

ORIGINAL LAYOUT SIZE - 22X34
©2022, HUBBELS AKM (AMIR) L. MAKNOJIA/AKM 70370 (SMALL) JAMATKHANA REC CENTER/04 CAD/PILOT SHEETS/COVER DWG 12/15/2022 1:08:18

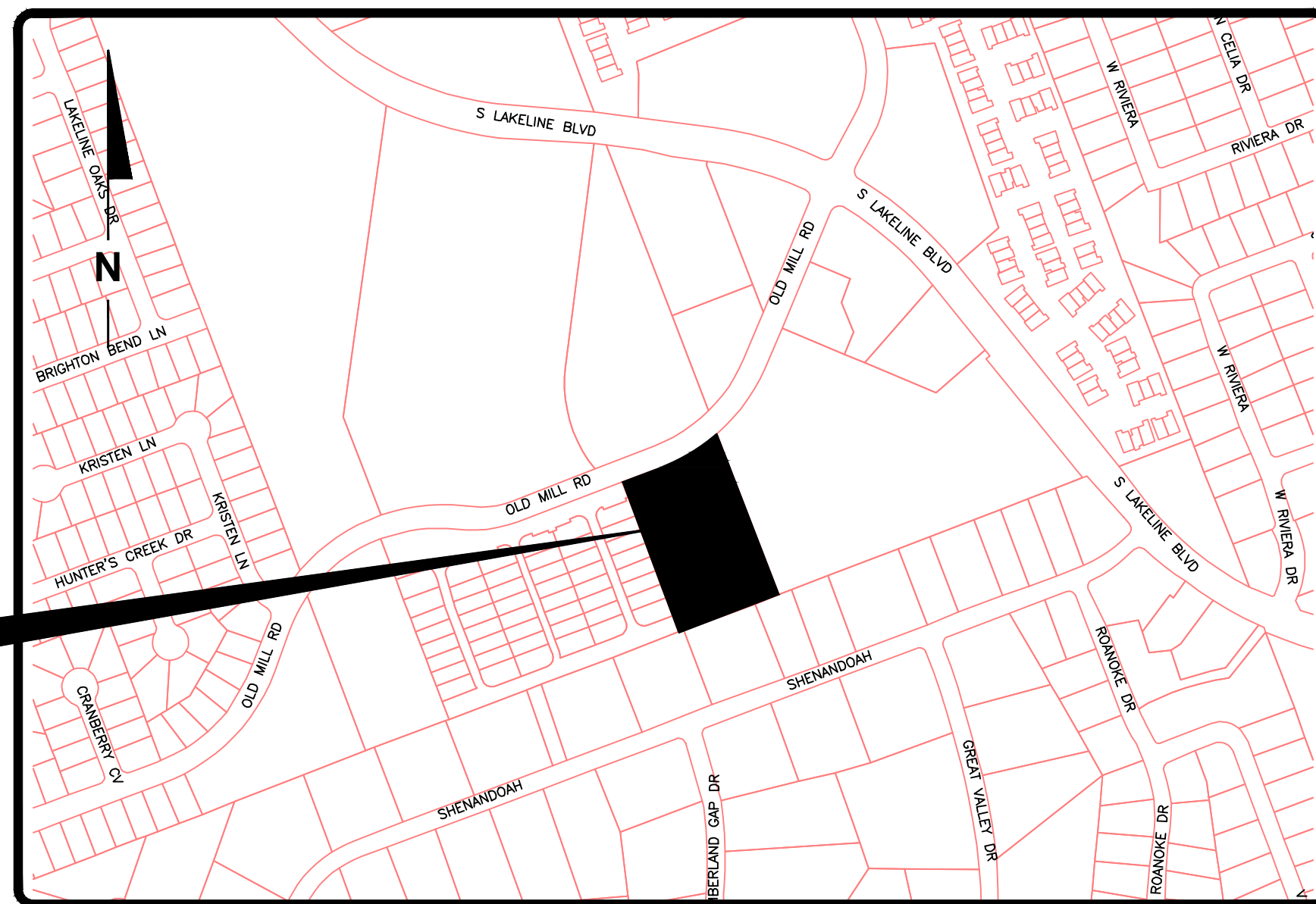
Site Development Plans For Unity Rec Center

820 Old Mill Road
Cedar Park, Texas 78613

2022-25-SD

Submittal Date: October 2022

Project Description: This project consists of the construction of a Recreational Center for a total of 76,367 sq. ft. (GSF) on a 3.00 acre site with associated parking, drainage and utility improvements. The total impervious cover is 58%



Project Location Map

1" = 400'

City Service Address Note:
During construction of any structure, the city service address must be posted on a sign in such a position as to be plainly visible and legible from the street indicated in the city service address.

No.	Description	Revise (R) Add (A) Void (V) in Sheet No's	Total # Sheets in Plan Set	Net Change Imp. Cover (sq. ft.)	Total Site Imp. Cover (sq. ft.) [%]	City of Cedar Park Approval /Date	Date Imagined

Site Development Data

Owner:
Unity Rec Center
Contact Person: Amir Maknoja
1410 Whitestone Blvd.
Cedar Park, Texas 78613
Phone: (512) 577-9314
Email: amir_mak1@yahoo.com

Engineer:
Bleyl Engineering
Contact Person: Steve Ihnen, PE
7701 San Felipe Blvd., Suite 200
Austin, Texas 78729
Phone: (512) 454-2400
Email: sihnen@bleylengineering.com

Surveyor:
4Ward Land Surveying
Contact Person: John Brautigam, RPLS
4120 Freidrich Lane, Suite 200
Austin, Texas 78744
Phone: (737) 249-0467
Email: jbrautigam@4wards.com

Legal Description:
Caspita / Hopper Sub, Lot 2, Acres 3

Zoning:
PO - Professional Office

Limits of Construction:
3.069 Acres

This project is located within the South Brushy Creek Watershed. All storm flows from this site will be directed to the South Brushy Creek Watershed. No portion of this tract is within the boundaries of the 100 year flood plain of any waterway that is within the limits of study of the Federal Flood Insurance Administration FIRM panel #48491C0605F, dated December 20, 2019 for Williamson County.

All detention basins, water quality ponds and appurtenances which receive stormwater runoff from commercial or multi-family development shall be maintained by the record owner in accordance with the maintenance standards in the Drainage and Environmental Criteria Manual.

Edwards Aquifer Note This project is located within the Edwards Aquifer Recharge Zone.

Contractor is responsible for filing all necessary forms with the Environmental Protection Agency for all projects involving 5 acres or more of disturbed area or part of a larger development which will eventually disturb 5 acres or more. **Note** The contractor and the owner both must file a Notice of Intent.

All temporary spoils and equipment storage areas shall have silt fence placed along the perimeter of the downslope side. Additional erosion/sedimentation controls may be required at the direction of the City's Environmental and Conservation Services Department Officer/Inspector. The contractor shall work closely with all City Personnel to insure adequacy of placement and maintenance of all erosion/sedimentation control devices. Only those construction entrances shown on the approved site plan shall be used for ingress and egress to and from site. In the event that additional entrance locations are required to facilitate placement of materials, the contractor shall construct a stabilized construction entrance in accordance with City of Austin Standard Details in order to comply with all provisions of the City's Land Development Code and Environmental Protection Ordinances.

Any project, as defined under Chapter 245 of the Texas Local Government Code, as amended shall expire on the Fifth anniversary of the date the first permit application was filed for the project, pursuant to Section 245.005 of the Texas Local Government Code, as amended (Sec. 14.03.009(b)).

These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.

Water & Wastewater City of Cedar Park Engineering Department 450 Cypress Creek Road, Bldg. 1 Cedar Park, Texas 78613 Phone: (512) 401-5000	City of Cedar Park Building Construction Department 450 Cypress Creek Road, Bldg. 1 Cedar Park, Texas 78613 Phone: (512) 401-5100 Email: permits@cedarparktexas.gov	Storm Sewer City of Cedar Park Engineering Department 450 Cypress Creek Road, Bldg. 1 Cedar Park, Texas 78613 Phone: (512) 401-5000
Electric Pedernales Electric Coop. 1949 W. Whitestone Blvd. Cedar Park, Texas 78613 Phone: (512) 401-2602 Contact: Ben Woods	Gas Center Point Energy 1005 Congress Ave Austin, Texas 78701 Phone: (512) 392-6673	

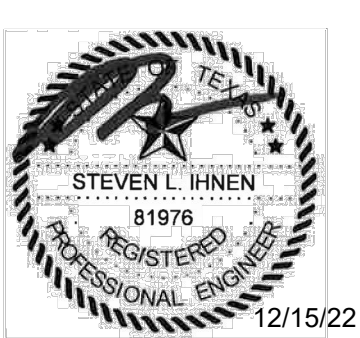
WPAP: Edwards Aquifer Protection Program ID No. 11-15032602; Investigation No. 1241017; Regulated Entity No. RN108190398

SCS: Edwards Aquifer Protection Program ID No. 11-15041403; Investigation No. 1241017; Regulated Entity No. RN108190398

TABS Registration #2022025592

I, Steven L. Ihnen, do hereby certify that the engineering work being submitted herein complies with all provisions of the Texas Engineering Practice Act, including Section 131.152(e). I hereby acknowledge that any misrepresentation regarding this certification constitutes a violation of the Act, and may result in criminal, civil and/or administrative penalties against me, as authorized by the Act. The plan or plat is complete, accurate and in compliance with Chapter 25-8 Subchapter A of the Land Development Code.

I certify that these engineering documents are complete, accurate and adequate for the intended purposes, including construction, but are not authorized for construction prior to formal City approval.



Sheet Number	Sheet Title
1	Cover
2	Subdivision Plat 1
3	General Notes
4	Fire Standard Notes
5	TCEQ Notes
6	Demolition Plan
7	Existing Conditions
8	Erosion & Sedimentation Plan
9	Erosion Control Notes
10	Erosion Control Details
11	Dimensional Control
12	Fire Protection Plan
13	Grading Plan
14	Storm Sewer Plan
15	Existing Drainage Area Map
16	Proposed Drainage Area Map
17	Inlet Drainage Area Map & TCEQ Calculations
18	Pond Plan
19	Utility Tap Plan
20	Construction Details

21	Water Details
22	Wastewater Details
23	AS1.0 Site Plan
24	AS1.1 Site Details
25	AS1.2 Fence Types
26	A2.0 Exterior Elevations
27	MEP Site Plan
28	Electrical Site Plan
29	Site Lighting Calculation
30	L1.1 Landscape Plan 1
31	L1.2 Landscape Plan 2
32	L1.3 Landscape Details

Reviewed for Code Compliance:
Signature required from all Departments

Planning	Date
Engineering Services	Date
Industrial Pretreatment	Date
Fire Marshal	Date
Landscape Planner	Date
Addressing	Date
2022-25-SD	Date
Site Development Permit Number	Date
TCEQ, Edwards Aquifer Protection Program No.	Date

All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In reviewing these plans, the City of Cedar Park must rely upon the adequacy of the work of the Design Engineer.

Bleyl Engineering and its associates will not be held responsible for the accuracy of the survey or for design errors or omissions resulting from survey inaccuracies.

Release of this application does not constitute a verification of all data, information and calculations supplied by the applicant. The engineer of record is solely responsible for the completeness, accuracy and adequacy of his/her submittal, whether or not the application is reviewed for Code compliance by City engineers.

A civil engineer registered in Texas must certify a plan or plat as complete, accurate, and in compliance with Chapter 25-8 Subchapter A of the Land Development Code. The director may waive this requirement after making a determination that the plan or plat includes only minor alterations or improvement that do not require the services of an engineer.

Traffic Control Plan Note
This note is being placed on the plan set in place of a temporary traffic control strategy with the full understanding that, at a minimum of 6 weeks prior to the start of construction, a temporary traffic control plan must be reviewed and approved by the Right of Way Management Division. The owner/ representative further recognizes that a review fee, as prescribed by the most current version of the City's fee ordinance, shall be paid each time a plan or plan revision is submitted to Right of Way Management Division for review.

The following must be taken into consideration when developing future traffic control strategies:

- Pedestrian and bicycle traffic access must be maintained at all times, unless otherwise authorized by Right of Way Management.
- No long-term lane closures will be authorized, unless Right of Way Management determines that adequate accommodations have been made to minimize traffic impact.
- Project should be phased so that utility installation minimally impacts existing or temporary pedestrian facilities.

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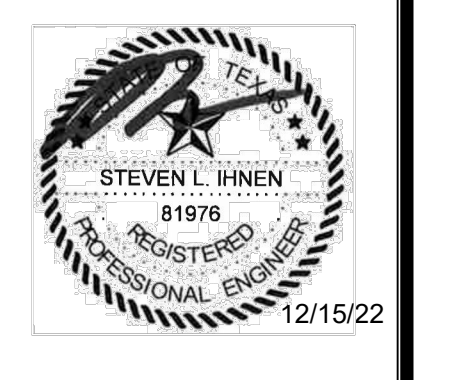
Revision	Date	By	App	Comment

Prepared For:
Caspita Industries, Inc./Pohl Partners Inc.
Leo Miks
10800 Pecan Park Blvd. #240
Austin, TX 78750

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Cover
Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County



Design: VG
CAD: AE Review: VG
Project No: AKM 70370
Sheet: **1 of 32**
2022-25-SD

ORIGINAL LAYOUT SIZE - 22X34

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City of Cedar Park
Fire Prevention Document

Standard Notes – Site Development			
Number: FP-2	Revision: 3	Effective Date: June 28, 2022	Pages: 3

- 0.1 Purpose**
- A.** This document is intended to provide an applicant for a site development plan with the list of common notes that must be included on the Fire Protection sheet.
- B.** Please list all of the following notes on the Fire Protection sheet contained within the site development plan. List in the order and format shown below.
1. Emergency Responder Radio Coverage (ERCC) is a critical component of all site development and building construction and must be contemplated early in the development process. ERCC is required for all new and existing buildings.
 - a. Testing for ERCC is the responsibility of the building owner or representative.
 - b. Testing must be in compliance with 2021 IFC Section 510.
 - c. Testing is required for:
 - i. Buildings with any sub-grade floor, including parking.
 - ii. Any building over 50,000 square feet.
 - iii. Any building more than 3 stories above grade plane.
 - iv. Any multi-story tilt wall building.
 - v. Any building where loss of signal strength becomes evident.
 1. Exception: 1- and 2-family dwellings and townhomes.
 - d. Testing must be completed after the building has the interior walls, exterior walls, elevator shafts, stair shafts, and roof completed, and remediation, if necessary, must be complete prior to issuance of a Certificate of Occupancy.
 - e. Remediation must be in compliance with 2021 IFC Section 510.
 - i. Exception: Plans may state that testing and remediation will be in accordance with 2021 IFC Section 510, however a combination of the two codes will not be allowed. Testing and remediation must both be in accordance with the same standard.
 2. Fire Apparatus Access Roads (Fire Lanes)
 - a. Must comply with 2021 International Fire Code (IFC) Chapter 5 and Appendices B through I, L and N, and City of Cedar Park Code of Ordinances Section 5.01 (fire code amendments).
 - b. Must be constructed of asphalt or concrete to support an imposed vehicle load of 90,000 pounds.
 - i. Grass pavers and other alternative materials are not allowed.
 - c. Must provide access to within 150 feet of all portions of the exterior of the building.
 - i. Access allowance is extended to 175 feet for a fully-sprinkled building.
 - d. Must have an unobstructed width of not less than 20 feet, except that at least 26 feet shall be required where hydrants are required along the fire lane or dead-end distances reach 500 feet or greater, or where required by other departments for mobility purposes.
 - e. Must have a minimum inside turning radius of 25 feet, and a minimum outside turning radius of 50 feet.
 - i. The minimum radii must be carried throughout the turning movement, from and to all required fire lanes. Example: a fire lane that turns 180-degrees must have a median depth of at least 50 feet.

- f. Must not have a dead-end of more than 150 feet without an approved turn-around at the dead-end.
 - i. Drawings for approved turn-arounds may be found in the 2021 IFC, Appendix D as amended.
 1. Must be 26 feet wide if the dead end is 500 feet or longer.
 2. Must have enlarged radii, per illustration.
 3. 150-500-foot dead end requires 96-foot diameter cul-de-sac, 120-foot hammerhead, or the alternative to the hammerhead.
 4. 501-750-foot dead end requires 96-foot diameter cul-de-sac
 5. 751-1000-foot dead end requires 108-foot diameter cul-de-sac
 6. Dead-ends over 1000 feet not allowed.
 - g. Shall not exceed a grade of more than 10% along any section of fire lane.
 - h. Shall not exceed an algebraic difference of more than 8% along the angles of approach and departure, measured on a rolling 50-stretch of fire lane. This includes transitions across sidewalks and cross-connecting streets, drives, and fire lanes.
 - i. Must be marked with red traffic paint or dye along both sides of the fire lane in a continuous stripe a minimum of 4 inches wide.
 - i. Stripe must use the curb face where available, and must continue along the pavement where no curb face is present.
 - ii. Must stencil FIRE LANE TOW AWAY ZONE in white letters a minimum of 3 inches high, no further than 35 feet between stencils. Place on curb face where available.
- 3. Fire Lanes During Construction**
- a. All fire lanes shown on the Fire Protection sheet must be in place prior to the onset of vertical construction, and prior to the delivery of any combustible materials to the site.
 - i. Compacted base may be used as fire apparatus access road during construction if approved by the Fire Prevention Division.
 1. Permission must be granted in writing.
 2. A compaction report shall be submitted by a third-party group prior to vertical construction and at any time throughout the construction process when deemed necessary by the Fire Prevention Division. Report must show 100% of optimal density throughout the fire lane, measured every 50 feet.
 3. Failure to maintain compacted base may result in a halt in construction until access is restored according to these standards.
 4. Even with compacted base, ALL CONCRETE DRIVEWAY APPROACHES MUST BE INSTALLED.
 5. Temporary fire lanes must still be identified as fire lanes – method to be approved by the Fire Prevention Division.
 - b. Fire lanes must be maintained throughout the construction process, and must be kept clear at all time. Blocking the fire lane with construction equipment or materials is not permitted.
- 4. Fire Protection During Construction**
- a. In addition to the fire lane, all fire hydrants need to be installed, tested, and functional prior to the onset of vertical construction, and prior to the delivery of combustible materials.
 - b. No burning of materials on site allowed.

- c. No smoking allowed inside any building under construction, nor within 10 feet of combustible construction. Site supervisor shall designate smoking areas away from the building under construction.
 - d. Site and building shall be kept free of debris and waste materials.
 - e. Standpipe for fire protection, if required, shall be installed before a building under construction reaches 40 feet in height, and shall be extended per floor up to one floor below the highest progressed floor.
 - f. Buildings shall not be occupied, nor shall any combustible items not related to the construction process be brought into the building prior to acceptance of all required fire protection systems.
 - g. All construction vehicles and those driven by the contractors and their sub-contractors shall be maintained on the lot that is under construction.
 - h. Buildings under construction shall have portable fire extinguishers:
 - i. At each stairway on all floor levels.
 - ii. In every storage and construction shed.
 - iii. Anywhere a special hazard exists, such as flammable liquid storage or use.
- 5. Fire Hydrants**
- a. Fire hydrants shall be installed in accordance with 2021 IFC Chapter 5 and Appendices B and C, including all footnotes in Table C102.1.
 - b. Any hydrant used to serve the fire flow for a building must be within 400 feet of the building, and must be positioned along a fire lane.
 - c. Hydrants shall be installed at least 3 feet from back of curb on the fire lane, but not more than 6 feet.
 - d. Hydrants shall be installed such that the center of the 5" cap measures at least 18 inches from finished grade, but not more than 24 inches.
 - e. Hydrants are required within 100 feet of a fire department connection or standpipe system, measured as the hose would lay along the fire lane. This hydrant shall not substitute for the hydrant(s) required by section 507.5.1.
 - f. The 5" cap must face the fire lane.
- 6. Approved Fire Apparatus Turn-arounds**
- a. Drawings for approved turn-arounds may be found in the 2021 IFC, Appendix D as amended.
 - i. 150-500-foot dead end requires 96-foot diameter cul-de-sac, 120-foot hammerhead, or the alternative to the hammerhead.
 - ii. 501-750-foot dead end requires 96-foot diameter cul-de-sac
 - iii. 751-1000-foot dead end requires 108-foot diameter cul-de-sac
 - iv. Dead-ends over 1000 feet not allowed.

Revision	Date	By	App Comment

Prepared For:
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Lee Mils
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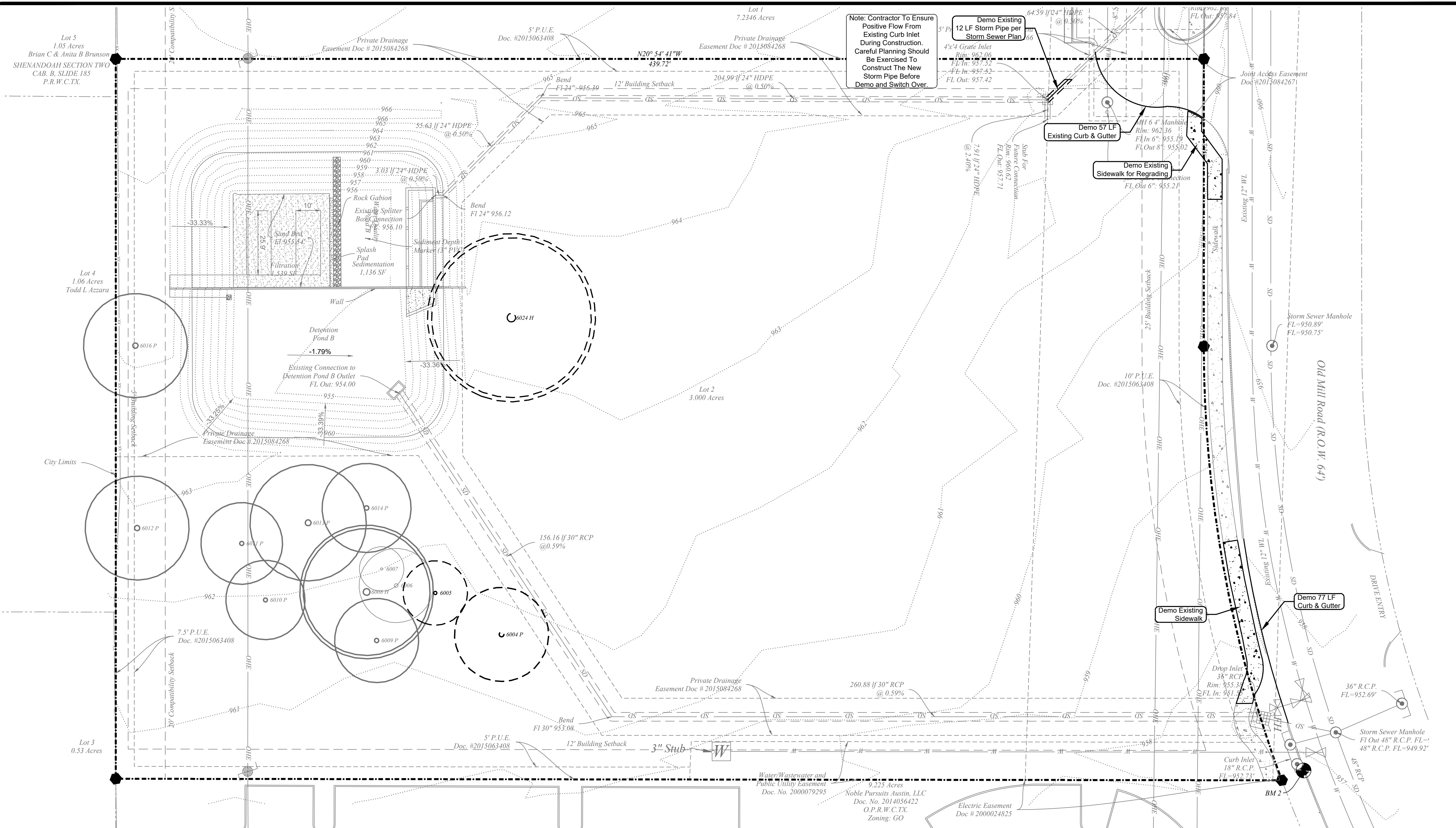
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HOUSTON

Fire Standard Notes

Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County





#	City Code	Species	Trunks	Description	Caliper Equivalent	Status
6004	P	Elm	3	10", 9", 8"	18.5	Removed
6005		Elm	1	13"	13	Removed
6006		Elm	1	15"	15	
6007		Post Oak	1	9"	9	
6008	H	Post Oak	2	21", 12"	27	
6009	P	Post Oak	1	17"	17	
6010	P	Post Oak	1	16"	16	
6011	P	Post Oak	2	12", 9"	16.5	
6012	P	Post Oak	1	21"	21	
6013	P	Post Oak	2	17", 13"	23.5	
6014	P	Post Oak	1	18"	18	
6016	P	Post Oak	1	21"	21	
6024	H	Post Oak	2	23", 21"	33.5	Removed

These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.

- Site Demolition Notes**
1. Install all tree protection fencing as per Sheet 7.
 2. All demolition within the full critical root zone of preserved trees to be performed with hand tools only.
 3. A pre-construction meeting with the Environmental Inspector is required prior to any site disturbance.
 4. All abandoned piping is to be plugged.
 5. Existing trees on the site are to remain unless noted otherwise.
 6. Contractor is to remove all demolished materials from site, and to repair or replace any materials or items designated to remain.
 7. Demolition work should be completed prior to any commencement of work on the proposed building.
 8. Contractor to remove gas & water meters and return meters to respective utility companies.
 9. Contractor to use "Sidewalk Closed" signs during sidewalk closures.
 10. Notify contracting officer and arborist before commencement of work which may jeopardize the well-being of any trees to remain.

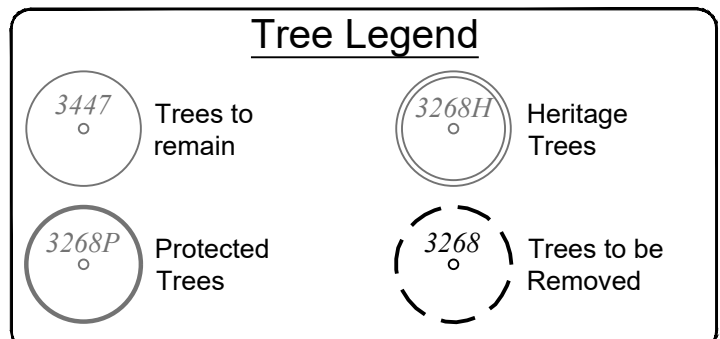


Call Before You Dig!!

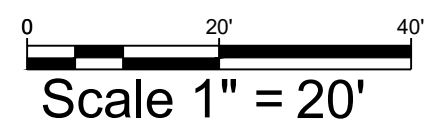
Benchmarks
 B.M. #1 - Square cut on top of curb
 Elevation = 963.01'
 B.M. #2 - Square cut on N.E. corner of inlet
 Elevation = 957.18'

Survey Control Point
 Grid N: 10,146,155.73
 Grid E: 3,087,275.54

The location of all existing utilities shown on these plans has been based upon record information only and may not match locations as constructed. The contractor shall contact Texas 811 for assistance in determining existing utility locations prior to beginning construction. Contractor shall field verify locations of utility crossings prior to beginning construction.



Legal Description
 Caspita/Hopper Subdivision, Lot 2, Acres 3



Scale 1" = 20'

Revision	Date	By	App	Comment

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 Lee Mills
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 Austin, TX 78750

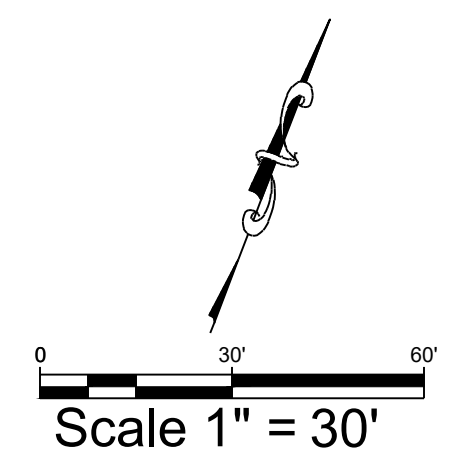
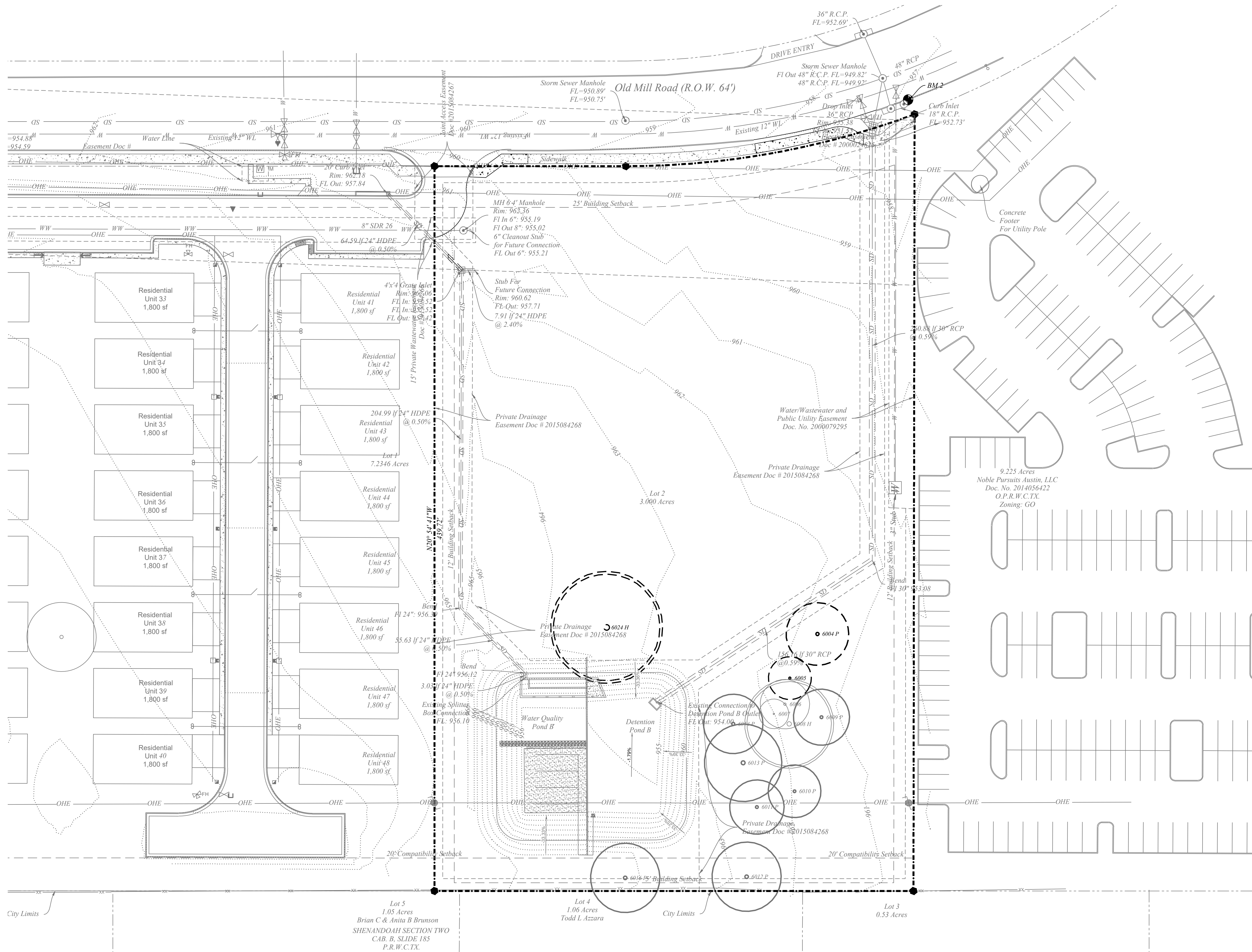
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Demolition Plan
 Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County



Design: VG
 CAD: AE Revision: VG
 Project No: AKM 70370
 Sheet: 6 of 32
 2022-25-SD



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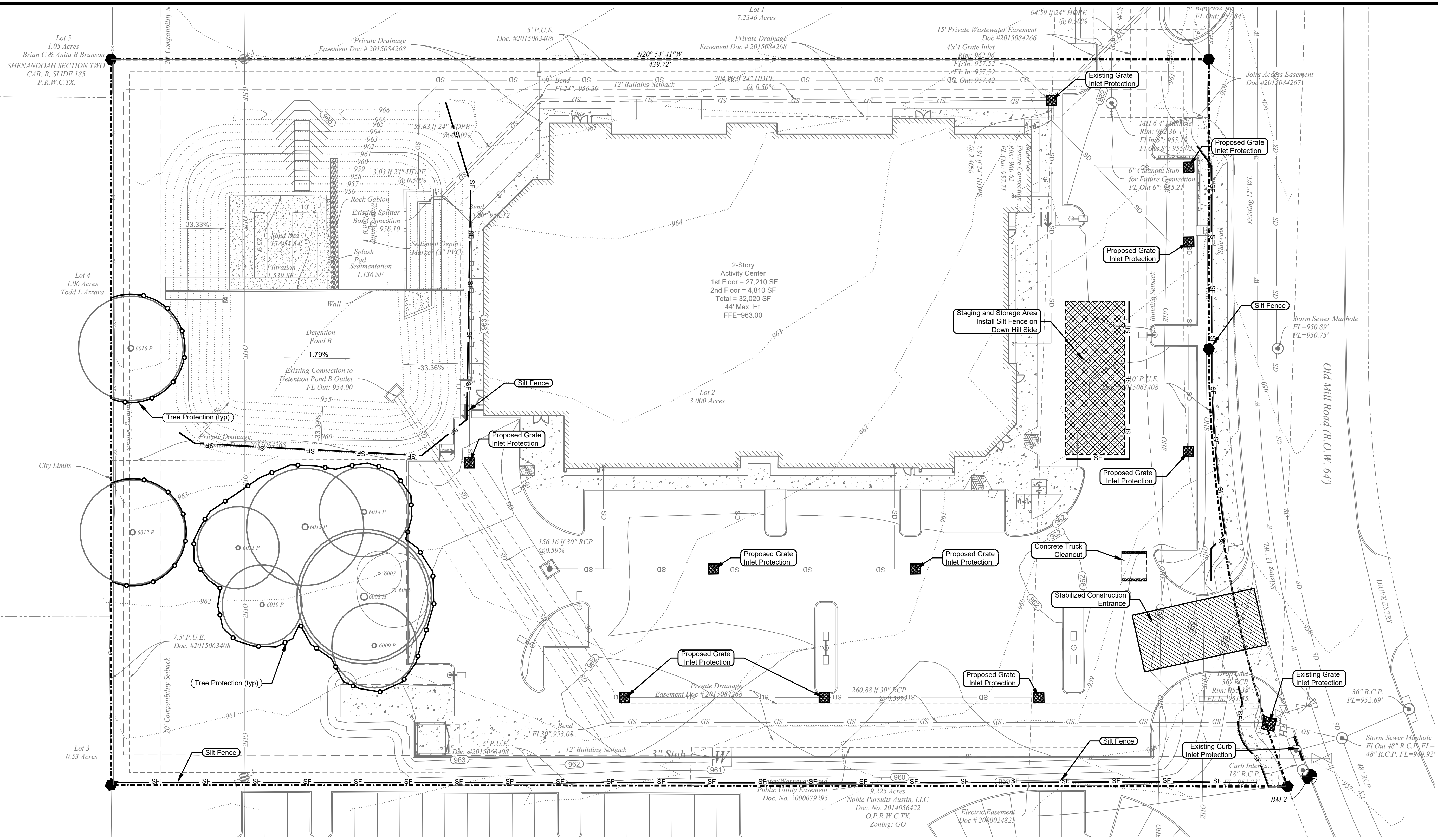
Existing Conditions
Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County

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 CAD: AE Review: VG
 Project No: AKM 70370
 Sheet: **7** of **32**
2022-25-SD

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Legend	
LOC	Proposed Limits of Construction
SF	Proposed Silt Fence
MS	Proposed Mulch Sock
Tree Protection Fence	Proposed Tree Protection Fence
Inlet Protection	Proposed Inlet Protection
Tree	Tree to be Removed

These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.

