, THE SUBGRADE PREPARATION SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
- OVER EXCAVATIONS SHALL BE BROUGHT TO THE CORRECT LINES AND GRADES WITH CONCRETE. THIS WILL BE AT THE CONTRACTOR'S EXPENSE.
- 10. BACKFILL SHALL COMPLY WITH THE GEOTECHNICAL INVESTIGATION. BACKFILLING SHALL NOT BEGIN UNTIL THE WALL HAS CURED FOR 7 DAYS AND REACHED 75% OF THE TOTAL 28 DAY COMPRESSIVE STRENGTH. FORMS SHALL REMAIN IN PLACE DURING THE CURING PERIOD.
- 11. BACKFILL PLACEMENT SHALL BE CONTROLLED TO PREVENT OVER COMPACTION OR DAMAGE TO THE STRUCTURE.
- 12. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH SCI 318, UNLESS OTHERWISE NOTED.
- 13. LAP SPLICES SHALL BE 36 BAR DIAMETERS, UNLESS OTHERWISE NOTED.
- 14. A TREMIE SHALL BE USED TO PLACE CONCRETE WHERE THE FALL IS GREATER THAN 5 FEET.
- 15. REINFORCING STEEL SHALL BE ASTM 615 (FY =60 KSI), GRADE 60.
- 16. REBAR SHALL BE SUPPORTED OR PLACED ON CHAIRS AT THE POSITION REQUIRED BY THE DRAWINGS.
- 17. NO FIELD CUTTING REINFORCEMENT BY TORCH WILL BE ALLOWED. ACCEPTABLE CUTTING SHALL BE SHEARING OR SAWING.
- 18. WATERSTOPS SHALL COMPLY WITH THE CORR SPEC ITEM 416.
- 19. ALL VISIBLE CONCRETE SURFACES SHALL RECEIVE A GRADE I, CLASS A FINISH, IN ACCORDANCE WITH CORR SPEC ITEM 411.
- 20. GEOTECHNICAL REPORT "ATLIN VILLAGE" PREPARED BY RABA KISTNER CONSULTANTS, INC UTILIZED FOR POND & RETAINING WALL DESIGN.



REINFORCING.



WAELTZ & PRETE, INC. CIVIL ENGINEERS

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



GOODWILL LIBERTY HILL

110 BRONCO BLVD.

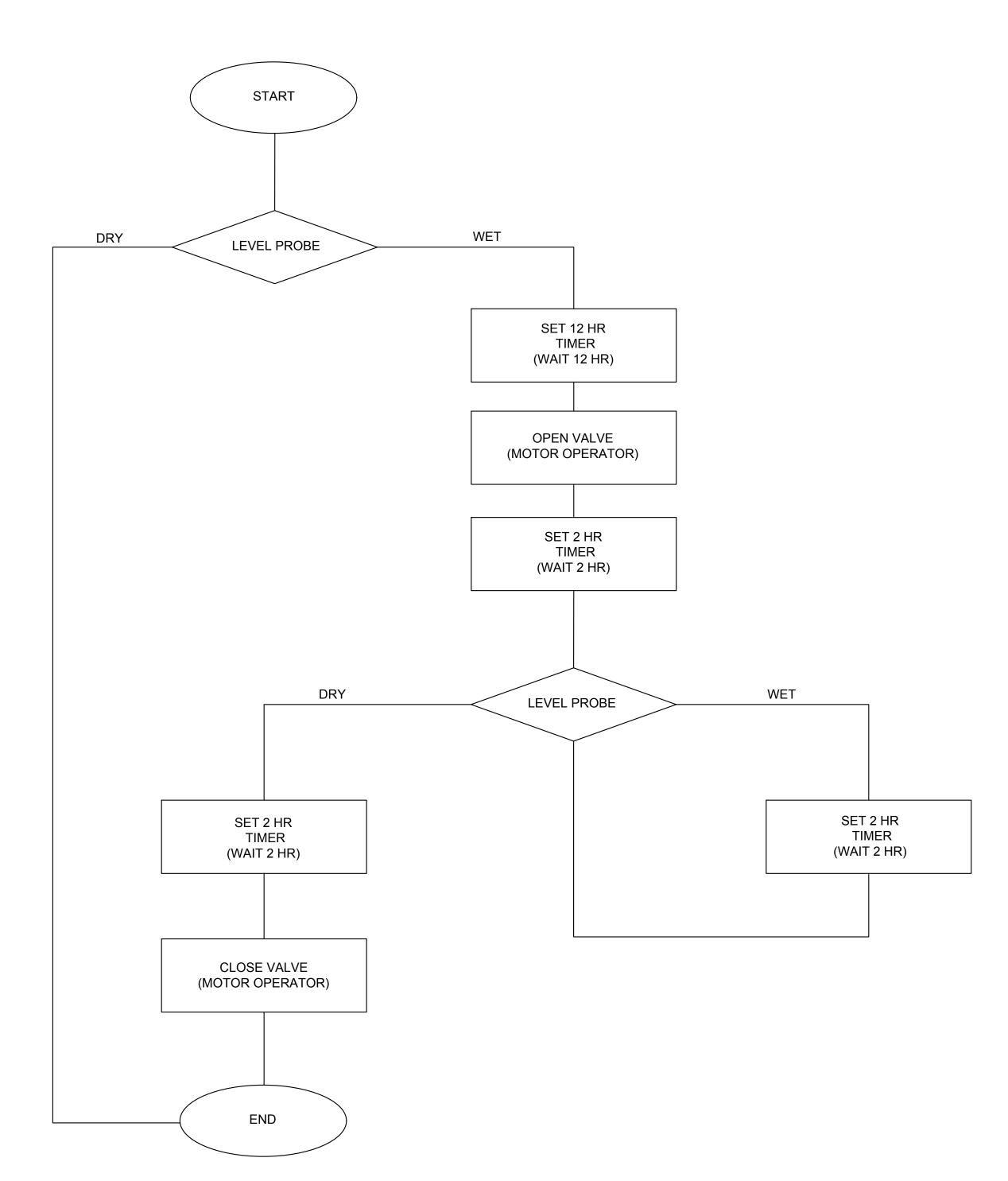
CSW BRONCO, LP

DESIGNED: JRW APPROVED: <u>AAP</u> DATE: <u>4/14/2023</u> DRAWN: JRW

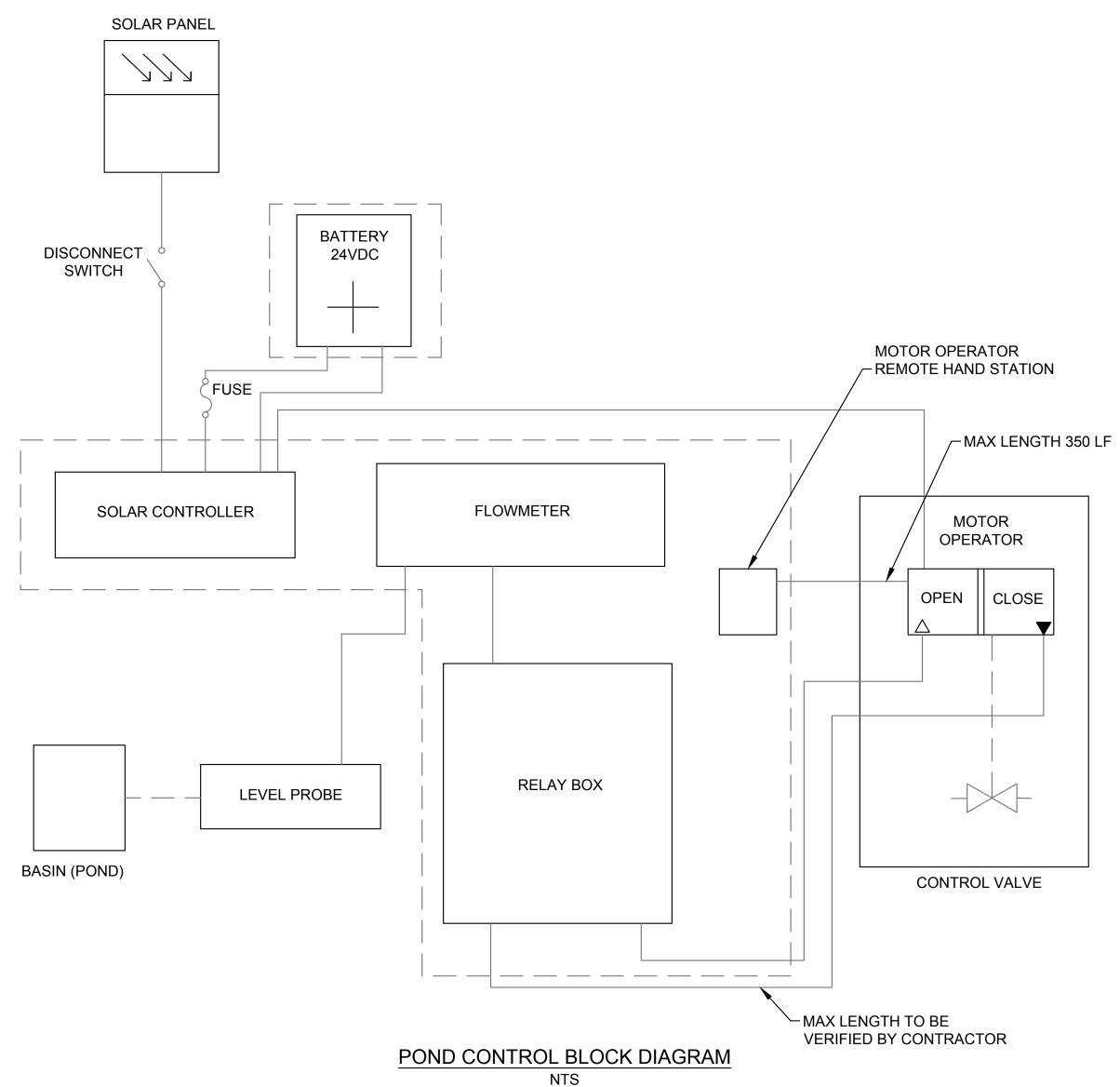
> SHEET TITLE: BATCH **DETENTION** POND DETAILS (2 OF 3)

PROJECT NO .: 073-024 COLH PROJECT NO.:

SHEET NO.:

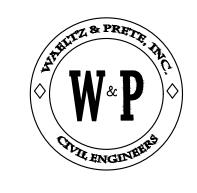


POND LEVEL CONTROL FLOW DIAGRAM



#### NOTE:

- 1. INSTALL COMPONENTS FOR SOLAR PHOTOVOLTAIC SYSTEM IN ACCORDANCE WITH NEC.
- 2. INSTALL ALL ABOVE GRADE CABLING IN RIGID METALLIC UNLESS OTHERWISE SPECIFICALLY IDENTIFIED BY THE MANUFACTURER AS DETRIMENTAL TO SIGNAL STRENGTH.
- 3. EQUIPMENT WITHIN DASHED LINES IS CONTAINED WITHIN THE SOLAR CONTROL PANEL OR BATTERY ENCLOSURE.
- 4. REFER TO SPECIAL SPECIFICATIONS 1012BATCH DETENTION POND FOR SOLAR CONTROL PANEL EQUIPMENT REQUIREMENTS.
- REFER TO TXDOT STANDARD DETAILS BDS(1) AND TS-FD-12 FOR POLE MOUNTED SOLAR POWER SYSTEM.



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



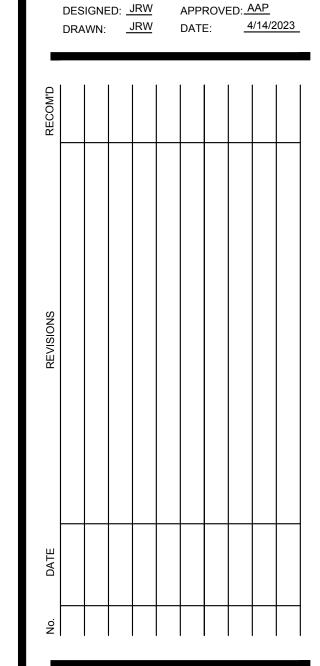
PROJECT:

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIE

CSW BRONCO, LP



BATCH
DETENTION
POND DETAILS
(3 OF 3)

PROJECT NO.: 073-024

COLH PROJECT NO.:

#### HEC-HMS SUMMARY & INPUT VARIABLES:

#### DRAINAGE AREA BOUNDRY CONDITIONS SUMMARY:

	SUB-BASIN [ID]	AREA [mi²]	AREA [ac]	CURVE#	Tc [min]	Tc lag [min]
EX CONDITIONS:	EX-1	0.005906	3.78	81.8	7.50	4.50
PROP. CONDITIONS:	DA-1 OS-1	0.004922 0.000984	3.15 0.63	93.5 82.7	5.00 5.00	3.00 3.00

\* NOTE: MINIMUM To LAG USED = 3 MINUTES.

#### RAINFALL DEPTH:

24HR STORM EVENT	SCS CURVE NUMBER METHOD - ATLAS-14 [in]
•	2.00
2 year	3.92
10 year	6.29
25 year	8.03
50 year	9.51
100 year	11.20

\* NOTE: THE PERCIPITATION DEPTHS ARE DERIVED FROM THE NOAA ATLAS-14 VOLUME 11 VERSION 2 POINT PERCIPITATION FREQUENCY WEBSITE.

