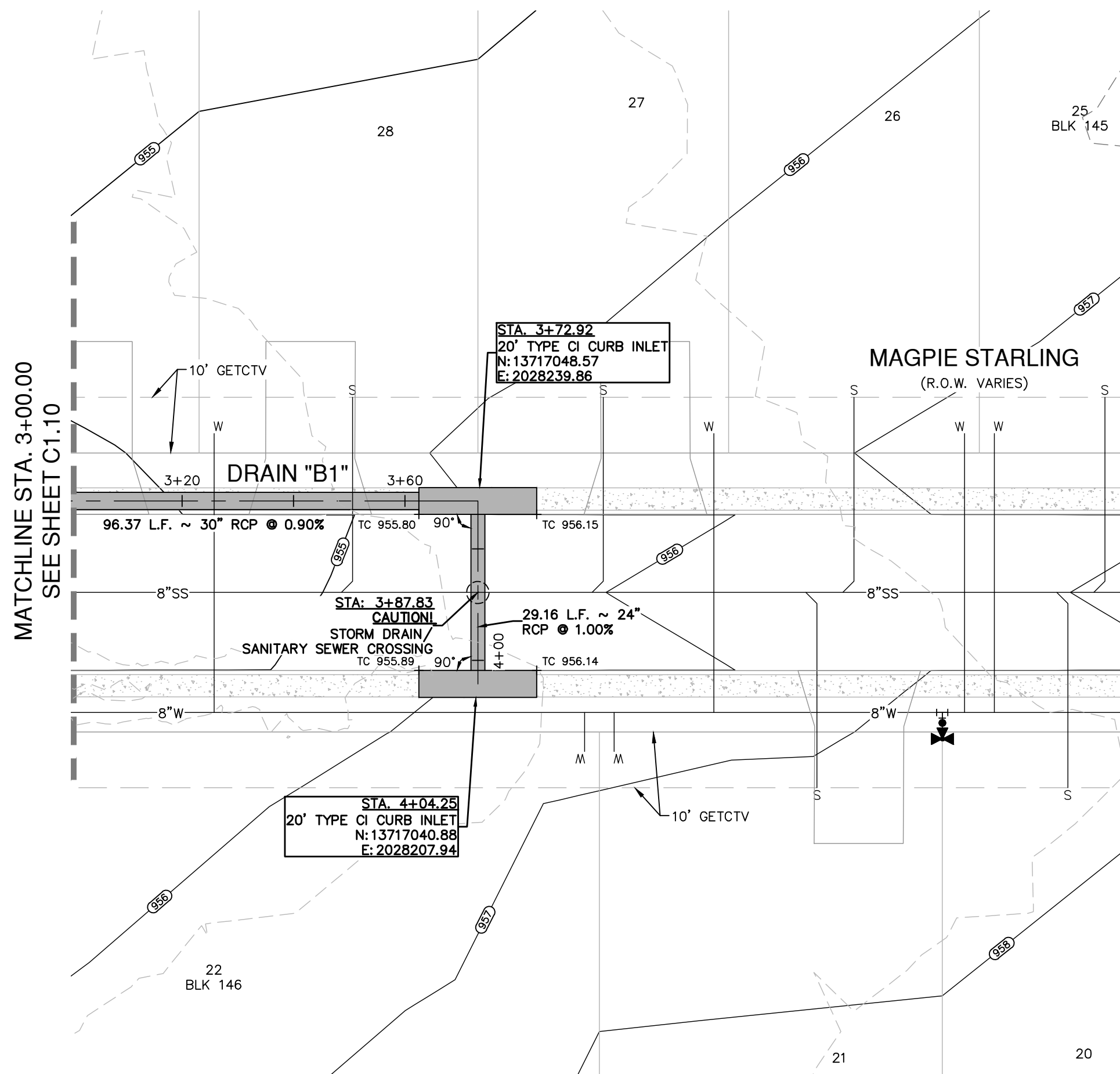


FOR PERMIT

PLAT NO. _____ N/A
JOB NO. _____ 30004-
DATE _____ NOVEMBER
DESIGNER _____ GC
CHECKED LC DRAW
SHEET C1.0

Date: Jan 14, 2026 9:08am User ID: mchewer.duke
File: P:\300\04\30\Design\Civil\SDR1-3004-39.dwg

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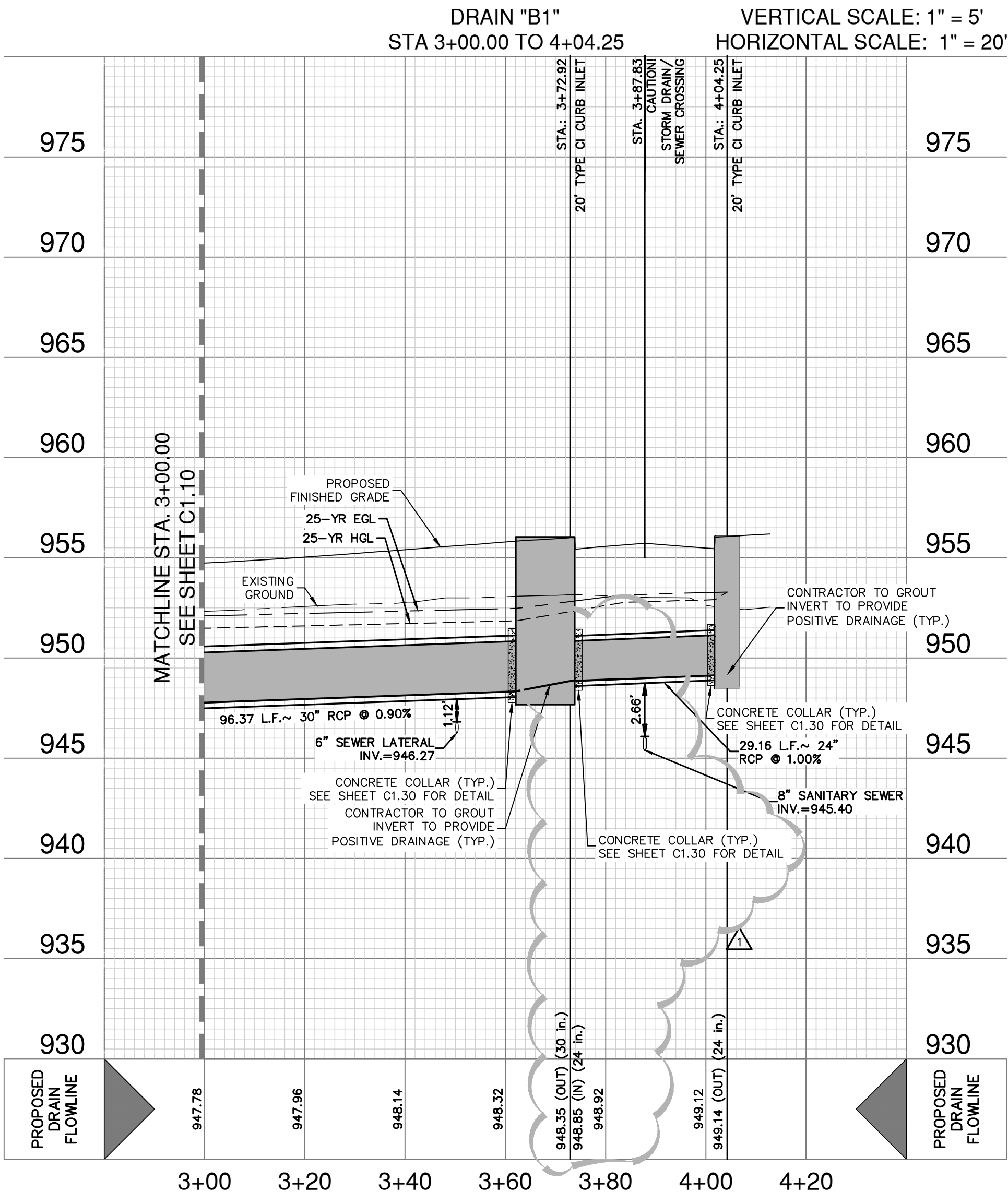


DRAINAGE LEGEND

PROJECT LIMITS	---
100 YR FLOODPLAIN	---
EXISTING CONTOUR	---
PROPOSED CONTOUR	---
PROPOSED WATER	---
PROPOSED SEWER	---
FLOW ARROW	→
GAS, ELECTRIC, TELEPHONE & CABLE TELEVISION EASEMENT	---
GETCTV	●

DRAIN "B1" ON-GRADE INLET
HYDRAULIC CALCULATIONS
 $Q_{25}/2 = 24.5$ CFS
 $S = 1.2\%$
 $L = 20'$ INLET
 $Q_{CAPTURED} = 15.5$ CFS
 $Q_{BYPASS} = 9$ CFS

HYDRAULIC CALCULATIONS STORM DRAIN STA. 2+58.08 TO 3+72.92	HYDRAULIC CALCULATIONS STORM DRAIN STA. 3+72.92 TO 4+04.25
$Q_{25} = 31$ CFS	$Q_{25} = 15.5$ CFS
$S = 0.90\%$	$S = 1.00\%$
$S_f = 0.57\%$	$S_f = 0.47\%$
$V = 6.32$ FPS	$V = 4.93$ FPS
$n = 0.013$	$n = 0.013$
$D = 2.50$ FT	$D = 2.00$ FT
$D_n = 2.50$ FT	$D_n = 2.00$ FT



DRAINAGE & GRADING NOTES:

- A MEDINA COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN MEDINA COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
- ALL CONCRETE FOR TXDOT DRAINAGE STRUCTURES SHALL MEET TXDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PSI CYLINDER STRENGTH IN 28 DAYS.
- REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BOX CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.
- CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES TO PROVIDE FOR POSITIVE DRAINAGE.
- EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION BEFORE MEDINA COUNTY WILL ACCEPT.
- CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN THE PROFILE.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CAUTION!!