- ### Erosion Notes
1. A preconstruction meeting with the Environmental Inspector is required prior to any site disturbance.
 2. Silt fence type and installation shall comply with ECM 1.4.2(G)
 3. If disturbed area is not to be worked on for more than 14 days, disturbed area needs to be stabilized by revegetation, mulch, tarp or revegetation matting.
 4. Environmental Inspector has the authority to add and/or modify erosion/sedimentation controls on site to keep project in-compliance with the City of Austin Rules and Regulations, [LDC 25-8-183].
 5. Contractor shall utilize dust control measures during site construction such as irrigation trucks and mulching as per ECM 1.4.5(A), or as directed by the Environmental Inspector.
 6. The contractor will clean up spoils that migrate onto the roads a minimum of once daily. [ECM 1.4.4.D.4]



Call Before You Dig!!

Benchmarks

B.M. #1 - Square cut on top of curb
Elevation = 963.01'
B.M. #2 - Square cut on N.E. corner of inlet
Elevation = 957.18'

Survey Control Point

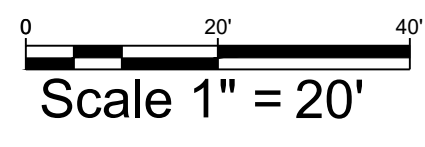
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Legal Description

Caspita/Hopper Subdivision, Lot 2, Acres 3

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Erosion & Sedimentation Plan

Unity Rec Center
820 Old Mill Road
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Williamson County

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Design: VG
CAD: AE Review: VG
Project No: AKM 70370
Sheet: **8** of **32**
2022-25-SD

Erosion Control Notes

- 1. The contractor shall install erosion/sedimentation controls, tree/natural area protective fencing, and conduct "Pre-Construction" tree fertilization (if applicable) prior to any site preparation work...
2. The placement of erosion/sedimentation controls shall be in accordance with the Environmental Criteria Manual and the approved Erosion and Sedimentation Control Plan...
- Plan sheets submitted to the City of Austin MUST show the following:
• Direction of flow during grading operations.
• Location, description, and calculations for off-site flow diversion structures.
• Areas that will not be disturbed; natural features to be preserved.
• Delineation of contributing drainage area to each proposed BMP (e.g., silt fence, sediment basin, etc.)
• Location and type of E&S BMPs for each phase of disturbance.
• Calculations for BMPs as required.
• Location and description of temporary stabilization measures.
• Location of on-site spoils, description of handling and disposal of borrow materials, and description of on-site permanent spoils disposal areas, including size, depth of fill and revegetation procedures.
• Describe sequence of construction as it pertains to ESC including the following elements:
1. Installation sequence of controls (e.g. perimeter controls, then sediment basins, then temporary stabilization, then permanent, etc.)
2. Project phasing if required (LOC greater than 25 acres)
3. Sequence of grading operations and notation of temporary stabilization measures to be used
4. Schedule for converting temporary basins to permanent WQ controls
5. Schedule for removal of temporary controls
6. Anticipated maintenance schedule for temporary controls
- Categorize each BMP under one of the following areas of BMP activity as described below:
3.1 Minimize disturbed area and protect natural features and soil
3.2 Control Stormwater flowing onto and through the project
3.3 Stabilize Soils
3.4 Protect Slopes
3.5 Protect Storm Drain Inlets
3.6 Establish Perimeter Controls and Sediment Barriers
3.7 Retain Sediment On-Site and Control Dewatering Practices
3.8 Establish Stabilized Construction Exits
3.9 Any Additional BMPs
- Note the location of each BMP on your site map(s).
- For any structural BMPs, you should provide design specifications and details and refer to them.
- For more information, see City of Austin Environmental Criteria Manual 1.4.
3. The Placement of tree/natural area protective fencing shall be in accordance with the City of Austin standard Notes for Tree and Natural Area Protection and the approved Grading/Tree and Natural Area Plan.
4. A pre-construction conference shall be held on-site with the contractor, design Engineer/permit applicant and Environmental Inspector after installation of the erosion/sedimentation controls, tree/natural area protection measures and "Pre-Construction" tree fertilization (if applicable) prior to beginning any site preparation work...
5. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the reviewing Engineer, Environmental Specialist or City Arborist as appropriate...
6. The contractor is required to provide a certified inspector that is either a licensed engineer (or person directly supervised by the licensed engineer) or Certified Professional in Erosion and Sediment Control (CPESC or CPESC-IT), Certified Erosion, Sediment and Stormwater- Inspector (CESSWI or CESSWI) or Certified Inspector of Sedimentation and Erosion Controls (CISEC or CISEC-IT) certification to inspect the controls and fences at weekly or bi-weekly intervals and after one-half (1/2) inch or greater rainfall events to insure that they are functioning properly...
7. Prior to final acceptance by the City, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated...
8. All work must stop if a void in the rock substrate is discovered which is; one square foot in total area; blows air from within the substrate and/or consistently receives water during any rain event...
9. Temporary and Permanent Erosion Control: All disturbed areas shall be restored as noted below:
A. All disturbed areas to be revegetated are required to place a minimum of six (6) inches of topsoil [see Standard Specification Item No. 601S.3(A)]. Do not add topsoil within the critical root zone of existing trees.
• Topsoil salvaged from the existing site is encouraged for use, but it should meet the standards set forth in 601S.
An owner/engineer may propose use of onsite salvaged topsoil which does not meet the criteria of Standard Specification 601S by providing a soil analysis and a written statement from a qualified professional in soils, landscape architecture, or agronomy indicating the onsite topsoil will provide an equivalent growth media and specifying what, if any, soil amendments are required.
• Soil amendments shall be worked into the existing onsite topsoil with a disc or tiller to create a well-blended material.
The vegetative stabilization of areas disturbed by construction shall be as follows:
TEMPORARY VEGETATIVE STABILIZATION:
1. From September 15 to March 1, seeding shall be with or include a cool season cover crop: (Western Wheatgrass (Pascopyrum smithii) at 5.6 pounds per acre, Oats (Avena sativa) at 4.0 pounds per acre, Cereal Rye Grain (Secale cereale) at 45 pounds per acre. Contractor must ensure that any seed application requiring a cool season cover crop does not utilize annual ryegrass (Lolium multiflorum) or perennial ryegrass (Lolium perenne). Cool season cover crops are not permanent erosion control.
2. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 45 pounds per acre or a native plant seed mix conforming to Item 604S or 609S.
A. Fertilizer shall be applied only if warranted by a soil test and shall conform to Item No. 606S, Fertilizer. Fertilization should not occur when rainfall is expected or during slow plant growth or dormancy. Chemical fertilizer may not be applied in the Critical Water Quality Zone.
B. Hydromulch shall comply with Table 1, below.
C. Temporary erosion control shall be acceptable when the grass has grown at least 1 1/2 inches high with a minimum of 95% total coverage so that all areas of a site that rely on vegetation for temporary stabilization are uniformly vegetated, and provided there are no bare spots larger than 10 square feet.
D. When required, native plant seeding shall comply with requirements of the City of Austin Environmental Criteria Manual, and Standard Specification 604S or 609S.

Table 1: Hydromulching for Temporary Vegetative Stabilization

Table with 5 columns: Material, Description, Longevity, Typical Application, Application Rates. Row 1: 100% or any blend of wood, cellulose, straw, and/or cotton plant material (except no mulch shall exceed 30% paper) | 70% or greater Wood/Straw 30% or less Paper or Natural Fibers | 0-3 months | Moderate slopes; from flat to 3:1 | 1500 to 2000 lbs per acres)

- PERMANENT VEGETATIVE STABILIZATION:
1. From September 15 to March 1, seeding is considered to be temporary stabilization only. If cool season cover crops exist where permanent vegetative stabilization is desired, the grasses shall be mowed to a height of less than one-half (1/2) inch and the area shall be re-seeded in accordance with Table 2 below. Alternatively, the cool season cover crop can be mixed with Bermudagrass or native seed and installed together, understanding that germination of warm-season seed typically requires soil temperatures of 60 to 70 degrees.
2. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 45 pounds per acre with a purity of 95% and a minimum pure live seed (PLS) of 0.83. Bermuda grass is a warm season grass and is considered permanent erosion control. Permanent vegetative stabilization can also be accomplished with a native plant seed mix conforming to Item 604S or 609S.

- A. Fertilizer use shall follow the recommendation of a soil test. See Item 606S, Fertilizer. Applications of fertilizer (and pesticide) on City-owned and managed property requires the yearly submittal of a Pesticide and Fertilizer Application Record, along with a current copy of the applicator's license. For current copy of the record template contact the City of Austin's IPM Coordinator.
B. Hydromulch shall comply with Table 2, below.
C. Water the seeded areas immediately after installation to achieve germination and a healthy stand of plants that can ultimately survive without supplemental water. Apply the water uniformly to the planted areas without causing displacement or erosion of the materials or soil. Maintain the seedbed in a moist condition favorable for plant growth. All watering shall comply with City Code Chapter 6-4 (Water Conservation), at rates and frequencies determined by a licensed irrigator or other qualified professional, and as allowed by the Austin Water Utility and current water restrictions and water conservation initiatives.
D. Permanent erosion control shall be acceptable when the grass has grown at least 1 1/2 inches high with a minimum of 95 percent for the non-native mix, and 95 percent coverage for the native mix so that all areas of a site that rely on vegetation for stability must be uniformly vegetated, and provided there are no bare spots larger than 10 square feet.
E. When required, native plant seeding shall comply with requirements of the City of Austin Environmental Criteria Manual, Items 604S and 609S.

Table 2: Hydromulching for Permanent Vegetative Stabilization

Table with 5 columns: Material, Description, Longevity, Typical Application, Application Rates. Row 1: Bonded Fiber Matrix (BFM) | 80% Organic defibrated fibers | | | | Row 2: 10% Tackifier | | 6 Months | On slopes up to 2:1 and erosive soil conditions | 2,500 to 4,000 lbs per acre (see manufacturer specifications) | Row 3: Fiber Reinforced Matrix (FRM) | 65% Organic defibrated fibers 25% Reinforcing Fibers or less 10% Tackifier | Up to 12 months | On slopes up to 1:1 and erosive soil condition. | 3000 to 4500 lbs per acre (see manufacturer recommendations)

- 10. Developer Information:
Owner: Amir Maknoja Phone: (512) 577-9314
Address: 1410 Whitestone Blvd. Cedar Park, Texas 78613
Owner's representative responsible for plan alterations:
Bleyl Engineering Phone # (512) 454-2400
Person or firm responsible for erosion/sedimentation control maintenance:
Amir Maknoja Phone # (512) 577-9314
Person or firm responsible for tree/natural area protection Maintenance:
Amir Maknoja Phone # (512) 577-9314
11. The contractor shall not dispose of surplus excavated material from the site without notifying the Development Services Department at (512) 974-2278 at least 48 hours prior with the location and a copy of the permit issued to receive the material.
12. All disturbed areas shall be re-vegetated to meet the requirements of the City of Cedar Park's ordinances.

Tree and Natural Area Protection Notes

- 1. All trees and natural areas shown on plan to be preserved shall be protected during construction with temporary fencing.
2. Protective fences shall be erected according to City of Austin Standards for Tree Protection.
3. Protective fences shall be installed prior to the start of any site preparation work (clearing, grubbing or grading), and shall be maintained throughout all phases of the construction project.
4. Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in soil build-up within tree drip lines.
5. Protective fences shall surround the trees or group of trees, and will be located at the outermost limit of branches (drip line), for natural areas, protective fences shall follow the Limit of Construction line, in order to prevent the following:
a. Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;
b. Root zone disturbances due to grade changes (greater than 6 inches cut or fill), or trenching not reviewed and authorized by the City Arborist;
c. Wounds to exposed roots, trunk or limbs by mechanical equipment;
d. Other activities detrimental to trees such as chemical storage, cement truck cleaning and fires.
6. Exceptions to installing fences at tree drip lines may be permitted in the following cases:
a. Where there is to be an approved grade change, impermeable paving surface, tree well, or other such site development, erect the fence approximately 2 to 4 feet beyond the area disturbed;
b. Where permeable paving is to be installed within a tree's drip line, erect the fence at the outer limits of the permeable paving area (prior to site grading so that this area is graded separately prior to paving installation to minimized root damage);
c. Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the building;
d. Where there are severe space constraints due to tract size, or other special requirements, contact the City Arborist at 974-1876 to discuss alternatives.

- Special Note:
For the protection of natural areas, no exceptions to installing fences at the Limit of Construction line will be permitted.
7. Where any of the above exceptions result in a fence being closer than 4 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 6 ft. (or to the limits of lower branching) in addition to the reduced fencing provided.
8. Trees approved for removal shall be removed in a manner which does not impact trees to be preserved.
9. Any roots exposed by construction activity shall be pruned flush with the soil. Backfill root areas with good quality top soil as soon as possible. If exposed root areas are not backfilled within 2 days, cover them with organic material in a manner which reduces soil temperature and minimizes water loss due to evaporation.
10. Any trenching required for the installation of landscape irrigation shall be placed as far from existing tree trunks as possible.
11. No landscape topsoil dressing greater than 4 inches shall be permitted within the drip line of trees. No soil is permitted on the root flare of any tree.
12. Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs. (ripping of branches, etc.)
13. All finished pruning shall be done according to recognized, approved standards of the industry (Reference the National Arborist Association Pruning Standards for Shade Trees available on request from the City Arborist).
14. Deviations from the above notes may be considered ordinance violations if there is substantial non-compliance or if a tree sustains damage as a result.

Special Construction Techniques

- 1. Prior to excavation within tree driplines, or the removal of trees adjacent to the other trees that are to remain, make a clean cut between the disturbed and undisturbed root zones with a rock saw or similar equipment to minimize root damage.
2. In critical root zone areas that cannot be protected during construction with fencing, and where heavy vehicular traffic is anticipated, cover those areas with four (4) inches of organic mulch to be produced on site, to minimize soil compaction.
3. Perform all grading within critical root zone areas with small equipment to minimize root damage.
4. Water all trees most heavily impacted by construction activities deeply as necessary during periods of hot, dry weather. Spray tree crowns with water periodically to reduce dust accumulation on the leaves.
5. When installing concrete adjacent to the root zone of a tree, use a plastic vapor barrier behind the concrete to prohibit leaching of lime into the soil.

Remedial Tree Care Notes

Aeration and Supplemental Nutrient requirements for trees within construction areas
As a component of an effective remedial tree care program per Environmental Criteria Manual section 3.5.4, preserved trees within the limits of construction may require soil aeration and supplemental nutrients. Soil and/or foliar analysis should be used to determine the need for supplemental nutrients. The City Arborist may require these analyses as part of a comprehensive tree care plan. Soil pH shall be considered when determining the fertilization composition as soil pH influences the tree's ability to uptake nutrients from the soil. If analyses indicate the need for supplemental nutrients, then humate/nutrient solutions with mycorrhizae components are highly recommended. In addition, soil analysis may be needed to determine if organic material or beneficial microorganisms are needed to improve soil health. Materials and methods are to be approved by the City Arborist (512-974-1876) prior to application. The owner or general contractor shall select a fertilization contractor and insure coordination with the City Arborist.
Pre-construction treatment should be applied in the appropriate season, ideally the season preceding the proposed construction. Minimally, areas to be treated include the entire critical root zone of trees as depicted on the City approved plans. Treatment should include, but not limited to, fertilization, soil treatment, mulching, and proper pruning.
Post-construction treatment should occur during final revegetation or as determined by a qualified arborist after construction. Construction activities often result in a reduction in soil macro and micro pores and an increase in soil bulk density. To ameliorate the degraded soil conditions, aeration via water and/or air injected into the soil is needed or by other methods as approved by the City Arborist. The proposed nutrient mix specifications and soil and/or foliar analysis results need to be provided to and approved by the City Arborist prior to application (Fax # 512-974-3010). Construction which will be completed in less than 90 days may use materials at 1/2 recommended rates. Alternative organic fertilizer materials are acceptable when approved by the City Arborist. Within 7 days after fertilization is performed, the contractor shall provide documentation of the work performed to the City Arborist, Development Services Department. P.O. Box 1088, Austin, TX 78767. This note should be referenced as item #1 in the Sequence of Construction.

Dust Control Note

Contractor shall utilize dust control measures during site construction such as irrigation trucks and mulching as per ECM 1.4.5(A), or as directed by the Environmental Inspector.

Environmental Inspector Note

Environmental Inspector has the authority to add and/or modify erosion/sedimentation controls on site to keep project in-compliance with the City of Austin Rules and Regulations.

Spoils Control Note

All spoils will be cleaned off of all roads, driveways, and any other impervious cover located outside the LOC at the end of each day.