#### **SUMMARY OF**

**EXISTING VS. PROPOSED CONDITIONS** 

RUNOFF AT SPECIFIED FLOW CONCENTRATION POINTS:

24HR STORM EVENT	Ex Peak Discharge FC PT 1 (SCS - ATLAS 14) [cfs]	Peak Discharge FC PT 1 (SCS - ATLAS 14) [cfs]
2 year	7.62	5.25
10 year	15.14	13.23
25 year	20.75	18.03
50 year	25.52	21.97
100 year	30.94	26.36

## SUMMARY TABLE DETENTION POND

#### DETENTION POND

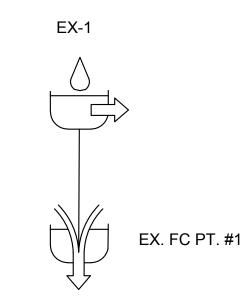
	Peak Discharge DET PND [cfs]	Peak Storage DET PND [ac-ft]	Peak Elevation DET PND [ft]
2 year	4.49	0.39	1054.11
10 year	11.15	0.50	1054.87
25 year	15.22	0.56	1055.26
50 year	18.54	0.60	1055.55
100 year	22.24	0.65	1055.87

#### **DETENTION POND 1**

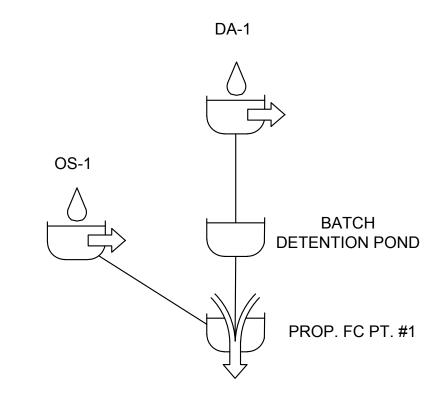
STAGE - STORAGE - DISCHARGE

STAGE	AREA	AVG. AREA	Δ ELEV.	STORAGE	CUMULATIVE	CUMULATIVE	RECTANGULAR WEIR	OVERFLOW WEIR	TOTAL DISCHARGE	
[msl]	[ft²]	[ft²]	[ft]	[ft³]	[ft <sup>3</sup> ]	[ac-ft]	[cfs]	[cfs]	[cfs]	_
			_	_						<b>-</b>
1050.75	0	0	0	0	0	0	0.00	0.00	0.00	
1051.00	1800	900	0.25	225	225	0.005	0.00	0.00	0.00	
1052.00	6100	3,950	1.00	3,950	4,175	0.096	0.00	0.00	0.00	WQV Req'd = 8,576 cf @ 1052.72'
1053.00	6160	6,130	1.00	6,130	10,305	0.237	0.00	0.00	0.00	
1053.25	6180	6,170	0.25	1,543	11,848	0.272	0.00	0.00	0.00	
1054.00	6220	6,200	0.75	4,650	16,498	0.379	3.57	0.00	3.57	2YR WSE = 1054.11
1055.00	6280	6,250	1.00	6,250	22,748	0.522	12.28	0.00	12.28	25YR WSE = 1055.26
1056.00	6340	6,310	1.00	6,310	29,058	0.667	23.66	0.00	23.66	
1057 00	6400	6.370	1 00	6.370	35 428	0.813	23 66	59 69	83 35	

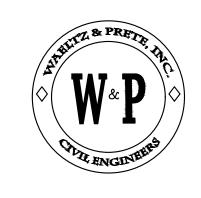
Rectangular Weir --> FL = 1053.25' , Length = 1.75', Height = 2.75' Energency Rectangular Weir --> FL = 1056.00' , Length = 18.50', Height = 1.00'



# EXISTING CONDITIONS HEC-HMS MODEL SCHEMATIC NTS



PROPOSED CONDITIONS
HEC-HMS MODEL SCHEMATIC
NTS



WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



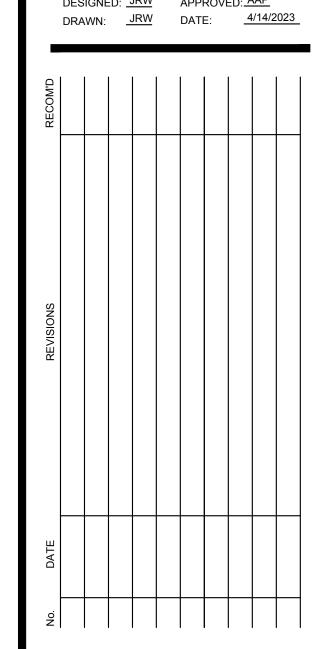
PROJEC

GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIEN

CSW BRONCO, LP



SHEET TI

BATCH DETENTION POND CALCULATIONS

PROJECT NO

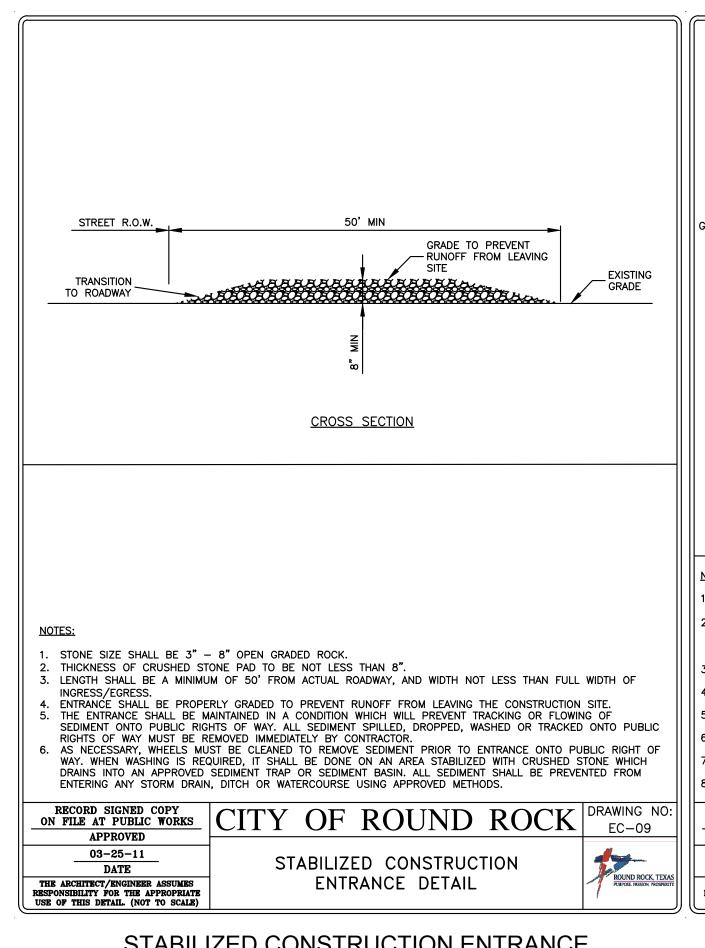
073-024

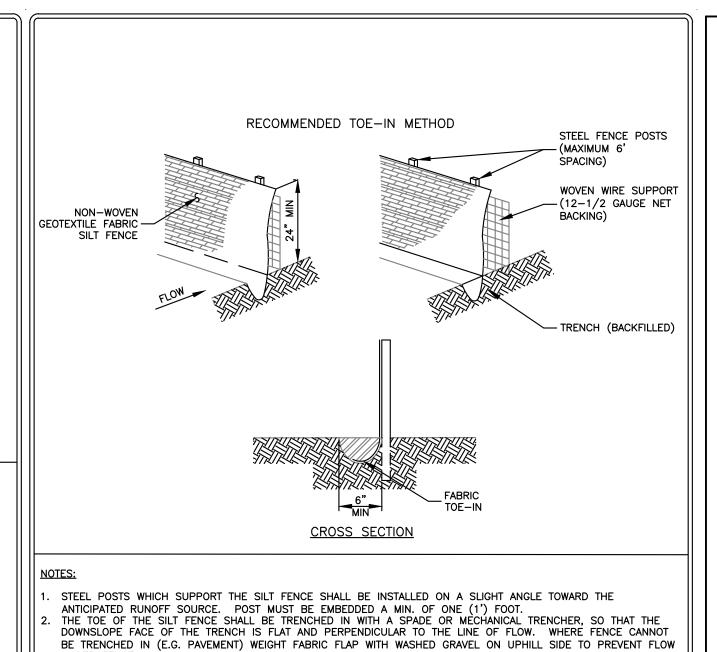
COLH PROJECT NO.:

SDP -

SHEET NO.:

25





- UNDER FENCE.
  THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE
- FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

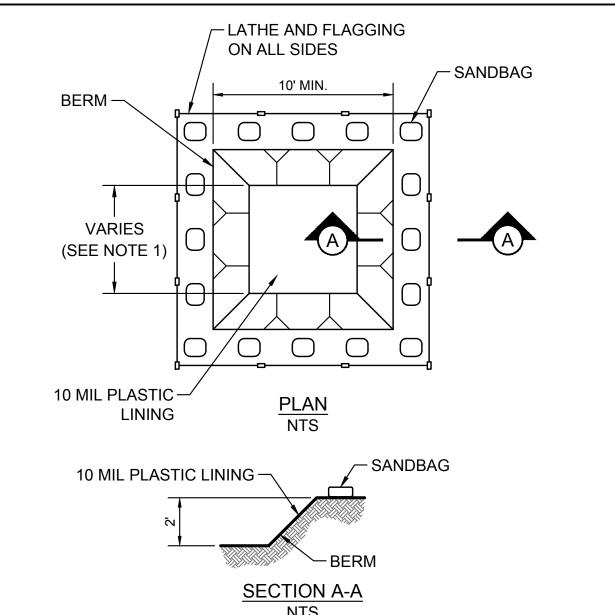
  SILT FENCE SHALL BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS SECURELY FASTENED TO THE STEEL FENCE POSTS. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION. SILT FENCE SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY	OF	ROU	IND	ROCK	DRAWING NO: EC-10
APPROVED						LC-10
03-25-11						
DATE		SILT	FENCE	DFTAII		POUND DOCK TEVA
THE ARCHITECT/ENGINEER ASSUMES ESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		O,LI	LITOL	DETAIL	•	ROUND ROCK, TEXA PURPOSE PASSION, PROSPERTI

STABILIZED CONSTRUCTION ENTRANCE NTS







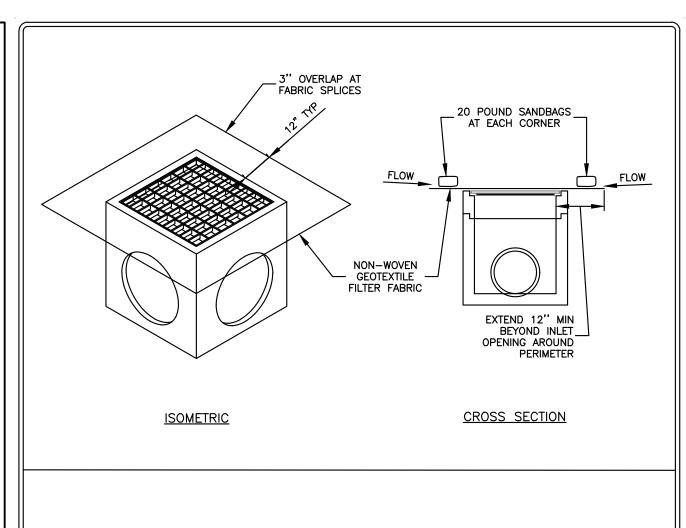
**INSTALLATION NOTES:** . 10' MIN. OR AS REQUIRED TO CONTAIN WASTE CONCRETE.

- 2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
- B. 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.
- EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

MAINTENANCE NOTES: 1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT

- AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE. 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.

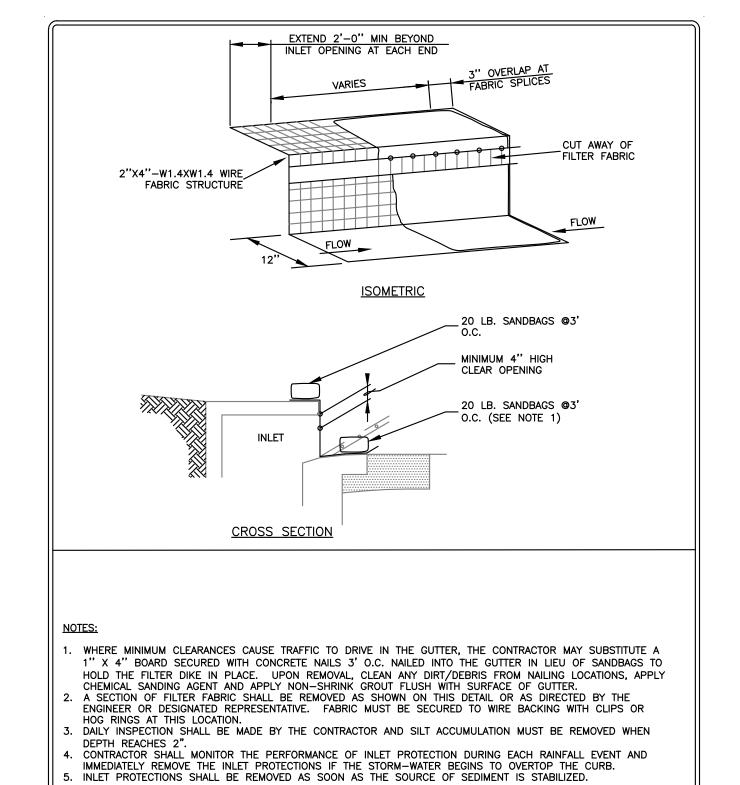
INSPECT WEEKLY, DURING AND AFTER EVERY STORM EVENT.