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NO.	REVISION	DATE
1	FLOW LINE UPDATED	1/14/26



PAPE-DAWSON

167 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78132 | 832.6533
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1028800

REDBIRD RANCH PHASE 2 UNIT 6M-1

MEDINA COUNTY, TEXAS

DRAIN B1 - PLAN & PROFILE

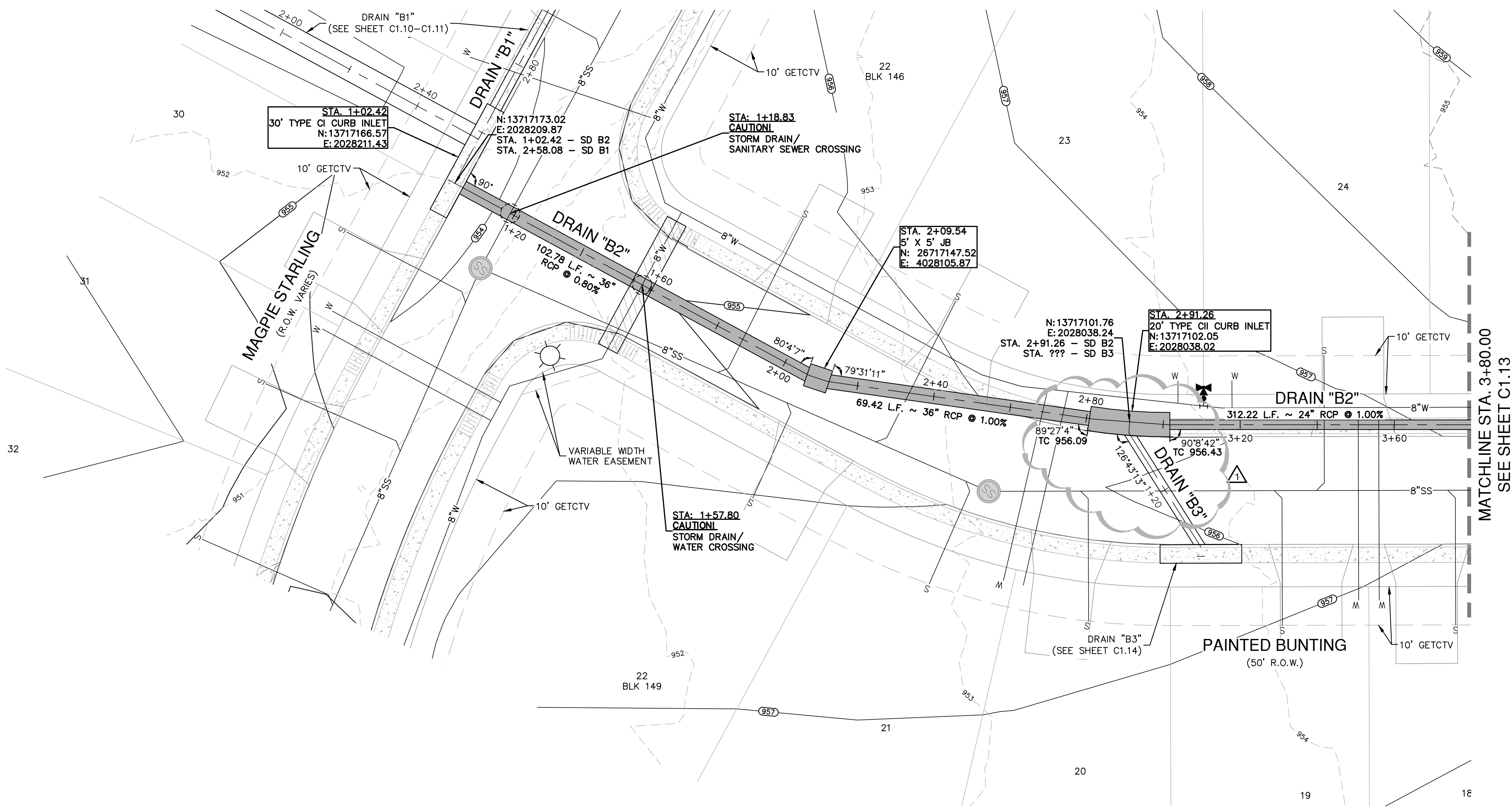
STA 3+00.00 TO 4+04.25

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	DRAWN ML
SHEET	C1.11

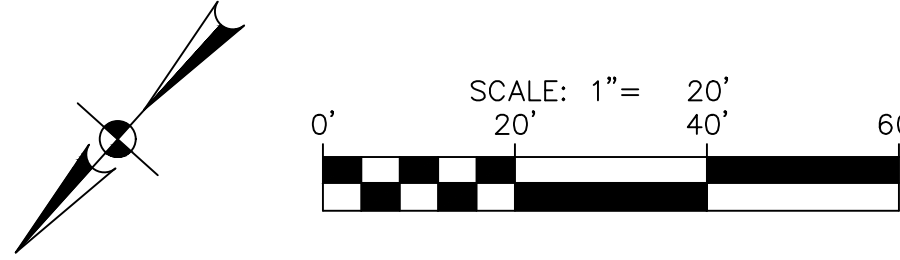
FOR PERMIT

Dates: Jan. 14, 2026, 9:08am, User ID: mcthen@dwk.com
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DRAIN "B2" ON-GRADE INLET
HYDRAULIC CALCULATIONS
 $Q_{25}/2 = 21.5$ CFS
 $S = 0.8\%$
 $L = 20'$ INLET
 $Q_{CAPTURED} = 15$ CFS
 $Q_{BYPASS} = 6.5$ CFS



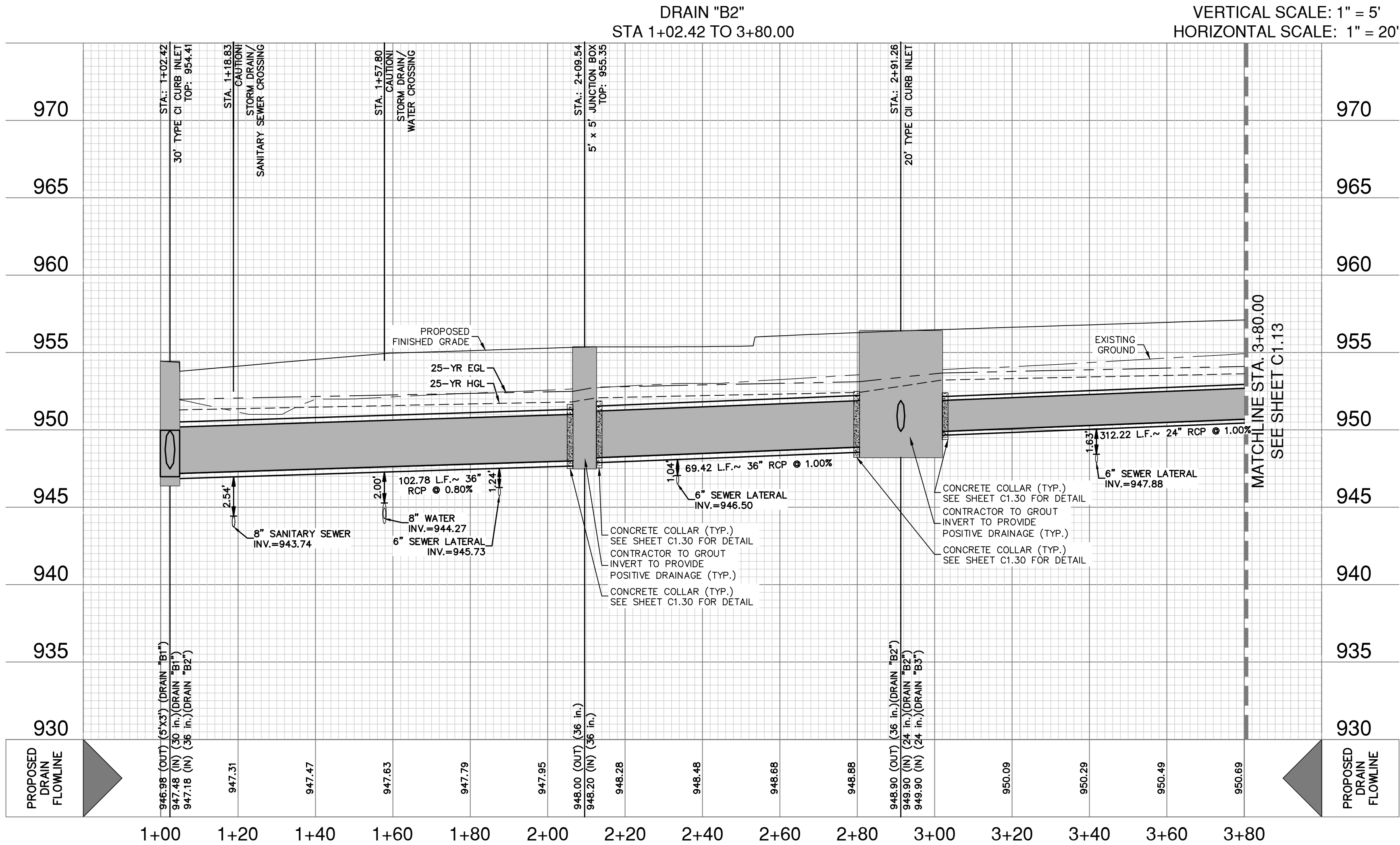
DRAINAGE LEGEND

PROJECT LIMITS	---
100 YR FLOODPLAIN	---
EXISTING CONTOUR	---
PROPOSED CONTOUR	---
PROPOSED WATER	---
PROPOSED SEWER	---
FLOW ARROW	→
GAS, ELECTRIC, TELEPHONE & CABLE TELEVISION EASEMENT	---
GETCTV	---

HYDRAULIC CALCULATIONS STORM DRAIN	
STA. 1+02.42 TO 2+09.54	
Q25 =	47 CFS
S =	0.80%
Sf =	0.50%
V =	6.65 FPS
n =	0.013
D =	3.00 FT
Dn =	3.00 FT

HYDRAULIC CALCULATIONS STORM DRAIN	
STA. 2+09.54 TO 2+91.26	
Q25 =	47 CFS
S =	1.00%
Sf =	0.50%
V =	6.65 FPS
n =	0.013
D =	3.00 FT
Dn =	3.00 FT

HYDRAULIC CALCULATIONS STORM DRAIN	
STA. 2+91.26 TO 6+23.29	
Q25 =	17 CFS
S =	1.00%
Sf =	0.57%
V =	5.41 FPS
n =	0.013
D =	2.00 FT
Dn =	2.00 FT



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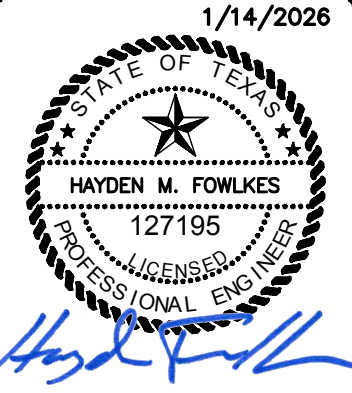
TRENCH EXCAVATION SAFETY PROTECTION:

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CAUTION!!