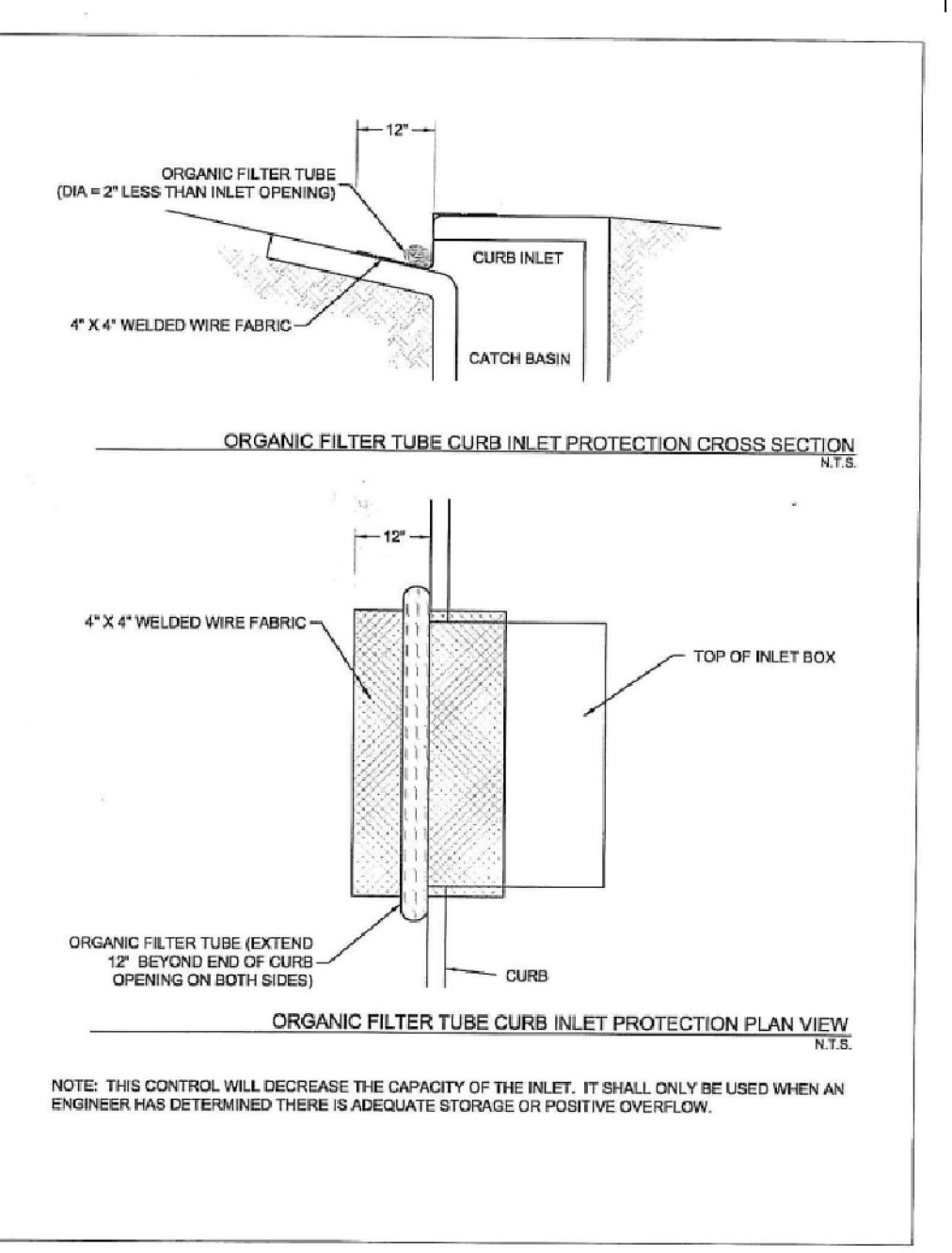
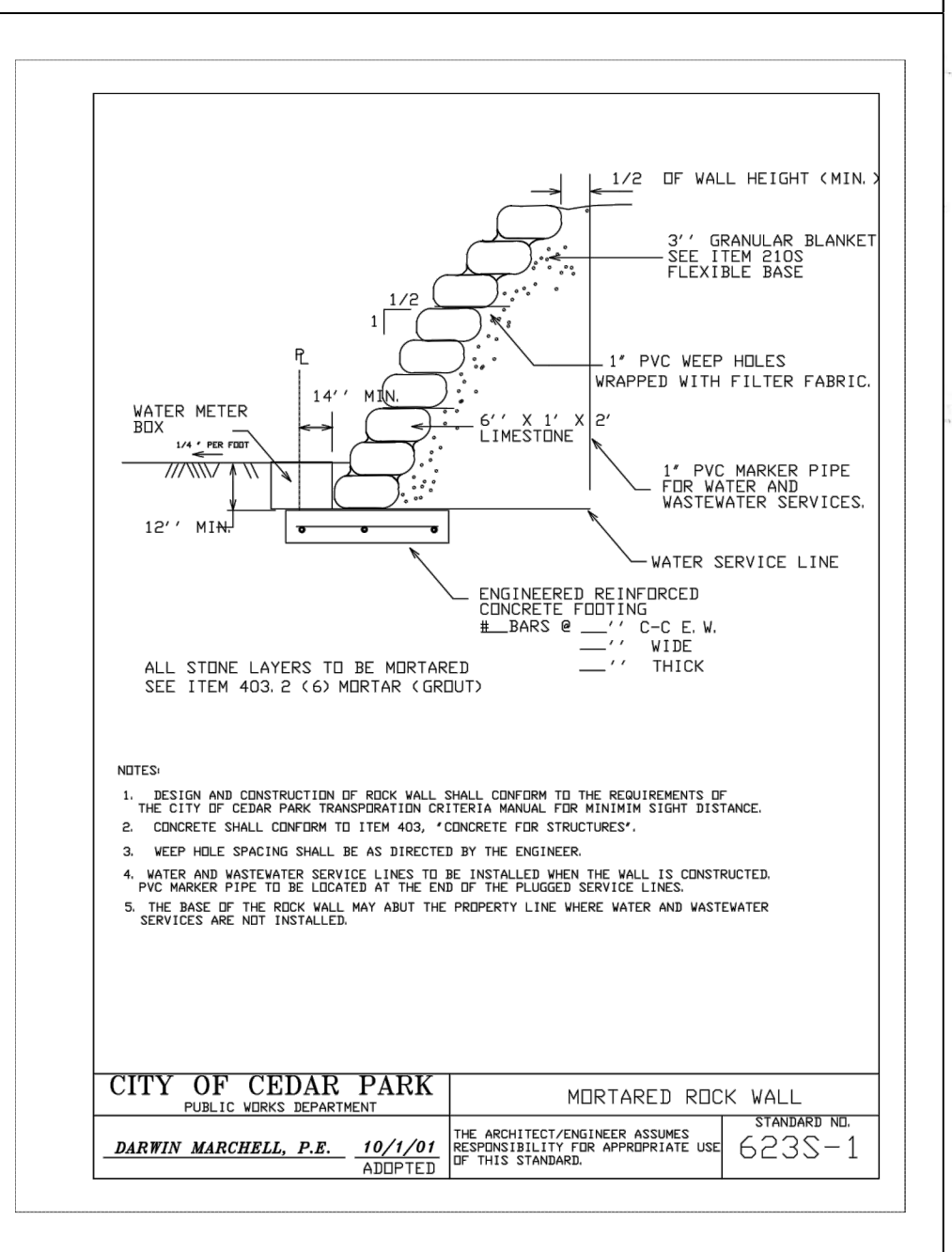
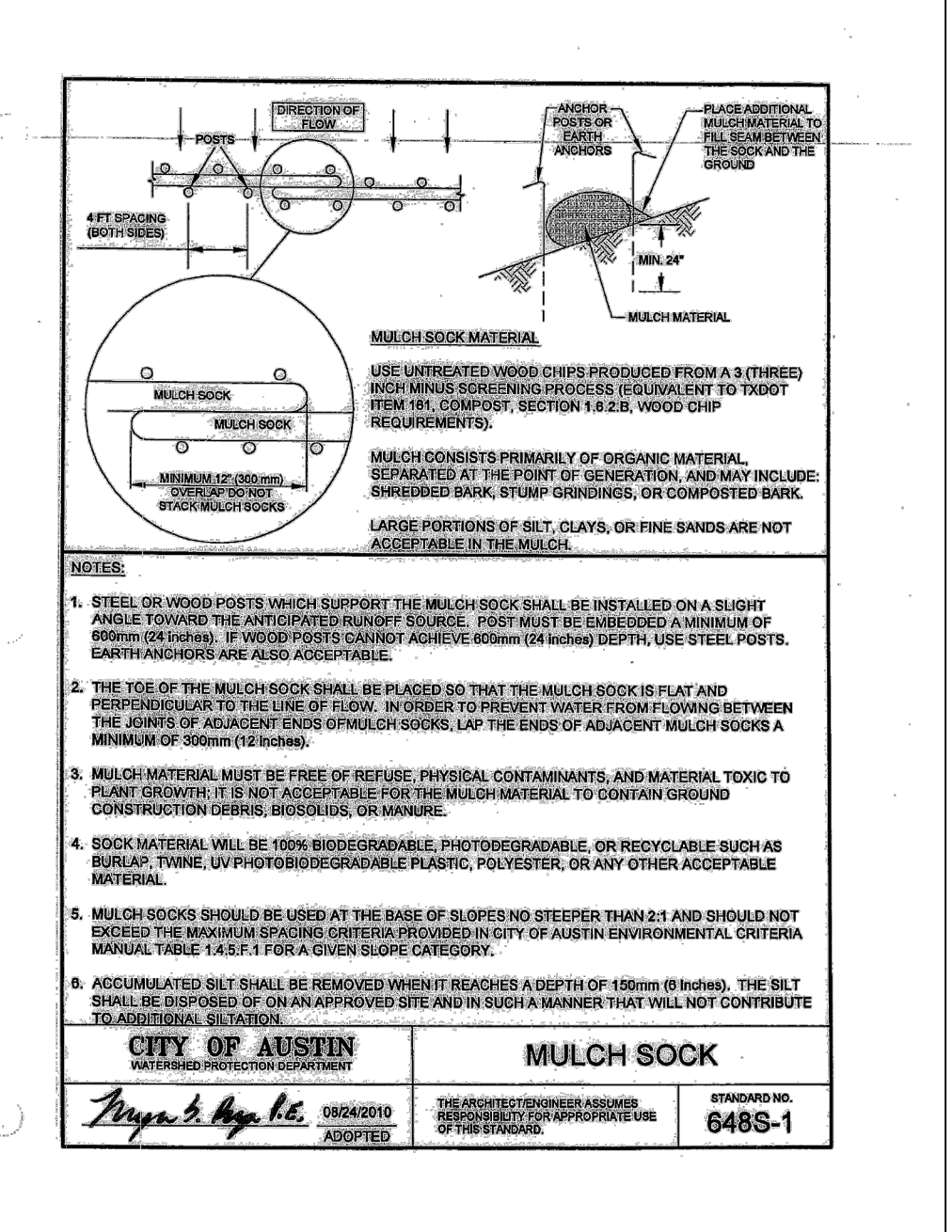
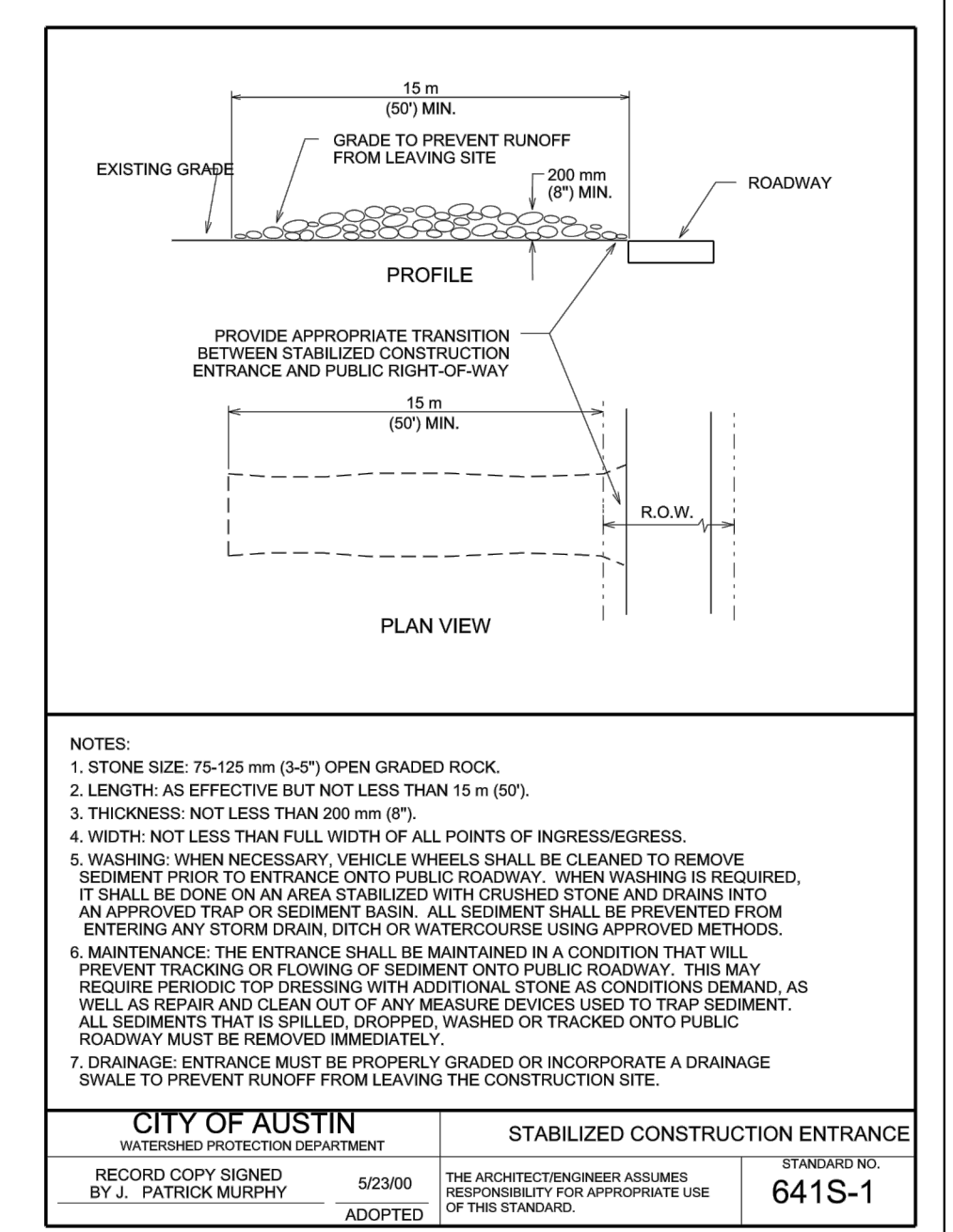
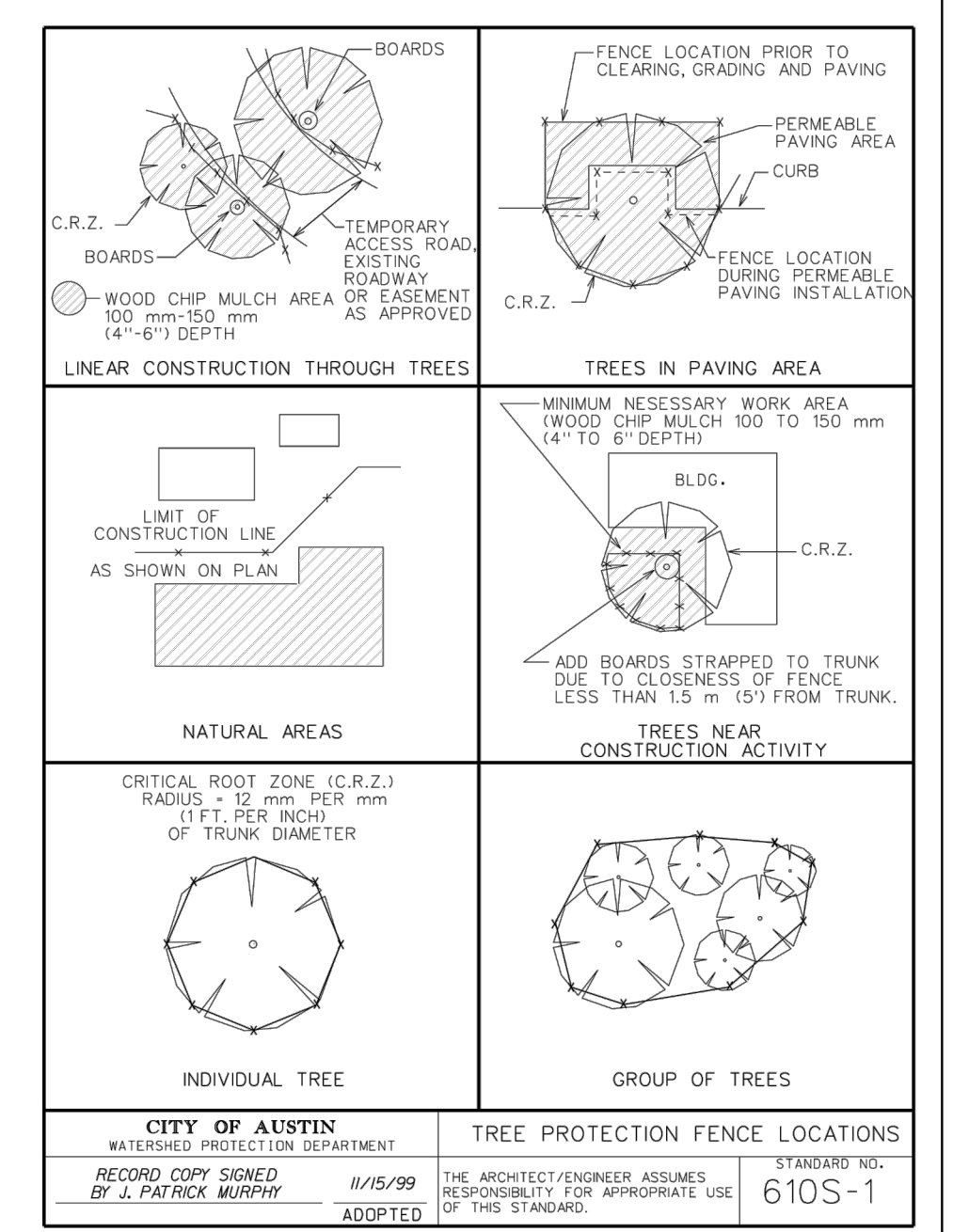
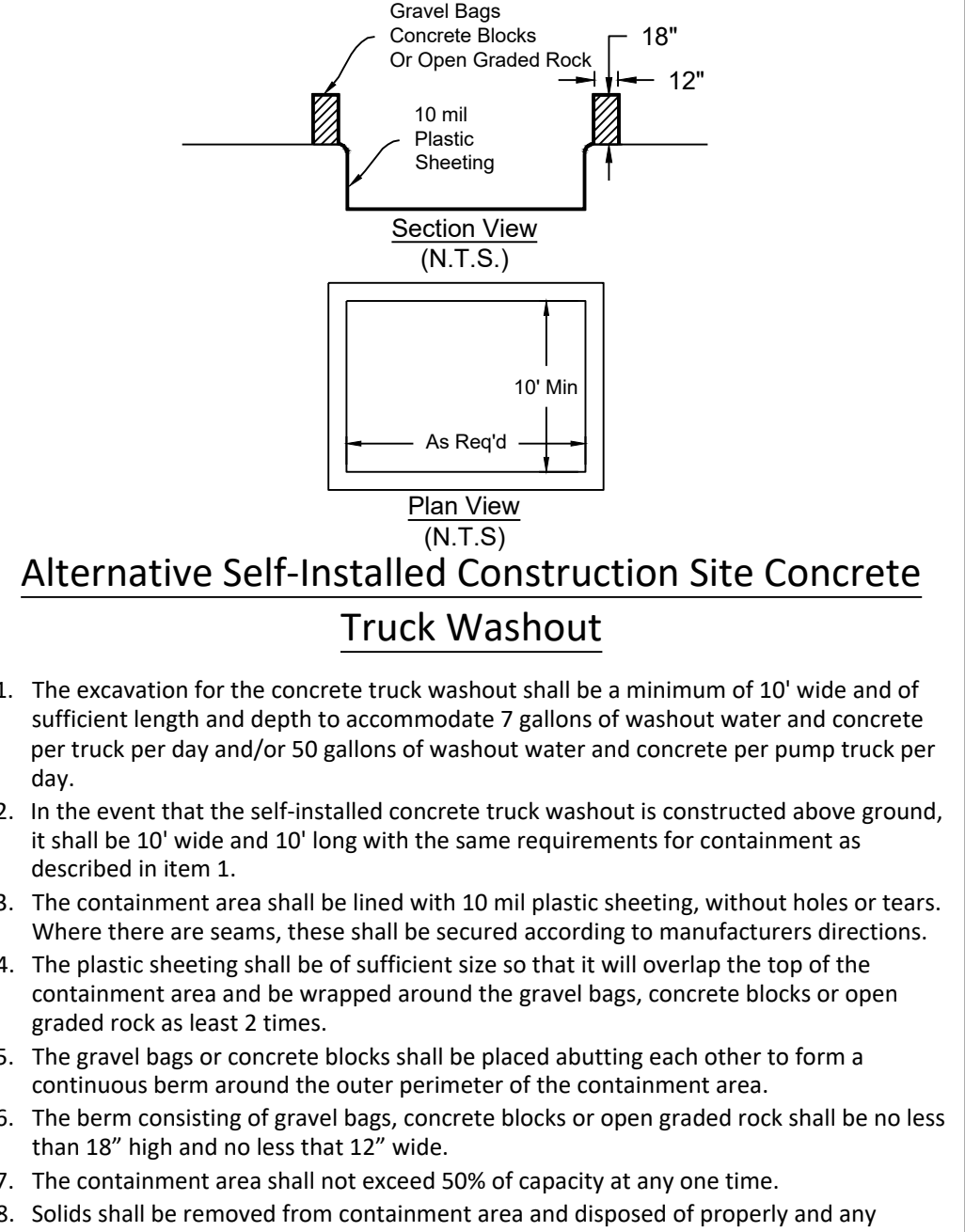
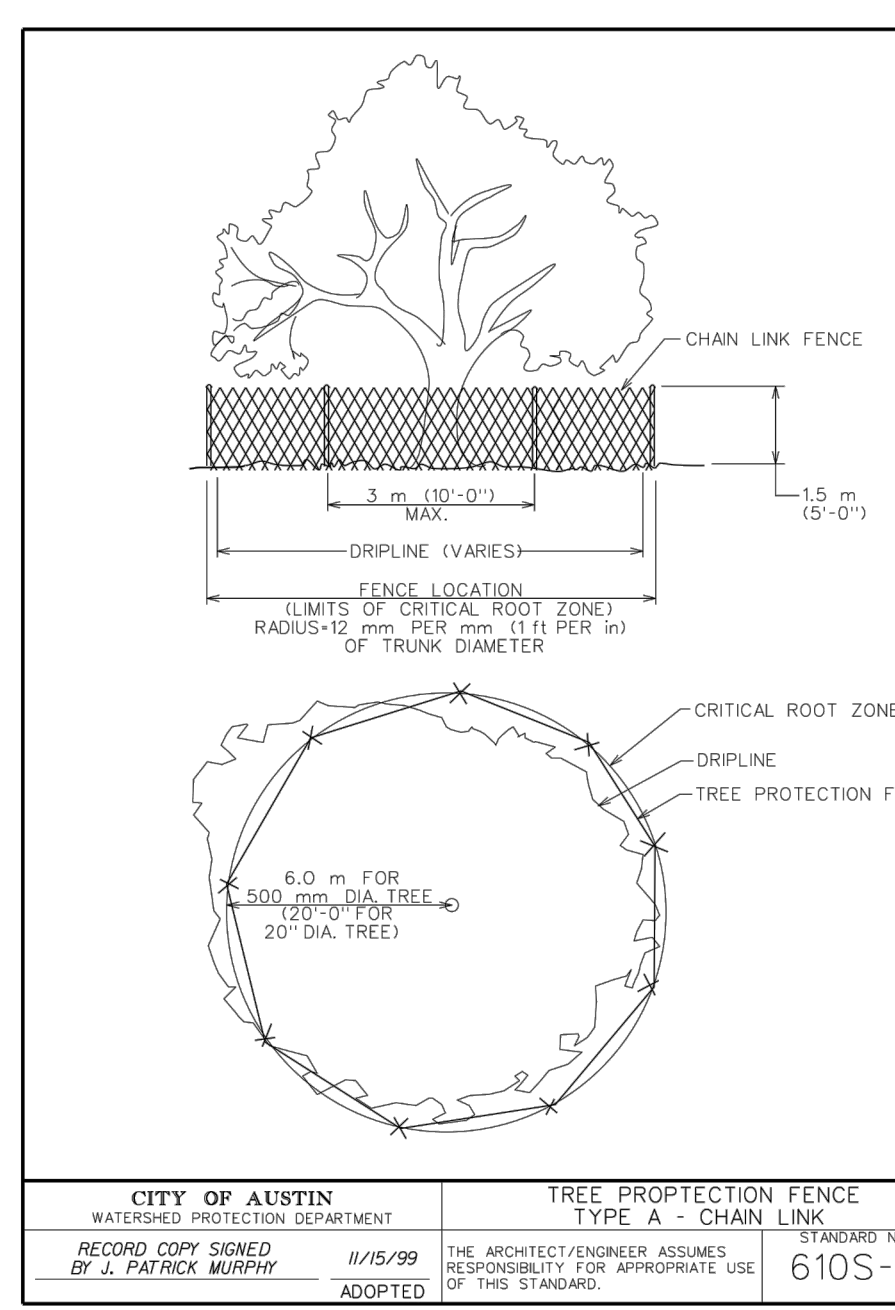
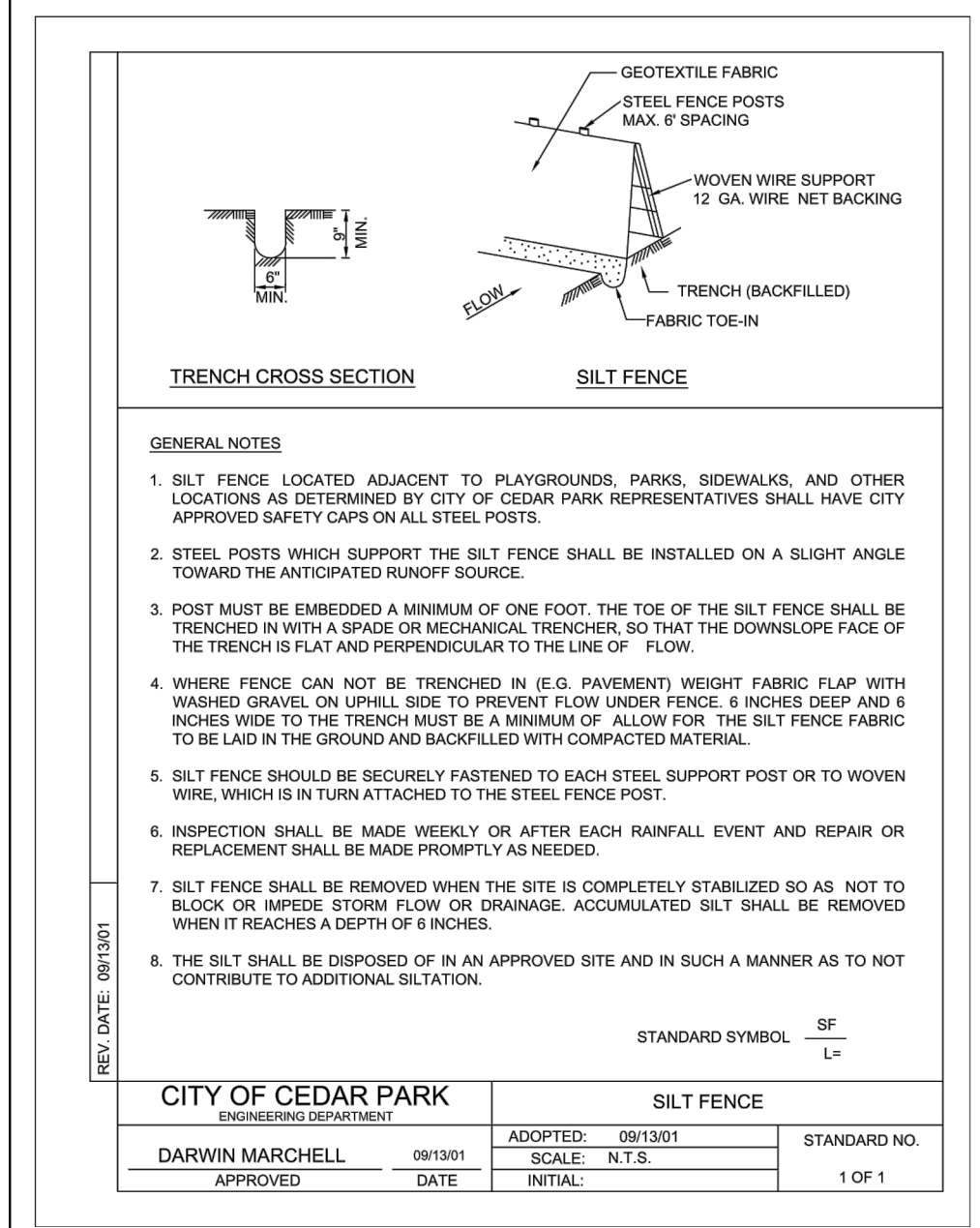
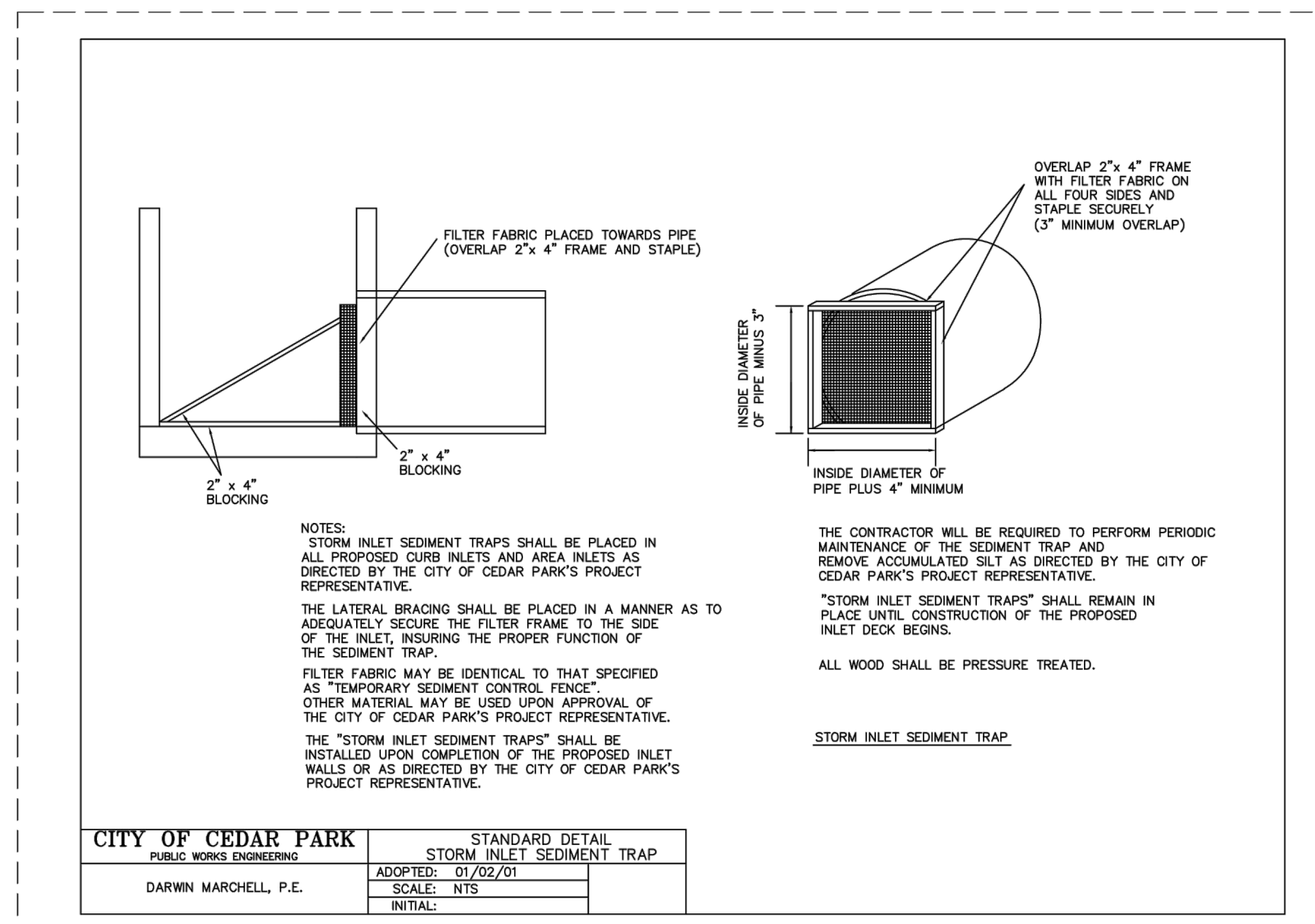
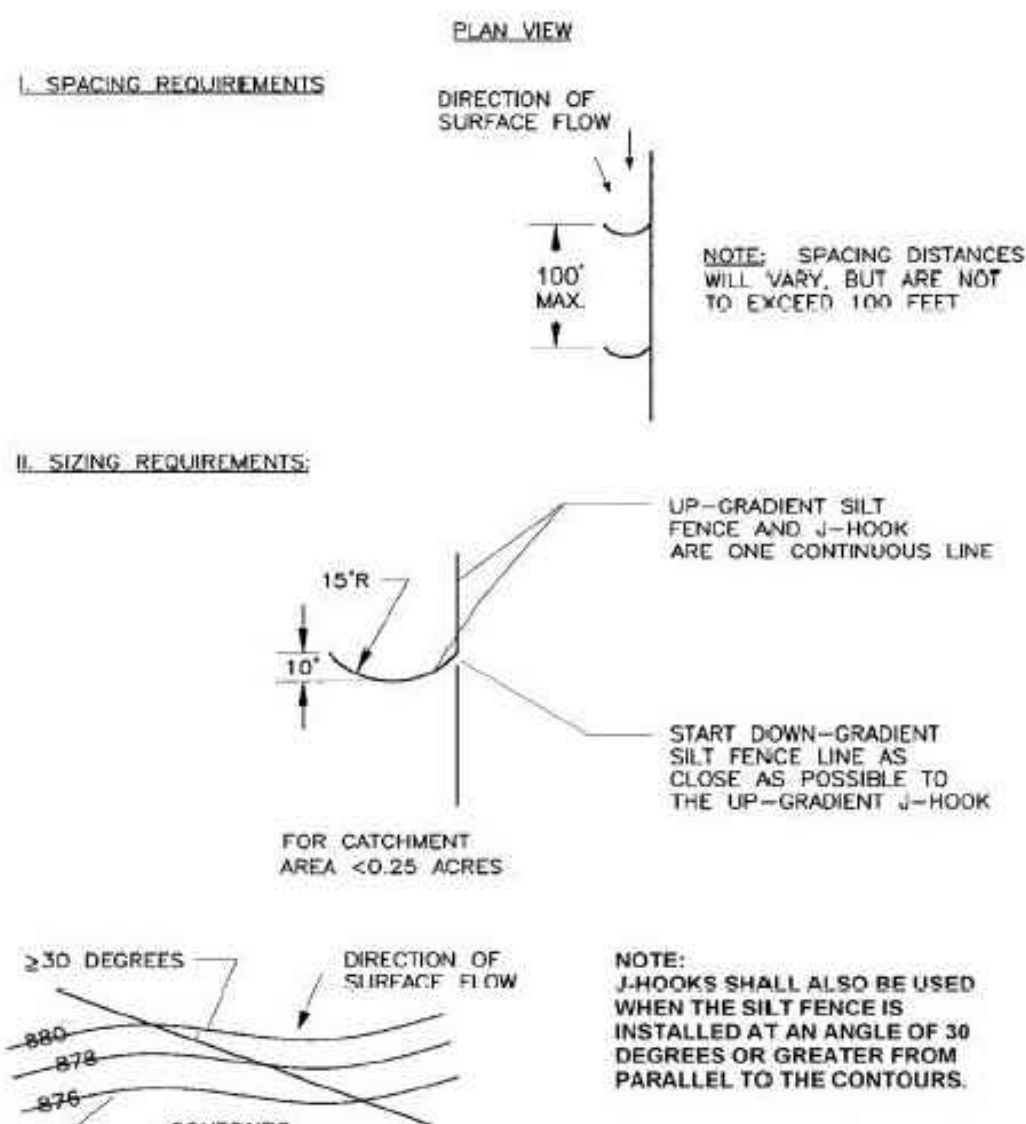
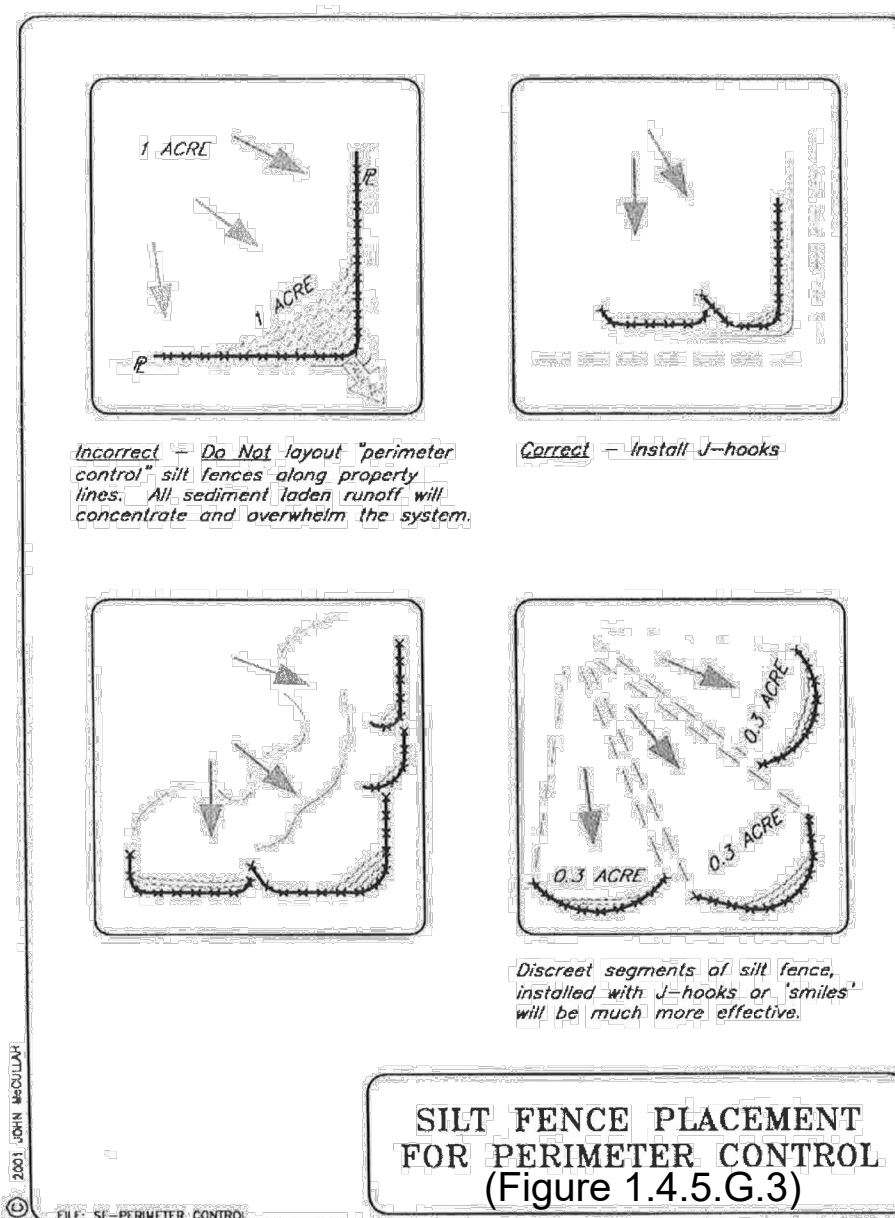
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Prepared For: Caspita Industries, Inc./Pohi Partners Inc. Leo Mills 10800 Pecan Park Blvd. #240 Austin, TX 78750

BLEYL ENGINEERING PLANNING • DESIGN • MANAGEMENT 7701 San Felipe Blvd., Ste. 200, Austin TX 78729 Texas Firm Registration No. F-678 Tel. 512-454-2400 www.bleylengineering.com AUSTIN BRYAN CONROE HOUSTON

Erosion Control Notes Unity Rec Center 820 Old Mill Road Cedar Park, Texas 78613 Williamson County STEVEN L. IHLEN 81976 REGISTERED PROFESSIONAL ENGINEER 12/15/22

Figure 1.4.5.G.3 Silt Fence Placement for Perimeter Control



Prepared For:	Caspla Industries, Inc./Pohl Partners Inc. Leo Mills 10800 Pecan Park Blvd. #240 Austin, TX 78750
Revision	
Date	
By	
App	
Comment	

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Erosion Control Details

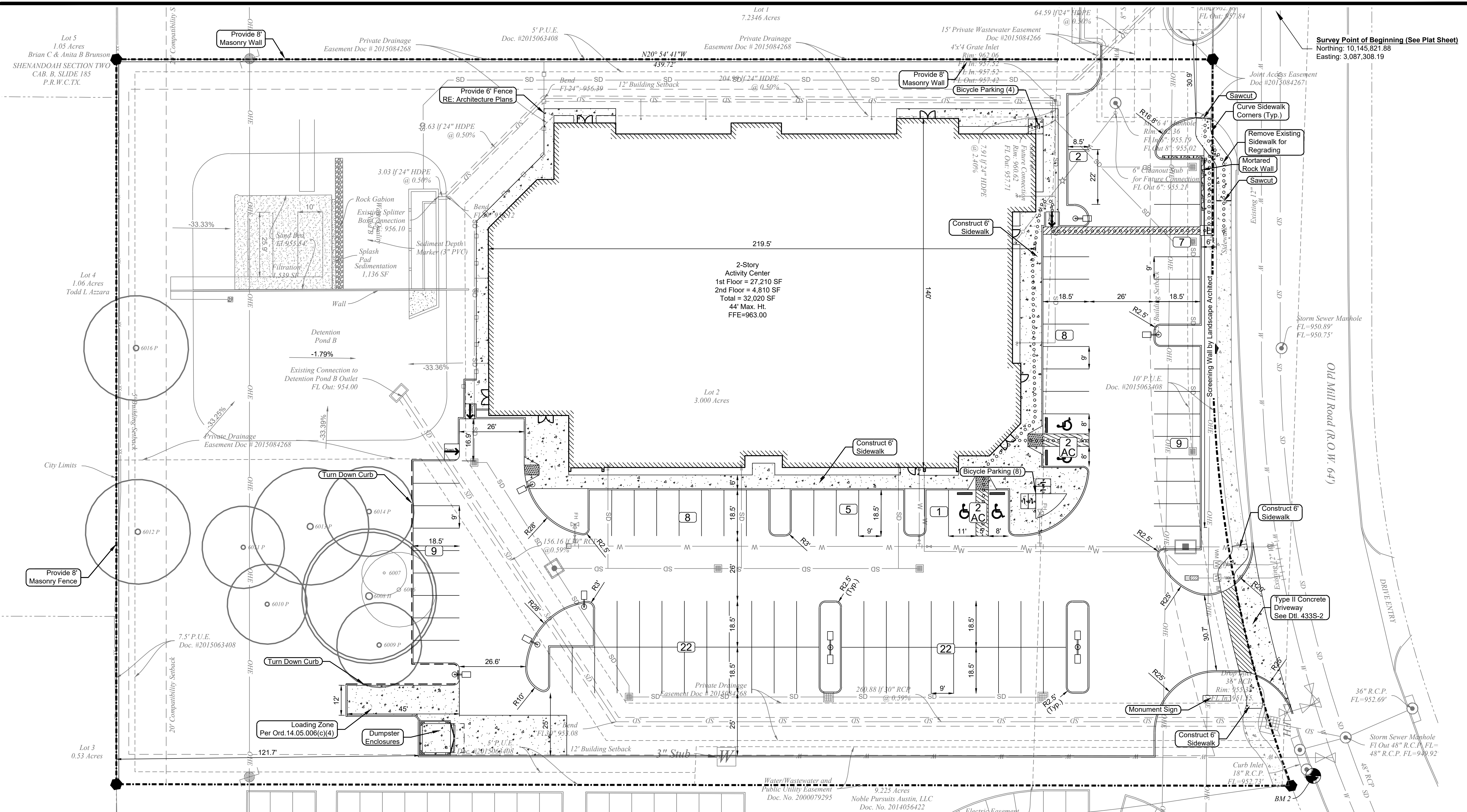
Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County

STEVEN L. IHLEN
REGISTERED PROFESSIONAL ENGINEER
81976
12/15/22

Design: VG
CAD: AE
Project No: AKM 70370
Sheet: 10 of 32
2022-25-SD

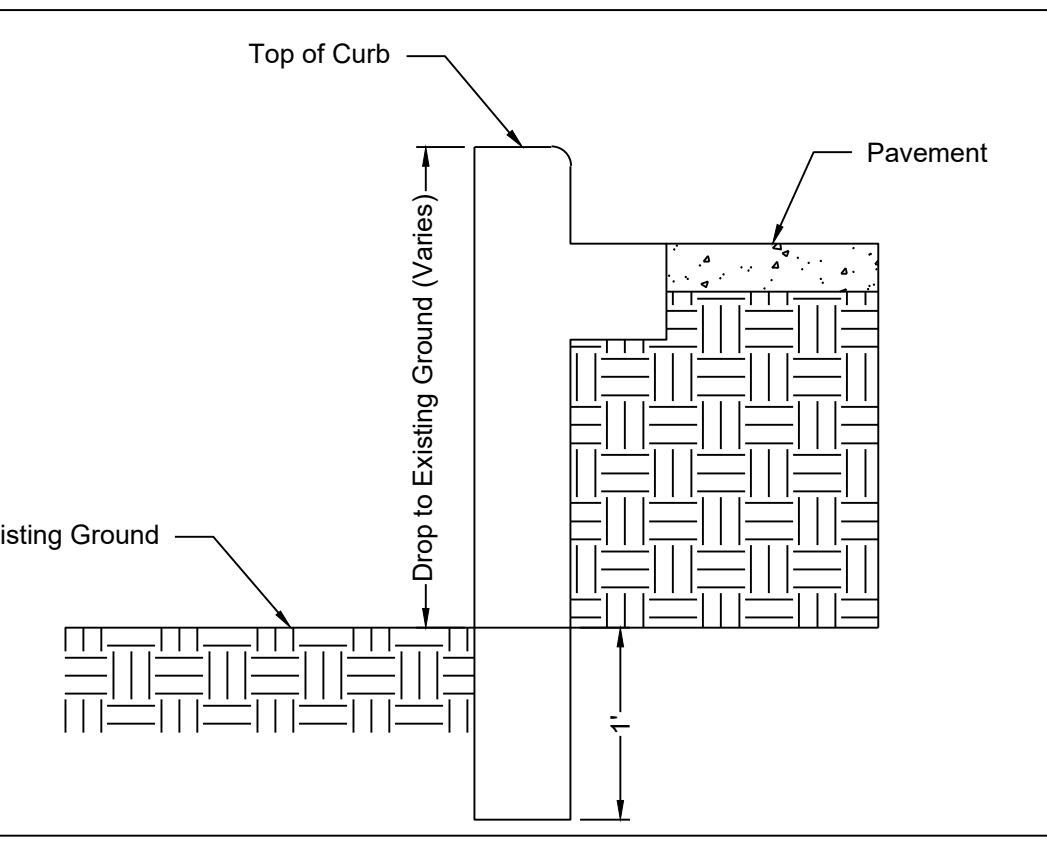
ORIGINAL LAYOUT SIZE - 22X34

©2022 H:\JOBFILES\AKM\AMIRBALK\MAKNOUJIA\AKM 70370 (SMALL)\AMATKHANA REC CENTER\04 CAD\PILOT SHEETS\DIMENSIONAL CONTROL.DWG 12/15/2022 Dmoral



Survey Point of Beginning (See Plat Sheet)
 Northing: 10,145,821.88
 Easting: 3,087,308.19

2-Story Activity Center
 1st Floor = 27,210 SF
 2nd Floor = 4,810 SF
 Total = 32,020 SF
 44' Max. Ht.
 FFE=963.00



Turn Down Curb Detail
 Scale: 1" = 1'

Site Data Table			
Zoning:	PO - Professional Office		
Use: Community Center	s.f.	acres	%
Site Area:	129,790	2.980	
Total Impervious Cover:	74,680	1.714	58%
Proposed Building Coverage:	27,294	0.627	21%
Gross Building Area:	32,020		
Floor to Area Ratio Proposed:	0.247		1
Building Height Proposed:	44		ft
Building Slab Construction:	Slab On Grade		

Parking Table							
Landuse	Building Area	Parking Requirements	Parking Required	Parking Provided	Compact	Regular	ADA
Recreation Center	32,020	3 spaces per court +1 space per 4 persons at design capacity	84	97	0	93	4

Parking Requirements	
2 Courts	6
1st Floor - 10,595 SF/200	53
2nd Floor - 4,810 SF/200	25

Survey Point of Beginning:
 Northing: 10,145,821.88
 Easting: 3,087,308.19

Benchmarks
 B.M. #1 - Square cut on top of curb
 Elevation = 963.01'
 B.M. #2 - Square cut on N.E. corner of inlet
 Elevation = 957.18'

Survey Control Point
 Grid N: 10,146,155.73
 Grid E: 3,087,275.54

Note:
 1. These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.
 2. Light sources shall be completely concealed within opaque housings and shall not be visible from adjacent streets or properties. All exterior lighting fixtures shall be full cut-off type fixtures. Lighting fixtures shall be no more than twenty-five (25) feet in height as measured from adjacent, finished grade.

Legal Description
 Caspita/Hopper Subdivision, Lot 2, Acres 3

The location of all existing utilities shown on these plans has been based upon record information only and may not match locations as constructed. The contractor shall contact Texas 811 for assistance in determining existing utility locations prior to beginning construction. Contractor shall field verify locations of utility crossings prior to beginning construction.

Release of this application does not constitute a verification of all data, information and calculations supplied by the applicant. The engineer of record is solely responsible for the completeness, accuracy and adequacy of his/her submittal, whether or not the application is reviewed for Code compliance by City engineers.