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

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

> AREA INLET PROTECTION NTS



**CURB INLET PROTECTION** NTS

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS

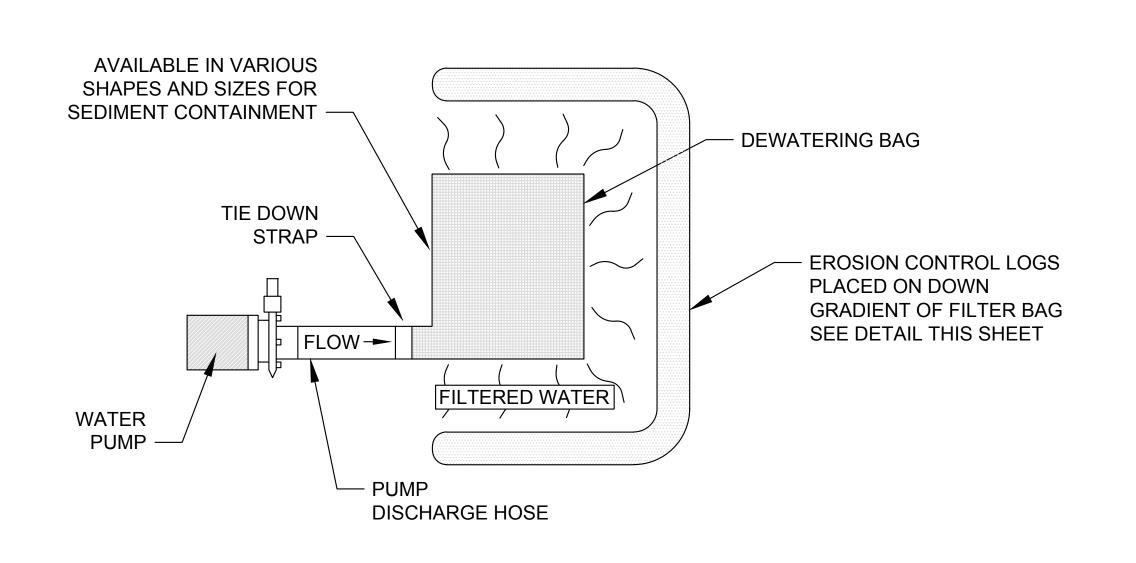
03-25-11

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

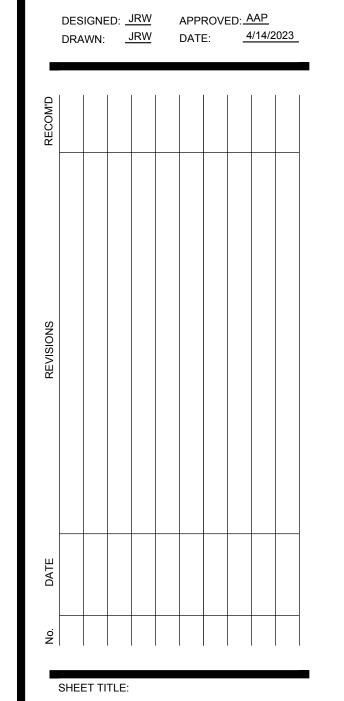
DATE

CITY OF ROUND ROCK | DRAWING NO: EC-14

CURB INLET PROTECTION DETAIL



**GRAVITY FILTER BAG DETAIL** NTS



WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

PH (512) 505-8953

FIRM TX. REG. #F-10308

GOODWILL

LIBERTY HILL

110 BRONCO BLVD.

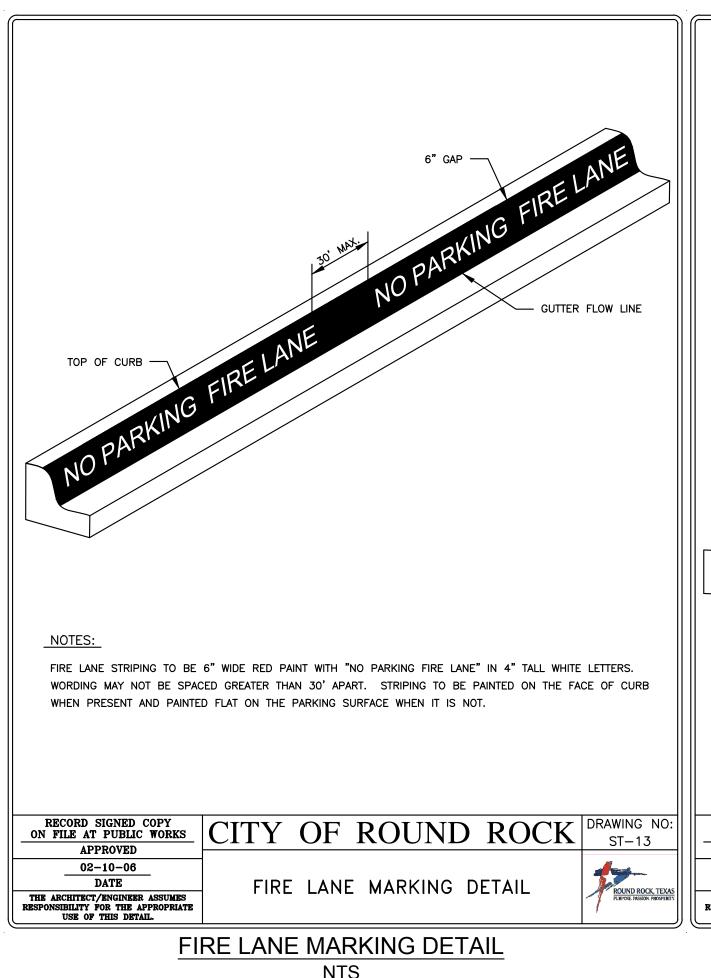
CSW BRONCO, LP

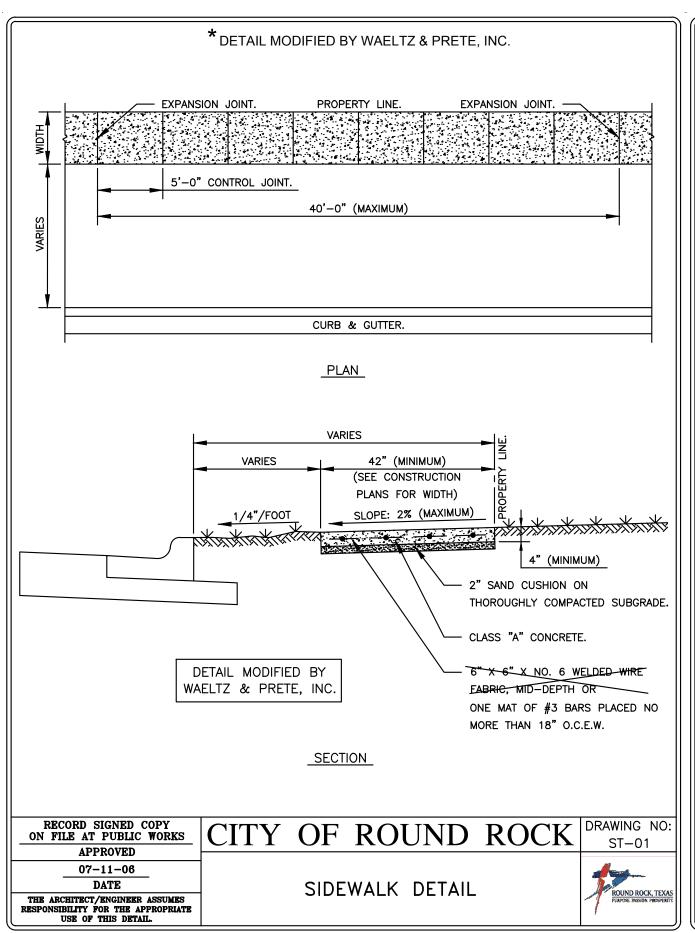
CLIENT:

**ESC DETAILS** 

PROJECT NO .: 073-024 **COLH PROJECT NO.:** 

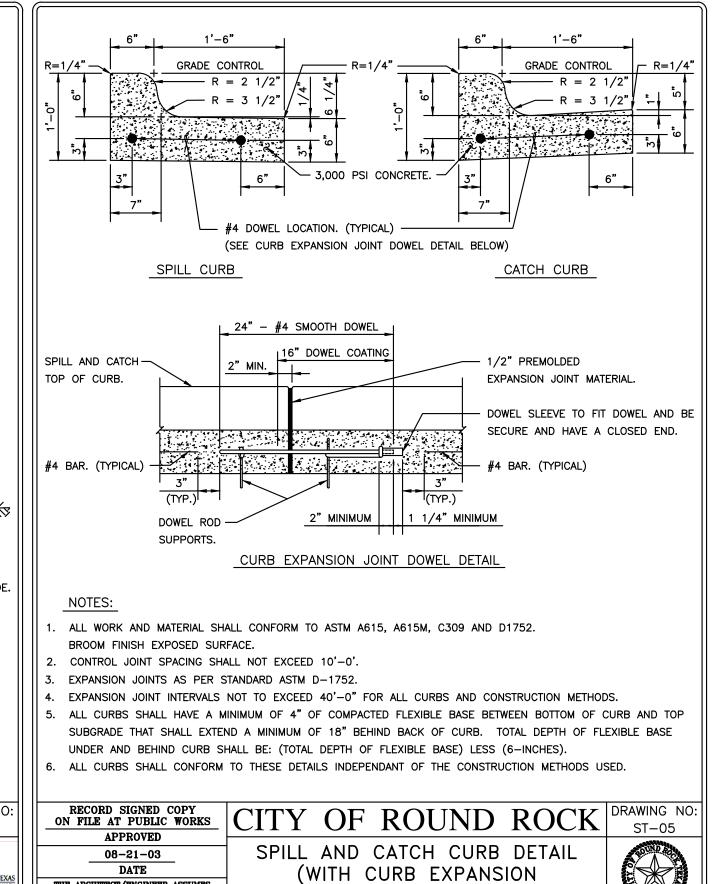
SHEET NO.:

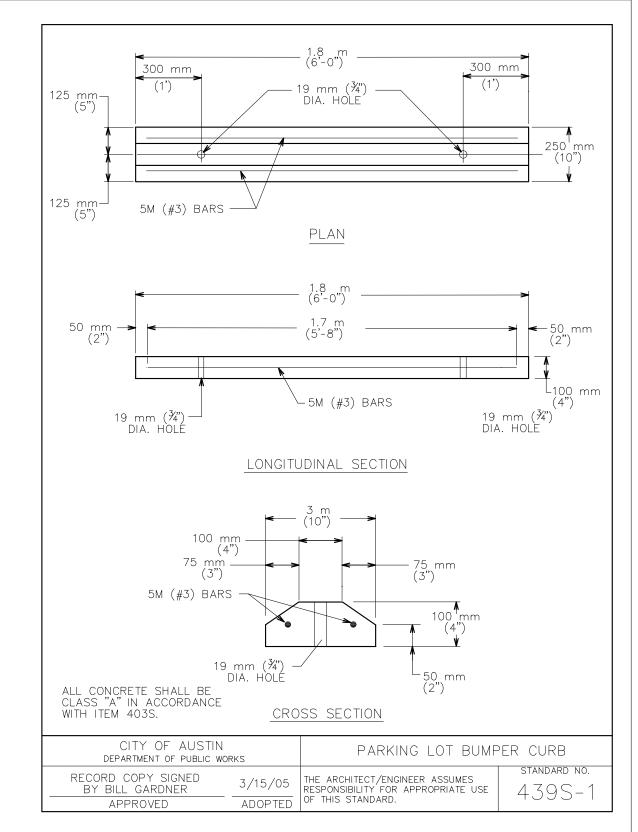




SIDEWALK DETAIL

NTS



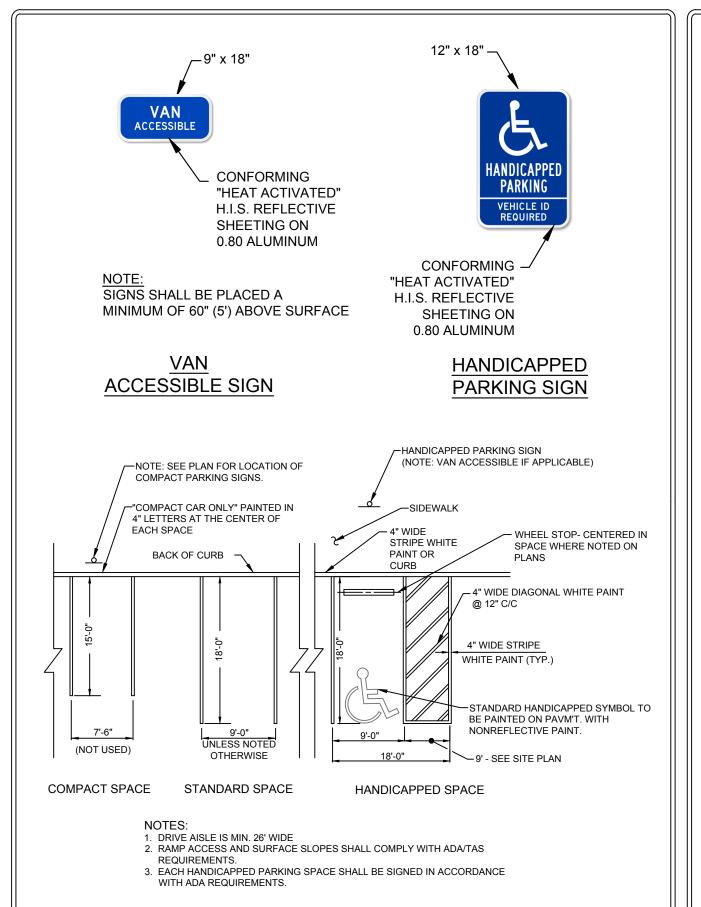


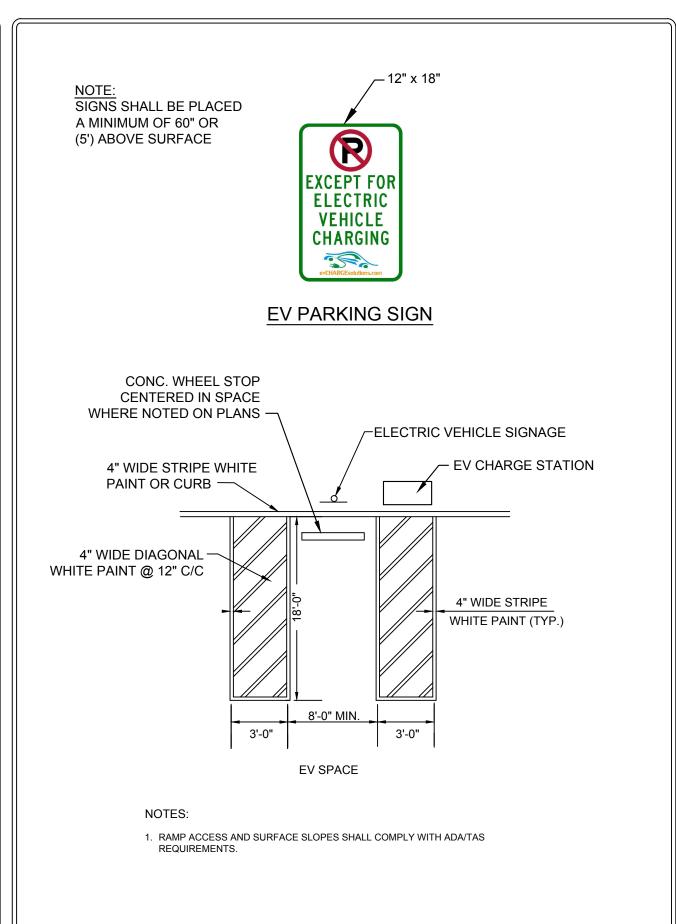
SPILL AND CATCH CURB DETAIL NTS

JOINT DOWEL DETAIL)

WHEEL STOP NTS

NTS





TYPICAL ELECTRIC SPACE LAYOUT

DESIGNED: JRW APPROVED: AAP DRAWN: <u>JRW</u> DATE: <u>4/14/2023</u> SHEET TITLE:

WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

PH (512) 505-8953

FIRM TX. REG. #F-10308

**GOODWILL** 

LIBERTY HILL

110 BRONCO BLVD.

CSW BRONCO, LP

SITE DETAILS

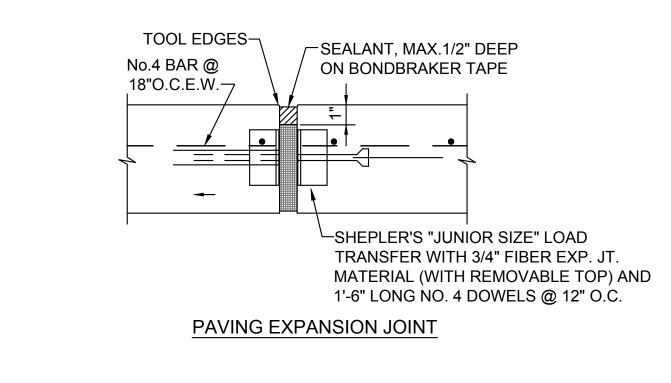
PROJECT NO .: 073-024 COLH PROJECT NO.:

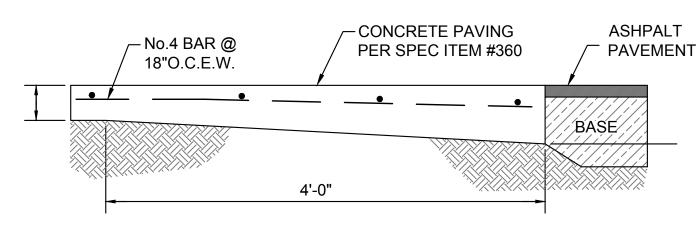
(1 OF 3)

SHEET NO.:

TYPICAL PARKING SPACE LAYOUT

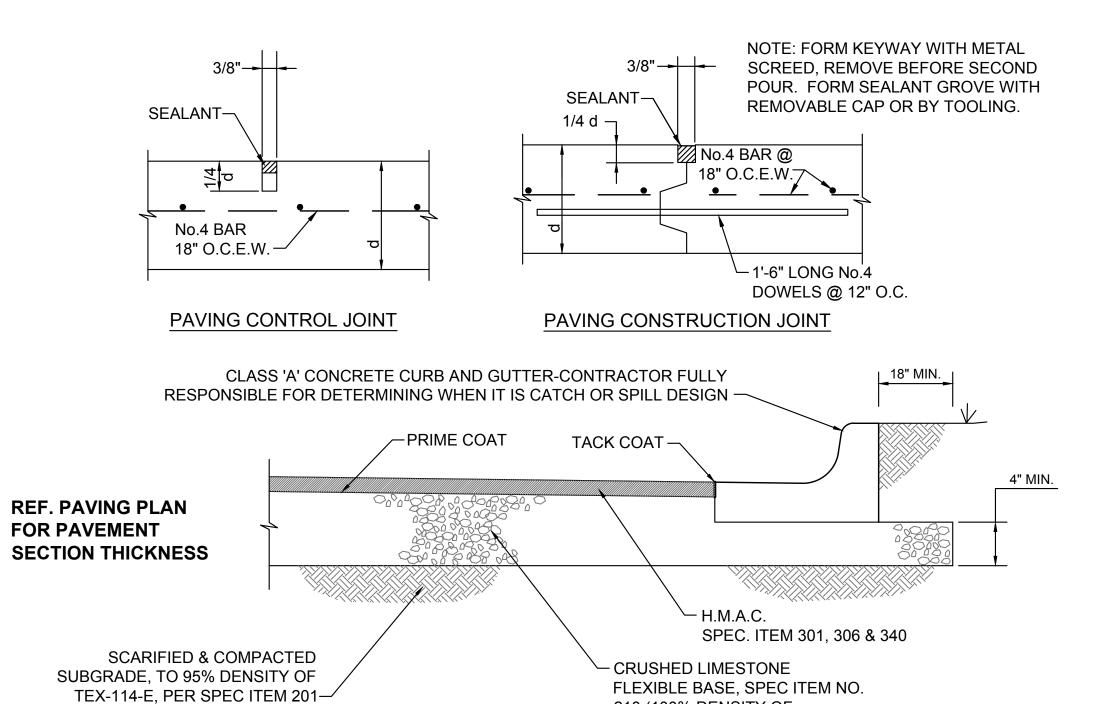
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.





ASPHALT/CONCRETE TRANSITION

RIGID PAVEMENT DETAILS NTS



210 (100% DENSITY OF

/#3 "L" BARS @ 18" O.C. MIN 1' OVERLAP

SIDEWALK TOE DOWN

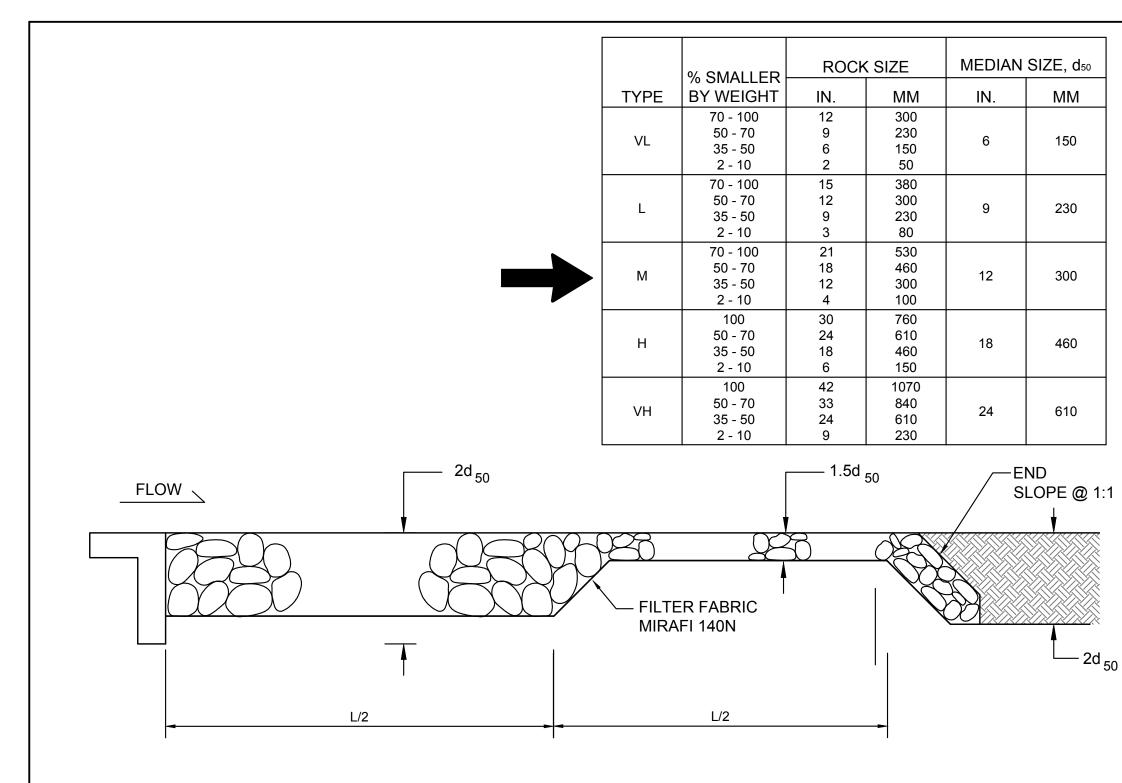
NTS

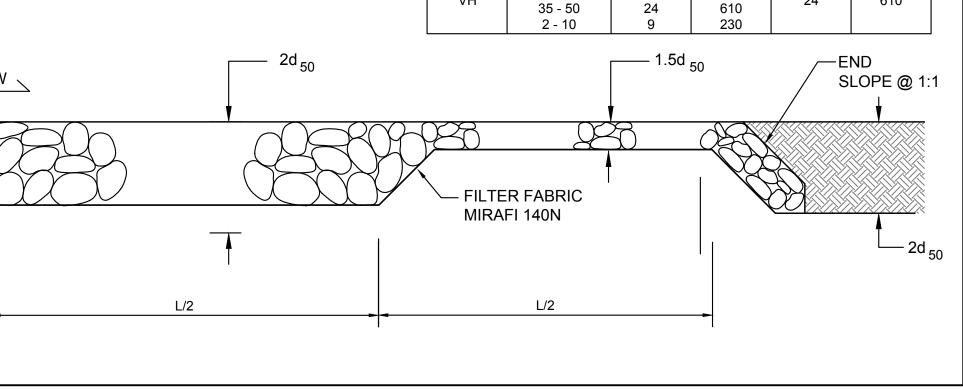
TEX-114-E)