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DATE	1/14/26
NO.	1
REVISION	TOP OF CURB UPDATED



PAPE-DAWSON

1677 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78132 | 830.632.5633

TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1028800

REDBIRD RANCH PHASE 2 UNIT 6M-1

MEDINA COUNTY, TEXAS

DRAIN B2 - PLAN & PROFILE

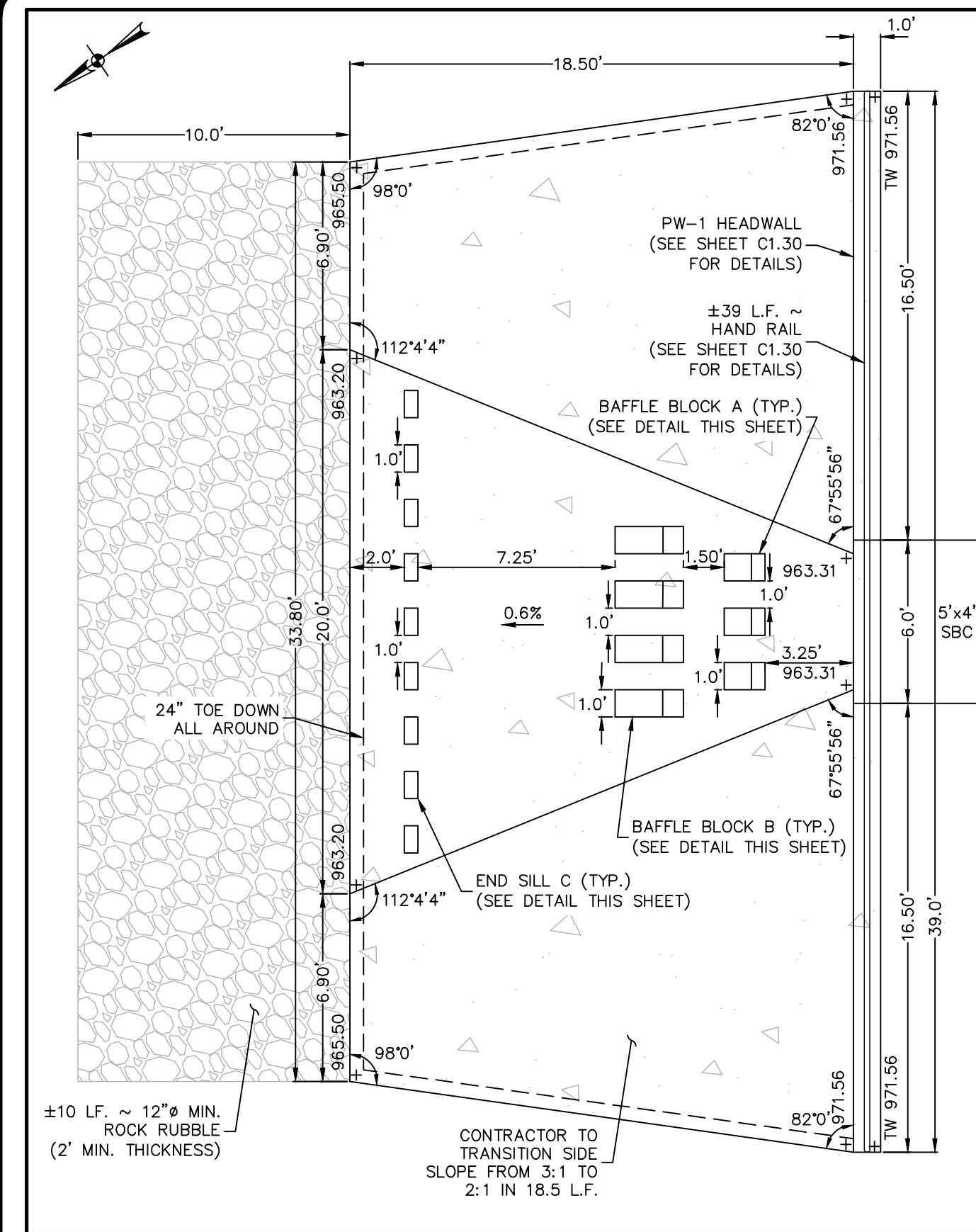
STA 1+02.42 TO 3+80.00

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	DRAWN ML
SHEET	C1.12

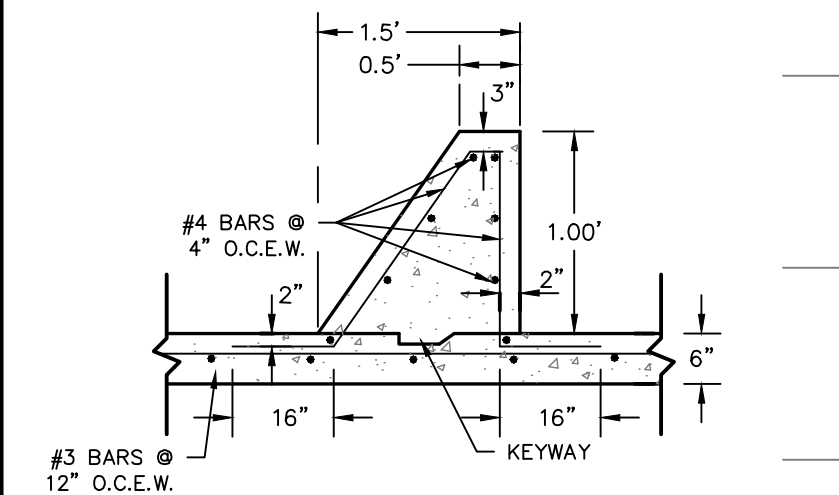
FOR PERMIT

Date: Jan 14, 2025 9:09am User ID: mcfhewer.dave
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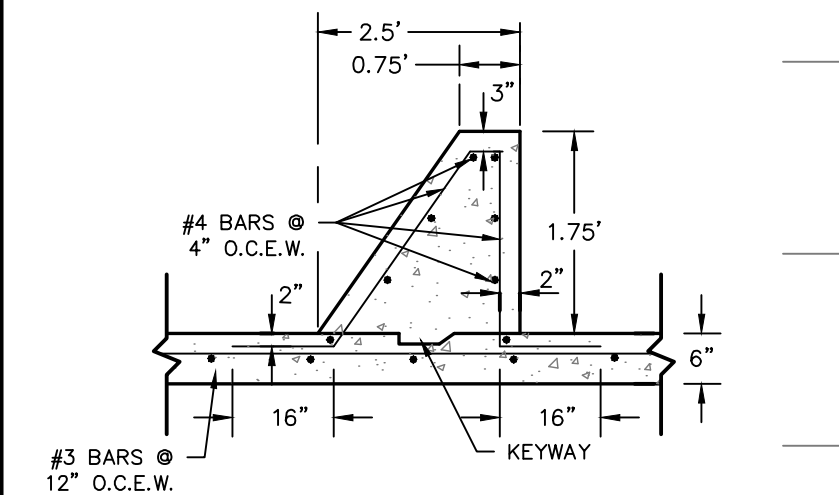
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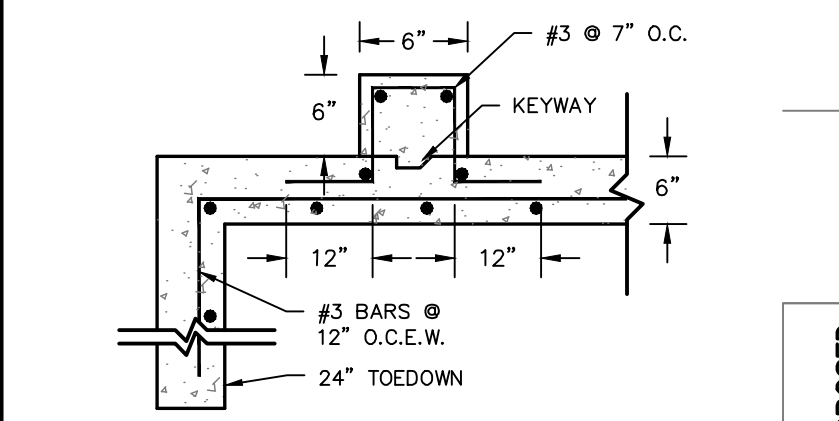
DETAIL "A"
1" = 5'