Legend	
	Benchmark
	Property Pin
	Existing Easement
	Property Line
	Proposed Easement
	Setback Line

Scale 1" = 20'

Revision	Date	By	App	Comment

Prepared For:
 Caspita Industries, Inc./Pohl Partners Inc.
 Lee Mills
 10800 Pecan Park Blvd. #240
 Austin, TX 78750

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Dimensional Control
 Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County

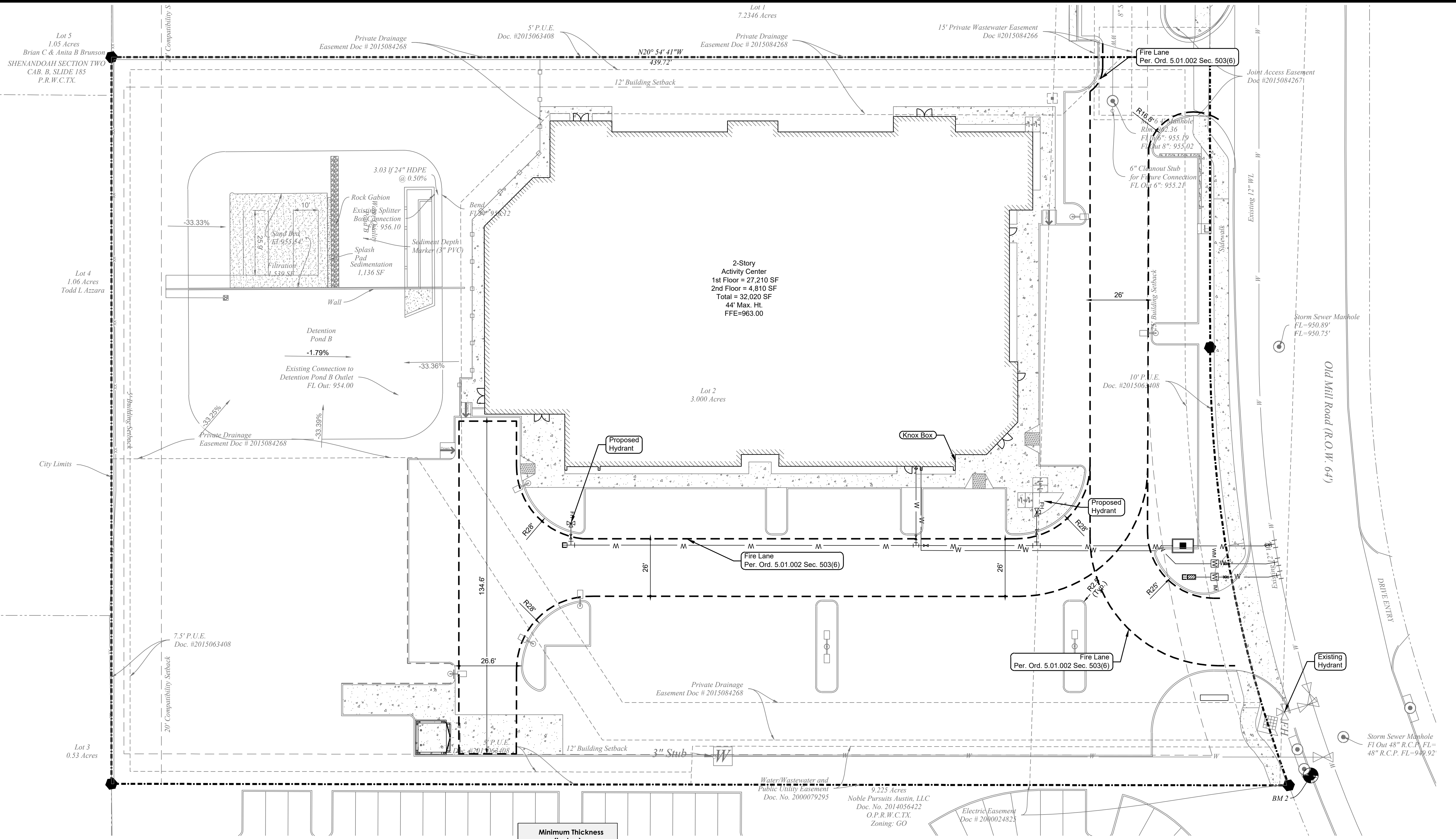
STEVEN L. IHLEN
 81978
 REGISTERED PROFESSIONAL ENGINEER
 12/15/22

Design: VG
 CAD: AE Review: VG
 Project No: AKM 70370
 Sheet: **11** of **32**
 2022-25-SD



ORIGINAL LAYOUT SIZE - 22X34

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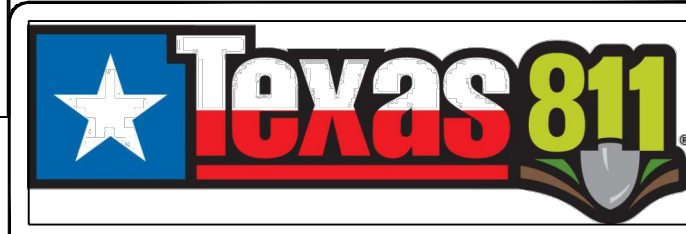
	Minimum Thickness (Inches)
Heavy Traffic	
Portland Cement Concrete	6
Minimum Lime Stabilized Subgrade	6
Compacted Subgrade Soils	6

FIRE LANE PAINT STRIPE PER CITY OF CEDAR PARK

SUBSECTION 503.3.1 STRIPING SHALL BE ADDED TO READ AS FOLLOWS: FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PAINTED LINES OF RED TRAFFIC PAINT SIX INCHES IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE. THE WORDS "FIRE LANE TOW-AWAY ZONE" SHALL APPEAR IN FOUR INCH WHITE LETTERS AT THIRTY-FIVE (35) FEET INTERVALS ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANES. CURB FACING SHALL BE USED WHEN AVAILABLE; FIRE LANE STRIPING SHALL BE CONTINUOUS THROUGHOUT THE DESIGNATED FIRE LANE AND SHALL LAY DOWN ALONG BACKSIDE OF HEAD IN PARKING SPACES.

SUBSECTION 503.3.2 SIGNS SHALL BE ADDED TO READ AS FOLLOWS: SIGNS SHALL READ "FIRE LANE TOWAWAY ZONE" AND SHALL BE TWELVE (12) INCHES WIDE AND EIGHTEEN (18) INCHES HIGH. SIGNS SHALL BE PAINTED ON A WHITE BACKGROUND WITH LETTERS AND BORDERS IN RED, USING NOT LESS THAN TWO (2) INCH LETTERING. SIGNS SHALL BE PERMANENTLY AFFIXED TO A STATIONARY POST AND THE BOTTOM OF THE SIGN SHALL BE SIX FEET, SIX INCHES ABOVE FINISHED GRADE. SIGNS SHALL BE SPACED NOT MORE THAN FIFTY (50) FEET APART. SIGNS MAY BE INSTALLED ON PERMANENT BUILDINGS OR WALLS IF APPROVED BY THE FIRE CODE OFFICIAL.

- Notes:**
- The fire lane should meet the pavement recommendations per geotechnical report by Geoscience Engineers LLC, report signed and sealed on 8/2/2022.
 - Speed bumps are not allowed in the fire lane unless prior approval is sought.
 - These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.



Call Before You Dig!!

Benchmarks
B.M. #1 - Square cut on top of curb
Elevation = 963.01'
B.M. #2 - Square cut on N.E. corner of inlet
Elevation = 957.18'

Survey Control Point
Grid N: 10,146,155.73
Grid E: 3,087,275.54

Legal Description
Caspita/Hopper Subdivision, Lot 2, Acres 3

The location of all existing utilities shown on these plans has been based upon record information only and may not match locations as constructed. The contractor shall contact Texas 811 for assistance in determining existing utility locations prior to beginning construction. Contractor shall field verify locations of utility crossings prior to beginning construction.

Release of this application does not constitute a verification of all data, information and calculations supplied by the applicant. The engineer of record is solely responsible for the completeness, accuracy and adequacy of his/her submittal, whether or not the application is reviewed for Code compliance by City engineers.

Scale 1" = 20'

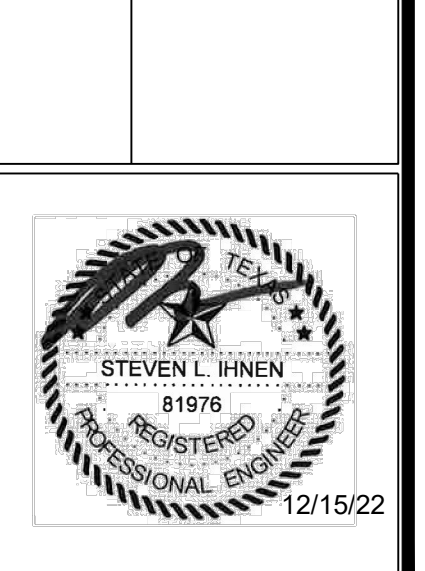
Revision	Date	By	App	Comment

Prepared For:
Caspita Industries, Inc./Pohl Partners Inc.
Lee Mills
10800 Pecan Park Blvd. #240
Austin, TX 78750

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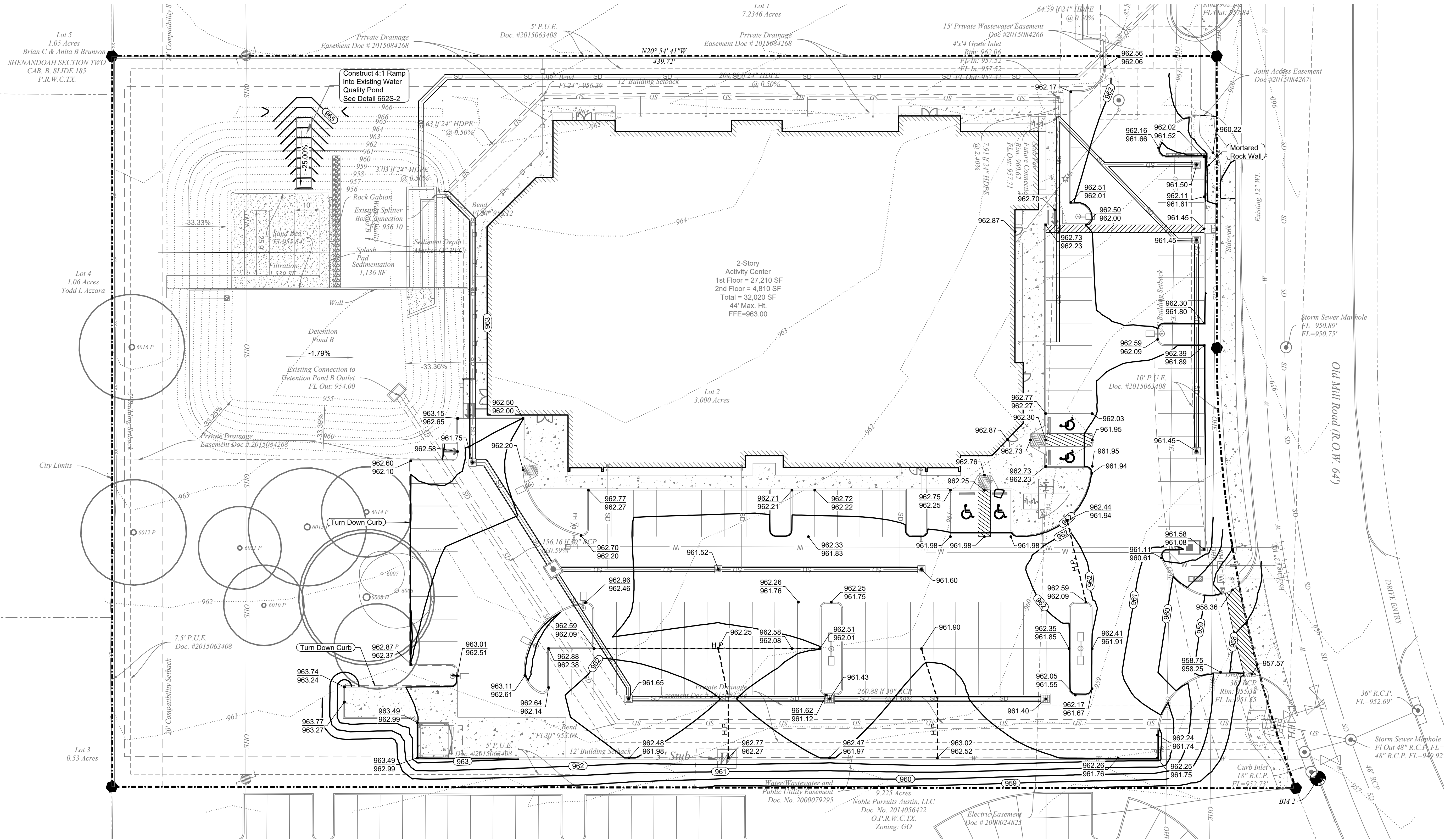
Fire Protection Plan
Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County



Design: VG
CAD: AE Review: VG
Project No: AKM 70370
Sheet: 12 of 32
2022-25-SD

ORIGINAL LAYOUT SIZE - 22X34

©2022, HUBBELLESAKAM, AMIRBALLI, MAKNOUJIAKAM 70370 (SMALL) LAMATKHANA REC CENTER V04 CAD PLOT SHEETS (GRADING ONLY) PLAN DWG 12/15/2022 Dmrcal



Legend

- Existing Contour
- Proposed Contour
- Proposed Spot Elevation
- Top of Curb
- Bottom of Curb
- Proposed Limits of Construction
- Proposed Storm Sewer Line
- Level Landing (Not to exceed 2% in any Direction)
- ADA Ramp (Not to exceed 8.33%)
- ADA Route

These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.

Note:
This project is subject to the Void and Water Flow Mitigation Rule (COA ECM 1.12.0 and COA Item No. 658S of the SSM) provision that all trenching greater than 5 feet deep must be inspected by a geologist (Texas P.G.) or a geologist's representative.

Curb Note:
Grading lines that indicate flows toward the curb shall be constructed as a catch curb. Grade lines that indicate flows away from curb shall be constructed as a spill curb.



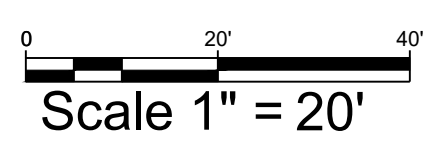
Benchmarks
 B.M. #1 - Square cut on top of curb
 Elevation = 963.01'
 B.M. #2 - Square cut on N.E. corner of inlet
 Elevation = 957.18'

Survey Control Point
 Grid N: 10,146,155.73
 Grid E: 3,087,275.54

Legal Description
 Caspita/Hopper Subdivision, Lot 2, Acres 3

The location of all existing utilities shown on these plans has been based upon record information only and may not match locations as constructed. The contractor shall contact Texas 811 for assistance in determining existing utility locations prior to beginning construction. Contractor shall field verify locations of utility crossings prior to beginning construction.

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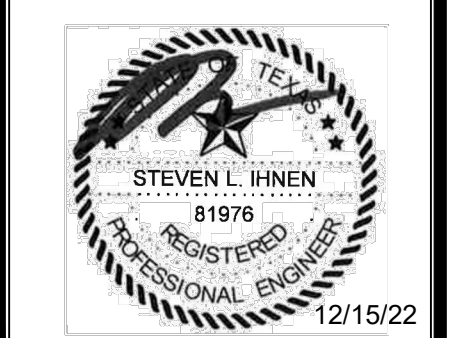
Revision	Date	By	App	Comment

Prepared For:
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 Leo Mills
 10800 Pecan Park Blvd. #240
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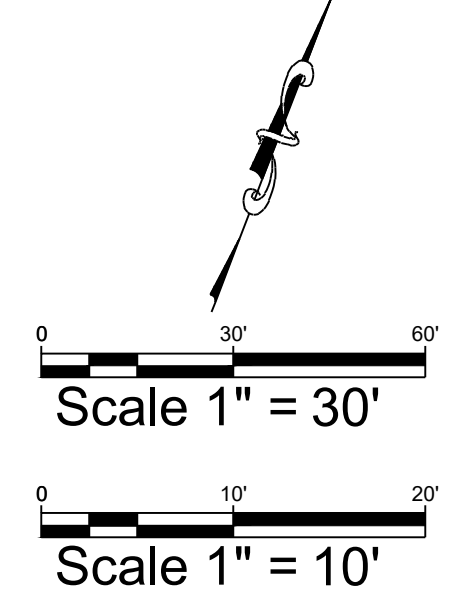
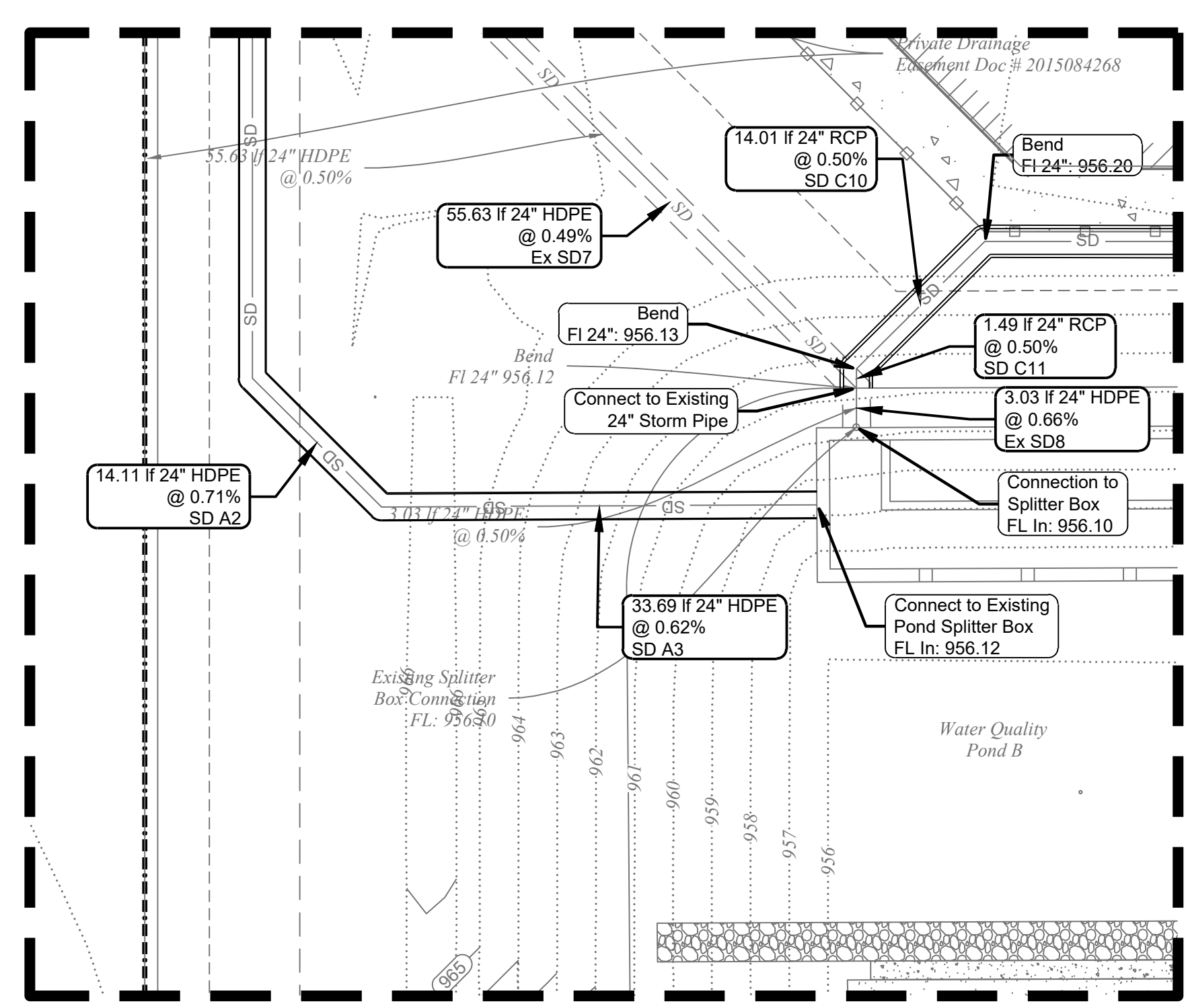
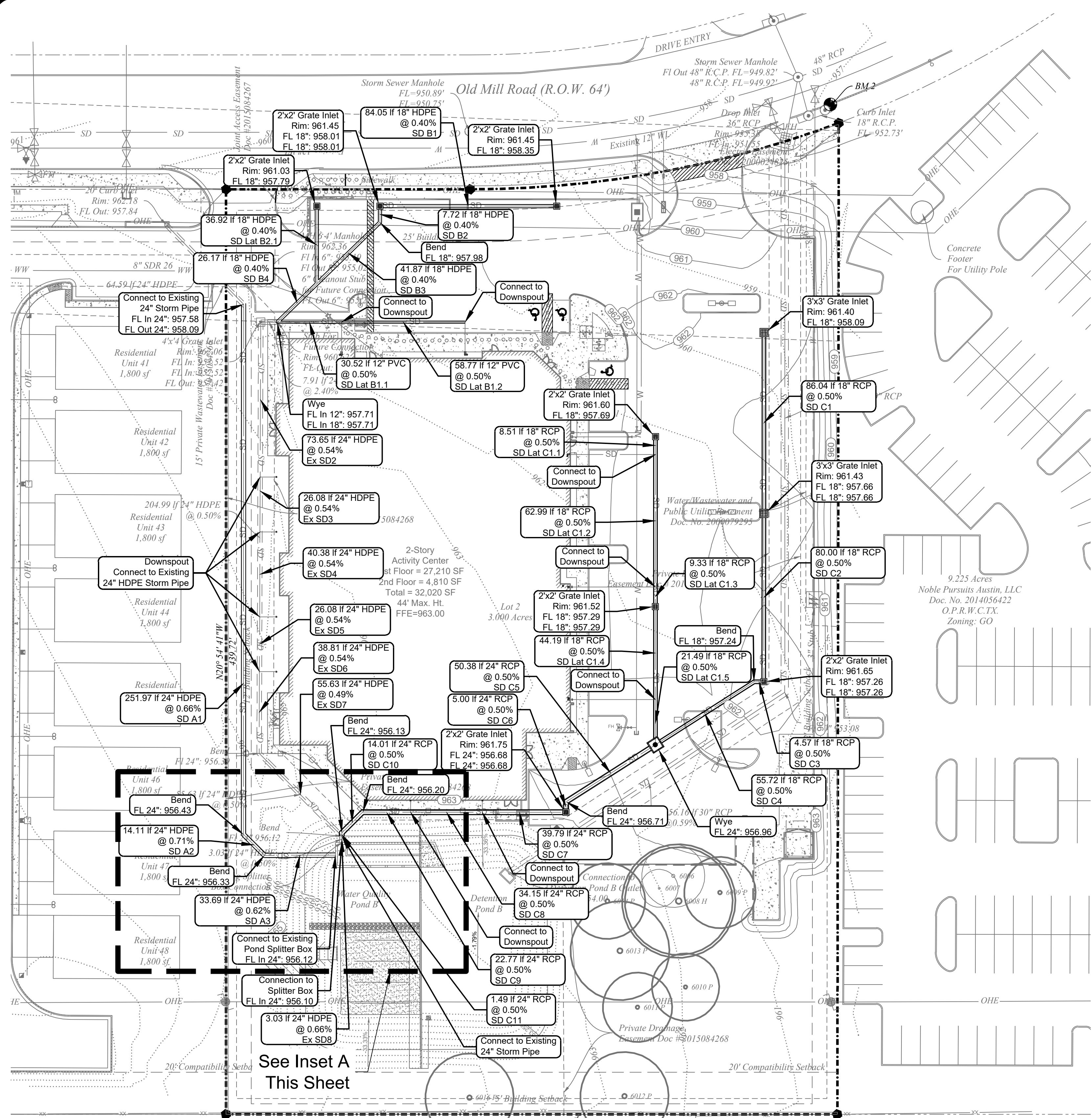
Grading Plan
 Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County



Design: VG
 CAD: AE Review: VG
 Project No: AKM 70370
 Sheet: **13 of 32**
 2022-25-SD

ORIGINAL LAYOUT SIZE - 22X34

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**Unity Recreation Center
25-Year QVDs**

LineID	LineSize	FlowRate	VelDn	DepthDn	HGLUp	HGLDn
	(in)	(cfs)	(ft/s)	(ft)	(ft)	(ft)
SD A3	24	22.7	8.42	1.6	958.03	957.72
SD A2	24	22.7	7.99	1.7	958.13	958.03
SD A1	24	22.7	7.99	1.7	959.79	958.13
Ex SD1	24	16.05	5.11	2	959.94	959.79
SD B4	18	2.64	4.29	0.57	958.43	958.28
SD B3	18	2.25	3.29	0.62	958.55	958.43
SD B2	18	1.37	2.24	0.57	958.45	958.55
SD B1	18	0.49	1.14	0.44	958.61	958.45
SD Lat B2.1	18	0.39	0.41	0.79	958.02	958.43
SD Lat B1.1	12	0.8	3.44	0.34	958.24	958.05
SD Lat B1.2	12	0.4	1.49	0.37	958.42	958.24
Ex SD7	24	8.36	6.19	0.89	957.42	957.01
Ex SD6	24	7.05	4.33	1.03	957.54	957.42
Ex SD5	24	5.74	3.95	0.94	957.58	957.54
Ex SD4	24	4.73	3.74	0.85	957.72	957.58
Ex SD3	24	3.62	3.28	0.76	957.76	957.72
Ex SD2	24	2.51	2.74	0.67	958.04	957.76
Ex SD8	24	1.31	4.06	0.32	956.52	956.42
SD C11	24	10.41	5.4	1.18	957.31	957.3
SD C10	24	10.11	3.95	1.52	957.66	957.65
SD C9	24	10.11	3.63	1.66	957.88	957.86
SD C8	24	9.81	3.63	1.6	957.95	957.92
SD C7	24	9.61	3.78	1.51	958.03	957.99
SD C6	24	8.81	3.21	1.63	958.31	958.31
SD C5	24	6.75	2.31	1.75	957.88	958.46
SD C4	18	2.76	2.43	0.92	957.92	957.88
SD C3	18	2.76	2.89	0.8	958.04	958.04
SD C2	18	1.46	1.29	0.91	958.11	958.17
SD C1	18	0.68	1.51	0.45	958.4	958.11
SD Lat C1.5	18	3.99	3.52	0.92	957.91	957.88
SD Lat C1.4	18	3.79	3.54	0.87	958.04	957.94
SD Lat C1.3	18	1.8	1.91	0.79	957.84	958.08
SD Lat C1.2	18	1.5	2.87	0.5	958.11	957.84
SD Lat C1.1	18	1.3	2.84	0.46	958.12	958.11

See Inset A
This Sheet

Legend

- 700 --- Existing Contour
- 700 — Proposed Contour
- 698.25 Proposed Spot Elevation
- 700.00 Top of Curb
- 699.50 Bottom of Curb
- LOC --- Proposed Limits of Construction
- Proposed Storm Sewer Line
- Level Landing (Not to exceed 2% in any Direction)
- ADA Ramp (Not to exceed 8.33%)

These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.

Note
This project is subject to the Void and Water Flow Mitigation Rule (COA ECM 1.12.0 and COA Item No. 658S of the SSM) provision that all trenching greater than 5 feet deep must be inspected by a geologist (Texas P.G.) or a geologist's representative.

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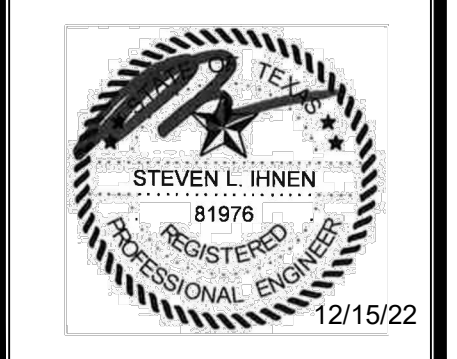
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Lee Mills
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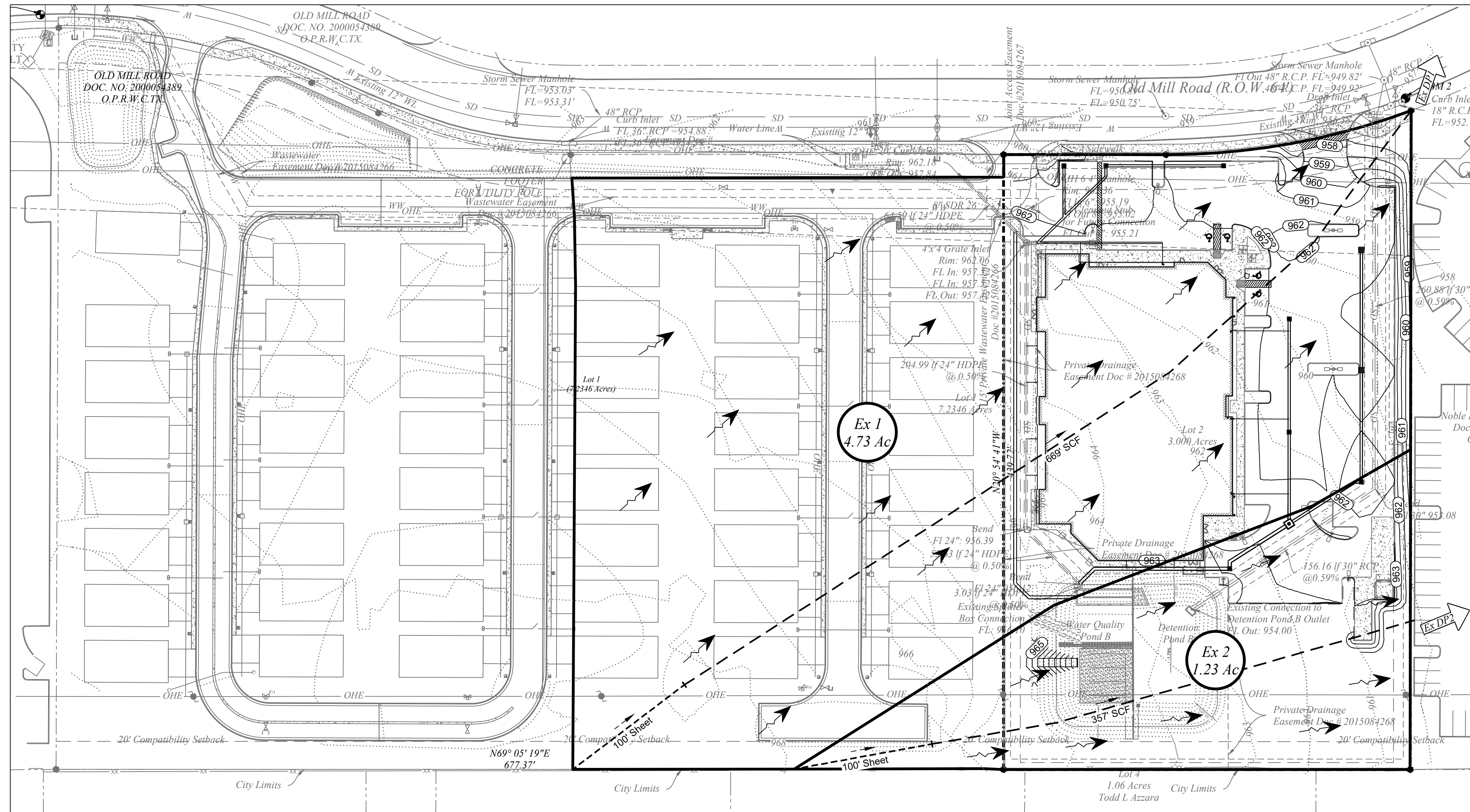
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Storm Sewer Plan

Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County



Design: VG
CAD: AE Review: VG
Project No: AKM 70370
Sheet: **14 of 32**
2022-25-SD



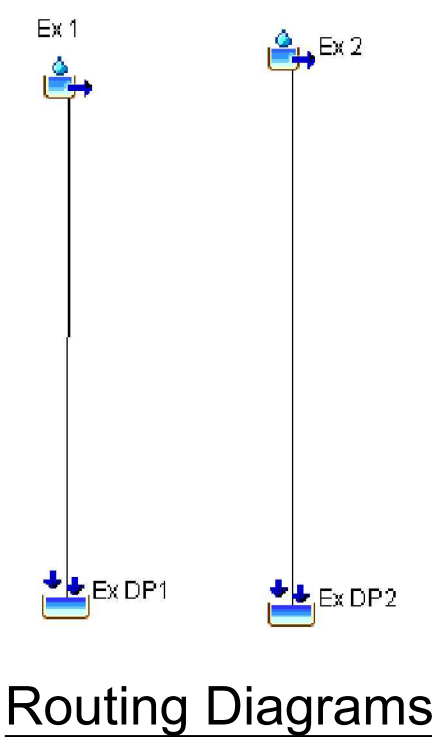
Existing Drainage Area Map

Drainage Area Calculations Summary									
Label	Area acres	IC		NRCS CN	Lag Time mins	NRCS Atlas 14, 24 hr Storm Water Flows (cfs)			
		acres	%			2-yr	10-yr	25-yr	100-yr
Ex 1	4.73	0.00	0.00	80	3.31	15.9	30.30	40.30	57.70
Ex 2	1.23	0.00	0.00	80	6.92	3.5	6.70	9.00	12.90
Pro A	3.42	2.02	59.06						
Pro 1.1	2.85	1.80	63.13	91	3.31	14.5	23.60	29.70	40.20
Pro 1.2	1.63	1.62	99.41	98	3.00	9.3	14.20	17.50	23.30
Pro 1.3	0.30	0.13	43.20	88	3.00	1.4	2.30	3.00	4.00
Pro 1.4	0.63	0.01	1.72	80	17.52	1.1	2.20	2.90	4.20

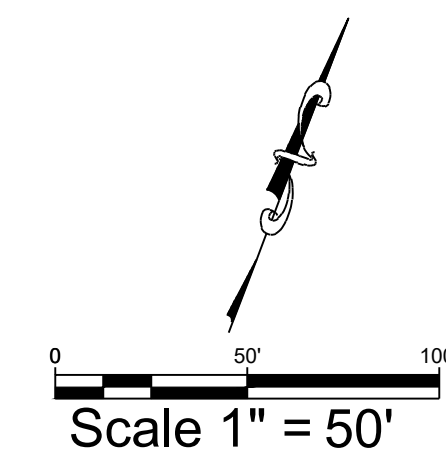
Drainage Area ID	OVERLAND SHEET FLOW					TIME OF CONCENTRATION SHALLOW CONCENTRATED FLOW					CHANNEL FLOW		TOTAL	TOTAL	TOTAL		
	n	Length	P ₂	Slope	Overland Travel Time	Slope	Distance	Surface ("Paved" or "Unpaved")	Velocity Coefficient*	Velocity	Shallow Concentrated Flow Travel Time	Velocity	Distance	Channel Travel Time	Travel Distance	Time of Concentration (Computational)	Time of Concentration (Computational)
Name	none	ft	inches	ft/ft	min	ft/ft	ft	type	none	ft/s	min	ft/s	ft	min	ft	min	min
Ex 1	0.015	100.00	4.06	0.0200	1.38	0.0175	669.00	Paved	20.33	2.69	4.15			0.00	769.00	5.52	3.31
Ex 2	0.150	100.00	4.06	0.0200	8.70	0.0170	357.00	Unpaved	16.13	2.10	2.83			0.00	457.00	11.53	6.92
Pro 1.1	0.015	100.00	4.06	0.0200	1.38	0.0175	349.00	Paved	20.33	2.69	2.16	5.00	308.00	0.00	757.00	5.52	3.31
Pro 1.2	0.015	19.00	4.06	0.0160	0.40	0.0000	0.00	Unpaved	16.13	0.00	0.00	5.00	299.00	1.00	318.00	5.00	3.00
Pro 1.3	0.015	77.00	4.06	0.0400	0.85	0.0600		Paved	20.33	4.98	0.00			0.00	77.00	5.00	3.00
Pro 1.4	0.150	100.00	4.06	0.0010	28.83	0.1000	111.00	Unpaved	16.13	5.10	0.36			0.00	211.00	29.19	17.52
Pro 2.1	0.150	100.00	4.06	0.0130	10.33	0.0240	113.00	Unpaved	16.13	2.50	0.75			0.00	213.00	11.09	6.65