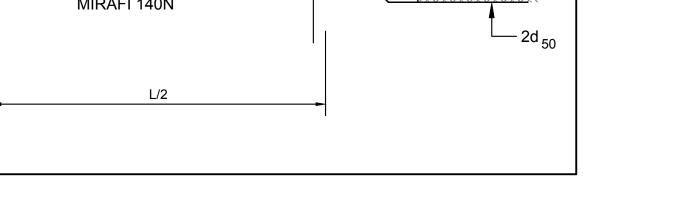
#3 REBAR CONT.~

FLEXIBLE PAVEMENT DETAILS NTS

TYPICAL SECTION

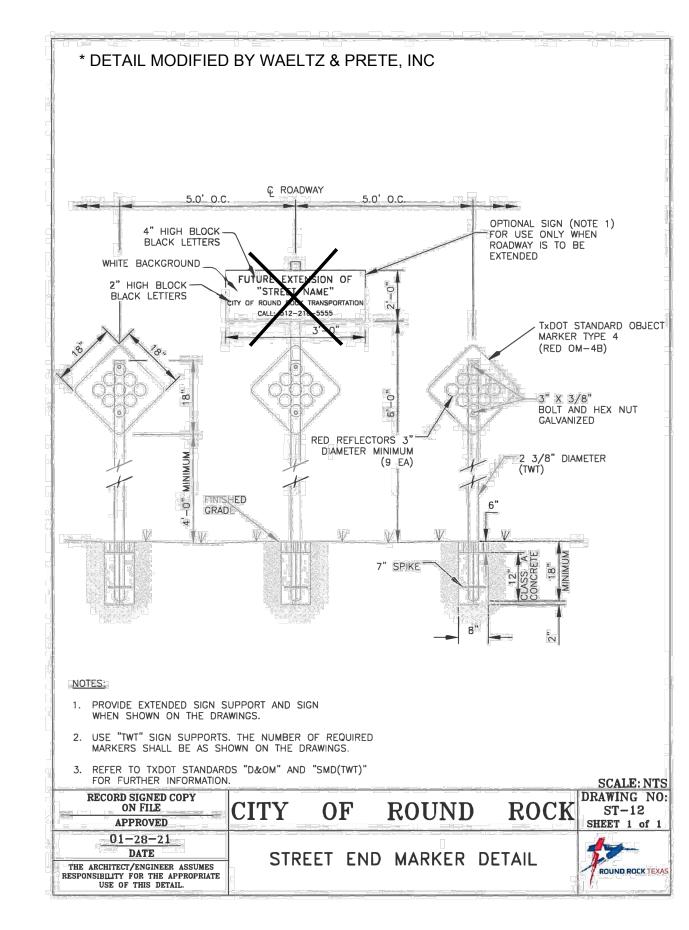




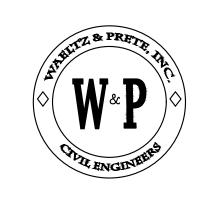


REF. GEOTECHNICAL

RECOMENDATIONS



STREET END MARKER NTS



WAELTZ & PRETE, INC. CIVIL ENGINEERS

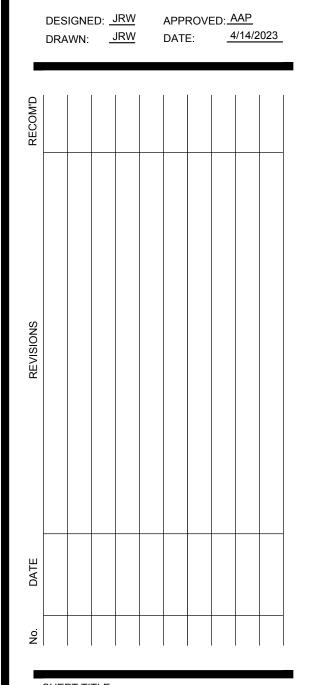
211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CSW BRONCO, LP



**ROCK RIP-RAP** NTS

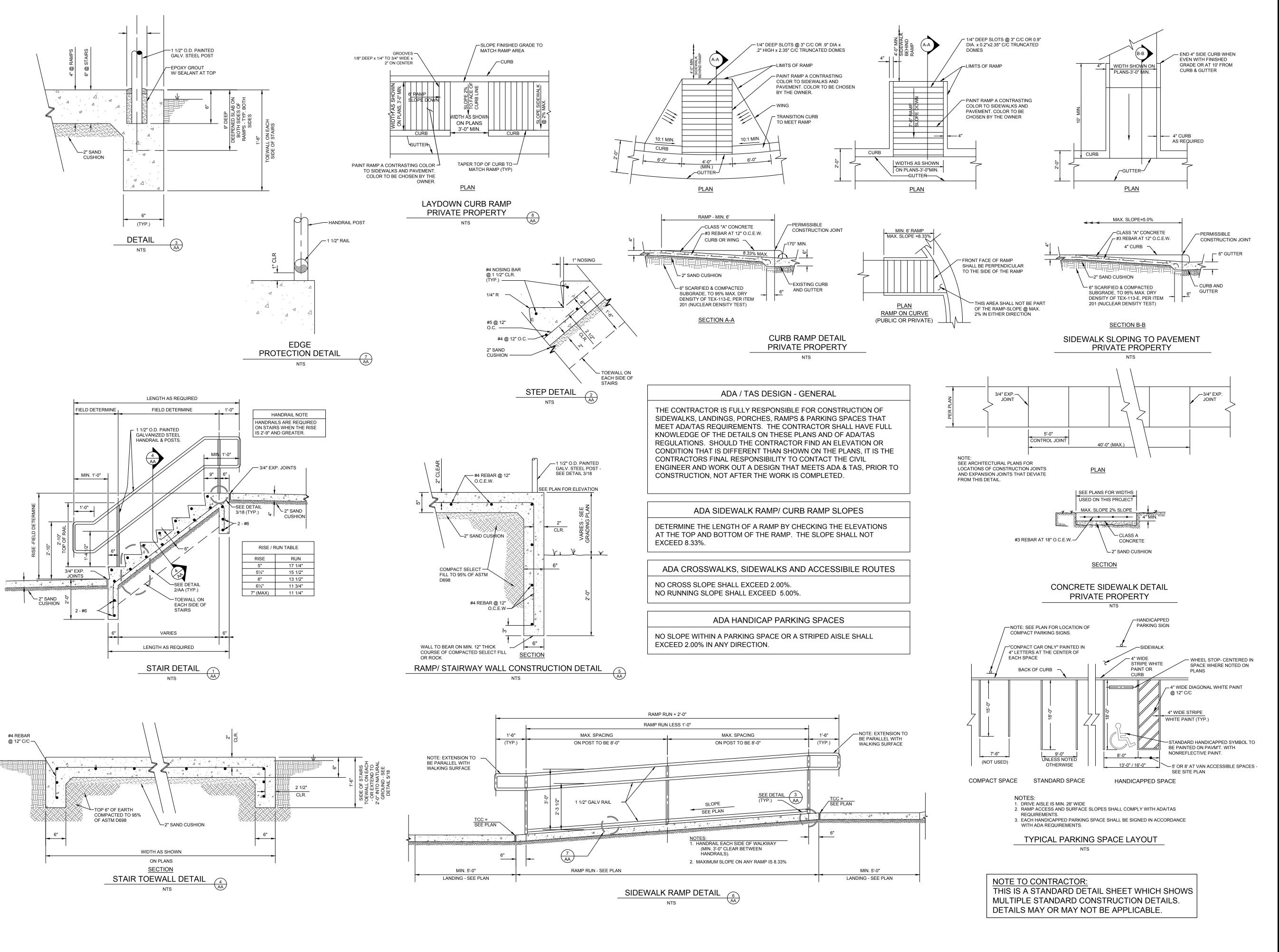
073-024

COLH PROJECT NO.:

C-28

SITE DETAILS

(2 OF 3)



W&P CONTRACTORERS

WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PPO IECT

GOODWILL LIBERTY HILL

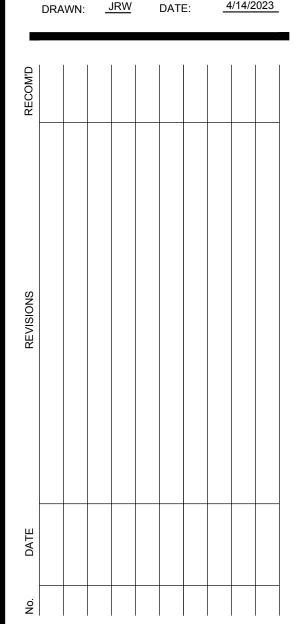
110 BRONCO BLVD.

CLIENT

DESIGNED: JRW

CSW BRONCO, LP

APPROVED: AAP



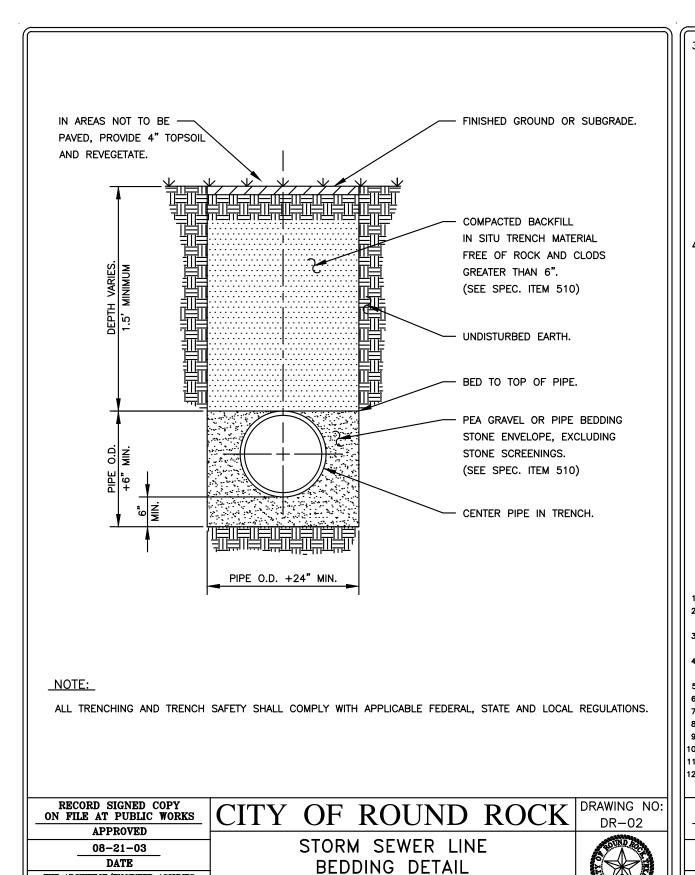
SHEET TITLE:

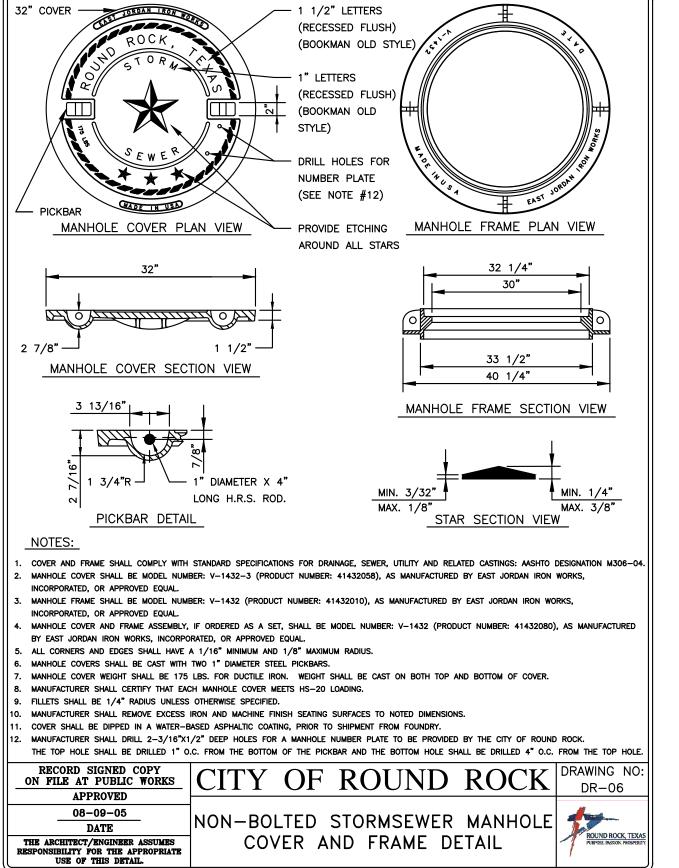
SITE DETAILS (3 OF 3)