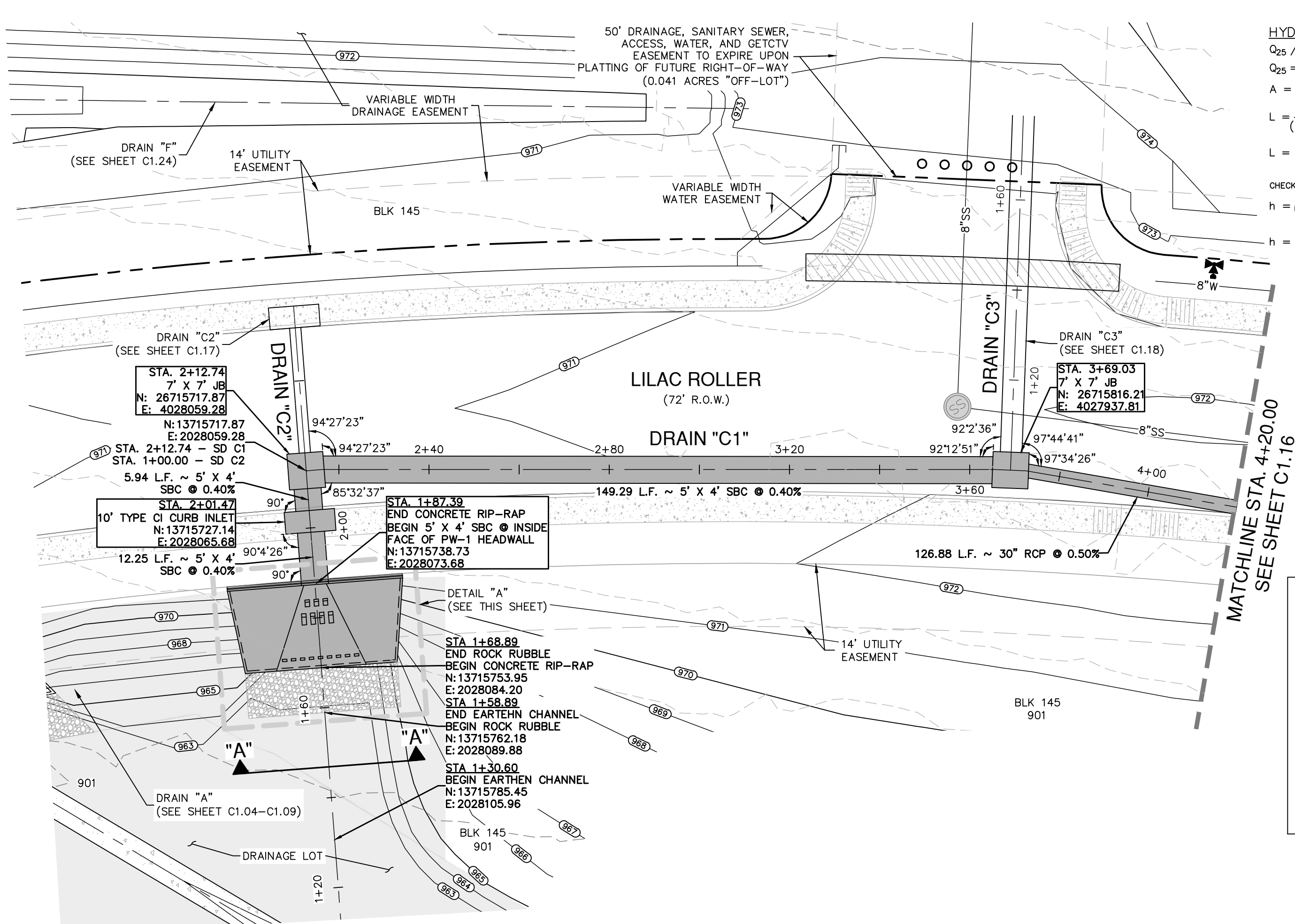
TYPICAL BAFFLE BLOCK DETAIL "A"
SECTION
NOT-TO-SCALE



TYPICAL BAFFLE BLOCK DETAIL "B"
SECTION
NOT-TO-SCALE



TYPICAL END SILL DETAIL "C"
SECTION
NOT-TO-SCALE



HYDRAULIC CALCULATIONS--DRAIN "C1"-- PT.4
 $Q_{25}/2 = 11.5$ CFS
 $Q_{25} = CA\sqrt{2gh}$ (ORIFICE FLOW EQN.)
 $A = L(0.52)$, $h = 0.54$, $g = 32.2$, $c = 0.7$
 $L = \frac{11.5 \text{ CFS}}{(0.7) (0.52) \sqrt{2} (32.2) (0.54)}$
 $L = 5.36$ FT USE 10'
CHECK WITH WEIR FORMULA
 $h = \left(\frac{Q}{(CL)}\right)^{2/3} = \left(\frac{11.5}{(3.087) (10)}\right)^{2/3} = 0.52$ FT.
 $h = 0.52 < 0.79$ OK

HYDRAULIC CALCULATIONS EARTH CHANNEL

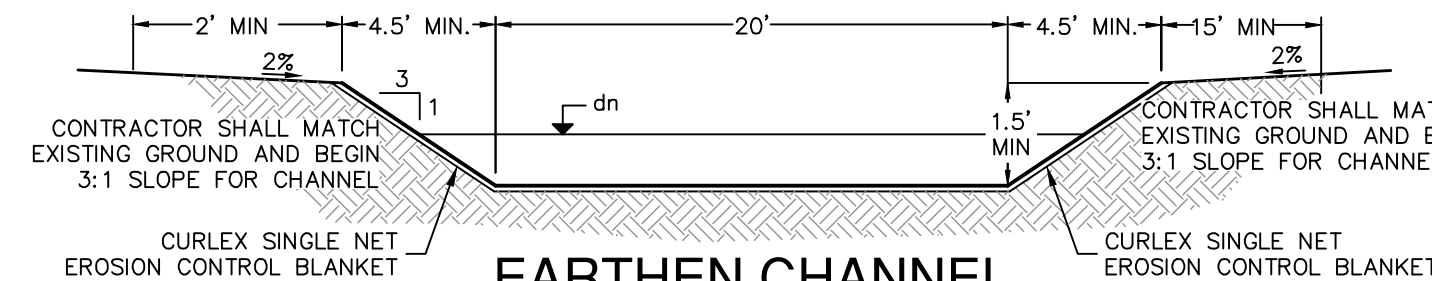
STA. 1+30.60 TO 1+68.89
 $Q_{25} = 119$ CFS
 $B_w = 20$ FT
 $n = 0.035$
 $S = 2.37\%$
 $dn = 0.92$ FT
 $WN = 5.68$ FPS
 $dn + FrBd = 1.42$ FT

HYDRAULIC CALCULATIONS
STORM DRAIN
STA. 1+87.39 TO 2+01.47
 $Q_{25} = 119$ CFS
 $S = 0.40\%$
 $S_f = 0.23\%$
 $V = 7.75$ FPS
 $n = 0.013$
 $D = 4.00$ FT
 $D_n = 2.66$ FT

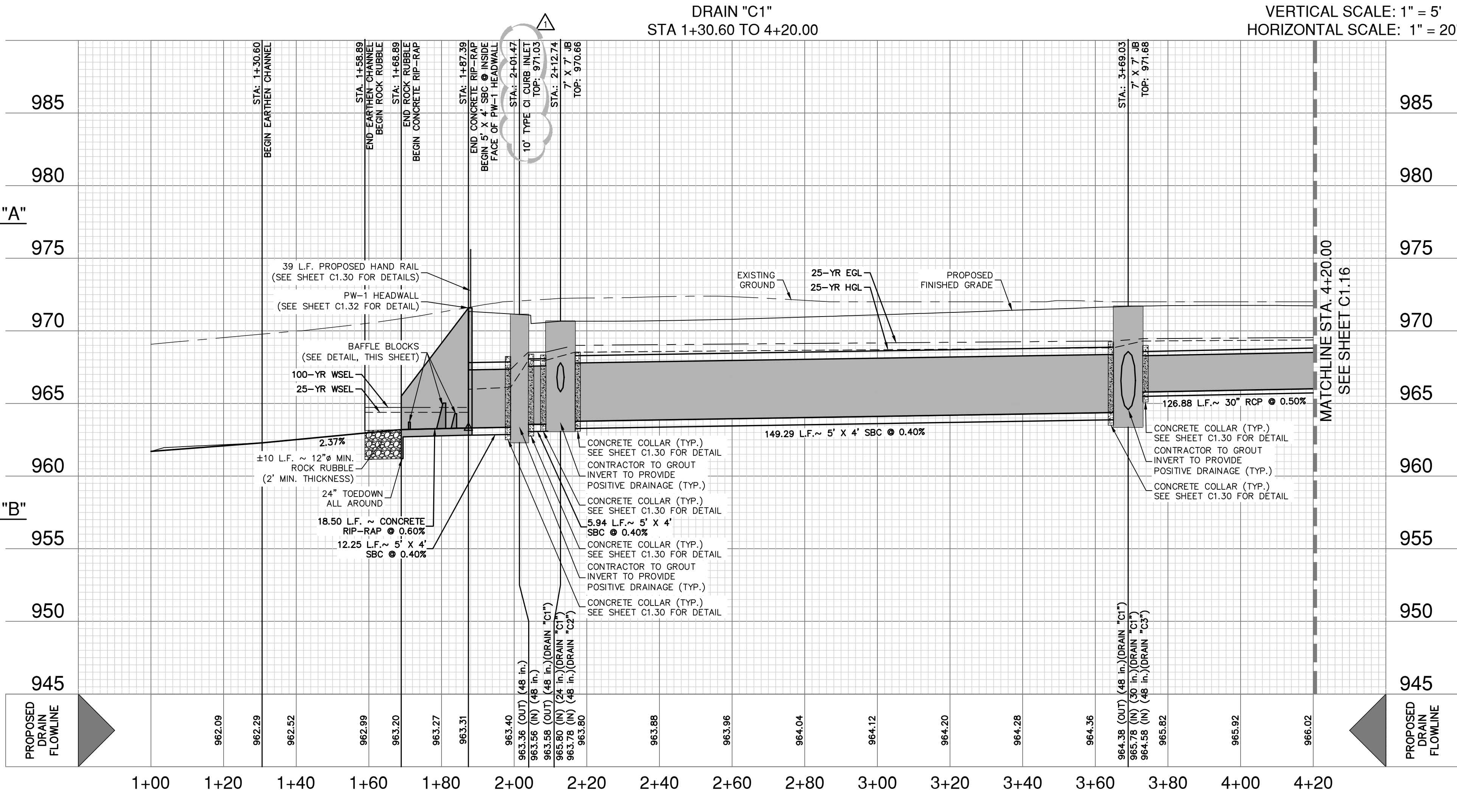
HYDRAULIC CALCULATIONS
STORM DRAIN
STA. 2+01.47 TO 2+12.74
 $Q_{25} = 116.5$ CFS
 $S = 0.40\%$
 $S_f = 0.23\%$
 $V = 6.14$ FPS
 $n = 0.013$
 $D = 4.00$ FT
 $D_n = 4.00$ FT

HYDRAULIC CALCULATIONS
STORM DRAIN
STA. 2+12.74 TO 3+69.03
 $Q_{25} = 105$ CFS
 $S = 0.40\%$
 $S_f = 0.18\%$
 $V = 5.25$ FPS
 $n = 0.013$
 $D = 4.00$ FT
 $D_n = 4.00$ FT

HYDRAULIC CALCULATIONS
STORM DRAIN
STA. 3+69.03 TO 5+09.41
 $Q_{25} = 16$ CFS
 $S = 0.40\%$
 $S_f = 0.15\%$
 $V = 3.26$ FPS
 $n = 0.013$
 $D = 2.50$ FT
 $D_n = 2.50$ FT



EARTHEN CHANNEL
SECTION "A-A"
(STA. 1+30.60 - 1+68.89)
NOT-TO-SCALE



DRAINAGE & GRADING NOTES:

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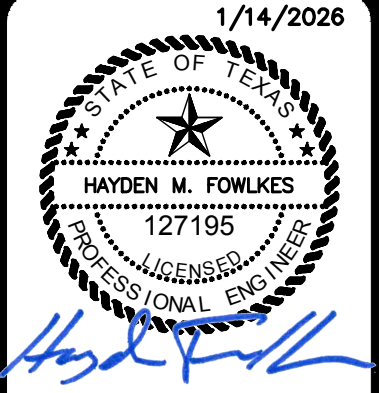
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CAUTION!!