CN Calculations				
Drainage Area	Open Space (Lawns, parks, golf courses, cemeteries, etc.) Good Condition - 80			Average Sum CN
ID	AC	AC	AC	CN
	80	98		
Ex 1	4.73	0.00	4.73	80
Ex 2	1.23	0.00	1.23	80
Pro 1.1	1.05	1.80	2.85	91
Pro 1.2	0.01	1.62	1.63	98
Pro 1.3	0.17	0.13	0.30	88
Pro 1.4	0.62	0.01	0.63	80

Site Discharge Summary				
Analysis Point	NRCS Atlas 14, 24 hr Storm Water Flows (cfs)			
	2-yr	10-yr	25-yr	100-yr
Ex DP1	15.9	30.3	40.3	57.7
Pro DP1	11.5	22.1	26.8	40.2
Ex DP2	3.5	6.7	9.0	12.9



Routing Diagrams



Existing Drainage Area Map

Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County

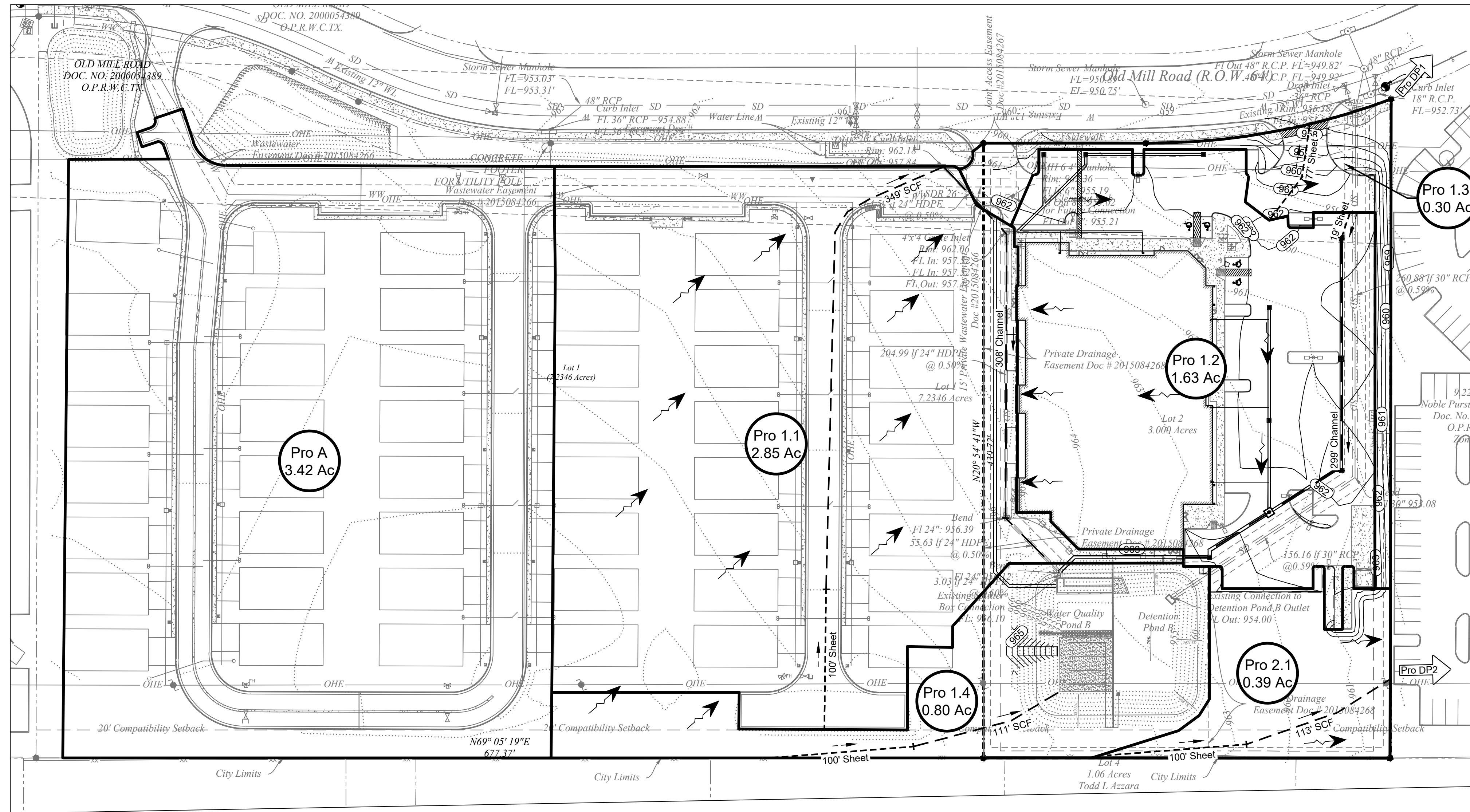


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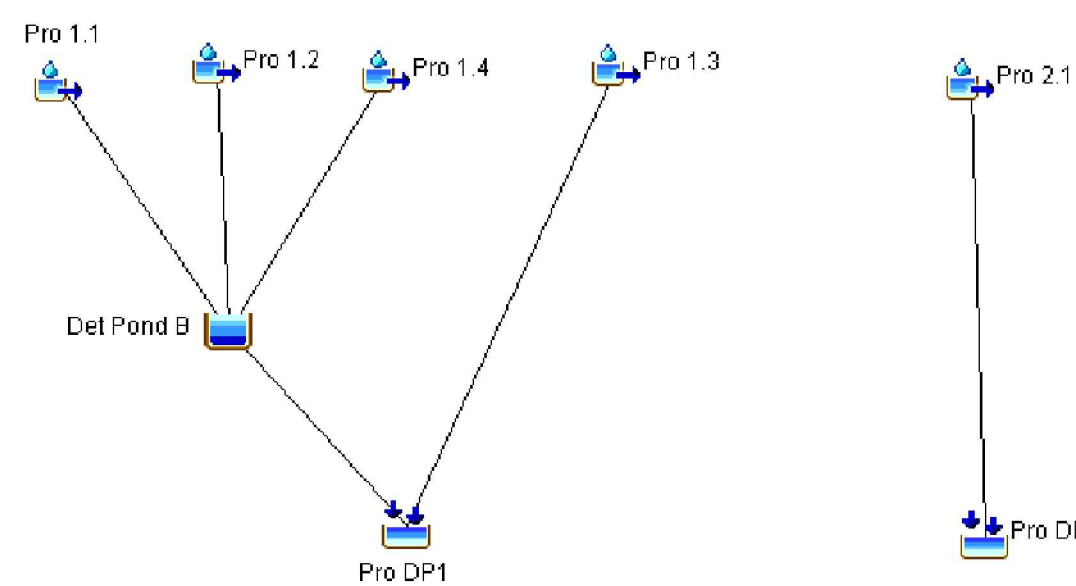
Proposed Drainage Area Map

Label	Area			NRCS CN	Lag Time mins	NRCS Atlas 14, 24 hr Storm Water Flows (cfs)			
	acres	IC	%			2-yr	10-yr	25-yr	100-yr
Ex 1	4.73	0.00	0.00	80	3.31	15.9	30.30	40.30	57.70
Ex 2	1.23	0.00	0.00	80	6.92	3.5	6.70	9.00	12.90
Pro A	3.42	2.02	59.06						
Pro 1.1	2.85	1.80	63.13	91	3.31	14.5	23.60	29.70	40.20
Pro 1.2	1.63	1.62	99.41	98	3.00	9.3	14.20	17.50	23.30
Pro 1.3	0.30	0.13	43.20	88	3.00	1.4	2.30	3.00	4.00
Pro 1.4	0.63	0.01	1.72	80	17.52	1.1	2.20	2.90	4.20
Pro 2.1	0.39	0.00	0.00	80	6.65	1.1	2.10	2.70	3.90

Drainage Area ID	OVERLAND SHEET FLOW				SHALLOW CONCENTRATED FLOW				CHANNEL FLOW			TOTAL	TOTAL	TOTAL			
	n	Length	P ₂	Slope	Overland Travel Time	Slope	Distance	Surface ("Paved" or "Unpaved")	Velocity Coefficient*	Velocity	Shallow Concentrated Flow Travel Time	Velocity	Distance	Channel Travel Time	Travel Distance	Time of Concentration (Computational)	Time of Concentration (Computational)
Name	none	ft	inches	ft/ft	min	ft/ft	ft	type	none	ft/s	min	ft/s	ft	min	ft	min	min
Ex 1	0.015	100.00	4.06	0.0200	1.38	0.0175	669.00	Paved	20.33	2.69	4.15			0.00	769.00	5.52	3.31
Ex 2	0.150	100.00	4.06	0.0200	8.70	0.0170	357.00	Unpaved	16.13	2.10	2.83			0.00	457.00	11.53	6.92
Pro 1.1	0.015	100.00	4.06	0.0200	1.38	0.0175	349.00	Paved	20.33	2.69	2.16	5.00	308.00	0.00	757.00	5.52	3.31
Pro 1.2	0.015	19.00	4.06	0.0160	0.40	0.0000	0.00	Unpaved	16.13	0.00	0.00	1.00	299.00	0.00	318.00	5.00	3.00
Pro 1.3	0.015	77.00	4.06	0.0400	0.85	0.0600		Paved	20.33	4.98	0.00			0.00	77.00	5.00	3.00
Pro 1.4	0.150	100.00	4.06	0.0010	28.83	0.1000	111.00	Unpaved	16.13	5.10	0.36			0.00	211.00	29.19	17.52
Pro 2.1	0.150	100.00	4.06	0.0130	10.33	0.0240	113.00	Unpaved	16.13	2.50	0.75			0.00	213.00	11.09	6.65

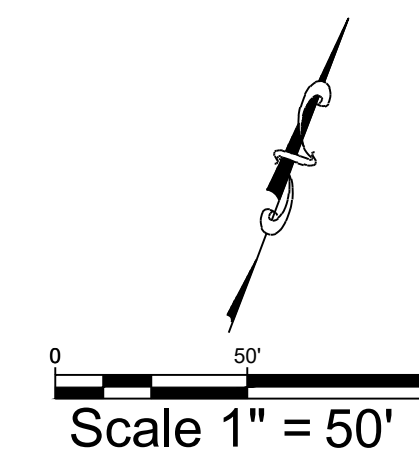
Drainage Area	CN Calculations			Average Sum CN
	Open Space (Lawns, parks, golf courses, cemeteries, etc.) Good Condition - 80	Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D - 98	Total Area	
ID	AC	AC	AC	CN
80	98			
Ex 1	4.73	0.00	4.73	80
Ex 2	1.23	0.00	1.23	80
Pro 1.1	1.05	1.80	2.85	91
Pro 1.2	0.01	1.62	1.63	98
Pro 1.3	0.17	0.13	0.30	88
Pro 1.4	0.62	0.01	0.63	80

Analysis Point	Site Discharge Summary			
	NRCS Atlas 14, 24 hr Storm Water Flows (cfs)	2-yr	10-yr	25-yr
Ex DP1	15.9	30.3	40.3	57.7
Pro DP1	11.5	22.1	26.8	40.2
Ex DP2	3.5	6.7	9.0	12.9



Routing Diagrams

Notes
 The flow off the site has not been increased from the existing conditions. Per Ref. Section 12.16.001(4)
 Engineer has reviewed plans pertaining to the design of the existing detention facilities and agrees with their design. Proposed development does not adversely affect any downstream properties. Per Ref. Section 12.13.002(g)



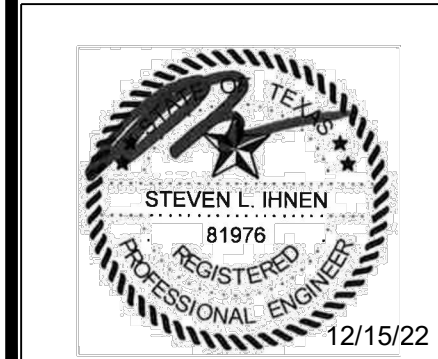
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AUSTIN BRYAN CONROE HOUSTON

Proposed Drainage Area Map
 Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County



Design: VG
 CAD: AE Review: VG
 Project No: AKM 70370
 Sheet: **16 of 32**
 2022-25-SD

ORIGINAL LAYOUT SIZE - 22x34

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: **Unity Rec Center Modification**
Date Prepared: **10/13/2022**

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

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

Page 3-29 Equation 3.3: $L_{w} = 27.2(A_{w} \times P)$

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

Site Data: Determine Required Load Removal Based on the Entire Project
 County = **Williamson**
 Total project area included in plan = **10.24** acres
 Predevelopment impervious area within the limits of the plan = **0.00** acres
 Total post-development impervious area within the limits of the plan = **6.60** acres
 Total post-development impervious cover fraction = **0.56**
 P = **32** inches

L_{w} TOTAL PROJECT = **4,874** lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = **2**

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

Drainage Basin/Outfall Area No. = **Pond B**

Total drainage basin/outfall area = **4.48** acres
 Predevelopment impervious area within drainage basin/outfall area = **0.00** acres
 Post-development impervious area within drainage basin/outfall area = **3.43** acres
 Post-development impervious fraction within drainage basin/outfall area = **0.77**
 L_{w} THIS BASIN = **2,985** lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Sand Filter**
 Removal efficiency = **89** percent

4. Calculate Maximum TSS Load Removed (L_{r}) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_{r} = (\text{BMP efficiency}) \times P \times (A_{c} \times 34.6 + A_{p} \times 0.54)$

where: A_{c} = Total On-Site drainage area in the BMP catchment area
 A_{p} = Impervious area proposed in the BMP catchment area
 A_{r} = Pervious area remaining in the BMP catchment area
 L_{r} = TSS Load removed from this catchment area by the proposed BMP

A_{c} = **4.48** acres
 A_{p} = **3.43** acres
 A_{r} = **1.05** acres
 L_{r} = **3,396** lbs.

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

Desired L_{w} THIS BASIN = **3033** lbs.
 F = **0.89**

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

Rainfall Depth = **1.60** inches
 Post Development Runoff Coefficient = **0.58**
 On-site Water Quality Volume = **15,062** cubic feet

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

Storage for Sediment = **3,012** cubic feet
 Total Capture Volume (required water quality volume) x 1.20 = **18,074** cubic feet
 Water Quality Volume Provided = **21,243** cubic feet

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **18,074** cubic feet
 Minimum filter basin area = **1,506** square feet
 Provided filter basin area = **1,539** square feet
 Maximum sedimentation basin area = **6,025** square feet For minimum water depth of 2 feet
 Minimum sedimentation basin area = **377** square feet For maximum water depth of 8 feet

Water Quality Pond Water Surface Elevations

Elevation (ft)	Depth (ft)	Storage (cf)	Required Volume (cf)
955.54	0.00	0	
956.00	0.46	0	
957.00	1.46	3891	
958.00	2.46	7438	
959.00	3.46	11493	
960.00	4.46	16086	
959.93	WQV Elev. (Required)		15711.23
961.00	Weir Elev. (WQV Provided)		21243.73
961.00	5.46	21244	
962.00	6.46	26995	

Size WQ Pond Weir

Q(100) = 44.41 cfs
 C(w) = 3.33
 H(w) = 1.00 ft. (provided)
 Depth of flow over weir = 0.48 ft.
 Freeboard Provided 0.52 ft.

Solving for L Gives
 L = 13.34 ft.
 Use L = **40.40** ft.

Size WQ Pond In-Flow Window

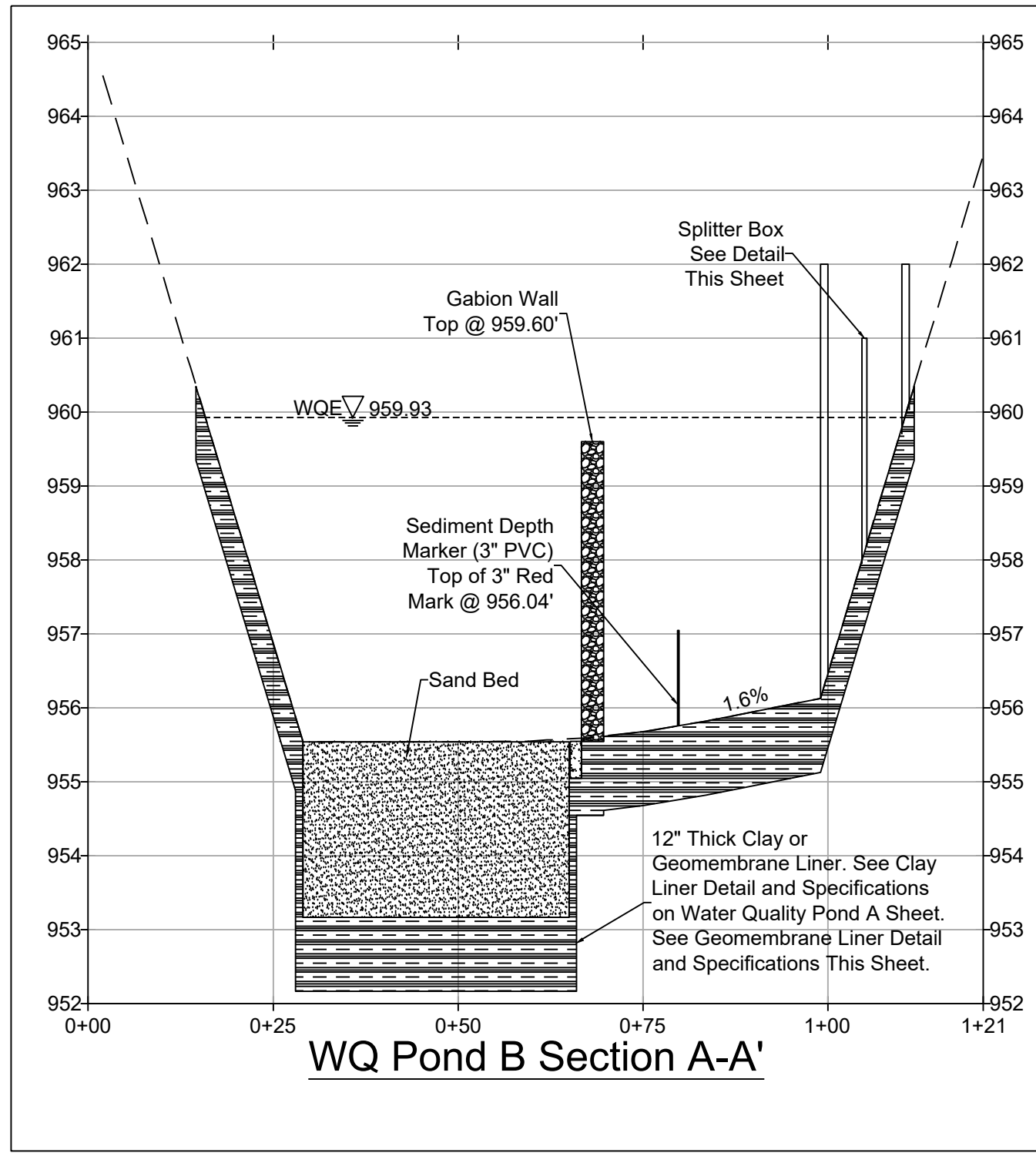
Q(25) = 32.90 cfs
 C(o) = 0.6
 g = 32.2 ft/s²
 Orifice Height = 1.00 ft.
 Orifice Width = 1.00 ft.
 H = 3.887 (Depth to Center of Window)

$Q = C(o) \cdot A \cdot (2gH)^{0.5}$
 Solving for A gives:
 A = 3.47 sf
 Try an orifice 12" high x 13" long (1.00 sf)
 # of Orifices = 4.00 orifices

USE 4 - 12" high by 12" wide orifices

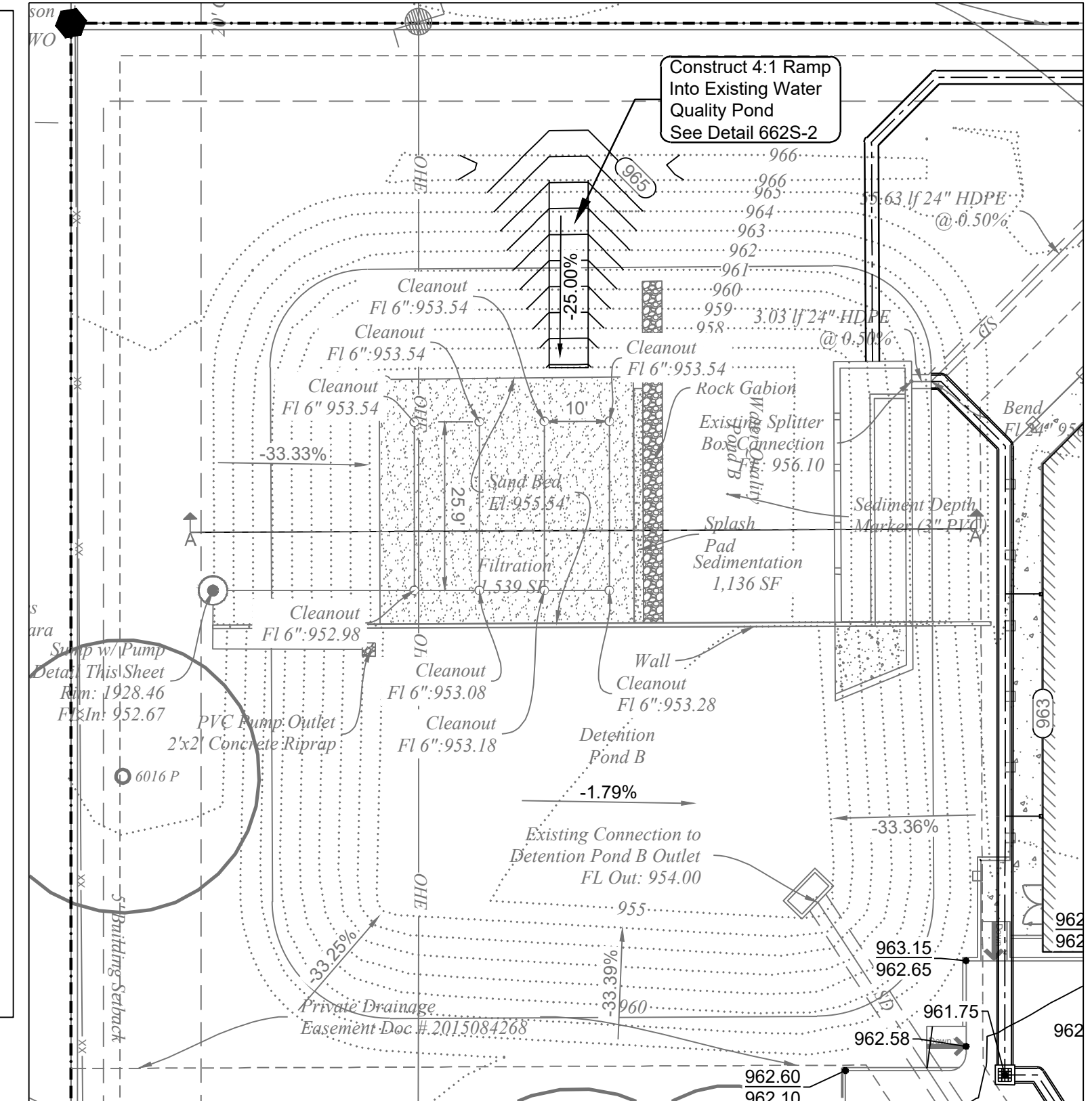
Sed/Fil Pond Volume

Contour Elev. (ft.)	Area (SF)	Estimated Incremental Volume (CF)	Estimated Accumulated Volume (CF)
955.54	1650		0
956.00	2551	966	966
957.00	3299	2925	3891
958.00	3794	3547	7438
959.00	4317	4056	11493
960.00	4868	4593	16086
961.00	5448	5158	21244
962.00	6055	5752	26995

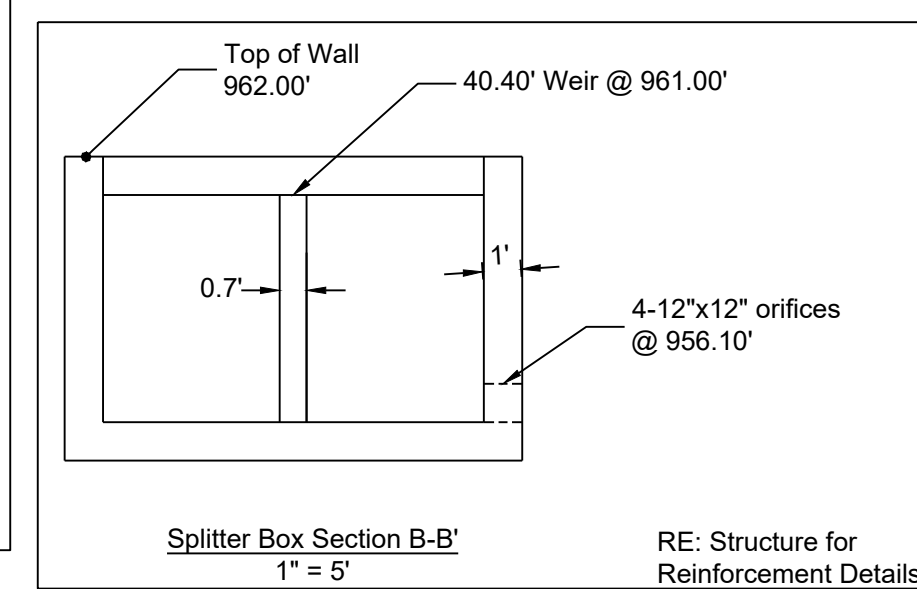
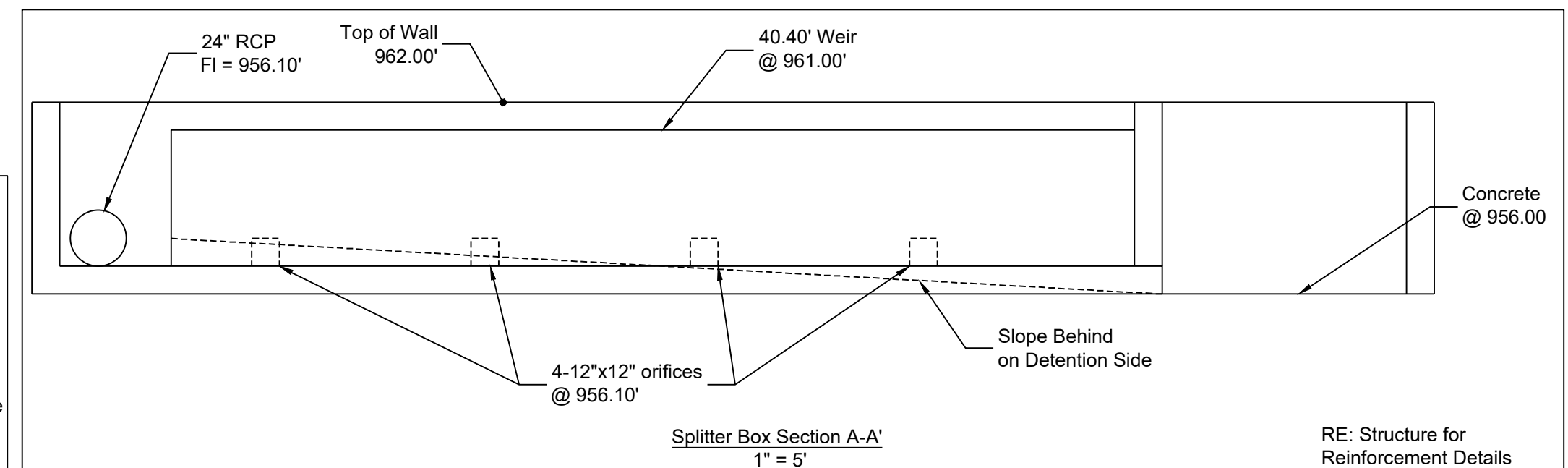
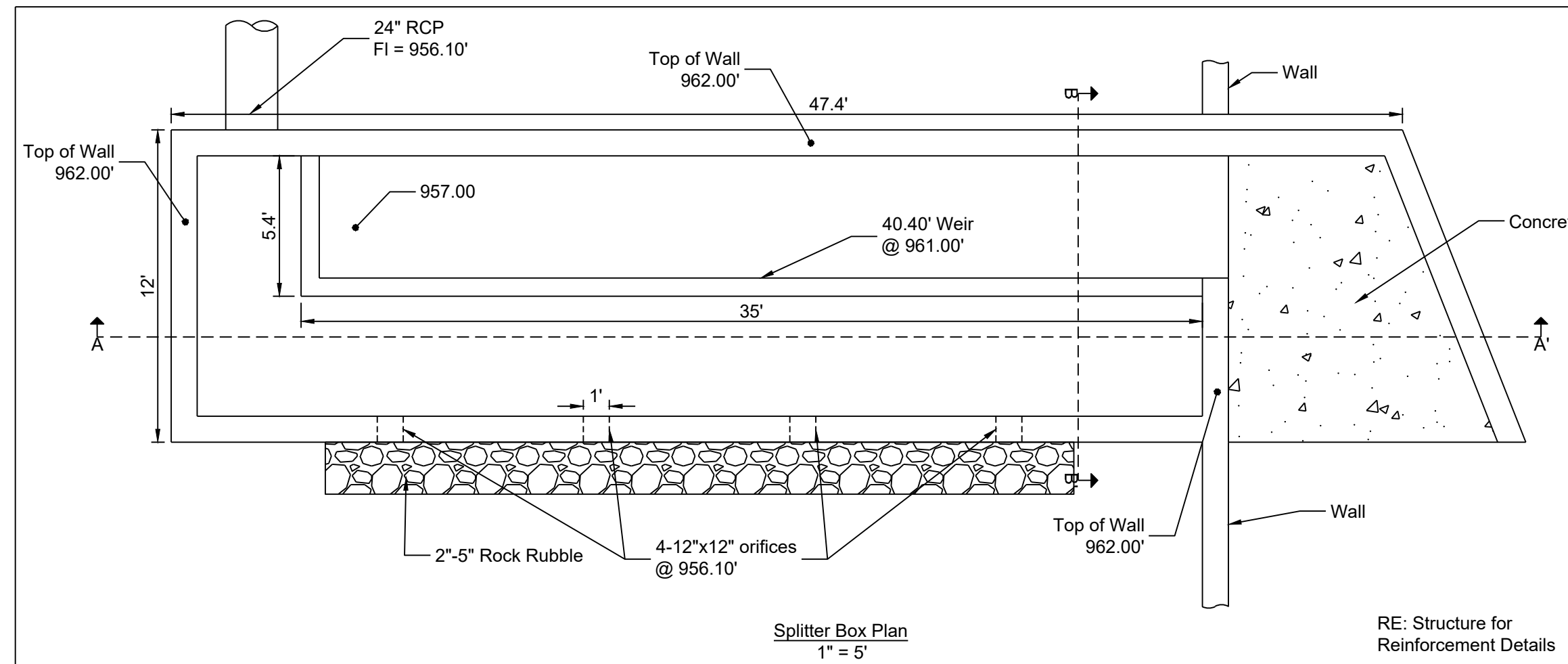
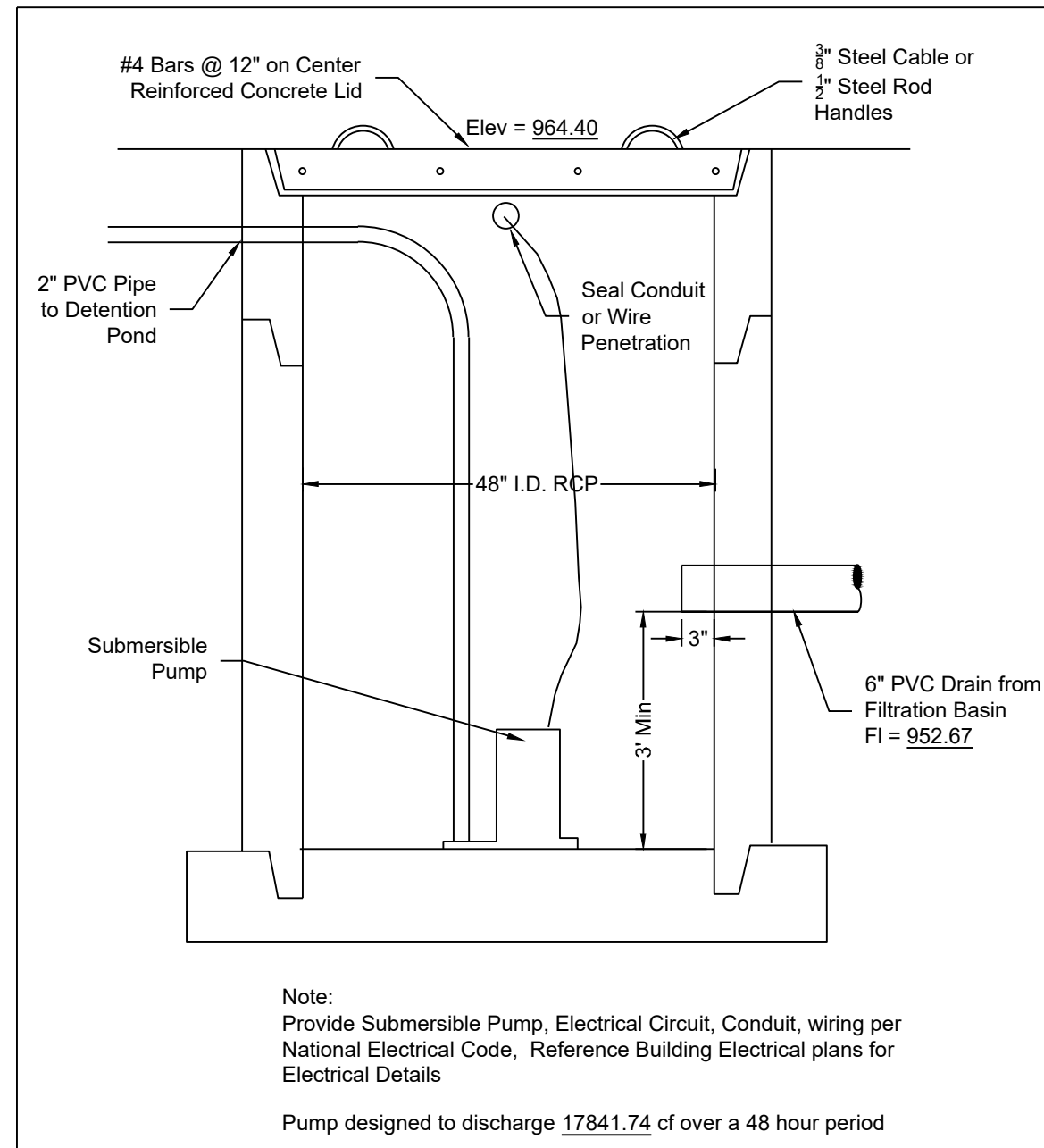
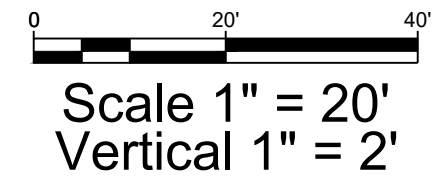


Detention Pond B Summary

Contour Elevation	Contour Area sf	Depth ft	Incremental Volume cu ft	Cumulative Volume cu ft	Detention Volume ac-ft
954.00	0	0.00	0	0.00	0.00
955.00	1569	1.00	785	784.50	0.18
956.00	3315	2.00	2442	3226.50	0.74
957.00	3818	3.00	3567	6793.00	1.56
958.00	4350	4.00	4084	10877.00	2.50
2-Year	958.10	4.10			
959.00	4909	5.00	4630	15506.50	3.56
10-Year	959.40	5.40			
960.00	5497	6.00	5203	20709.50	4.75
25-Year	960.40	6.40			
961.00	6113	7.00	5805	26514.50	6.09
100-Year	961.40	7.40			
962.00	6758	8.00	6436	32950.00	7.56



Existing Detention and Water Quality Pond Detail Sheet.
 Note: This project modifies the pond by adding a maintenance ramp only.