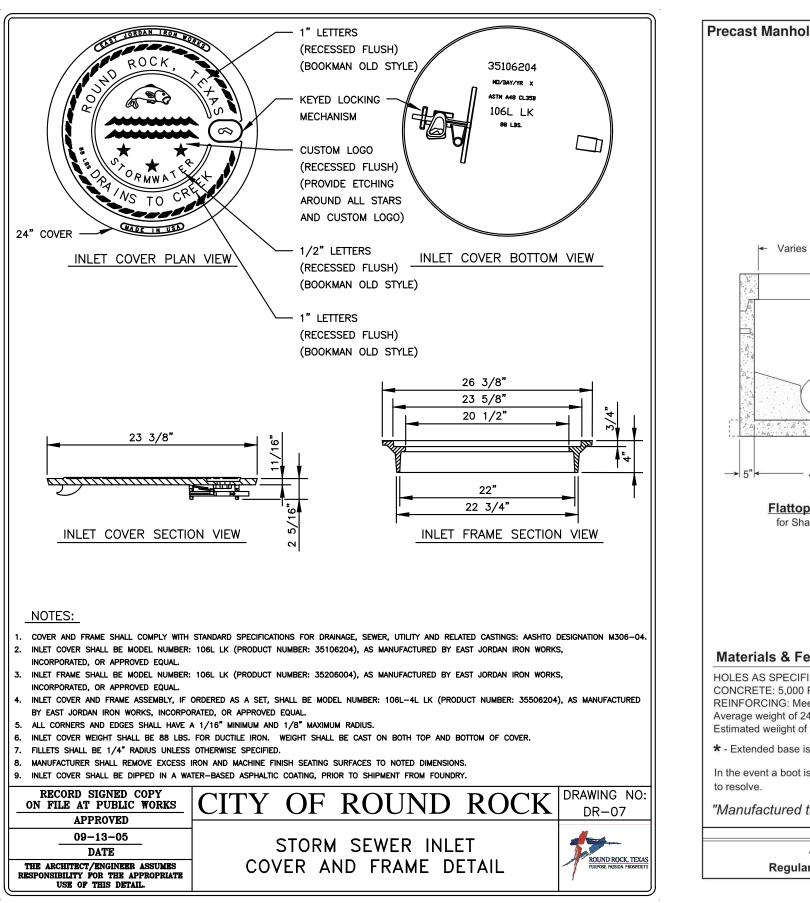
PROJECT NO.: 073-024

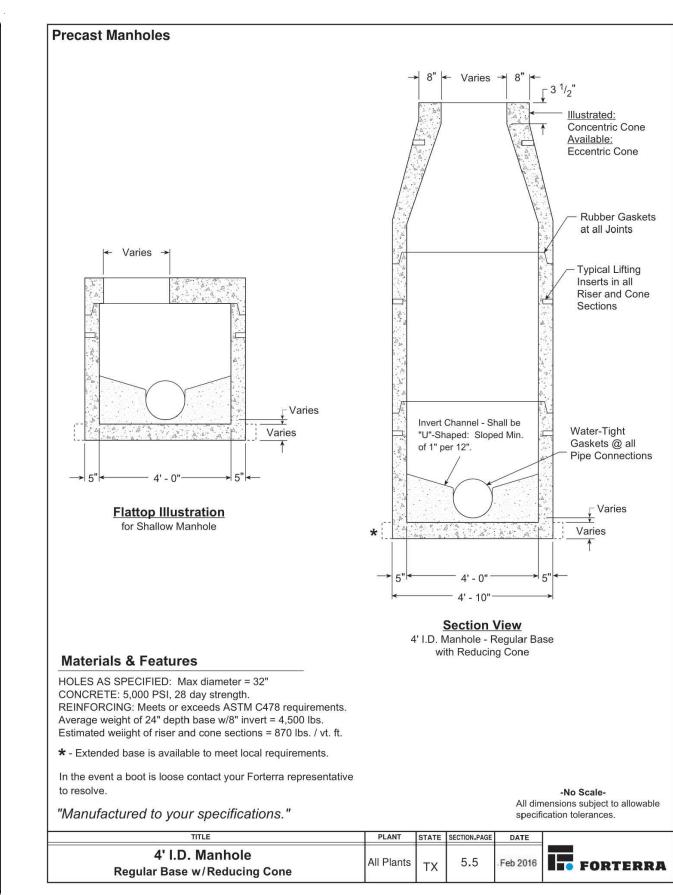
COLH PROJECT NO.:

SHEET NO.:









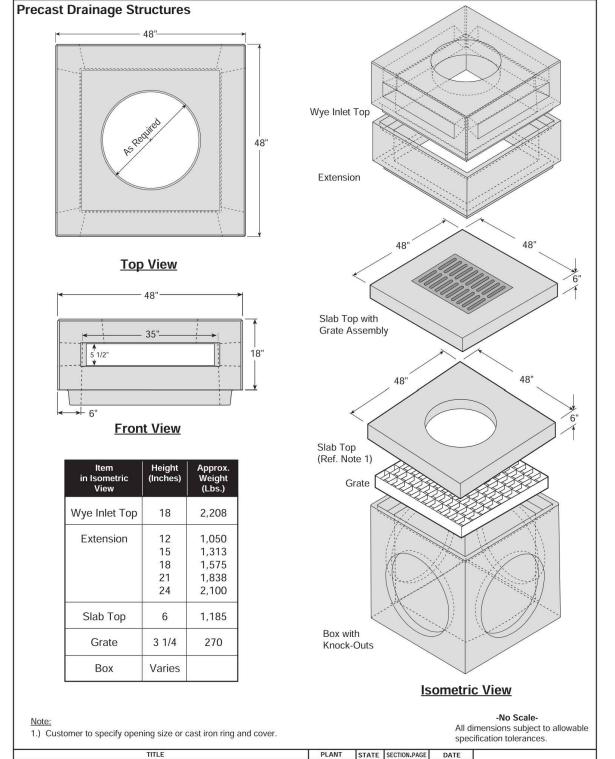
4' DIA. SSMH NTS

#### STORM SEWER LINE BEDDING DETAIL NTS

(NON-PAVED SURFACE)

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.

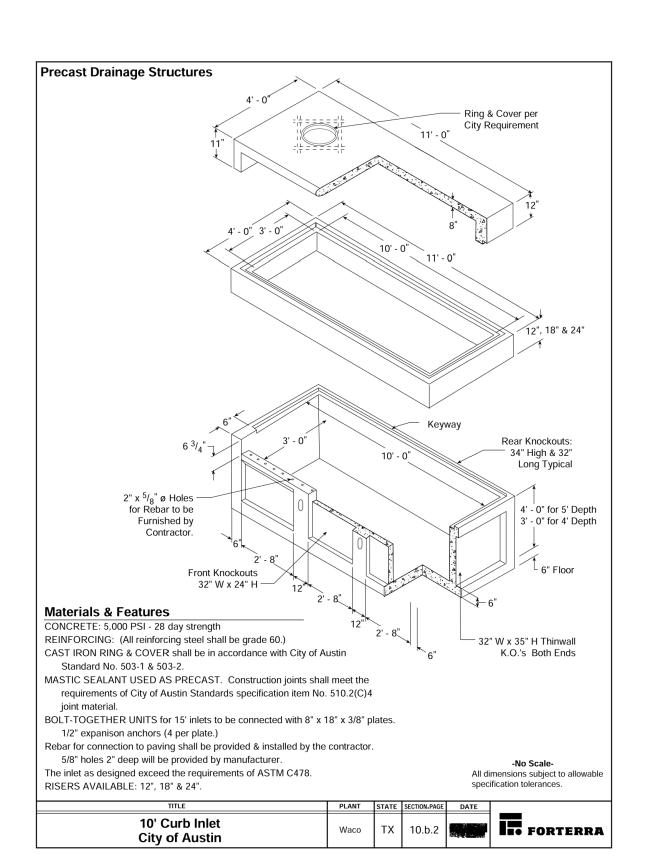




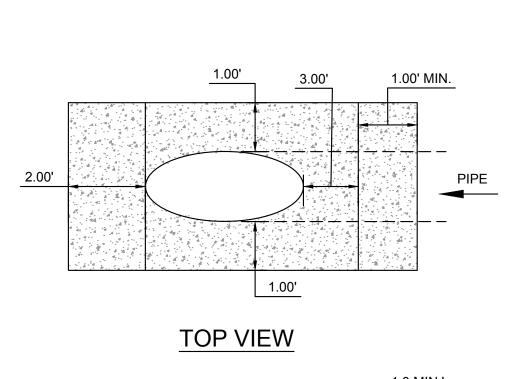
NTS

FORTERRA Top Options for 3' x 3' Precast Box 3' X 3' GRATE INLET

3:1 SLOPED CONCRETE HEADWALL NTS

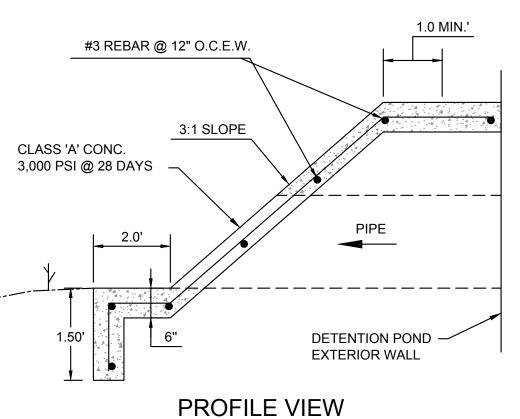






STORM SEWER INLET FRAME & COVER

NTS



WAELTZ & PRETE, INC. CIVIL ENGINEERS

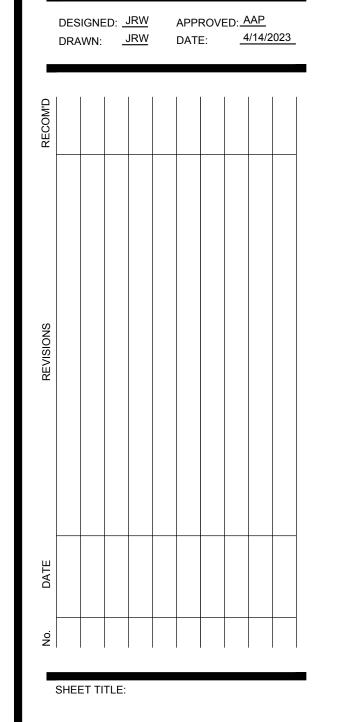
211 N. A.W. GRIMES BLVD. ROUND ROCK, TX. 78665 PH (512) 505-8953 FIRM TX. REG. #F-10308