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DATE	1/14/26
NO.	1
REVISION	TOP OF INLET UPDATED



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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

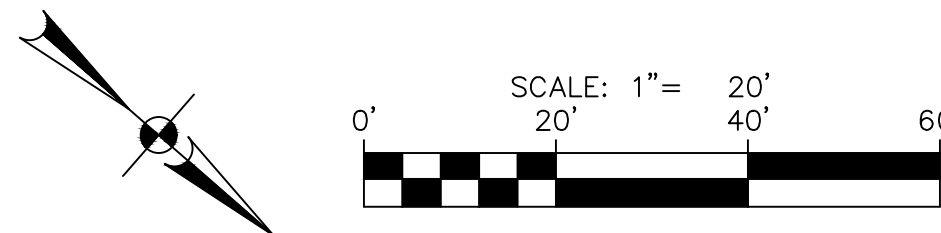
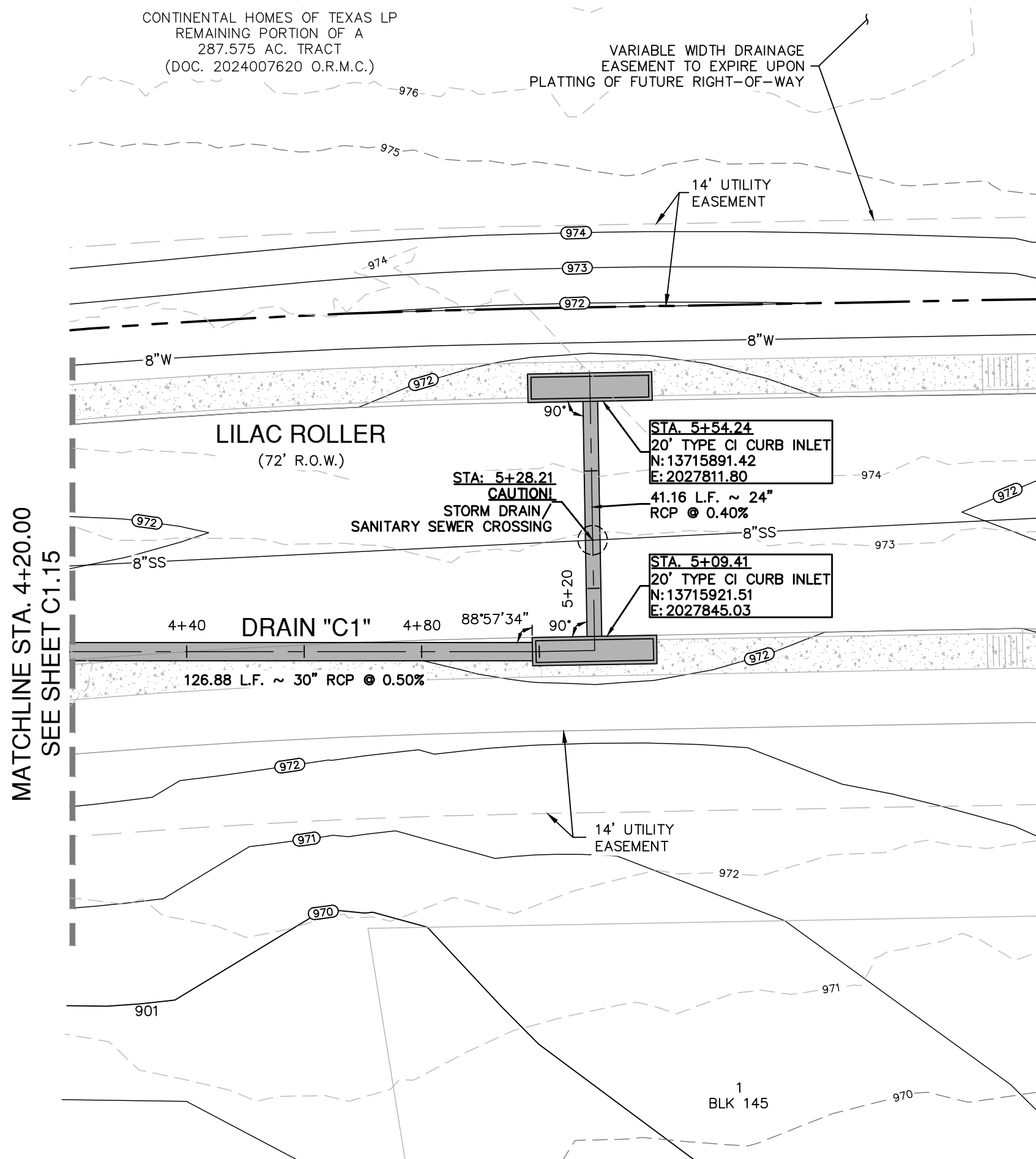
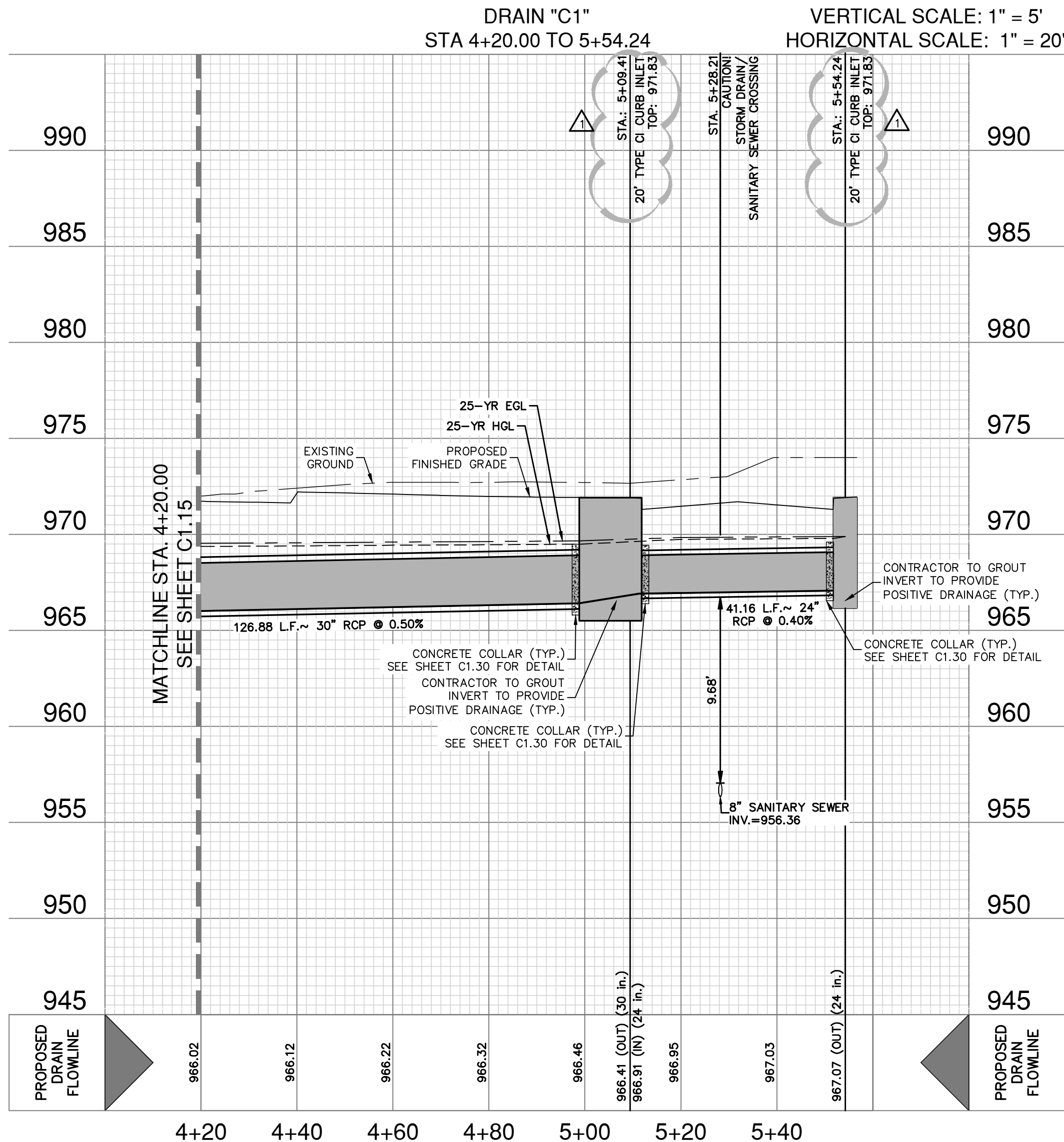
REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS
DRAIN C1 - PLAN & PROFILE
STA 1+30.60 TO 4+20.00

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	DRAWN ML
SHEET	C1.15

FOR PERMIT

Dates: Jan. 14, 2026 9:09am User ID: matthew.duke
File: P:\300\04\30\Design\Civil\SD01-3004-39.dwg

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DRAINAGE LEGEND

PROJECT LIMITS	---
100 YR FLOODPLAIN	---
EXISTING CONTOUR	---
PROPOSED CONTOUR	---
PROPOSED WATER	---
PROPOSED SEWER	---
FLOW ARROW	→
GAS, ELECTRIC, TELEPHONE & CABLE TELEVISION EASEMENT	→
GETCTV	→

HYDRAULIC CALCULATIONS STORM DRAIN

STA. 3+69.03 TO 5+09.41

Q25 =	16 CFS
S =	0.50%
Sf =	0.15%
V =	3.26 FPS
n =	0.013
D =	2.50 FT
Dn =	2.50 FT

HYDRAULIC CALCULATIONS STORM DRAIN

STA. 5+09.41 TO 5+54.24

Q25 =	8 CFS
S =	0.40%
Sf =	0.13%
V =	2.55 FPS
n =	0.013
D =	2.00 FT
Dn =	2.00 FT

HYDRAULIC CALCULATIONS-DRAIN "C1"- PT.14

Q₂₅ / 2 = 8 CFS

Q₂₅ = CA√2gh (ORIFICE FLOW EQN.)

A = L(0.52), h = 0.54, g = 32.2, c = 0.7

$L = \frac{8 \text{ CFS}}{(0.7) (0.52) \sqrt{2 (32.2) (0.54)}}$

L = 3.73 FT USE 20'

CHECK WITH WEIR FORMULA

$h = \left(\frac{Q}{(CL)} \right)^{2/3} = \left(\frac{8}{(3.087) (20)} \right)^{2/3} = 0.26 \text{ FT.}$

h = 0.26 < 0.79 OK

DRAINAGE & GRADING NOTES:

1. A MEDINA COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN MEDINA COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
3. ALL CONCRETE FOR TXDOT DRAINAGE STRUCTURES SHALL MEET TXDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PSI CYLINDER STRENGTH IN 28 DAYS.
4. REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BOX CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.
5. CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES TO PROVIDE FOR POSITIVE DRAINAGE.
6. EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION BEFORE MEDINA COUNTY WILL ACCEPT.
7. CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN THE PROFILE.