These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.

The location of all existing utilities shown on these plans has been based upon record information only and may not match locations as constructed. The contractor shall contact Texas 811 for assistance in determining existing utility locations prior to beginning construction. Contractor shall field verify locations of utility crossings prior to beginning construction.

Release of this application does not constitute a verification of all data, information and calculations supplied by the applicant. The engineer of record is solely responsible for the completeness, accuracy and adequacy of his/her submittal, whether or not the application is reviewed for Code compliance by City engineers.

©2022, H:\D\BLESIAK\AMIRALLI, K. MAKNOUJIA\AKM 70370 (SMALL) UMATKHANA REC CENTER\04 CAD\PILOT SHEETS\POND PLAN.DWG, 12/15/2022, Dmrcal

Revision	Date	By	App	Comment

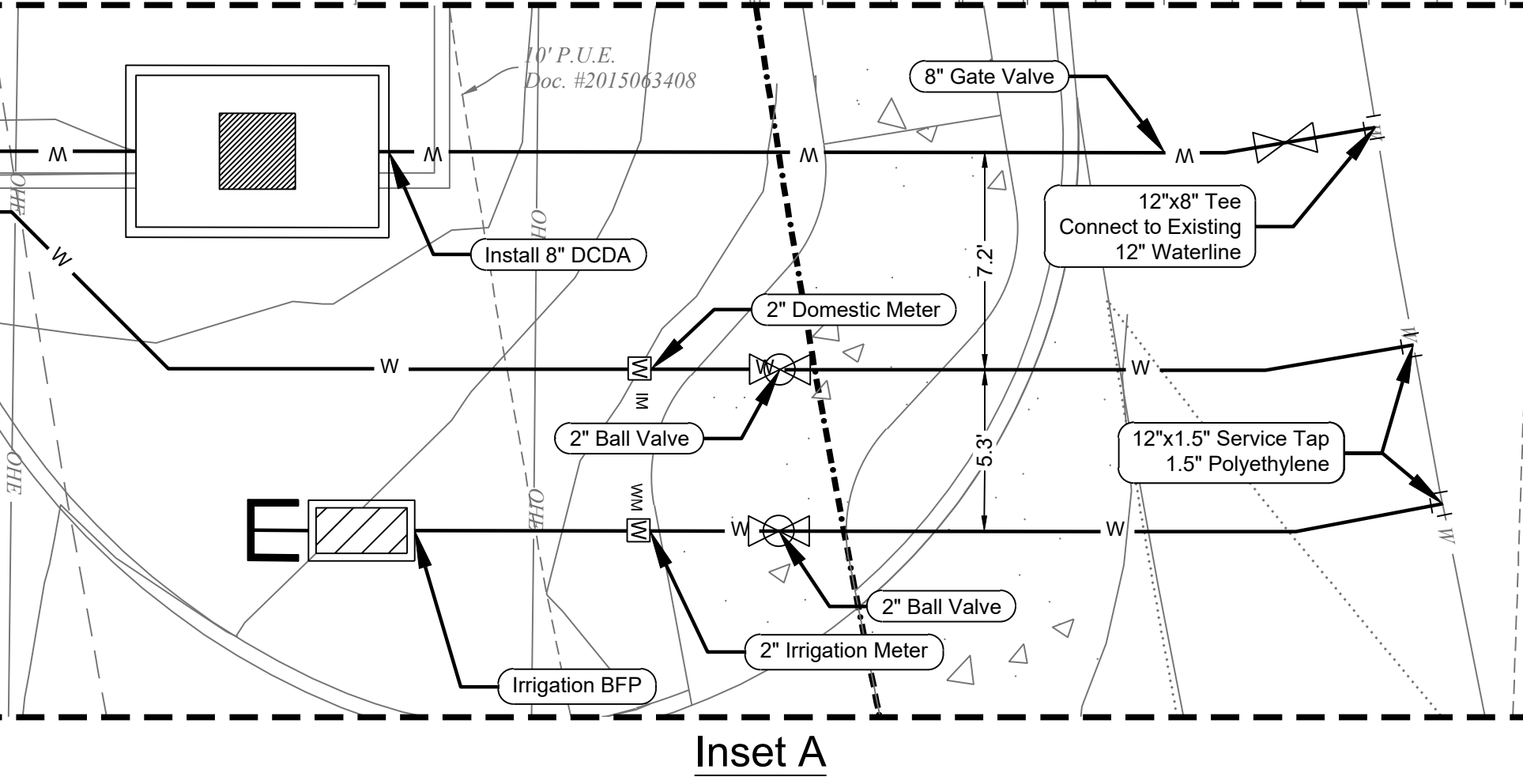
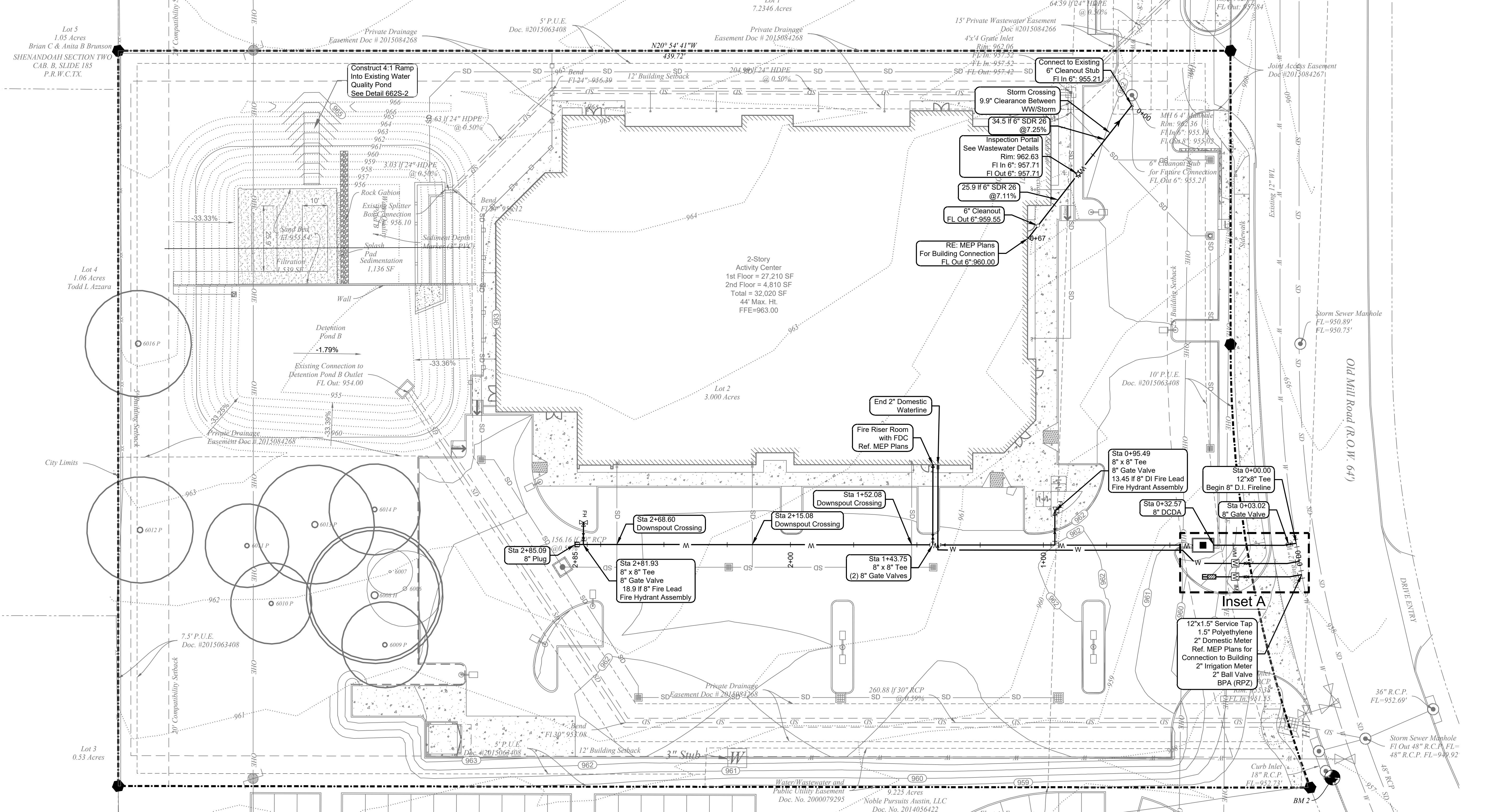
Prepared For:
 Caspita Industries, Inc./Poh Partners Inc.
 Leo Mills
 10800 Pecan Park Blvd. #240
 Austin, TX 78750

BLEYL ENGINEERING
 PLANNING • DESIGN • MANAGEMENT
 7701 San Felipe Blvd., Ste. 200, Austin TX 78729
 Texas Firm Registration No. F-678
 Tel. 512-454-2400
 www.bleylengineering.com

AUSTIN BRYAN CONROE HOUSTON

Pond Plan
Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County





Scale 1" = 5'

Legend

— W —	Existing Water Line
— W —	Proposed Water Line
■	Single Water Service
■	Double Water Service
— WW —	Existing Wastewater Line
— WW —	Proposed Wastewater Line
○	Wastewater Service
— RW —	Existing Reclaimed Water Line
— RW —	Proposed Reclaimed Water Line
— E —	Proposed Underground Electric
— SD —	Proposed Storm Drain
⊕	Fire Hydrant
⊕	Gate Valve
⊕	AARV
⊕	Transformer Pad

These plans are in full compliance with the Landscape and Tree ordinance of the City of Cedar Park, Texas.

Benchmarks
 B.M. #1 - Square cut on top of curb
 Elevation = 963.01'
 B.M. #2 - Square cut on N.E. corner of inlet
 Elevation = 957.18'

Survey Control Point
 Grid N: 10,146, 155.73
 Grid E: 3,087,275.54

PRV Note
 Lots/Structure with 65 psi or greater require a pressure reducing valve, set at 65 psi, to be installed on the property owner's side of the right of way.

Legal Description
 Caspita/Hopper Subdivision, Lot 2, Acres 3

The location of all existing utilities shown on these plans has been based upon record information only and may not match locations as constructed. The contractor shall contact Texas 811 for assistance in determining existing utility locations prior to beginning construction. Contractor shall field verify locations of utility crossings prior to beginning construction.

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Scale 1" = 20'

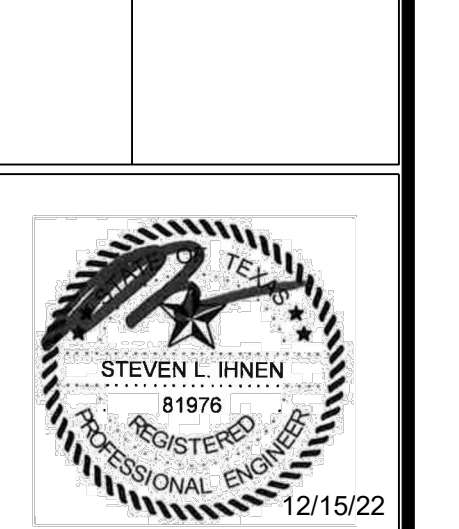
Revision	Date	By	App	Comment

Prepared For:
 Caspita Industries, Inc./Pohl Partners Inc.
 Leo Mills
 10800 Pecan Park Blvd. #240
 Austin, TX 78750

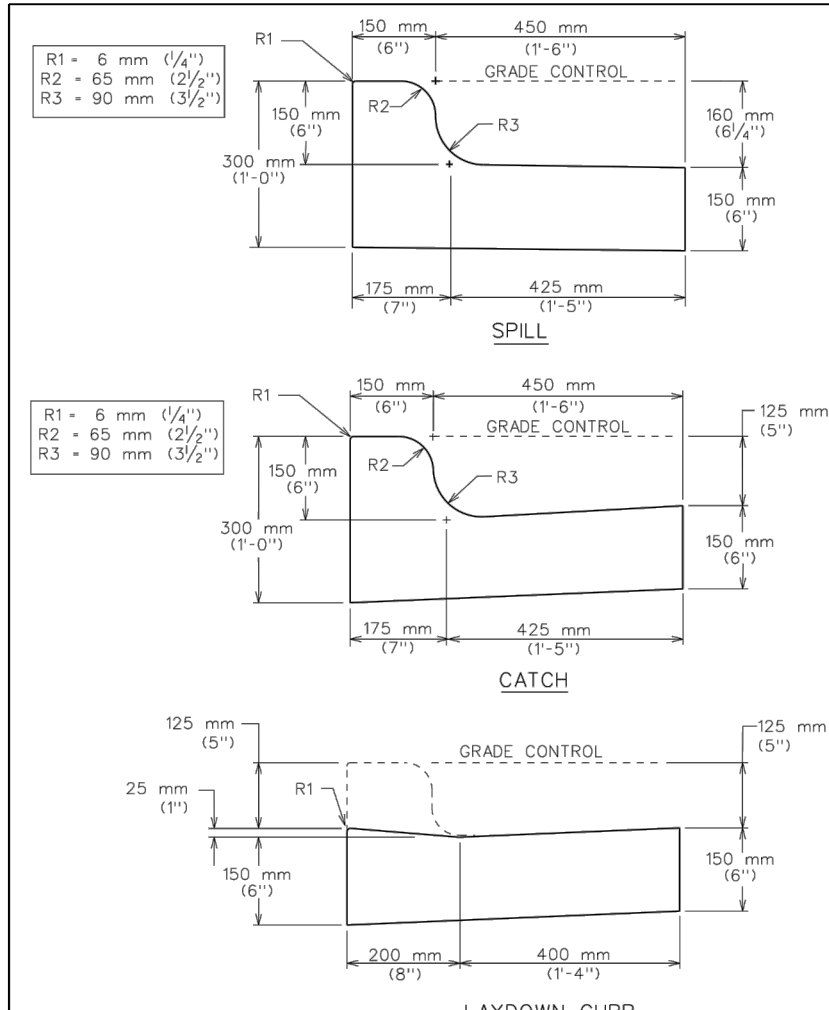
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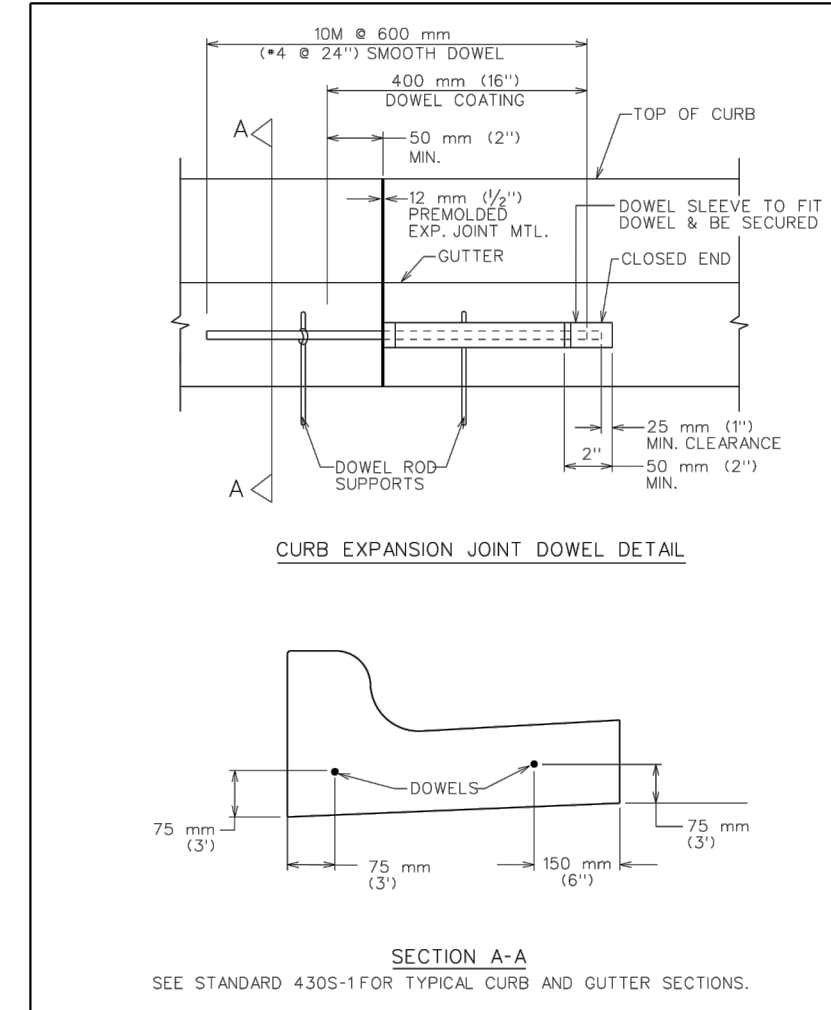
Utility Tap Plan
 Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County



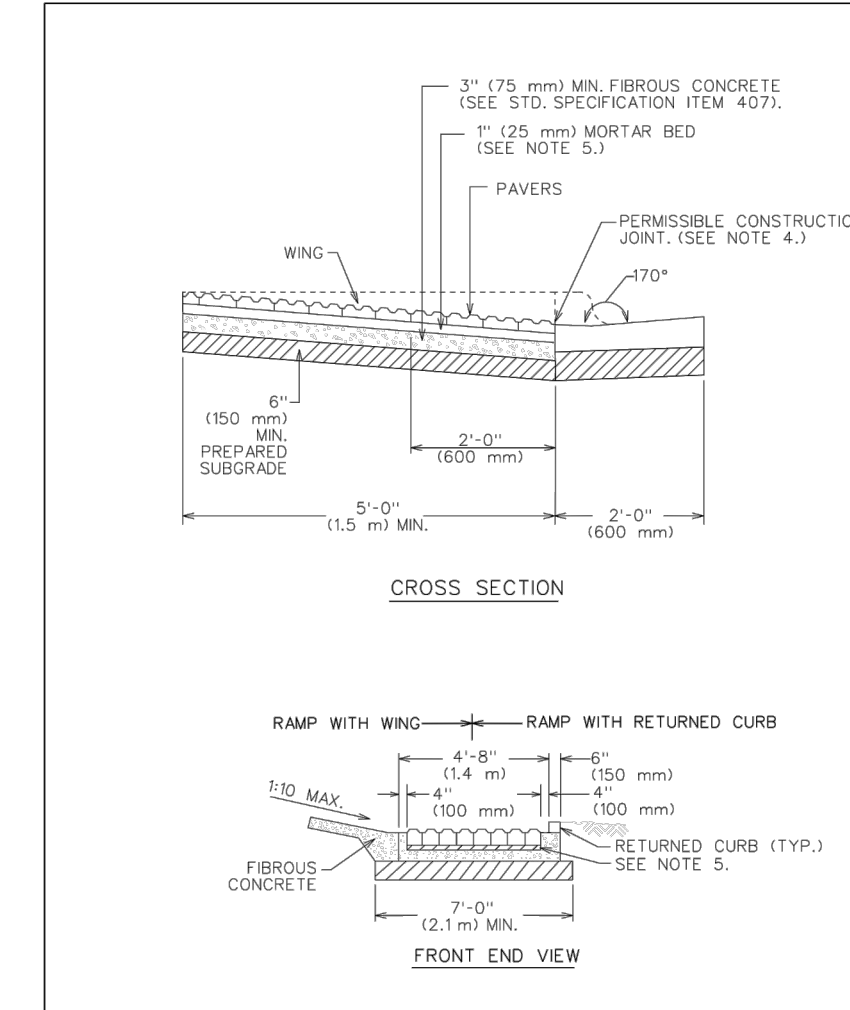
Design:	VG
CAD:	AE
Review:	VG
Project No:	AKM 70370
Sheet:	19 of 32
2022-25-SD	