**GOODWILL** LIBERTY HILL

110 BRONCO BLVD.

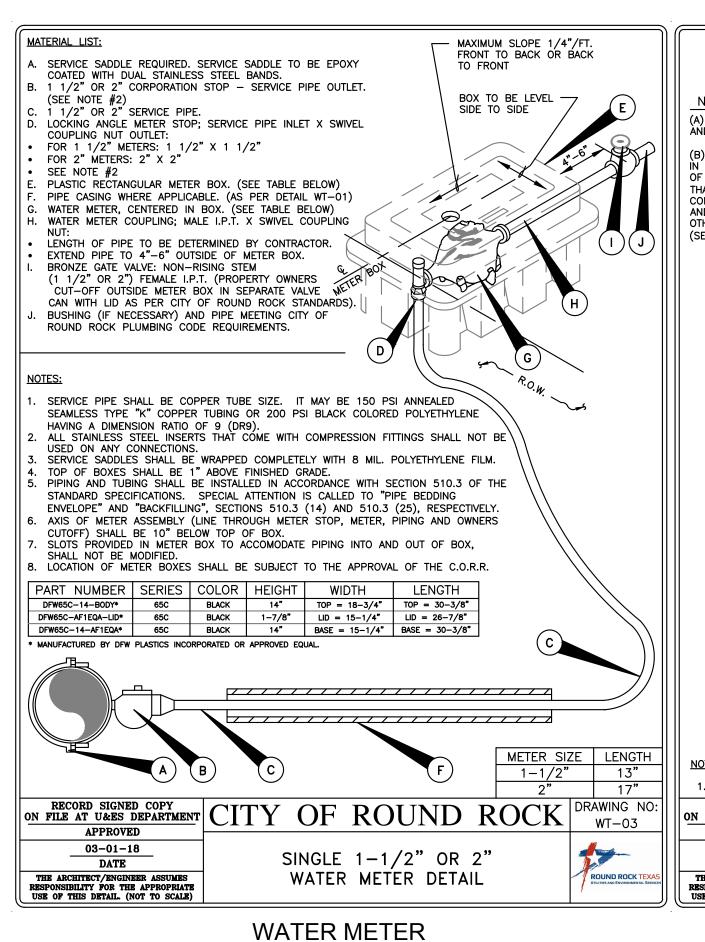
CSW BRONCO, LP

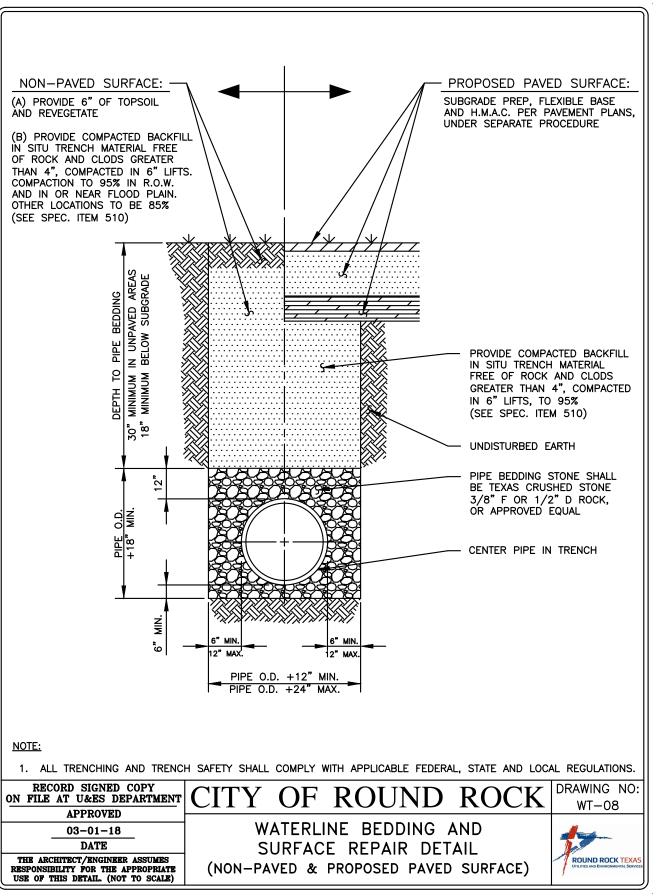


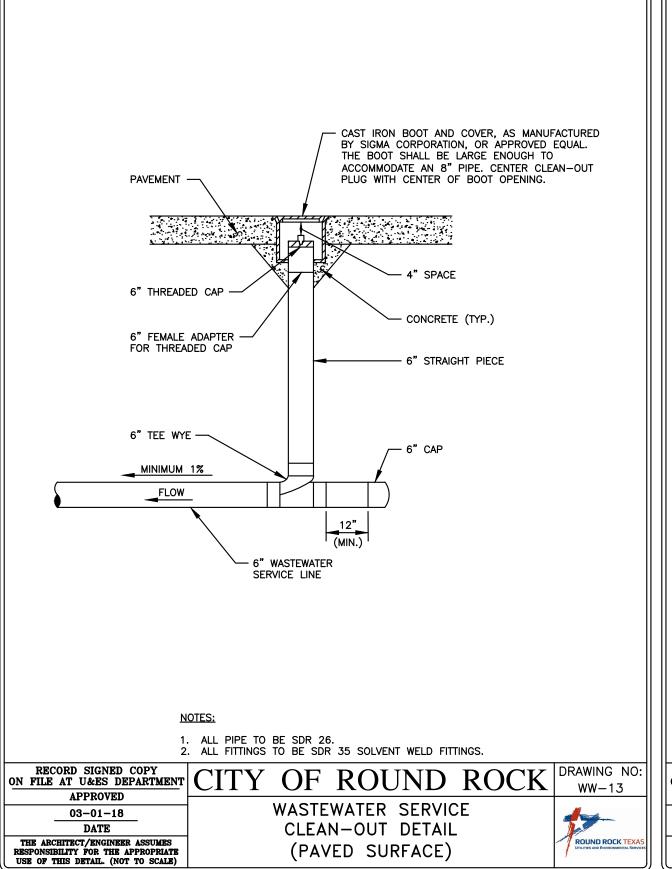
STORM SEWER **DETAILS** 

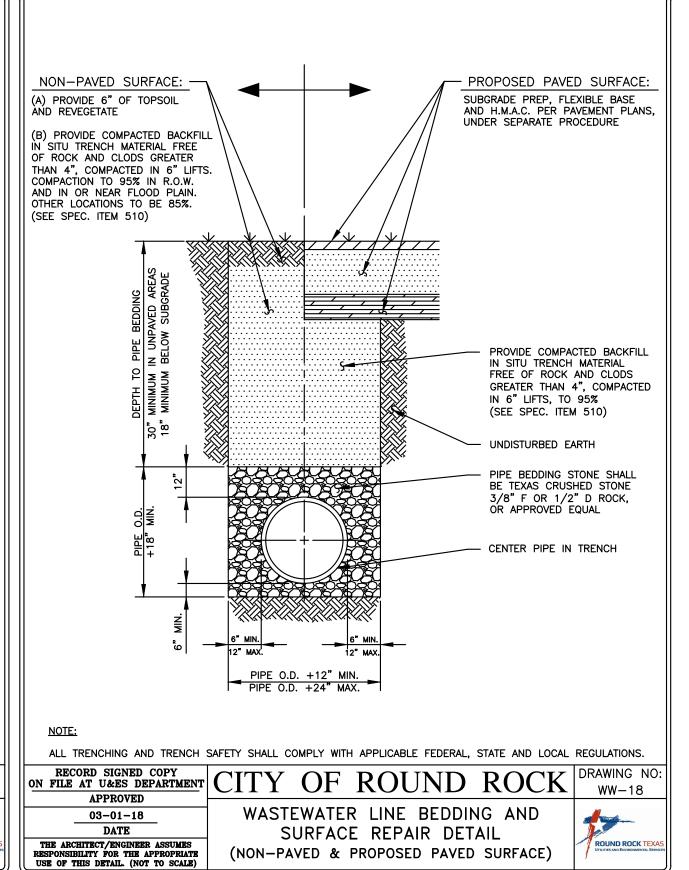
073-024 COLH PROJECT NO.:

SHEET NO.: C-30







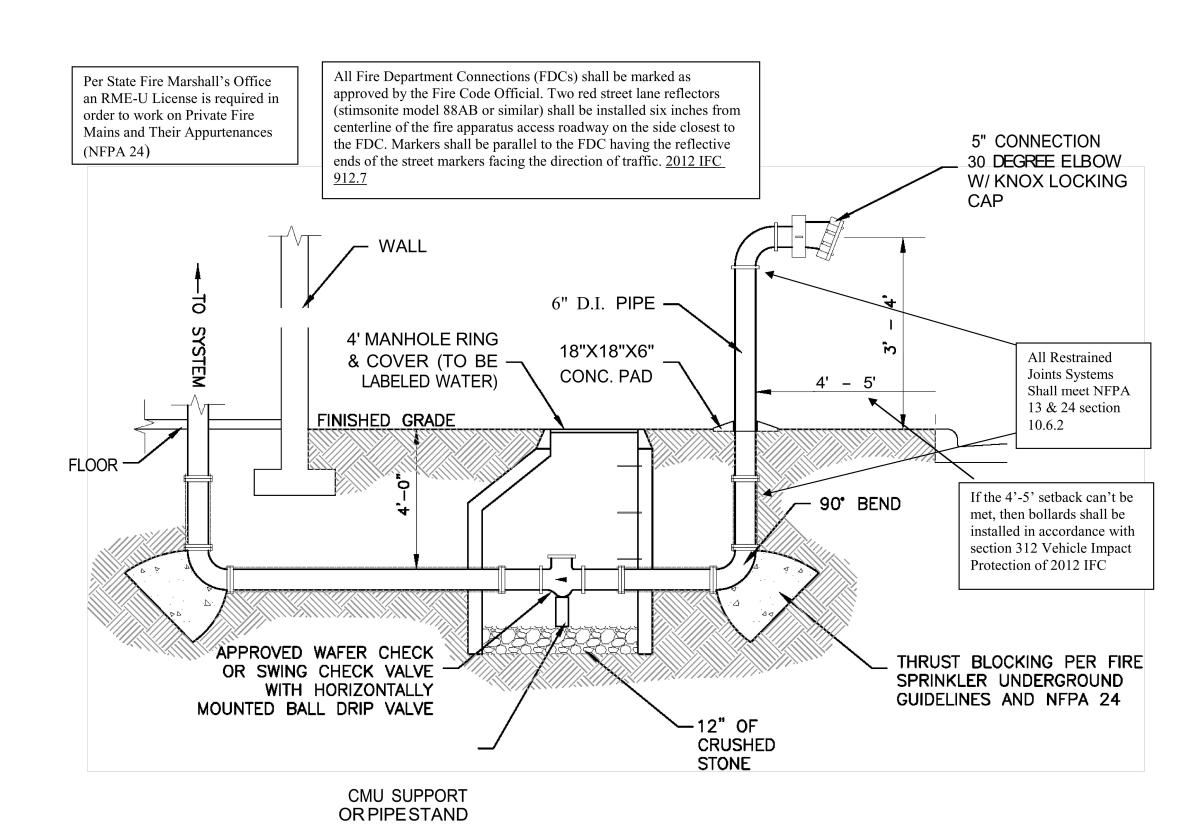


NTS

WATERLINE BEDDING AND SURFACE REPAIR NTS

**CLEANOUT** 

WASTEWATER LINE BEDDING & SURFACE REPAIR



**FIRE DEPARTMENT CONNECTION** NOT TO SCALE

DESIGNED: JRW APPROVED: AAP DRAWN: <u>JRW</u> DATE: SHEET TITLE:

WAELTZ & PRETE, INC.

CIVIL ENGINEERS

211 N. A.W. GRIMES BLVD.

ROUND ROCK, TX. 78665

PH (512) 505-8953

FIRM TX. REG. #F-10308

GOODWILL

LIBERTY HILL

110 BRONCO BLVD.

CSW BRONCO, LP

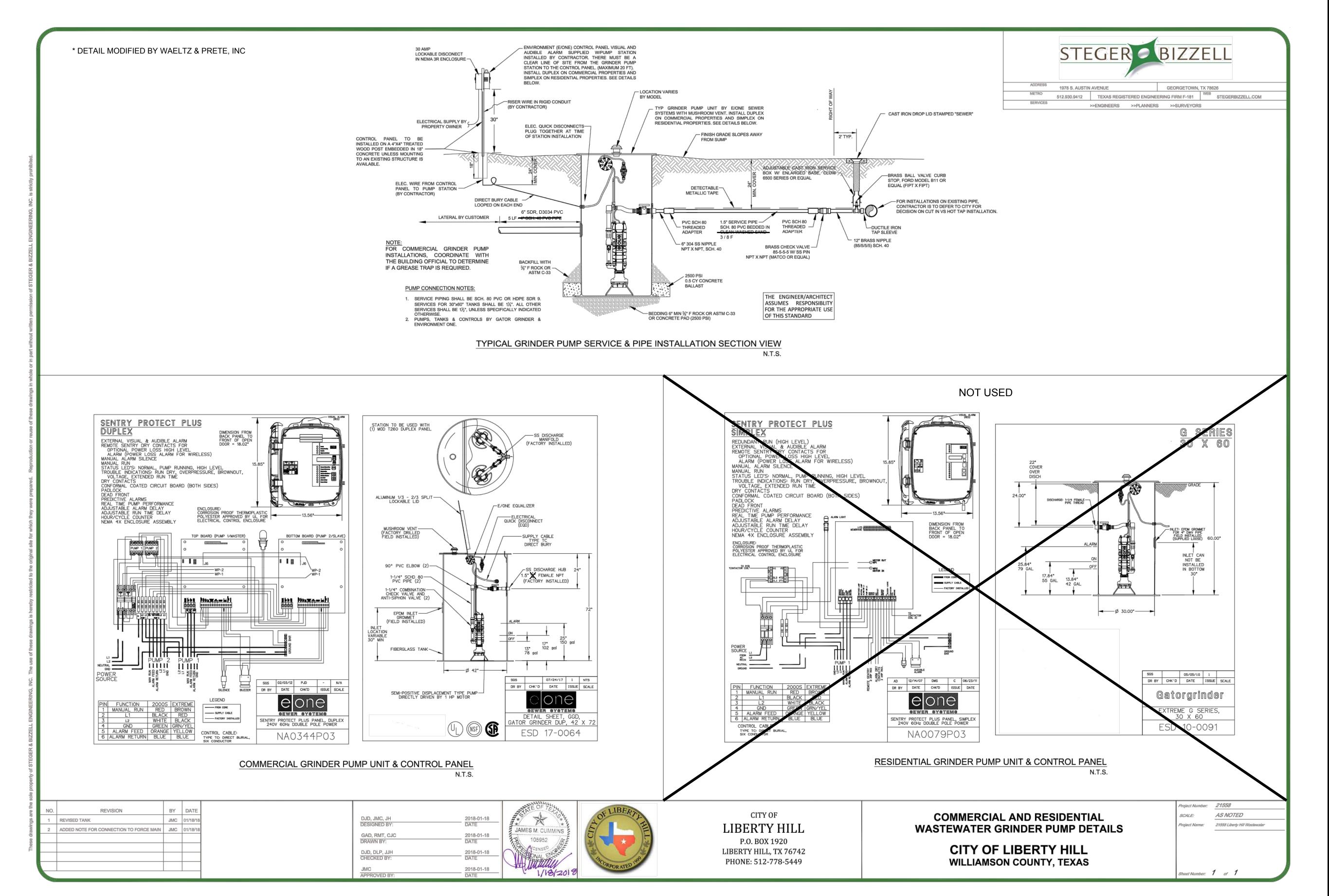
**UTILITY DETAILS** 

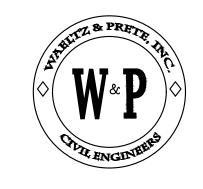
(1 OF 2)

PROJECT NO.: 073-024

SHEET NO.:

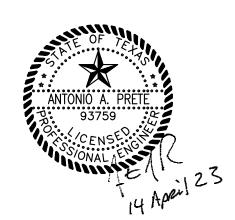
COLH PROJECT NO.:





WAELTZ & PRETE, INC.
CIVIL ENGINEERS

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



PROJECT:

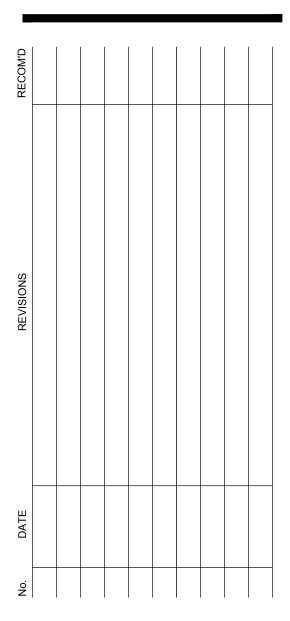
GOODWILL LIBERTY HILL

110 BRONCO BLVD.

CLIENT

CSW BRONCO, LP

DESIGNED: JRW APPROVED: AAP
DRAWN: JRW DATE: 4/14/2023



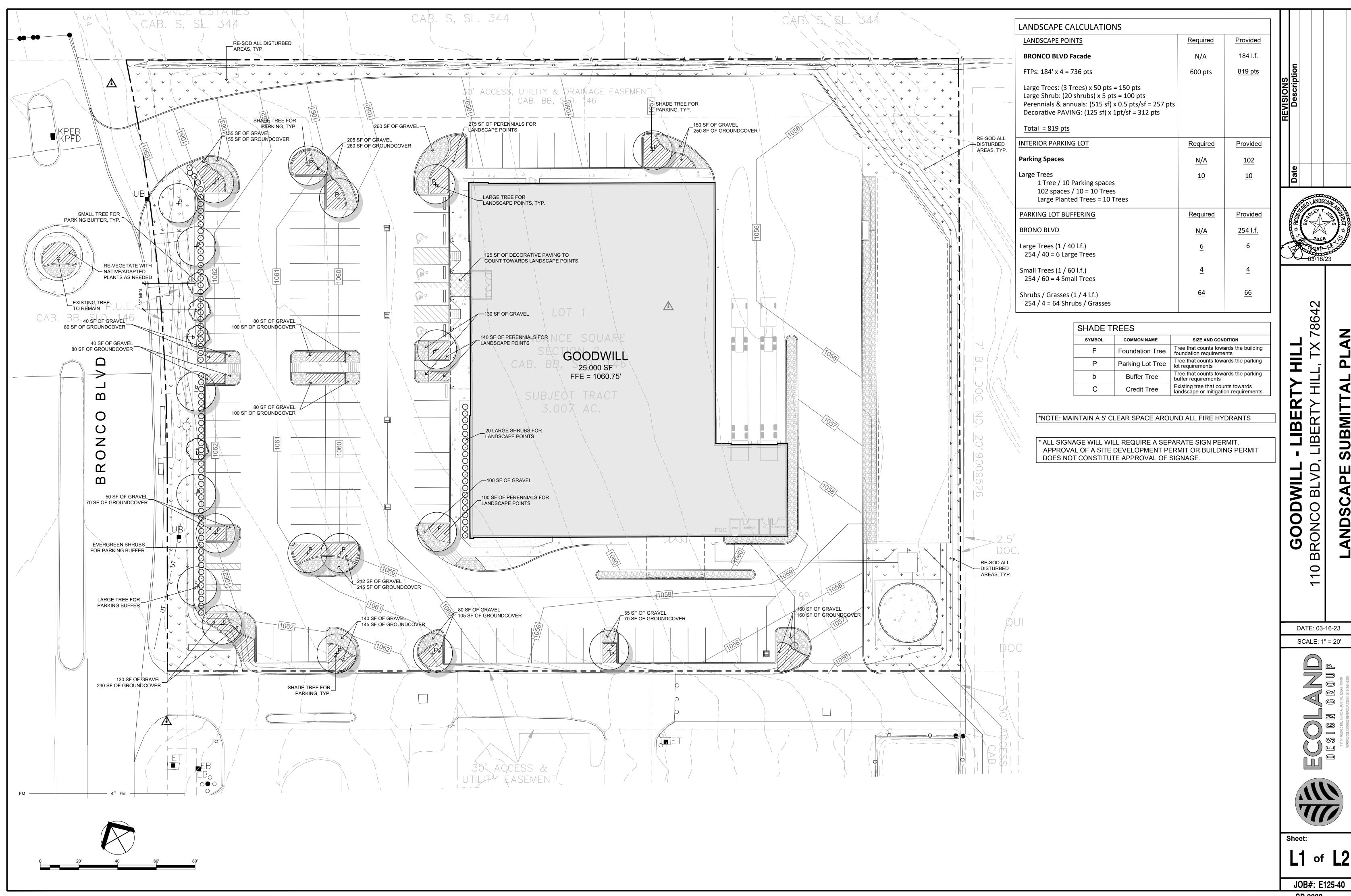
SHEET TITLE:

UTILITY DETAILS (2 OF 2)

PROJECT NO.: 073-024

COLH PROJECT NO.:

SHEET NO.:



ANDSC,



JOB#: E125-40

SP-2023-\_

SYMBOL	QUANTITY	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION		
		Cedar Elm	Ulmus crassifolia	3" caliper / 10' height minimum		
	40	Mexican Sycamore	Platanus mexicana	3" caliper / 10' height minimum		
+	19	Monterrey Oak	Quercus polymorpha	3" caliper / 10' height minimum		
		Texas Red Oak	Quercus shumardi 'Buckleyi'	3" caliper / 10' height minimum		
SMALL TR	EES	•				
SYMBOL	QUANTITY	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION		
	1	Texas Redbud	Cercis canadensis var. 'Texensis'	2" Cal., 6' height minimum		
	4	Tree Yaupon	llex vomitoria	2" Cal., 6' height minimum		
SHRUBS						
SYMBOL	QUANTITY	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION		
	86	Big Muhly	Muhlenbergia lindheirmeri	5 gallon minimum., 24" ht.		
		Dwarf Wax Myrtle	Myrica pusilla	5 gallon minimum., 24" ht.		
		Knockout Rose, Red	Rosa spp. 'Radrazz'	5 gallon minimum., 24" ht.		
		Texas Sage	Leucophyllum frutescens	5 gallon minimum., 24" ht.		
GROUND	COVER / F	PERENNIALS				
SYMBOL	QUANTITY	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION		
		Artemisia	Artemisia 'Powis Castle'	1 gallon minimum., 24" O.C.		
		Cherry Sage	Salvia greggii	1 gallon minimum., 24" O.C.		
	500	Damiantia	Chrysactina mexicana	1 gallon minimum., 24" O.C.		
	500	Fall Aster	Aster oblongifolium	1 gallon minimum., 24" O.C.		
		New Gold Lantana	Lantana x 'New G'ld	1 gallon minimum., 24" O.C.		
		Trailing Lantana	Lantana montevidensis	1 gallon minimum., 24" O.C.		
TURF GRA	ASS					
SYMBOL	QUANTITY	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION		
* * * * * * * * * * * * * * * * * * *	+/- 12,500	Tiffway 419 Bermuda Grass	Cynodon dactylon var. "Tiffway 419	SF - Solid sod free of weeds		
MISCELLA	NEOUS					
SYMBOL	QUANTITY	DESCRIPTION				
	+/- 4,400	SF 3" depth 3/8" limestone gravel w/ weed mat				
	+/- 6,100	SF 3" depth native hardwood				

#### NOTE:

No more than fifty percent (50%) of the required trees shall be of the same species

#### GENERAL LANDSCAPE CONSTRUCTION NOTES

- Contractor shall provide all labor and materials necessary to complete the work shown on the plans.
- 2.) All proposed landscaping is to be installed as per local city ordinances and codes. Notify
- owner's representative and landscape architect of any discrepancies prior to construction.

  3.) All plant material shall comply with plant size per container as stated by the American
- Association of Nurseryman.
  4.) Plants are subject to inspection and approval by the landscape architect. Plants are required
- for the site may be inspected and tagged at growing site before delivery.

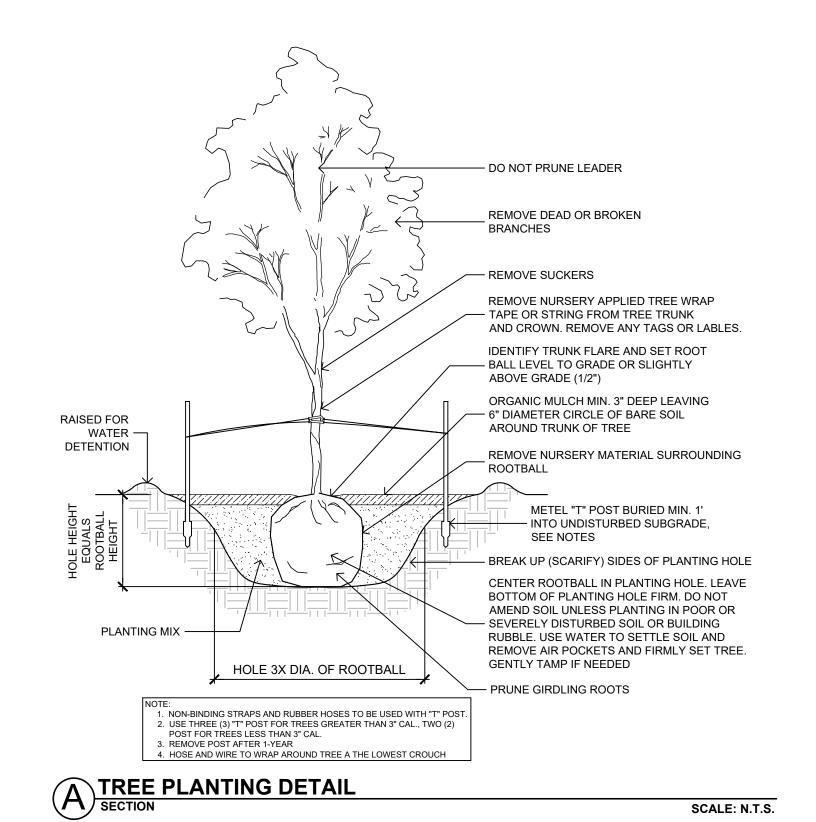
  5.) Groundcover bed preparation shall be 2 inches of planting mix tilled 8 inches into bed areas.
- 6.) Shrubs and trees shall be pocket planted. Excavate planting hole 1-1/2 times the width and height of the root ball. Backfill with  $\frac{1}{3}$  sandy loam.
- 7.) Grading shall provide positive drainage away from buildings and other structures. Fine grade for positive drainage to prevent ponding.
- 8.) Quantities provided in the plant list are for general use only, contractor is responsible for quality of workmanship, superintendence and scheduling of work.
- 9.) Contractor is responsible for quality of workmanship, superintendence and scheduling of
- 10.) Contractor is responsible for removal of trash and job safety conditions.
- 11.) Contractor to provide (1) year warranty on all plant material.

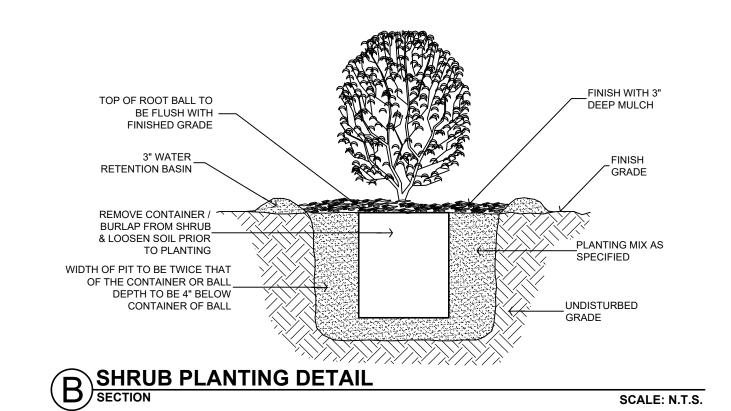
#### **IRRIGATION NOTES**

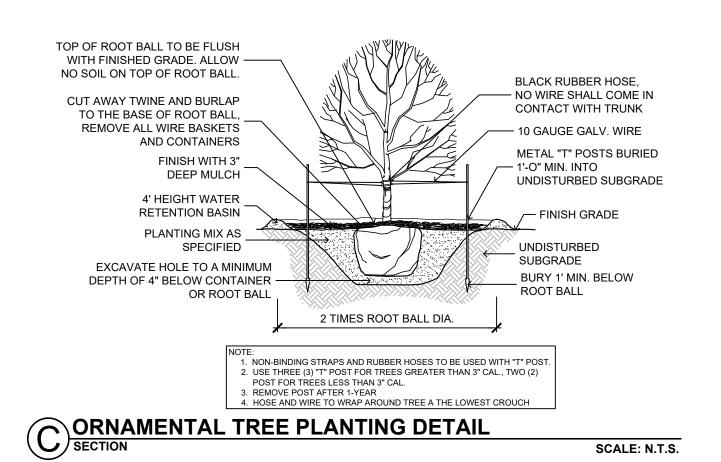
#### **UNDERGROUND AUTOMATIC SYSTEM NOTES**

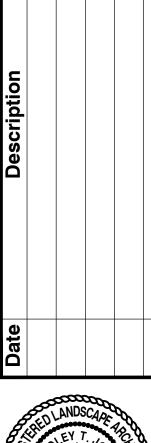
All required landscape areas shall be irrigated by an underground automatic system that may be include a drip irrigation system. This system shall adhere to manufacturer specifications and the rules and regulations established by TCEQ or successor agency. In addition, an irrigation system must be designed by a landscape architect or irrigator licensed by the state. An irrigation system shall comply with the following:

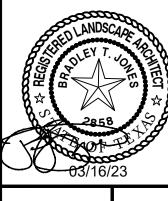
- a. Sprinkler head spacing shall be designed for head-to-head coverage and adjusted for prevailing winds. The system shall promote minimum runoff and minimum overespray onto non-irrigated areas (i.e., paving, walkway, buildings).
- b. Sprinkler heads shall have matched precipitation rates within each control valve circuit.
- c. Adjustable flow controls shall be required on circuit remote control valves. Pressure regulation components shall be required where static pressure exceeds manufacturer's recommended operating range.
- d. Valves and circuits shall be separated based on water use requirements, so that turf areas can be watered separately from shrubs, trees and groundcover areas. A minimum of one bubbler each shall be provided for all large and medium size trees.
- e. Serviceable check valves shall be required where elevation differential may cause low head drainage adjacent to paving areas.
- f. All automatic irrigation systems shall be equipped with an electronic controller capable of dual or multiple programming. Controller(s) shall have multiple cycles start capacity and a flexible calendar program, including the capability of being set to water every five days.
- g. All automatic irrigation systems shall be equipped with a rain and freeze sensor shut-off device.











GOODWILL - LIBERTY HILL 110 BRONCO BLVD, LIBERTY HILL, TX 78642

DATE: 03-16-23

SCALE: AS SHOWN

S

ECOLE DR. SUITE A. AUSTIN, TEXAS 78736



L2 of L2

JOB#: E125-40 SP-2023-