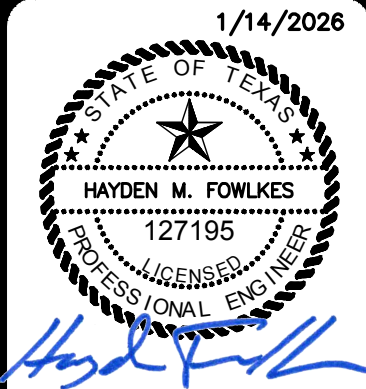
TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

NO.	REVISION	DATE
1	TOP OF INLET UPDATED.	1/14/26



PAPE-DAWSON

1677 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78132 | 830.632.5633
TEXAS SURVEYING FIRM #470 | TEXAS ENGINEERING FIRM #10228800

REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS

DRAIN C1 - PLAN & PROFILE
STA 4+20.00 TO 5+54.24

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DRAWN	GC
CHECKED	ML
SHEET	C1.16

FOR PERMIT



The diagram illustrates a cross-section of a river channel with the following features and their locations:

- PROJECT LIMITS:** Indicated by a dashed line at the top of the diagram.
- 100 YR FLOODPLAIN:** Represented by a thick grey bar on the left bank.
- EXISTING CONTOUR:** A dashed line across the channel, labeled with the elevation "690".
- PROPOSED CONTOUR:** A solid line across the channel, labeled with the elevation "690" in a circle.
- PROPOSED WATER:** Indicated by a horizontal line labeled "W" in the center of the channel.
- PROPOSED SEWER:** A line labeled "SS" (sewer) on the right bank, with a circular manhole symbol.
- FLOW ARROW:** A large black arrow pointing to the right, indicating the direction of flow.
- GAS, ELECTRIC, TELEPHONE & CABLE TELEVISION EASEMENT:** A grey rectangular area on the left bank.
- GETCTV:** A label pointing to the right bank area.
- CURLEX SINGLE NET EROSION CONTROL BLANKETS:** A grey rectangular area on the left bank, below the easement.

$$\begin{aligned} Q_{25}/2 &= 11.5 \text{ CFS} \\ Q_{25} &= CA\sqrt{2gh} \quad (\text{ORIFICE FLOW EQN.}) \\ A &= L(0.52), h = 0.54, g = 32.2, c = 0.7 \\ L &= \frac{11.5 \text{ CFS}}{(0.7)(0.52)\sqrt{2(32.2)(0.54)}} \\ L &= 5.36 \text{ FT} \quad \text{USE } 10' \end{aligned}$$

CHECK WITH WEIR FORMULA

$$h = \left(\frac{Q}{(CL)} \right)^{2/3} = \left(\frac{11.5}{(3.087)(10)} \right)^{2/3} =$$

$$h = 0.52 < 0.79 \quad \text{OK}$$

**HYDRAULIC
CALCULATIONS
STORM DRAIN**

STA. 1+00.00 TO 1+34.23

Q25 = 11.5 CFS

S = 0.56%

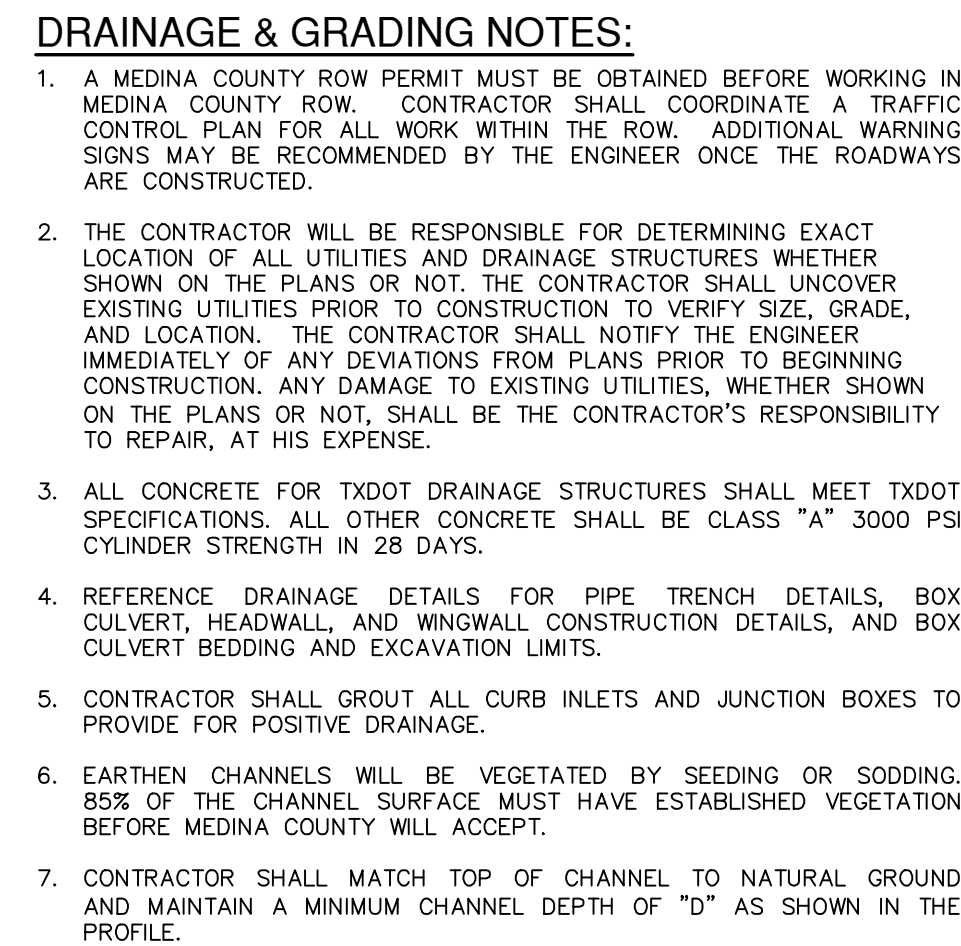
Sf = 0.26%

V = 3.66 FPS

n = 0.013

D = 2.00 FT

Dn = 2.00 FT



CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IDENTIFY AND PREPARE FOR ANY TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION TO EMPLOYEES AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE TRENCH EXCAVATION SAFETY PROTECTION FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS AND REGULATIONS REGARDING THE ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CAUTION!!!