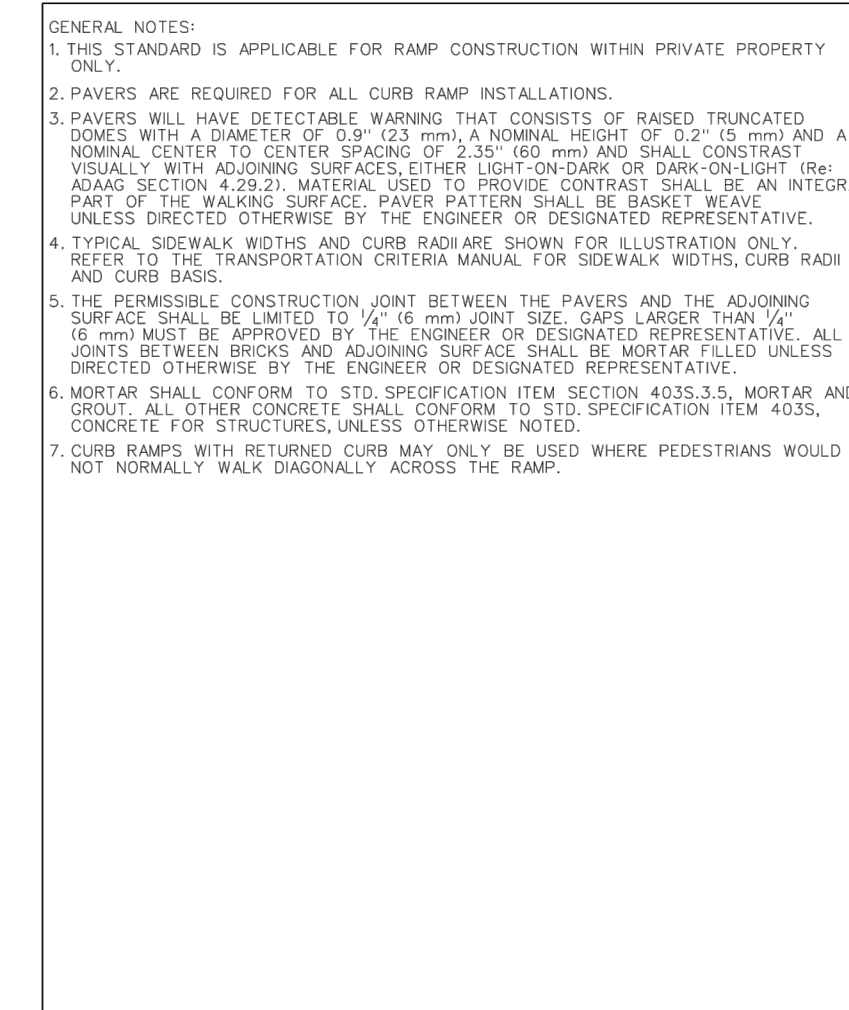
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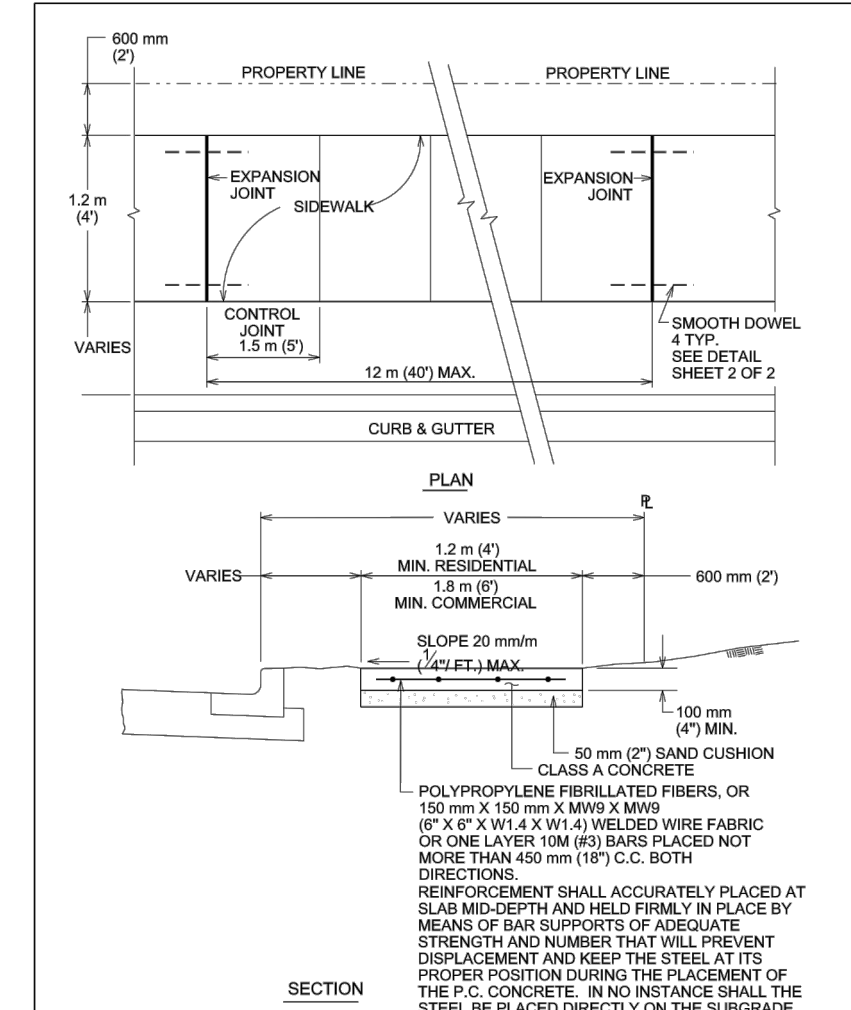
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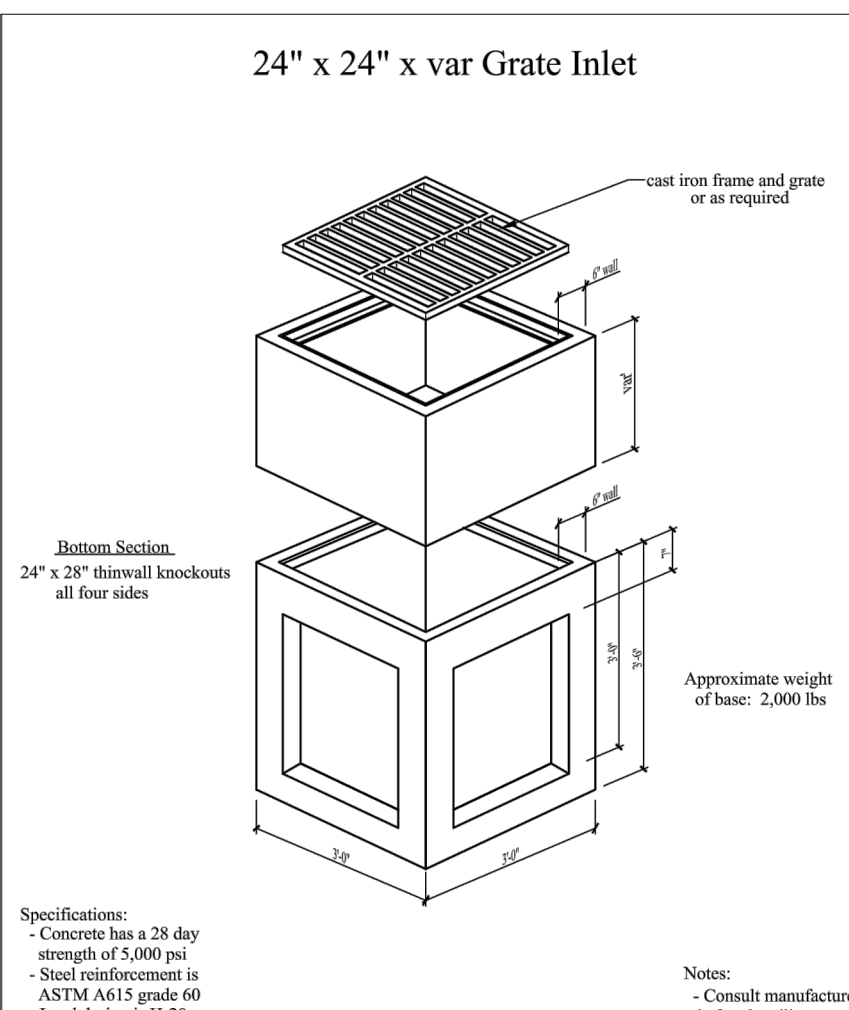
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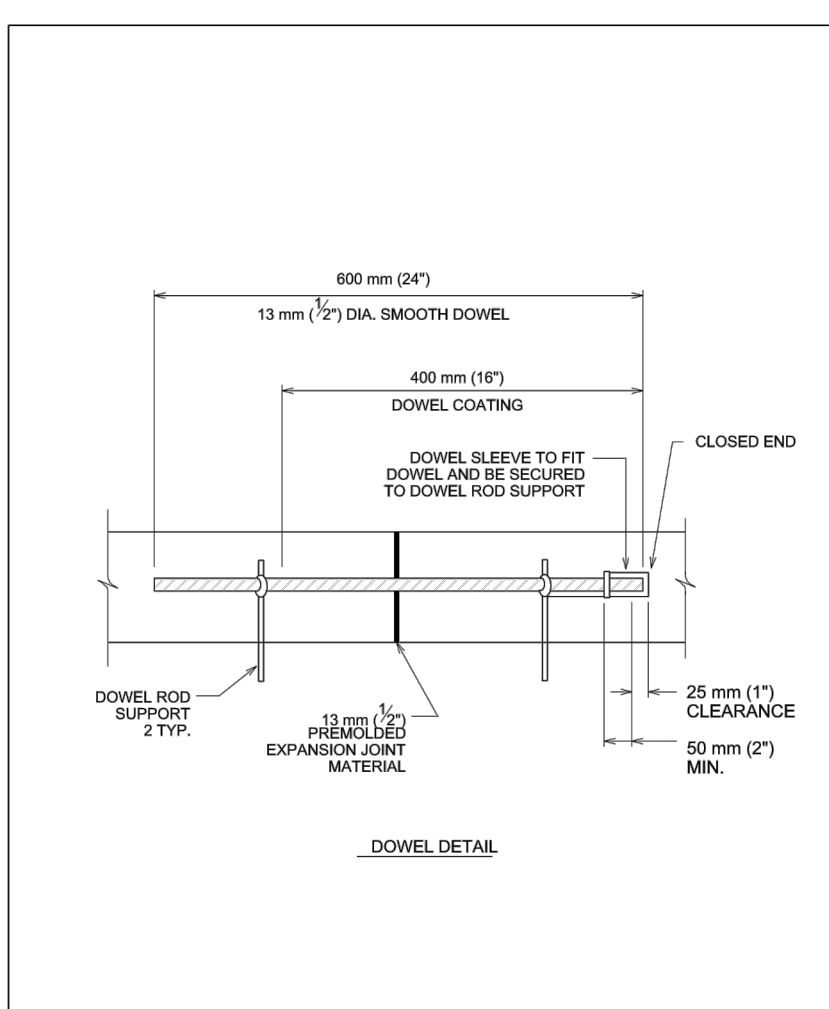
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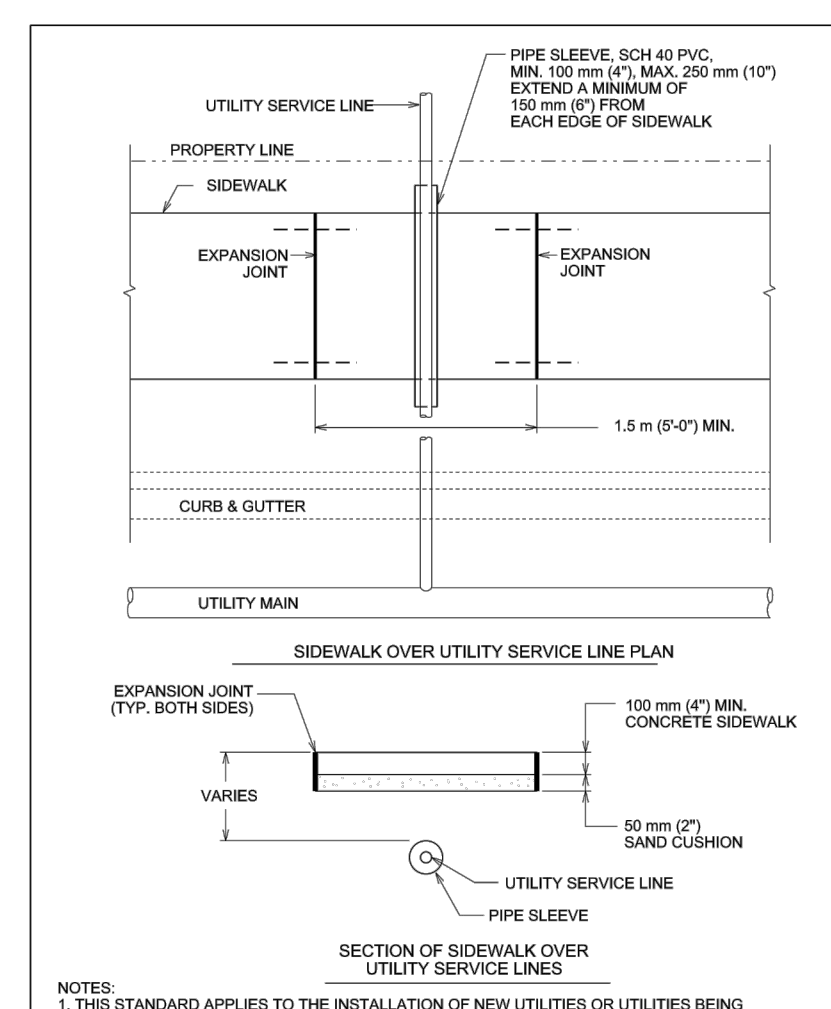
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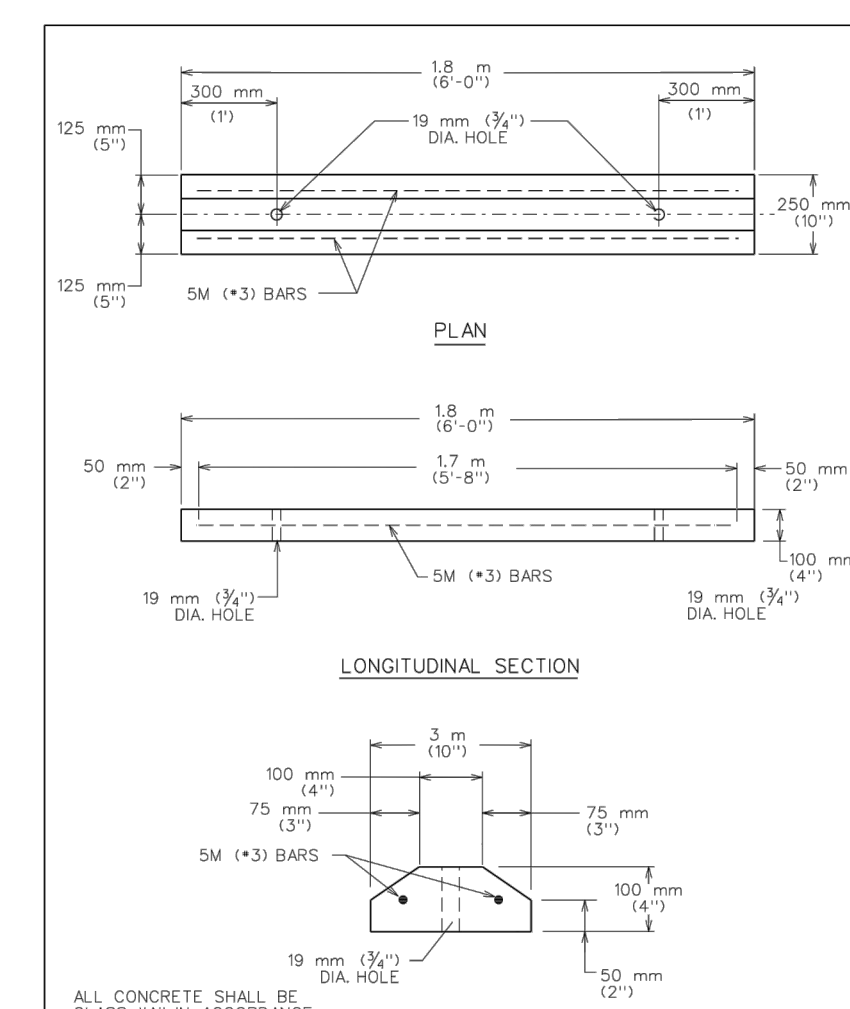
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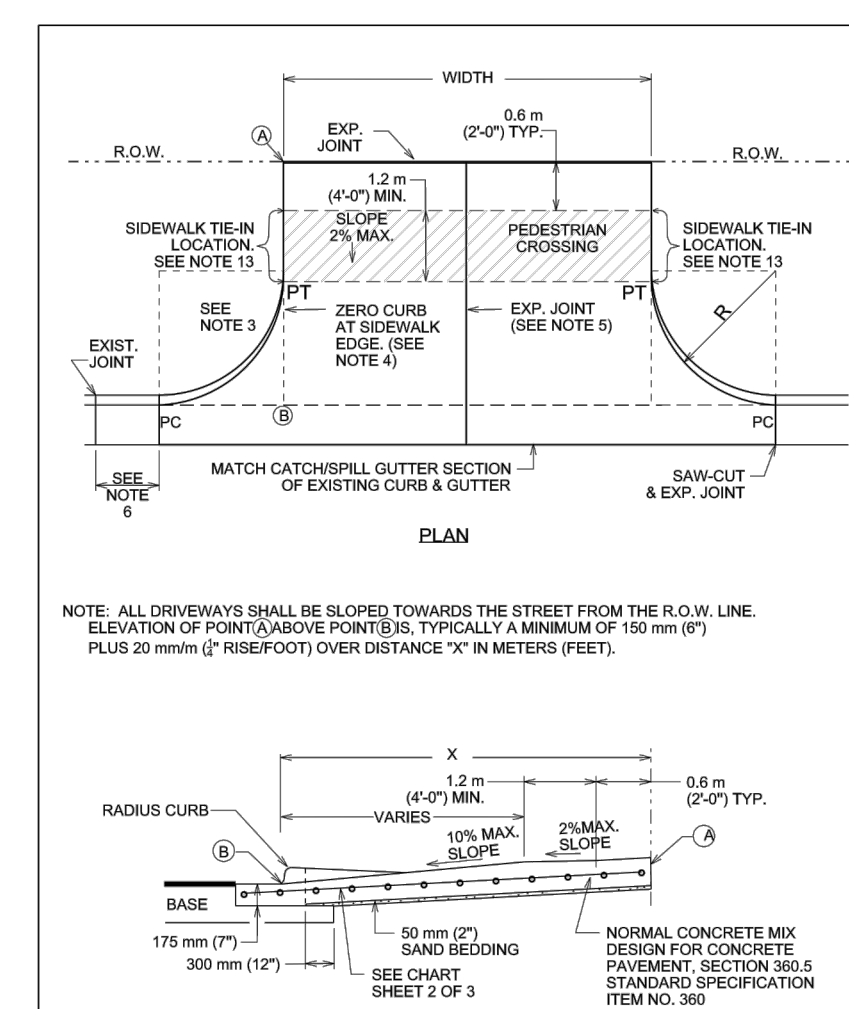
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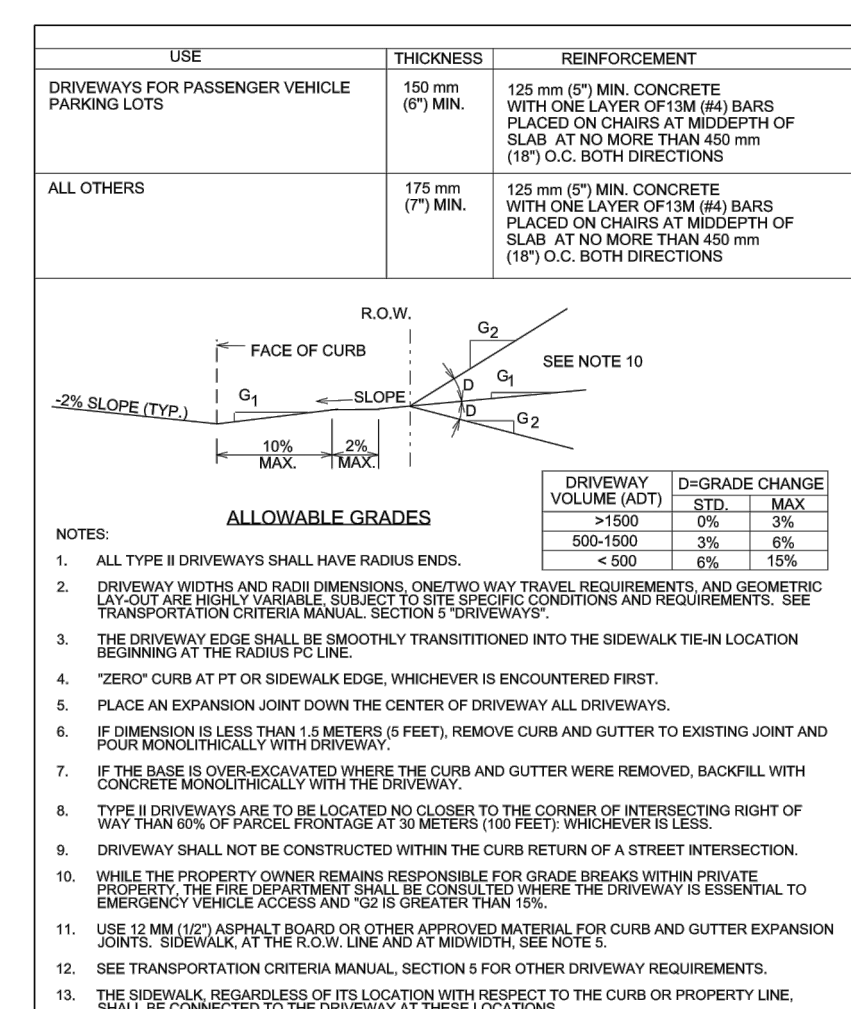
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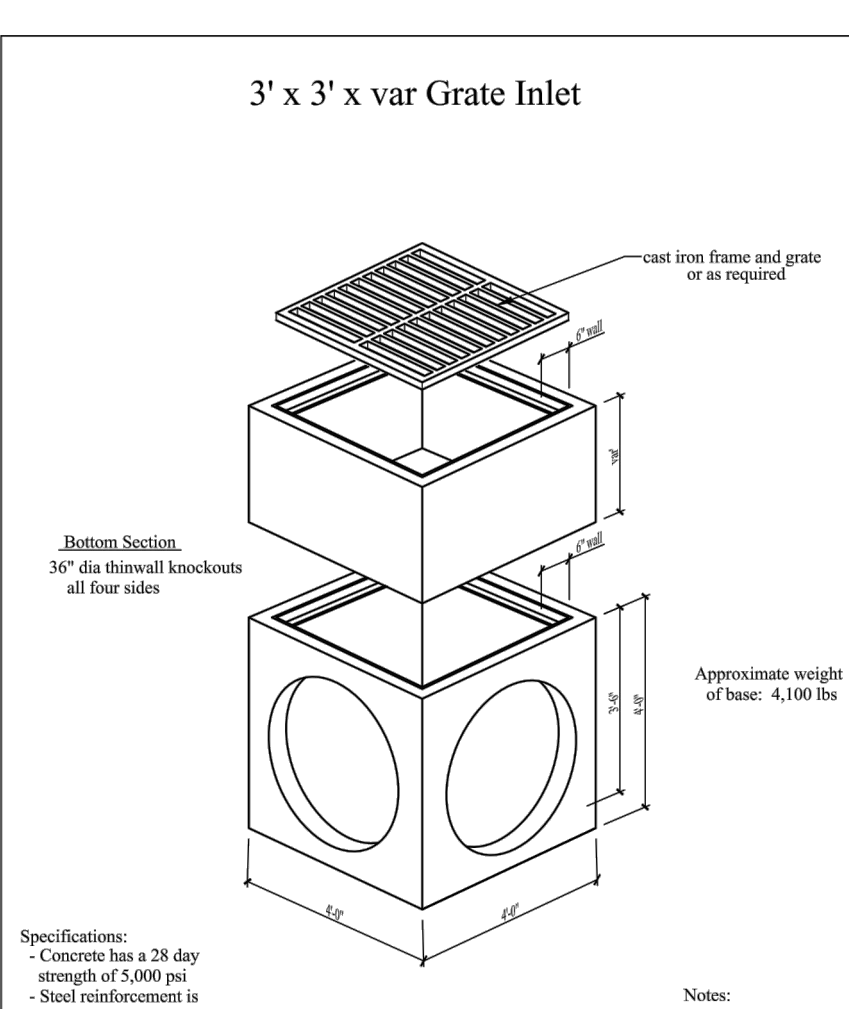
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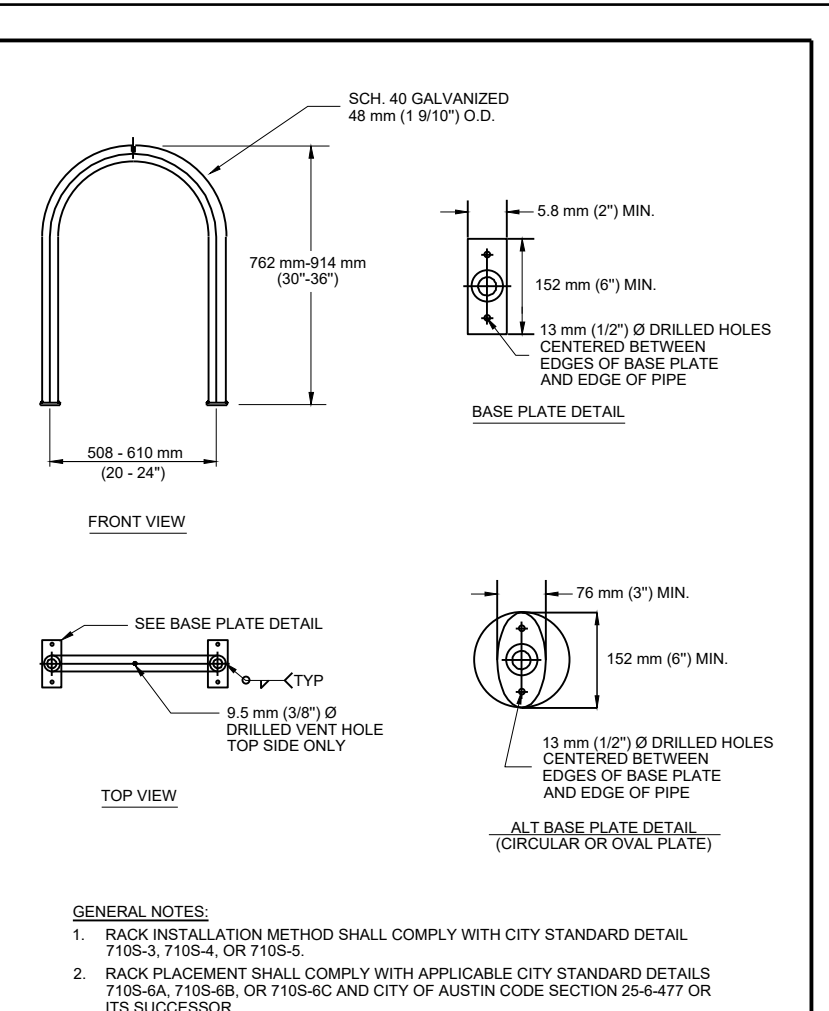
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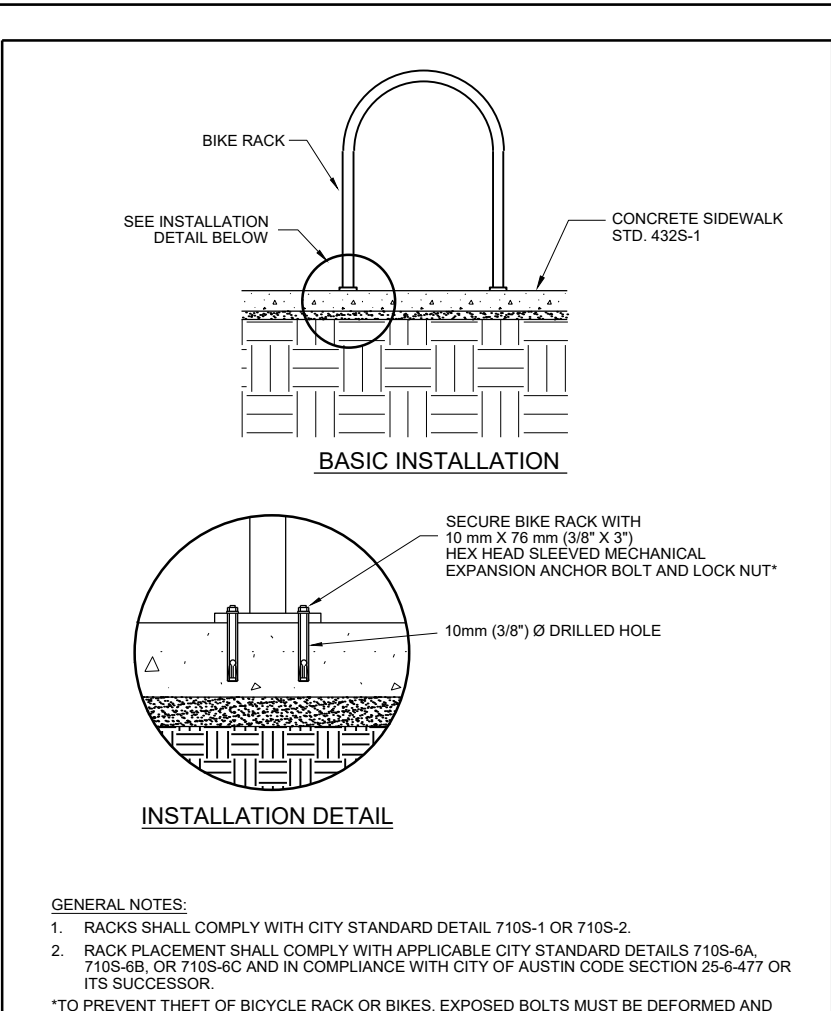
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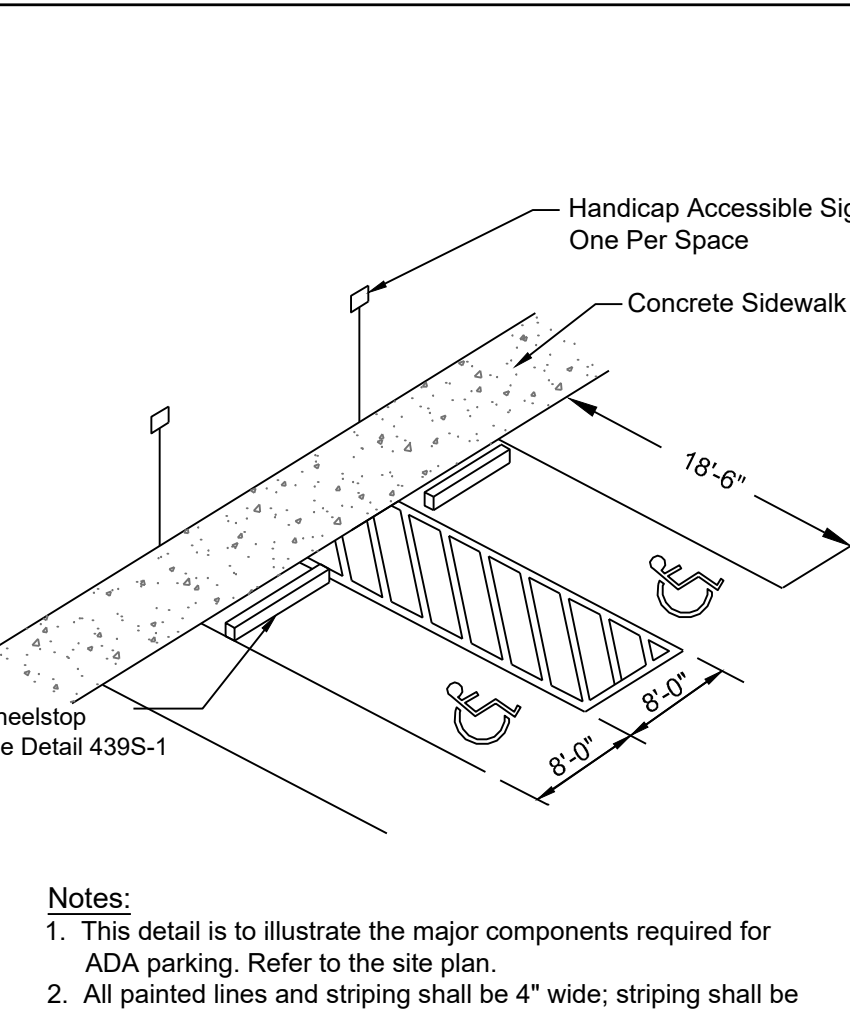
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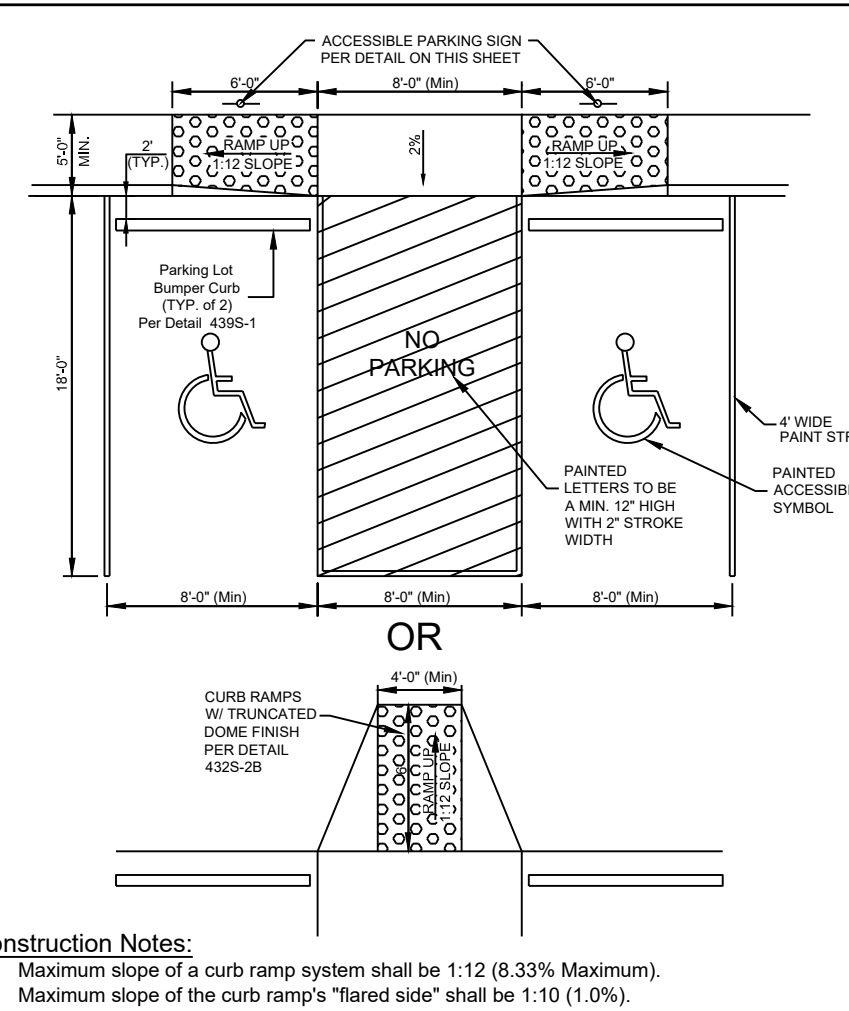
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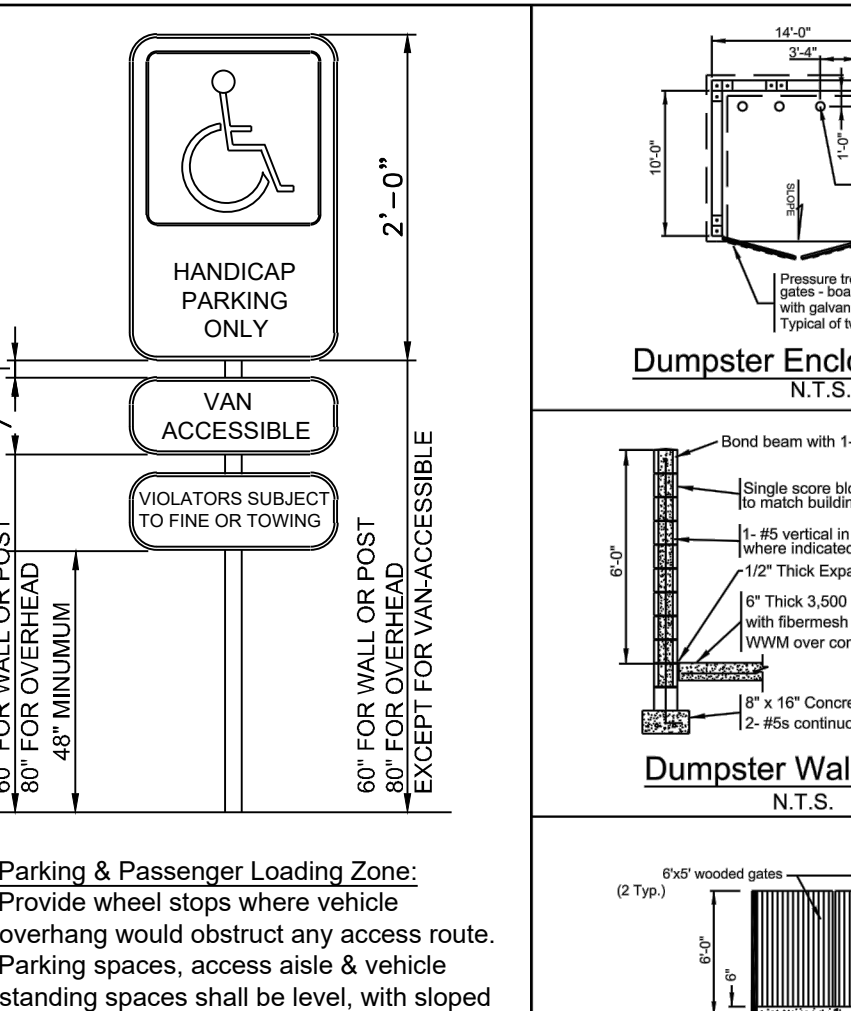
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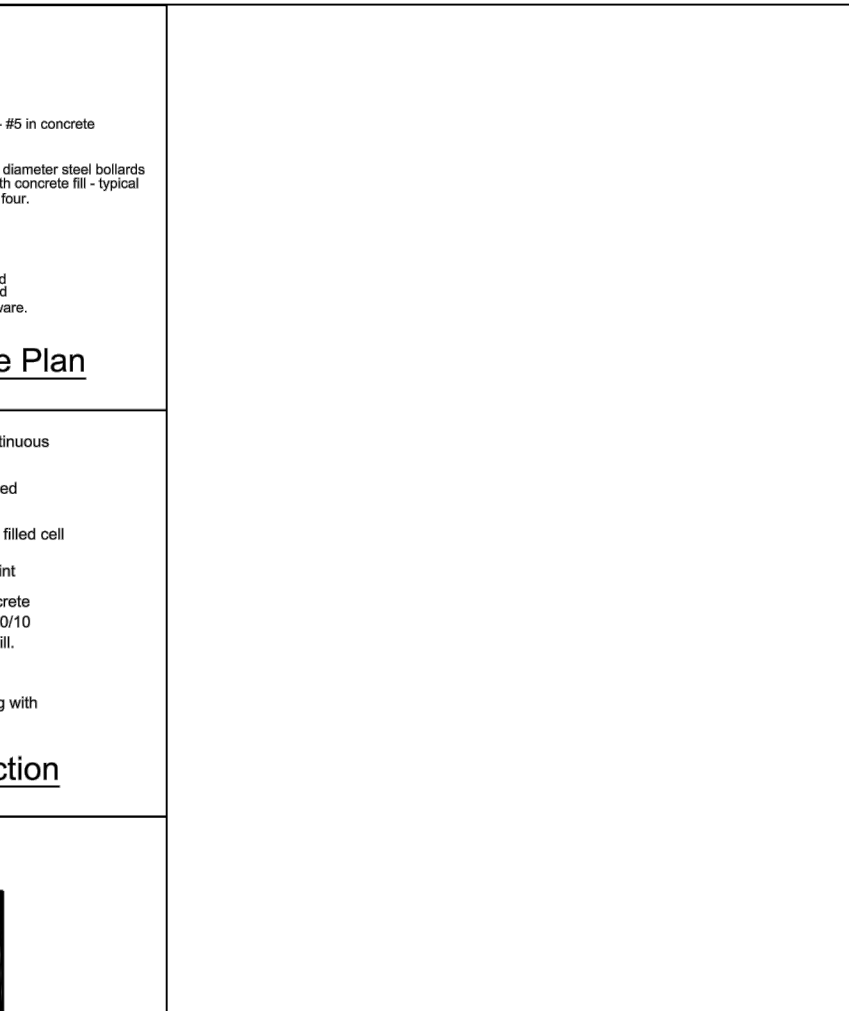
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CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	Handicapped Parking Spaces (Van)	N.T.S.
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CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	Dumpster Enclosure Plan N.T.S.	N.T.S.
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	Dumpster Wall Section N.T.S.	N.T.S.



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	Dumpster Enclosure Front Elev.	N.T.S.
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Prepared For:	Capita Industries, Inc./Poh Partners Inc. Lee Mills 10800 Pecan Park Blvd. #240 Austin, TX 78750
Revision	Date
By	App
Comment	

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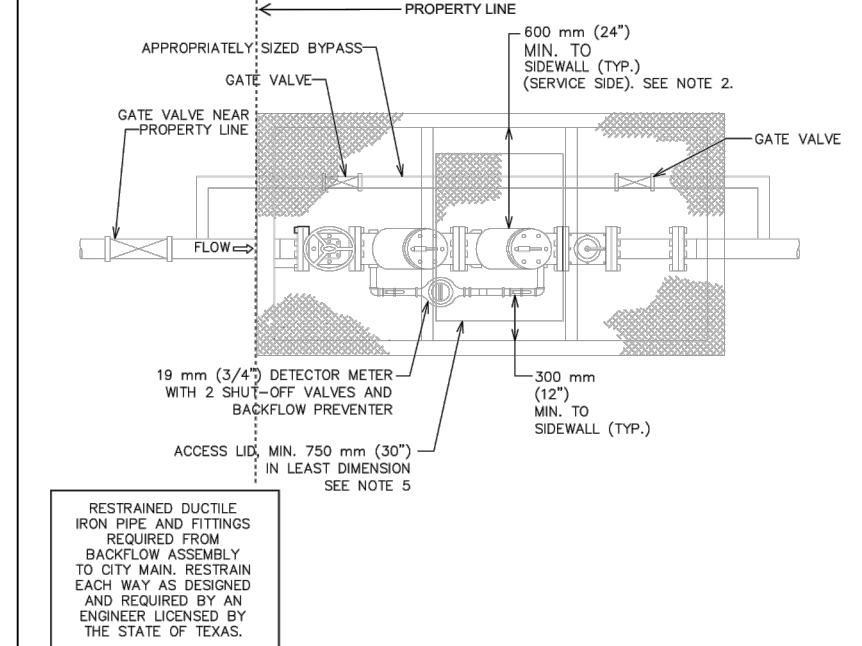
AUSTIN **BRYAN** **CONROE** **HOUSTON**

Construction Details

Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County

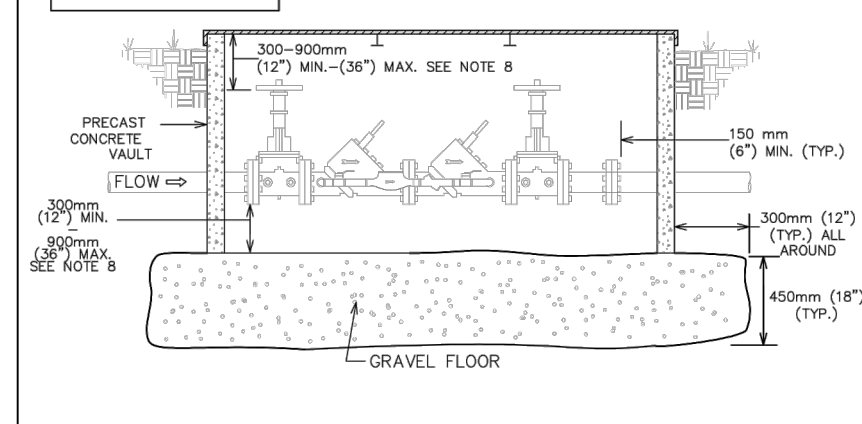
STEVEN L. IHLEN
REGISTERED PROFESSIONAL ENGINEER
81978
12/15/22

Design: VG
CAD: AE Review: VG
Project No: AKM 70370
Sheet: **20** of **32**
2022-25-SD



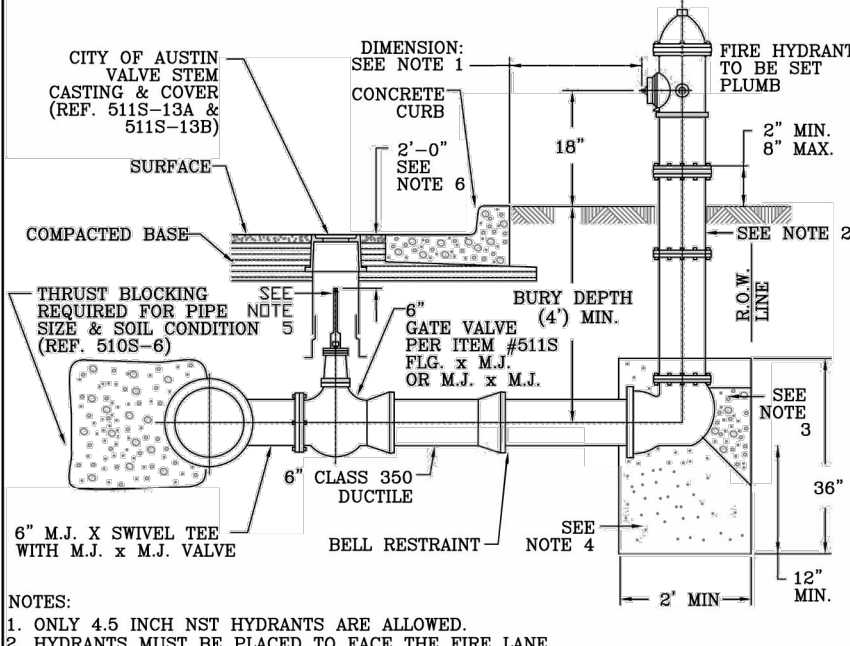
NOTES:

- ALL BACKFLOW PREVENTION ASSEMBLIES SHALL HAVE LAB AND FIELD APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
- ALL TEST PORTS SHALL BE DIRECTED UPWARD AND PLUGGED. TEST PORTS ARE LOCATED ON SERVICE SIDE. PLUGS SHALL BE NON-FERROUS.
- BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED IN THE UPRIGHT HORIZONTAL POSITION, UNLESS OTHERWISE APPROVED. BACKFLOW PREVENTION ASSEMBLIES SHALL NOT BE INSTALLED ON THEIR SIDE.
- CLEARANCE SHALL BE AS INDICATED AND IN THE STANDARD CROSS CONNECTION ORDINANCES AND UCM.
- ACCESS OPENING MUST BE LARGE ENOUGH TO REMOVE LARGEST PORTION OF BACKFLOW PREVENTER, BUT NOT LESS THAN 750 mm (30") IN LEAST DIMENSION.
- TEST AND MAINTENANCE REPORT SHALL BE RECEIVED BY AUSTIN WATER UTILITY'S SPECIAL SERVICE DIVISION WITHIN 5 DAYS AFTER BEING INSTALLED.
- VALVE SHALL NOT BE INSTALLED IN TRAFFIC AREA.
- VALVE DEPTH MAY NOT EXCEED 1.8m (72"), BOTTOM OF LID TO TOP OF FLOOR.
- HAND WHEELS SHALL BE HORIZONTALLY LOCATED WITHIN 300mm (12") OF ACCESS OPENING.
- FOR ACCESS DOORS SEE SPL W/M-414 OR APPROVED EQUAL (H20 LOADING REQUIRED).
- FOR VALVE SEE SPL W/M-296 OR APPROVED EQUAL (H20 LOADING REQUIRED).
- VALVE FIRE WALL Voids SHALL BE SEALED WITH NON-BRINK GROUT OR SEALANT PER SPL W/M-146A OR APPROVED EQUAL.
- THE TOP OF THE METER VALVE SHALL BE AT AN ELEVATION SUCH THAT THE BURNING GROUND BLOWS AWAY FROM THE VALVE. ADDITIONAL DRAINAGE CONSIDERATION SUCH AS CONNECTION OF VALVE TO STORM DRAINER, LATERAL DRAIN LINES FROM GRAVEL BED OR OTHER MEANS SHALL BE REQUIRED IF CONDITIONS CAUSE WATER TO COLLECT IN VALVE.
- Detector water meter shall be a Sensus SR II 3/4" meter with AMI radio read capability. The City of Cedar Park will provide this meter.