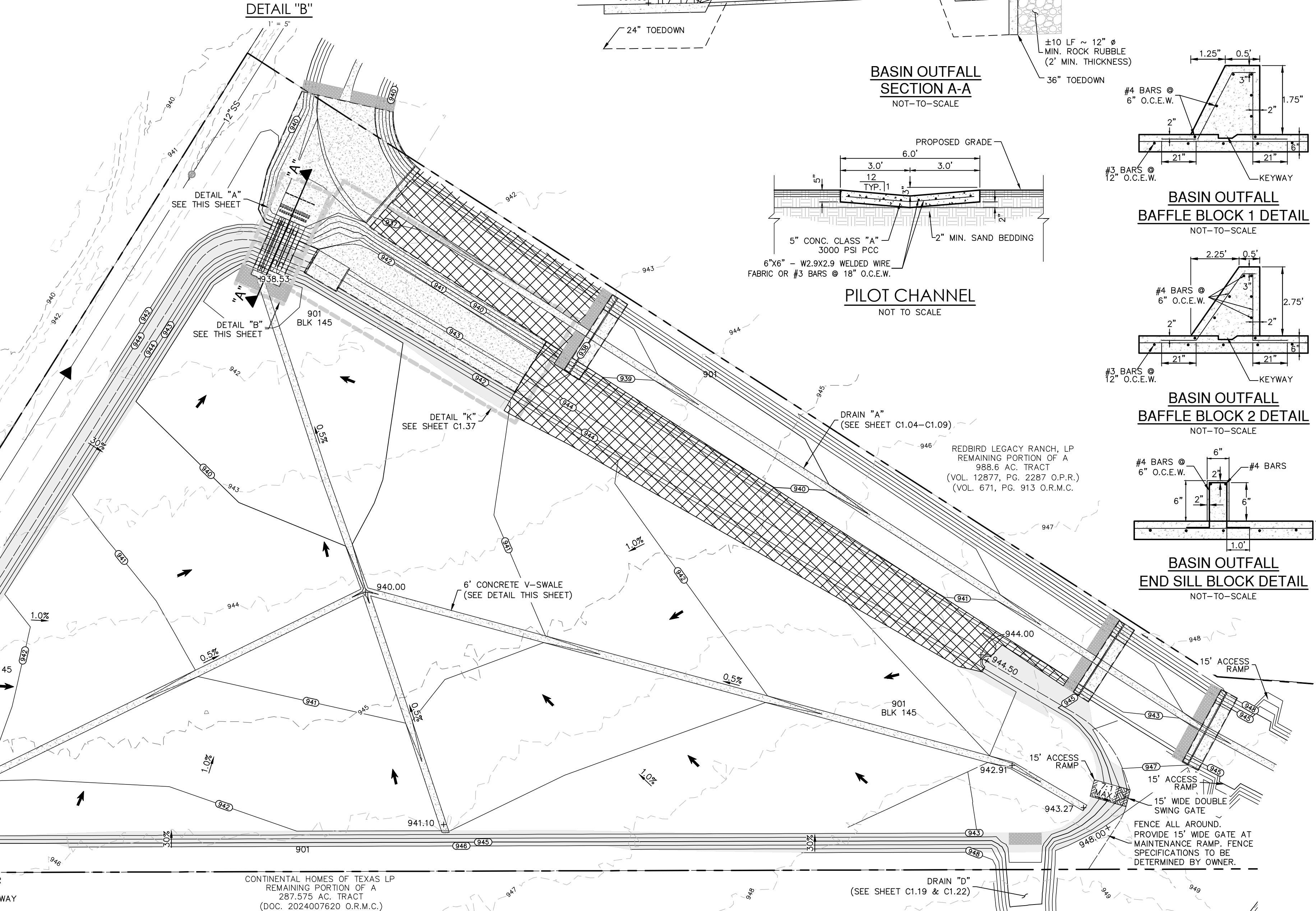
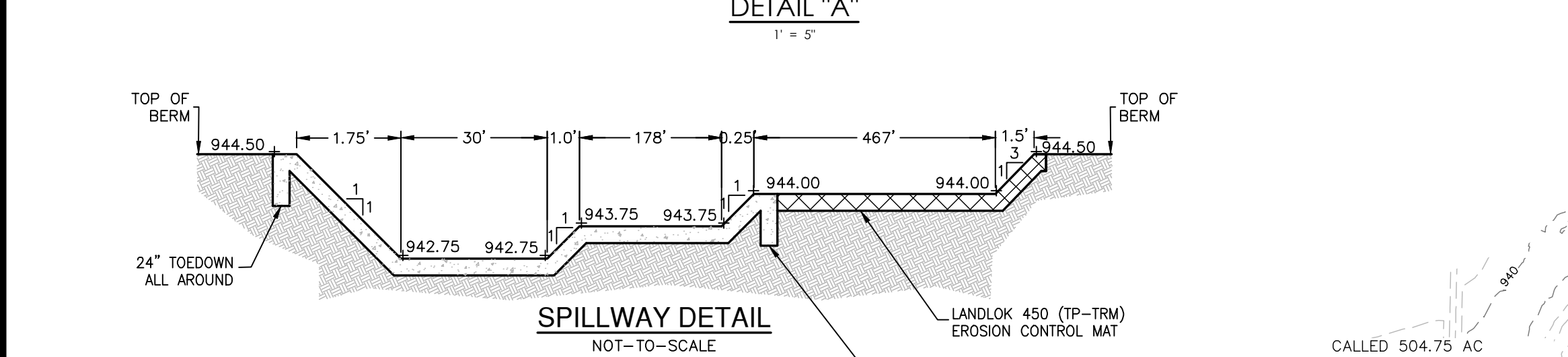
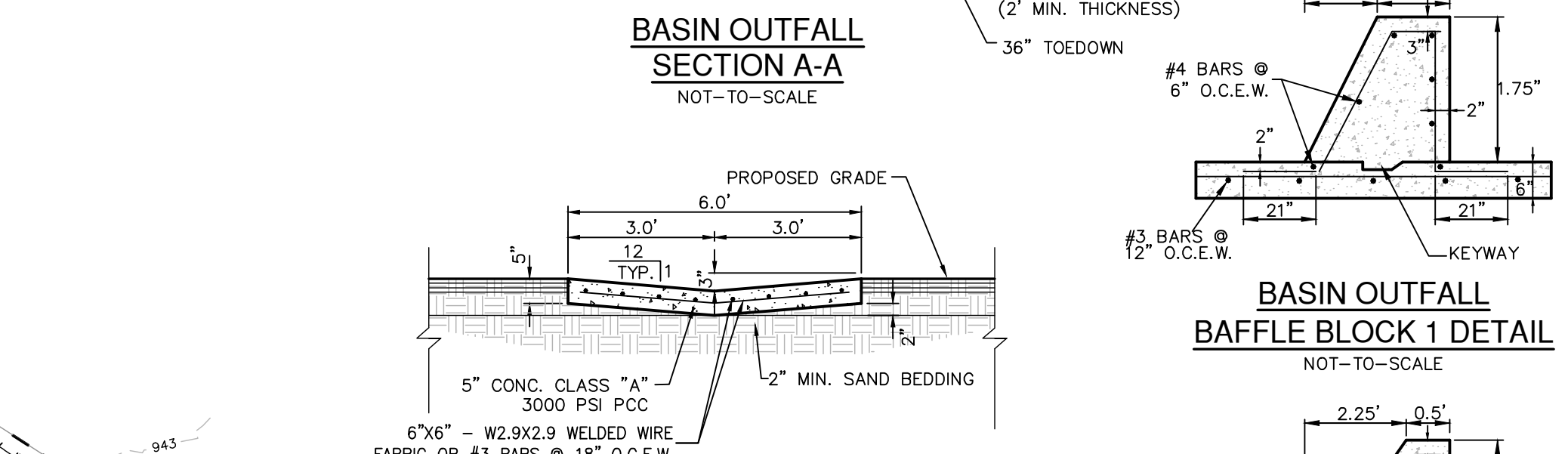
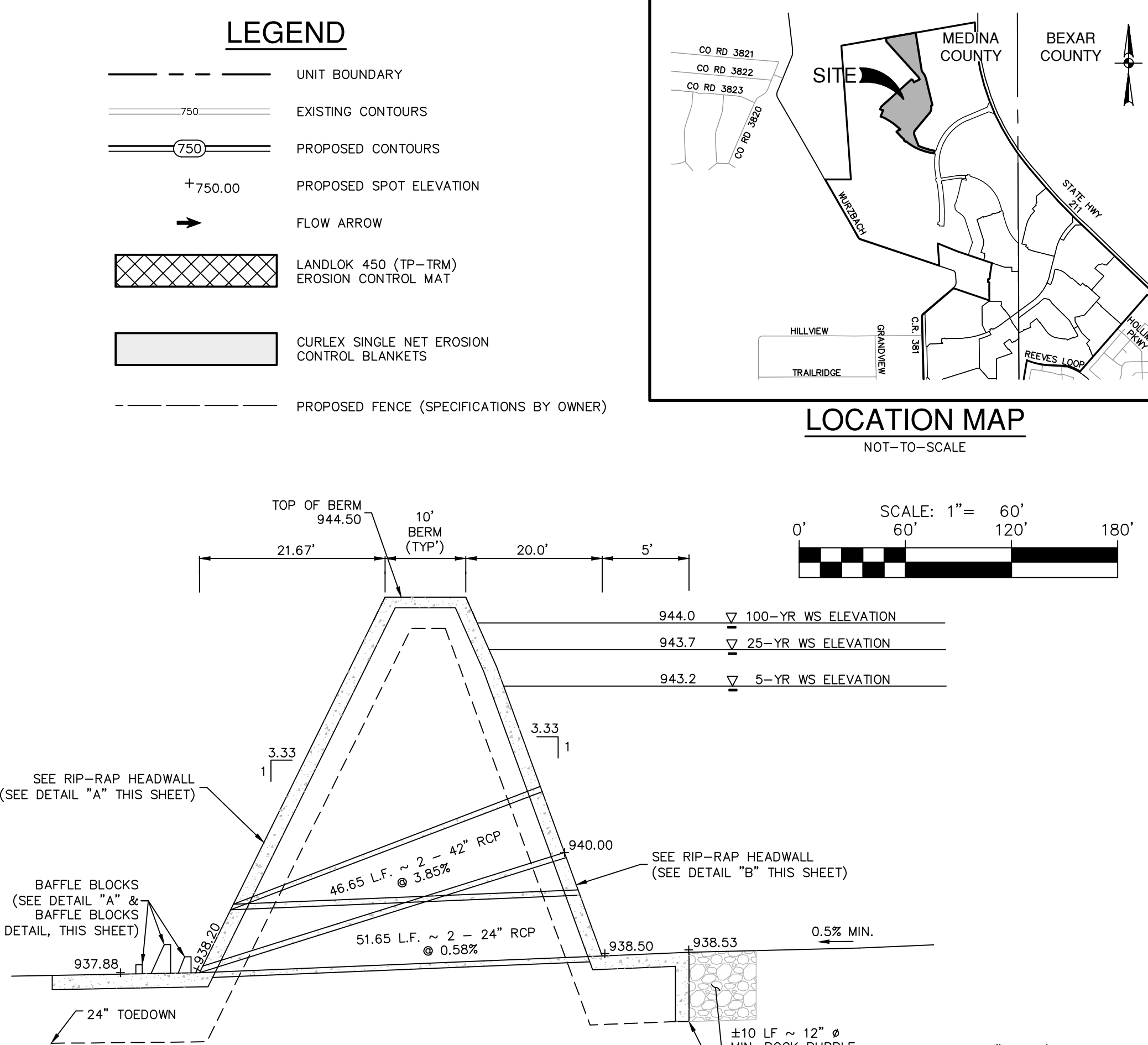
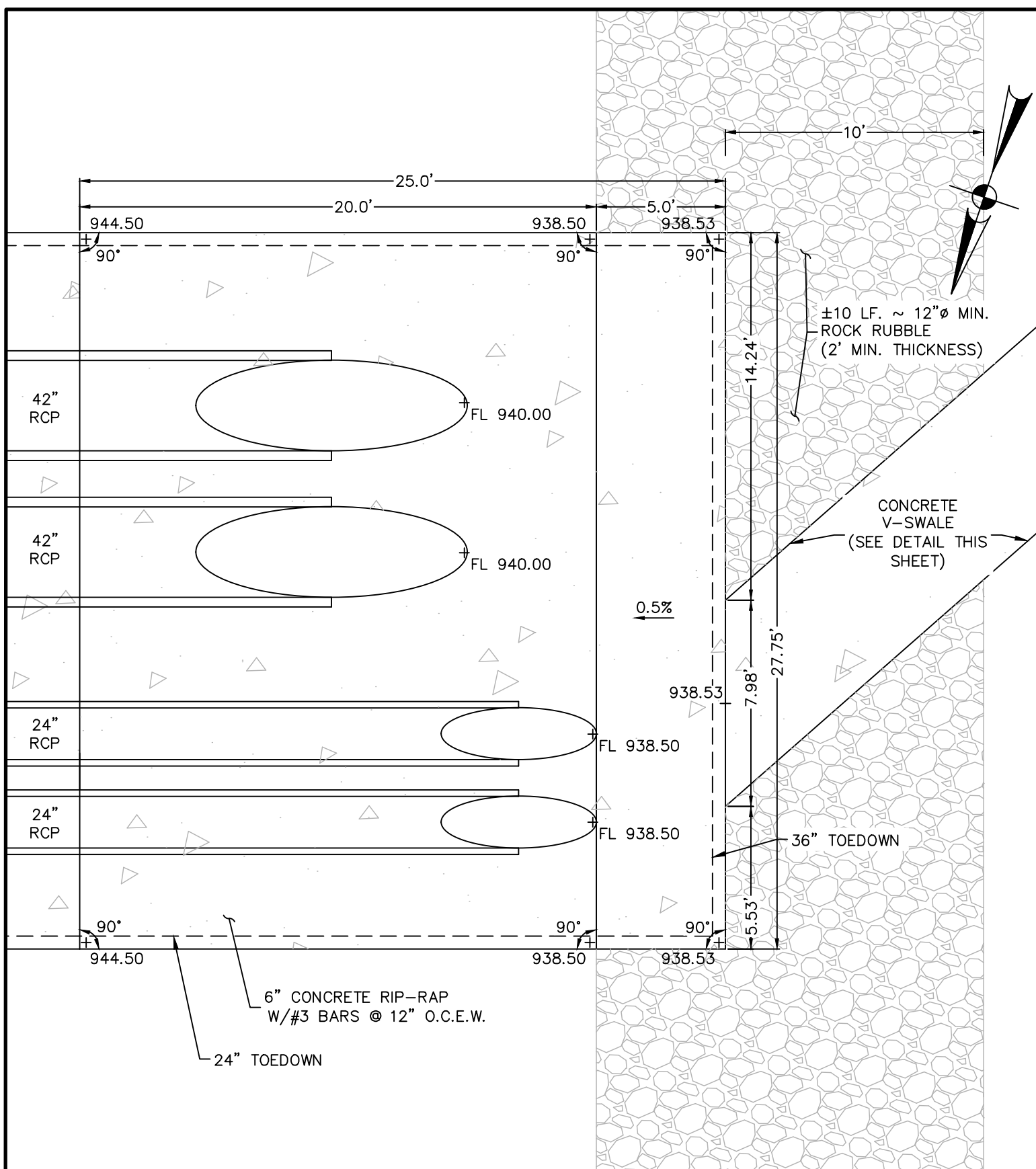
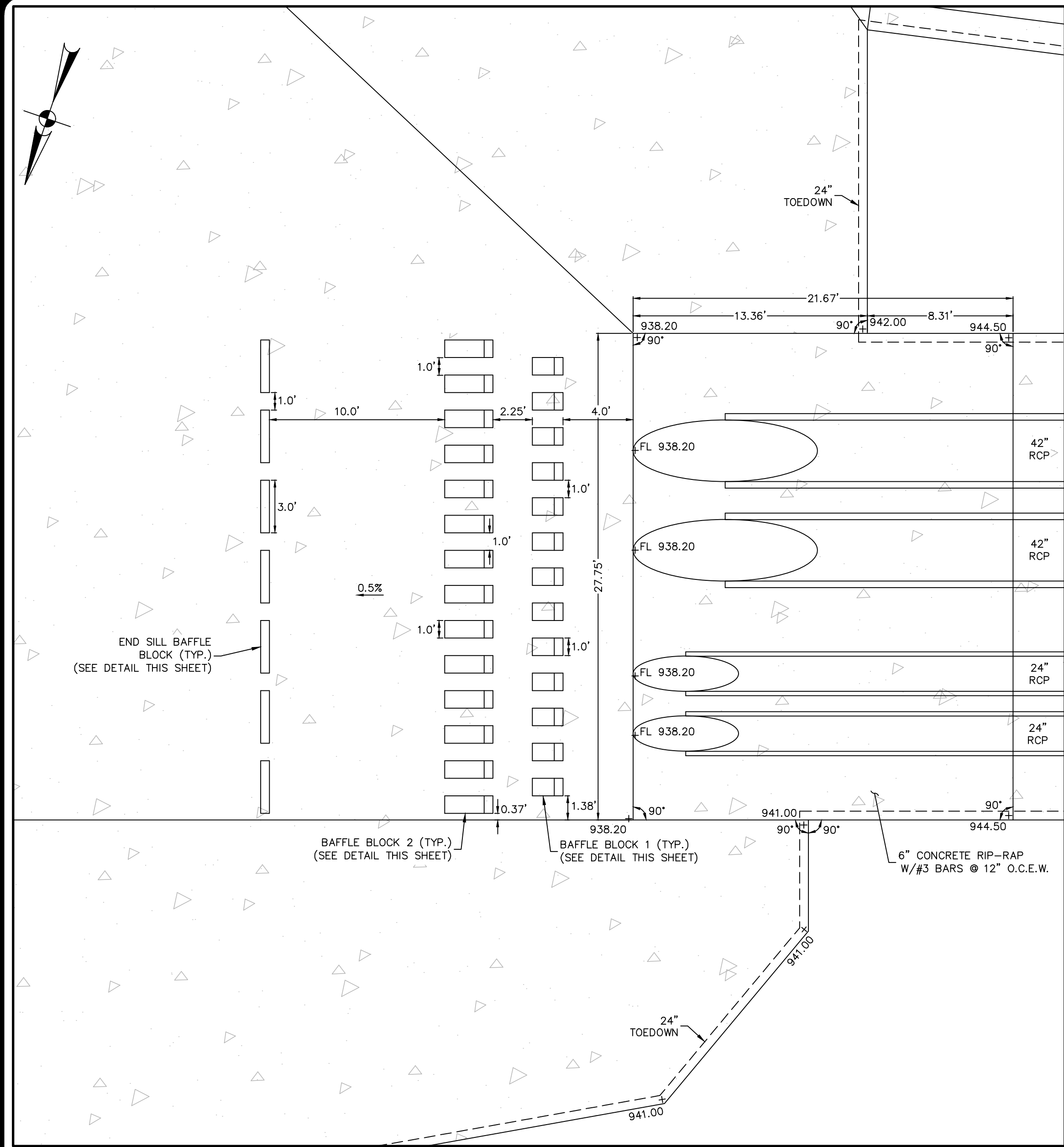
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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS
DRAIN C2 - PLAN & PROFILE
STA 1+00.00 TO 1+34.23