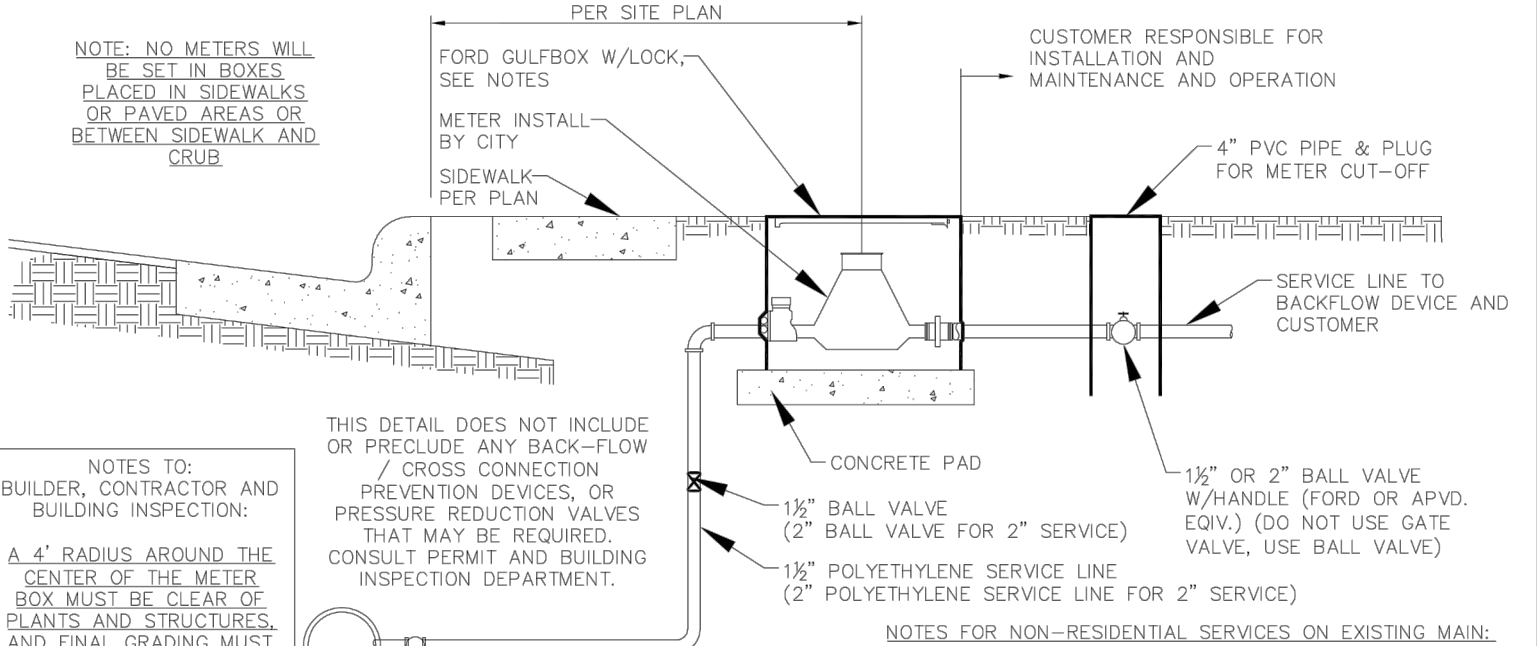
NOTES:

- ONLY 4.5 INCH NPT HYDRANTS ARE ALLOWED.
- HYDRANTS MUST BE PLACED TO FACE THE FIRE LANE.
- IN RIGHT OF WAY AREAS, PLACE HYDRANTS AT ROW LINE. HYDRANTS ARE NOT TO BE PLACED IN SIDEWALK AREAS. HYDRANTS SHOULD NOT BE PLACED CLOSER THAN 3 FEET OR FURTHER THAN 6 FEET FROM THE BACK OF CURB WHERE POSSIBLE. PLACE VALVE IN PAVEMENT. IF NOT POSSIBLE, PLACE A VALVE BOX PAD (DETAIL FROM CEDAR PARK WEBSITE) AROUND VALVE. NO VALVES ARE TO BE PLACED IN CONFLICT WITH PROPOSED/EXISTING CURBS OR GUTTERS.
- FOR BURY DEPTHS GREATER THAN 5', ONE BARREL EXTENSION NOT EXCEEDING 2 FOOT IN LENGTH SHALL BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT.
- ALL PIPE AND FITTINGS SHALL HAVE JOINT RESTRAINT FROM MAIN TO FIRE HYDRANT. ALL INCLUSIVE, THRUST BLOCKING SHALL BE CLASS A CONCRETE WITH A MINIMUM 1.5 SQUARE FOOT SURFACE AREA AGAINST PIPE. DO NOT BLOCK DRAIN HOLES.
- CROSSED STONE OR GRAVEL SHALL BE PLACED AROUND THE BOTTOM OF THE HYDRANT FOR A RADIUS OF AT LEAST 12" AND EXTEND AT LEAST 12" ABOVE THE OUTLET. DO NOT BLOCK DRAIN HOLES.
- WELD SOCKET 2-1/2" X 2" DEEP TO 1" SCH. 40 ROUND STEM EXTENSION, FITTED ON OPERATING NUT, SCH. 60 FOR LENGTHS OVER 10'.
- VALVE EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18" AND 24" FROM FINISHED GRADE.
- VALVE SPECIFICATION PER CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 511.



NOTES:

- ONLY 4.5 INCH NPT HYDRANTS ARE ALLOWED.
- HYDRANTS MUST BE PLACED TO FACE THE FIRE LANE.
- IN RIGHT OF WAY AREAS, PLACE HYDRANTS AT ROW LINE. HYDRANTS ARE NOT TO BE PLACED IN SIDEWALK AREAS. HYDRANTS SHOULD NOT BE PLACED CLOSER THAN 3 FEET OR FURTHER THAN 6 FEET FROM THE BACK OF CURB WHERE POSSIBLE. PLACE VALVE IN PAVEMENT. IF NOT POSSIBLE, PLACE A VALVE BOX PAD (DETAIL FROM CEDAR PARK WEBSITE) AROUND VALVE. NO VALVES ARE TO BE PLACED IN CONFLICT WITH PROPOSED/EXISTING CURBS OR GUTTERS.
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- VALVE SPECIFICATION PER CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 511.



NOTES TO BUILDER, CONTRACTOR AND BUILDING INSPECTOR:

A 4' RADIUS AROUND THE CENTER OF THE METER BOX MUST BE CLEAR OF PLANTS AND STRUCTURES, AND FINAL GRADING MUST BE < 2% (1" PER 1') WITHIN THE 4' RADIUS OR METER MAY NOT TRANSMIT CORRECTLY AND THE CUSTOMER'S ACCOUNT CAN NOT BE FINANCED. THE OWNER AND CONTRACTOR RESPONSIBLE FOR THE PROPER USE OF THIS DETAIL. THE UTILITY MUST REQUEST ANY INSTALLATION WHERE COMMUNICATION CAN NOT BE ACHIEVED.

NOTES FOR NON-RESIDENTIAL SERVICES ON EXISTING MAIN:

- CITY OF CEDAR PARK WATER UTILITY WILL MAKE TAP ON EXISTING MAIN AND PROVIDE ALL PIPE AND APPURTENANCES LISTED IN PARTS LIST ITEMS #1.
- A METER WILL NOT BE SET UNTIL ALL FINAL WORK IN THE RIGHT OF WAY IS COMPLETE, TESTED AND INSPECTED.

NOTES FOR NEW RESIDENTIAL SERVICES OR NON-RESIDENTIAL SERVICES ON NEW MAIN:

- THE CONTRACTOR WILL PROVIDE ALL PARTS, FITTINGS, PIPE, BOXES AND APPURTENANCES SHOWN.
- THE CONTRACTOR SHALL PERFORM ALL TAPS.
- ALL TAPS SHALL BE COMPLETE, FLUSHED AND OPEN TO THE CURB STOP PRIOR TO MAIN TESTING.

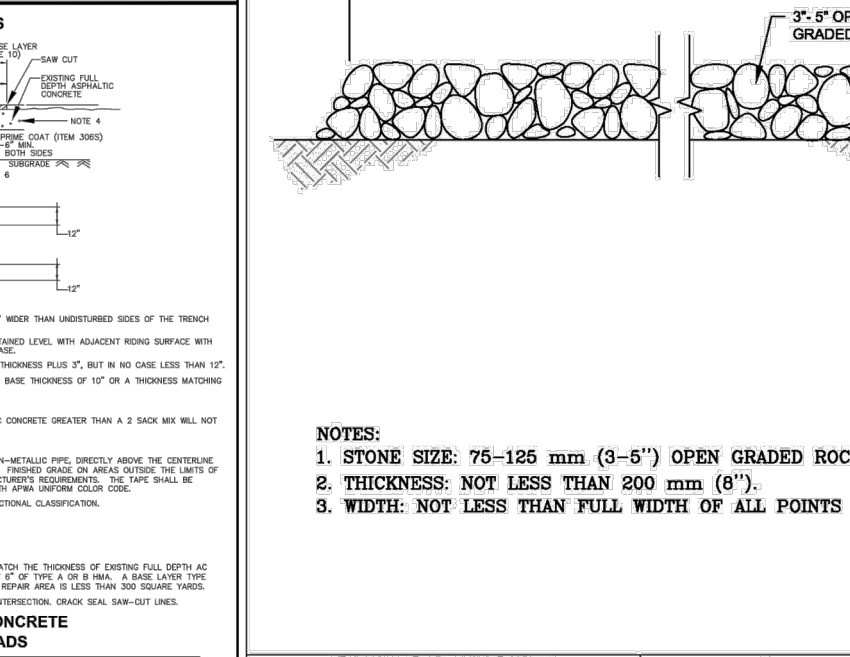
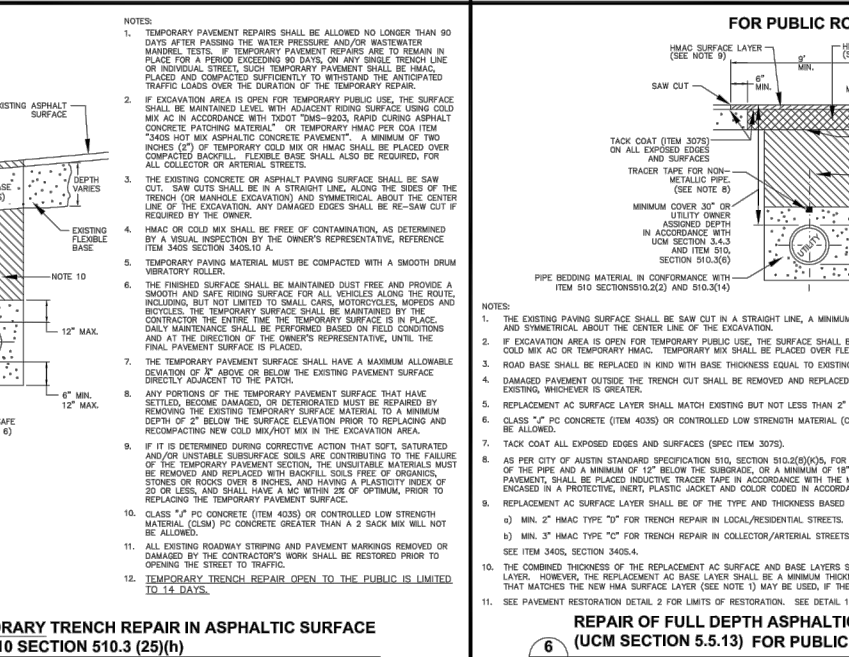
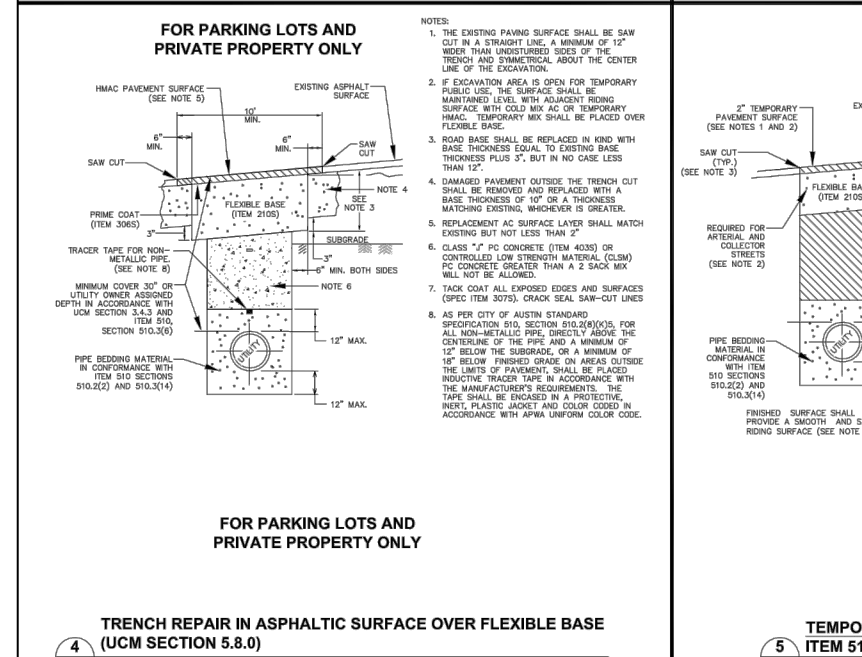
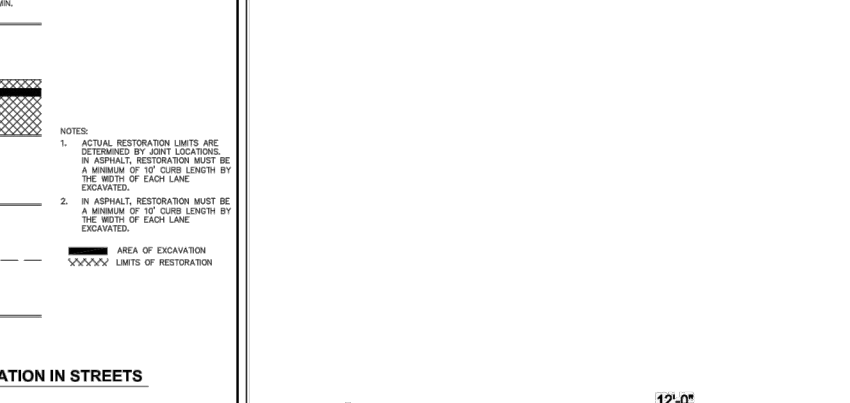
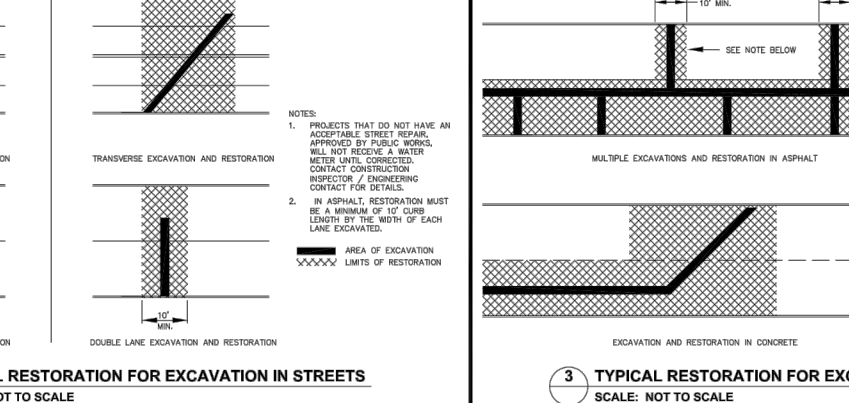
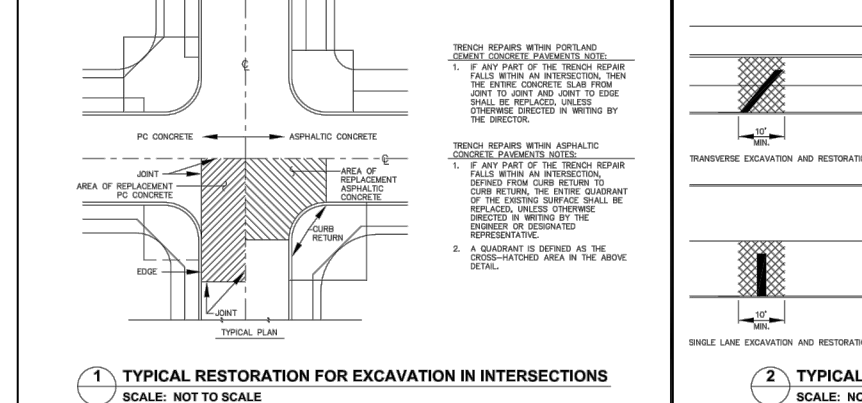
CITY OF CEDAR PARK
ENGINEERING DEPARTMENT
STANDARD WATER LINE INSTALLATION WITH METER
ADOPTED: 1980
SCALE: 1/2" = 1'-0"
INITIAL: TD

CITY OF CEDAR PARK
ENGINEERING DEPARTMENT
STANDARD WATER LINE INSTALLATION WITH METER
ADOPTED: 1980
SCALE: 1/2" = 1'-0"
INITIAL: TD

CITY OF CEDAR PARK
ENGINEERING DEPARTMENT
STANDARD FIRE HYDRANT INSTALLATION
ADOPTED: 1980
SCALE: 1/2" = 1'-0"
INITIAL: TD

CITY OF CEDAR PARK
DEPARTMENT OF PUBLIC WORKS
VER: 200918

STANDARD DETAIL FOR 1/2" OR 2" WATER METER SERVICE



CITY OF CEDAR PARK
DEPARTMENT OF PUBLIC WORKS

TEMPORARY AND FINAL REPAIR OF STREETS AND PUBLIC TRAFFIC AREAS
SHEET 1 OF 1

CITY OF AUSTIN
DEPARTMENT OF PUBLIC WORKS
ADOPTED

POND MAINTENANCE ROAD CROSS SECTION
ITEM 610 SECTION 6.1.2 FOR PUBLIC ROADS
SCALE: NOT TO SCALE
STANDARD NO. 662S-2



Design: VG	By: App	Comment:
CAD: AE	Revision:	
Project No: AKM 70370	Date:	
Sheet: 21 of 32		
2022-25-SD		

Prepared For:
Caspita Industries, Inc./Pohl Partners Inc.
Leo Mills
10800 Pecan Park Blvd. #240
Austin, TX 78750

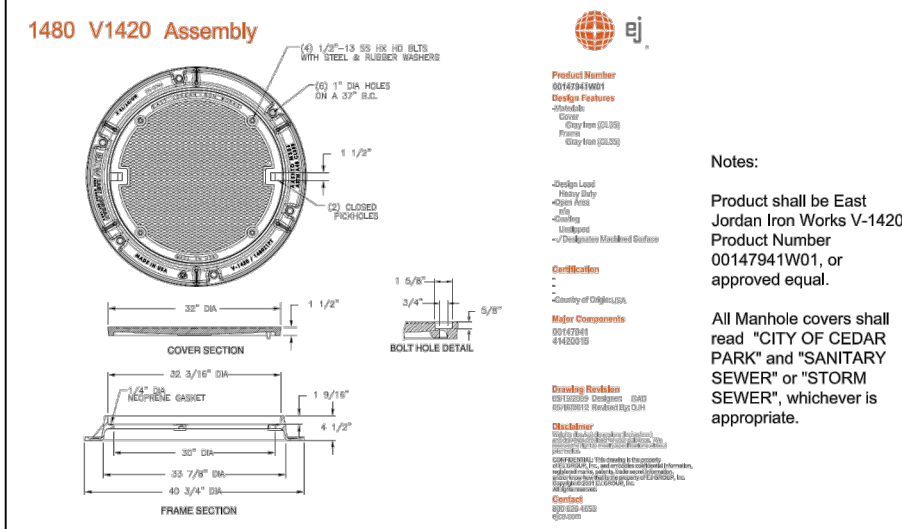
BLEYL ENGINEERING
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AUSTIN

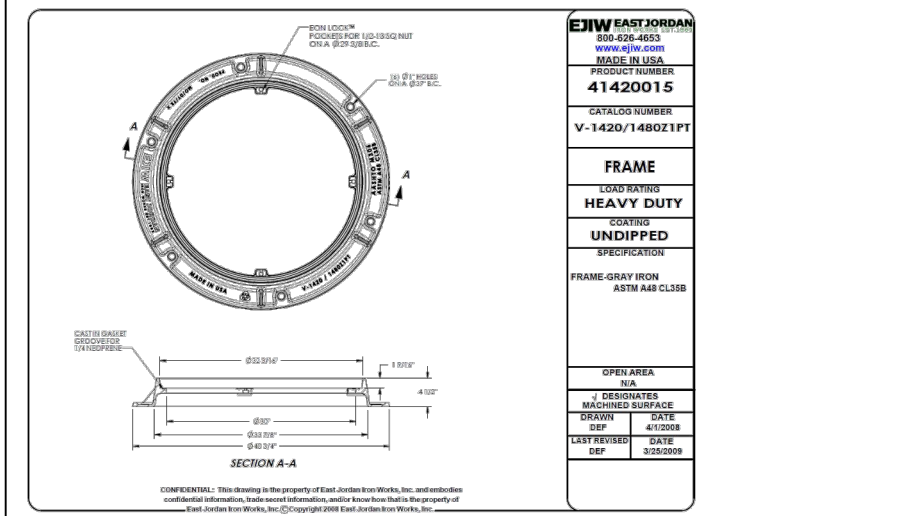
Water Details
Unity Rec Center
820 Old Mill Road
Cedar Park, Texas 78613
Williamson County

STEVEN L. IHEN
81978
REGISTERED PROFESSIONAL ENGINEER
12/15/22

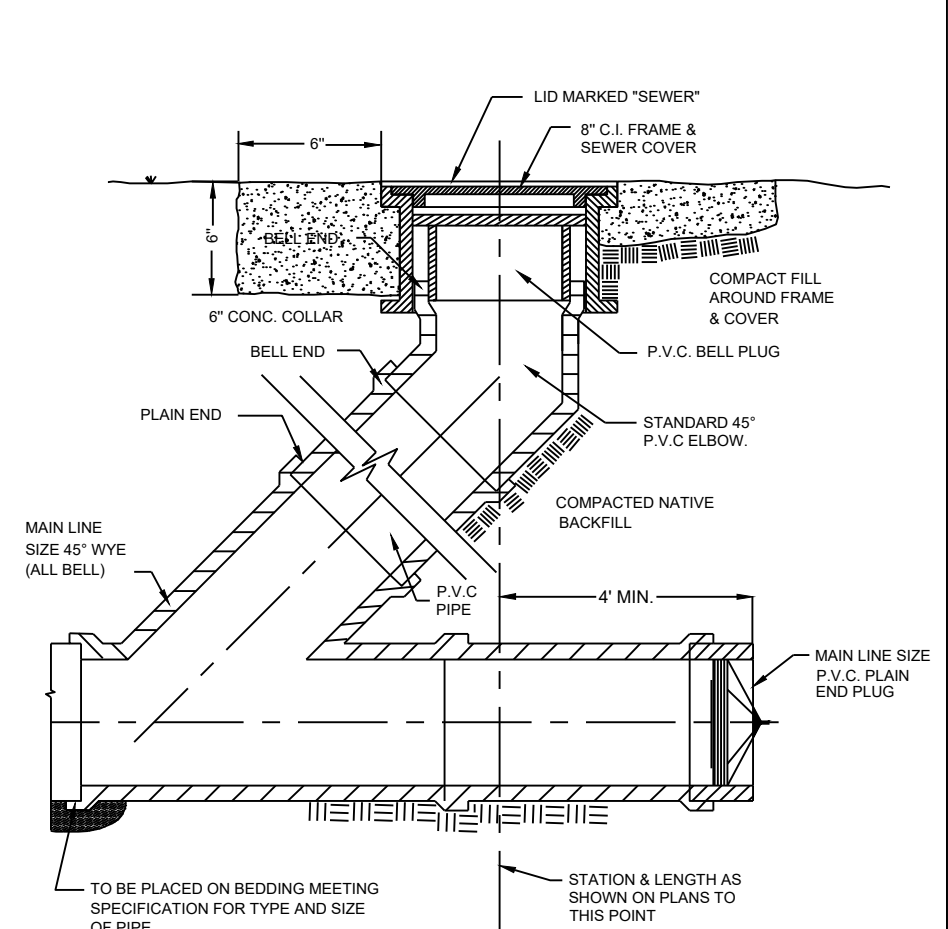
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Sheet: 21 of 32
2022-25-SD



Notes:
 Product shall be East Jordan Iron Works V-1420, Product Number 00142041003, or approved equal.
 All Manhole covers shall read "CITY OF CEDAR PARK" and "SANITARY SEWER" or "STORM SEWER" whichever is appropriate.

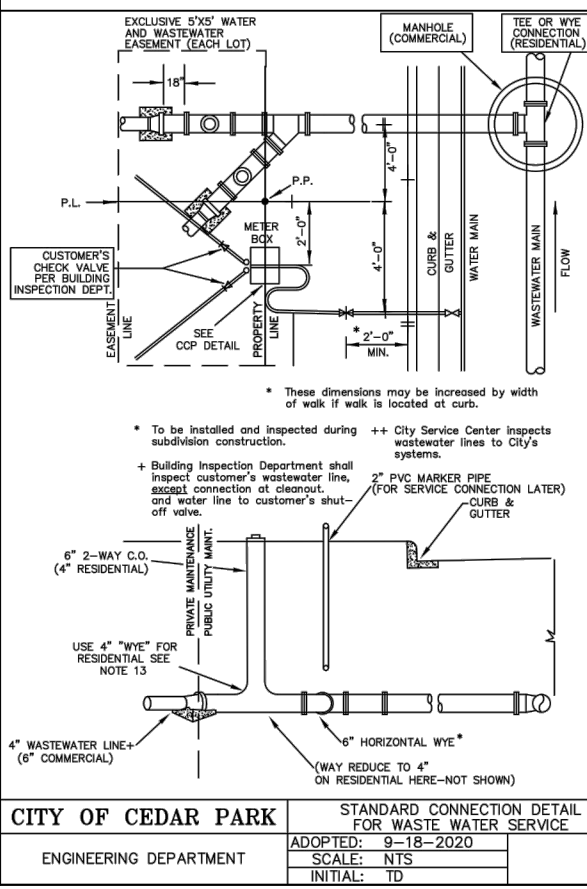


CITY OF CEDAR PARK
 ENGINEERING DEPARTMENT



NOTE: SOLVENT WELDED SLIP ON JOINTS MAY BE USED ON VERTICAL RISING SECTION OF PIPE WITH A MINIMUM OF 4" CONCRETE ENCASEMENT ON ALL SIDES.

TYPICAL SEWER CLEANOUT (Private Side)
 N.T.S.



CITY OF CEDAR PARK
 STANDARD CONNECTION DETAIL FOR WASTE WATER SERVICE
 ENGINEERING DEPARTMENT

- UTILITY CONTRACTOR LEAVE ONE (1) HORIZONTAL WYE AS SHOWN FOR DOUBLE SERVICE CONNECTION - OPENINGS PLOUGED FOR DOUBLE SERVICE AND NEW INSTALLS OF METER BOX, WATER PIPE, FITTINGS AND VALVE TO INLET SIDE OF METER(S) IN ACCORDANCE WITH INFORMATION SHOWN ON APPLICABLE STANDARD DETAIL SHEET. INSTALLATION TO BE COMPLETED DURING SUBDIVISION CONSTRUCTION - INSPECTION BY WATER AND WASTEWATER CONSTRUCTION INSPECTION PERSONNEL.
- CUSTOMER IS RESPONSIBLE FOR METER BOX AND PIPING SYSTEMS UNTIL METER IS INSTALLED AND WASTEWATER IS CONNECTED. ANY MISSING OR DAMAGED PARTS SHALL BE REINSTALLED BY CUSTOMER AND SHALL GUARANTEE FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. THAT CONNECTIONS TO CITY SYSTEMS ARE FREE FROM DEFECTS IN WORKMANSHIP OR MATERIALS. CUSTOMER HAS THE RESPONSIBILITY TO ASSURE THAT ALL VALVES AND STOPS, METER BOX AND VERTICAL WYE REMAIN CLEAR OF SIDEWALKS AND OTHER OBSTRUCTIONS.
- CITY OF CEDAR PARK ACTIVITY IS LIMITED TO INSTALLATION OF THE WATER METER AND INSPECTION OF CONNECTIONS TO THE CITY'S WATER AND WASTEWATER SYSTEMS FOR MAINTENANCE PURPOSES. THE CITY'S RESPONSIBILITY ENDS AT THE METER BOX AND AT THE WASTEWATER CONNECTION TO THE HORIZONTAL WYE.
- ALL WASTEWATER SERVICE LATERALS SHALL SLOPE 1 PERCENT (1/8 INCH PER FOOT) MINIMUM TO MAIN.
- PIPE IN STREET RIGHT-OF-WAY AND IN EASEMENT AREAS SHALL BE BEDDED WITH MATERIALS REQUIRED BY CITY OF AUSTIN SPECIFICATIONS, AND TO HAVE A MINIMUM COVER BELOW FINAL GRADE OF 42 INCHES. THE ENGINEERING DEPARTMENT MUST SPECIFICALLY APPROVE ANY EXCEPTION.
- CUSTOMER TO PROVIDE CLEANOUT WITHIN 5' P.U.E.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS & LABOR UNLESS DIRECTED OTHERWISE BY THE CITY UTILITY INSPECTOR.
- FOR COMMERCIAL SITES, COORDINATE ALL W/W/TAPS WITH THE UTILITY INSPECTOR. 512-401-5550.
- DO NOT USE DOUBLE WYE OR "X" WYE. SINGLE SERVICES SHALL NOT HAVE ANY WYE INSTALLED.
- ALL W/W FITTINGS UPSTREAM OF THE SERVICE LATERAL FROM THIS POINT TO BE SOLVENT WELD. DO NOT USE GASKET-TYPE OR PUSH ON FITTINGS FOR SERVICE LATERALS.
- GENERAL CONTRACTOR/HOME OR COMMERCIAL BUILDER/PLUMBER SHALL INSTALL AND MAINTAIN A PLUG ON THE CITY SIDE OF THE SERVICE LATERAL AT ALL TIMES UNTIL FINISHED DEVELOPMENT IS APPROVED AND CONNECTED TO THE WASTE WATER SYSTEM.
- INSTALL A 6-INCH INSPECTION PORTAL AT EACH SERVICE CONNECTION FOR EACH NON-RESIDENTIAL BUILDING AT LEAST FIVE FEET OFF THE BUILDING. CLEAN OUT REQUIRED AT PROPERTY LINE OF NON-RESIDENTIAL DEVELOPMENT SHALL MEET INSPECTION PORTAL CRITERIA. DISPLAY THE INSPECTION PORTAL AS A SINGLE "STAR" SYMBOL ON THE WASTEWATER LINE LABEL AS AN "INSPECTION PORTAL". THE INSPECTION PORTAL SHALL NOT BE INSTALLED AT A CHANGE IN HORIZONTAL OR VERTICAL ALIGNMENT OF THE SEWER LINE AND NOT ON THE EDGE OF A CURB, SIDEWALK OR OTHER HARDSCAPE. AN INSPECTION PORTAL LOCATED IN A TRAFFIC AREA WILL NEED TO HAVE AN APPROPRIATE TRAFFIC BEARING CAST IRON LID COVERING THE "PVC" THREADED CAP. AN "INSPECTION PORTAL" IS A SINGLE RISER WITH A "TWO-WAY" CLEANOUT AT THE BOTTOM, NOT A DOUBLE CLEANOUT WHICH HAS TWO RISERS.
- RESIDENTIAL TO USE 4"(MIN) VERTICAL WYE FITTING FACING THE MAIN IN PLACE OF THE 6" 2-WAY CO REQUIRED BY THE IPT PROGRAM AND COMMERCIAL CODE. (NON RESIDENTIAL APPLICATION SHOWN IN SKETCH.)
- CONNECTIONS CLASSIFIED AS "HEALTH HAZARD" BY INDUSTRIAL PRETREATMENT PROGRAM SHALL HAVE REDUCED PRESSURE ZONE ASSEMBLY (RPZ) AS REQUIRED BY 30 TAC 290-470 RBP TO 18.09.
- SITE THAT UTILIZES AN AUXILIARY WATER SOURCE (WELL, RAINWATER HARVESTER, ETC.) ARE CLASSIFIED AS HIGH HAZARD AND SHALL INSTALL AN RPZ ON ALL WATER SERVICES TO THE SITE (DOMESTIC AND IRRIGATION). WELLS SHALL BE PLOUGED IN ACCORDANCE WITH 16 TAC SECTION 17.104 AND LISTED IN THE STATE WELL DATABASE.
- COMMERCIAL DEVELOPMENT REQUIRING A GRINDER PUMP SHALL LOCATE THE GRINDER PUMP INSIDE THE BUILDING.
- ALL PIPE DOWNSTREAM OF THE C.O. NEAR THE R-O-W, IS CITY-MAINTAINED. CONTACT CITY FOR PUBLIC UTILITY ISSUE AT 512-401-5550
- NO METER, CLEAN-OUT, VALVE, VAULT, OR UTILITY APPURTENANCE, MAY BE UNDER OR WITHIN A DRIVEWAY, SIDEWALK, OR IMPERVIOUS HARDSCAPE.
- NO SIGNS SHALL BE PERMITTED IN ANY UTILITY EASEMENT OR RIGHT-OF-WAY.

Wastewater Details
 Unity Rec Center
 820 Old Mill Road
 Cedar Park, Texas 78613
 Williamson County



Design: VG
 CAD: AE Review: VG
 Project No: AKM 70370
 Sheet: 22 of 32
 2022-25-SD

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AUSTIN BRYAN CONROE HOUSTON

Prepared For:
 Caspita Industries, Inc./Poh Partners Inc.
 Leo Mills
 10800 Pecan Park Blvd. #240
 Austin, TX 78750

Revision	Date	By	App	Comment