PLAT NO. N/A
JOB NO. 30004-39
DATE NOVEMBER 2025
DESIGNER GC
CHECKED GC DRAWN ML
SHEET C1.17

FOR PERMIT



OVERFLOW WEIR CALCULATIONS	
$Q_{100} = (C_w)(L)(h)^{3/2}$	
$Q_{100} = 735.6$	
$C = 3.087$	
$L = 679.5 \text{ ft}$	
$735.6 = (3.087)(679.5)(h)^{3/2}$	
$h = 0.50 \text{ ft}$	

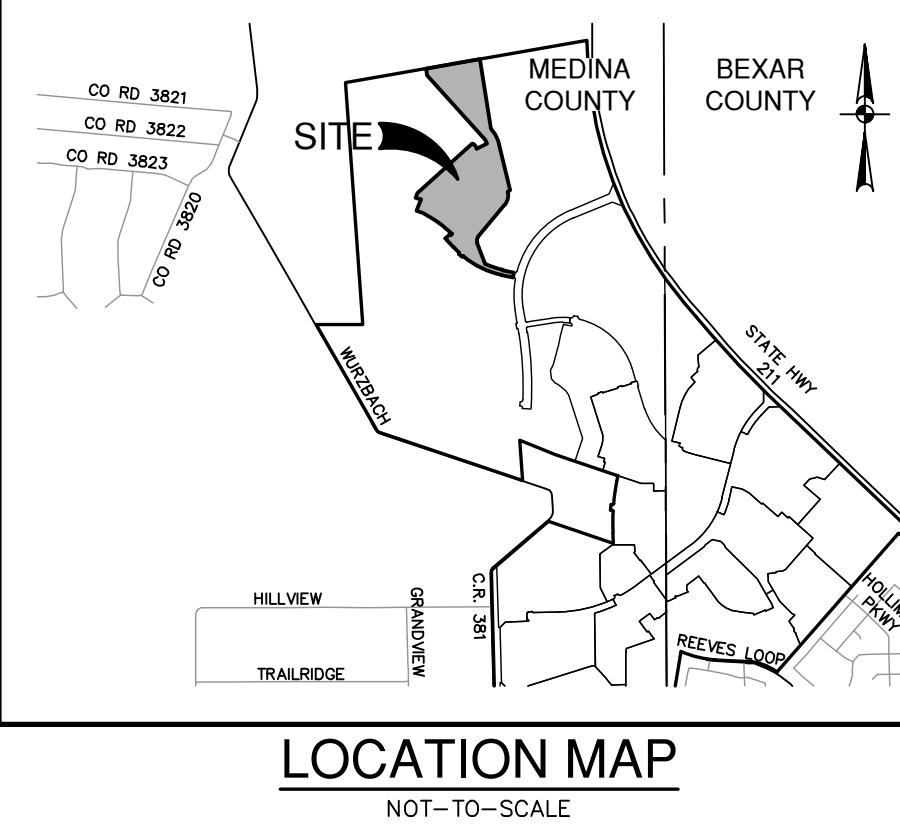
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NOTE:

ALL DISTURBED AREA WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT CHANNEL. CONTRACTOR SHALL INCLUDE ALL COST TO REVEGETATE CHANNEL IN BASE BID, NO SEPARATE PAY ITEM.

- LEGEND**
- UNIT BOUNDARY
 - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - PROPOSED SPOT ELEVATION
 - FLOW ARROW
 - LANDLOK 450 (TP-TRM) EROSION CONTROL MAT
 - CURLEX SINGLE NET EROSION CONTROL BLANKETS
 - PROPOSED FENCE (SPECIFICATIONS BY OWNER)



DATE 1/14/26

REVISION 1 SPOT ELEVATIONS UPDATED

1/14/2026

HAYDEN M. FOWLES
127195
PROFESSIONAL ENGINEER
TEXAS

PAPE-DAWSON

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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

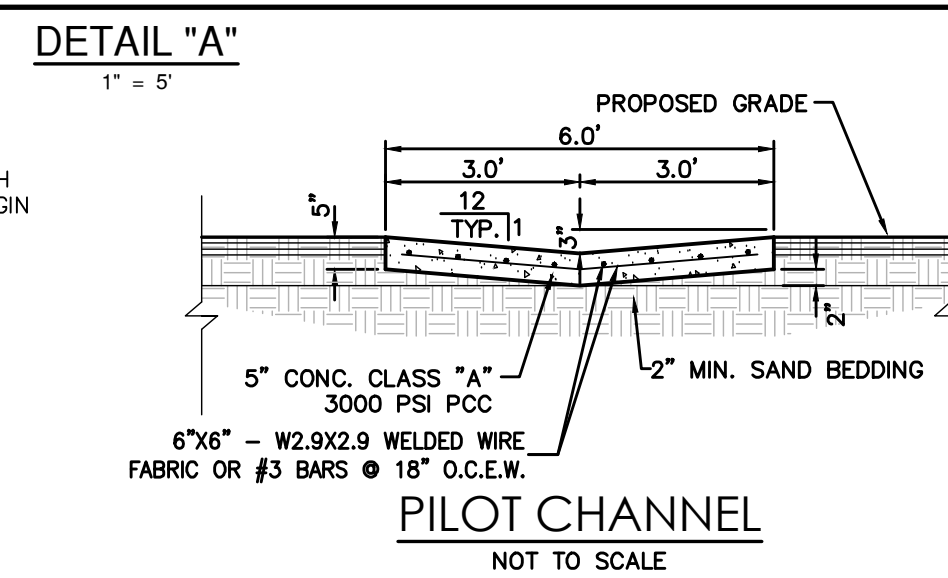
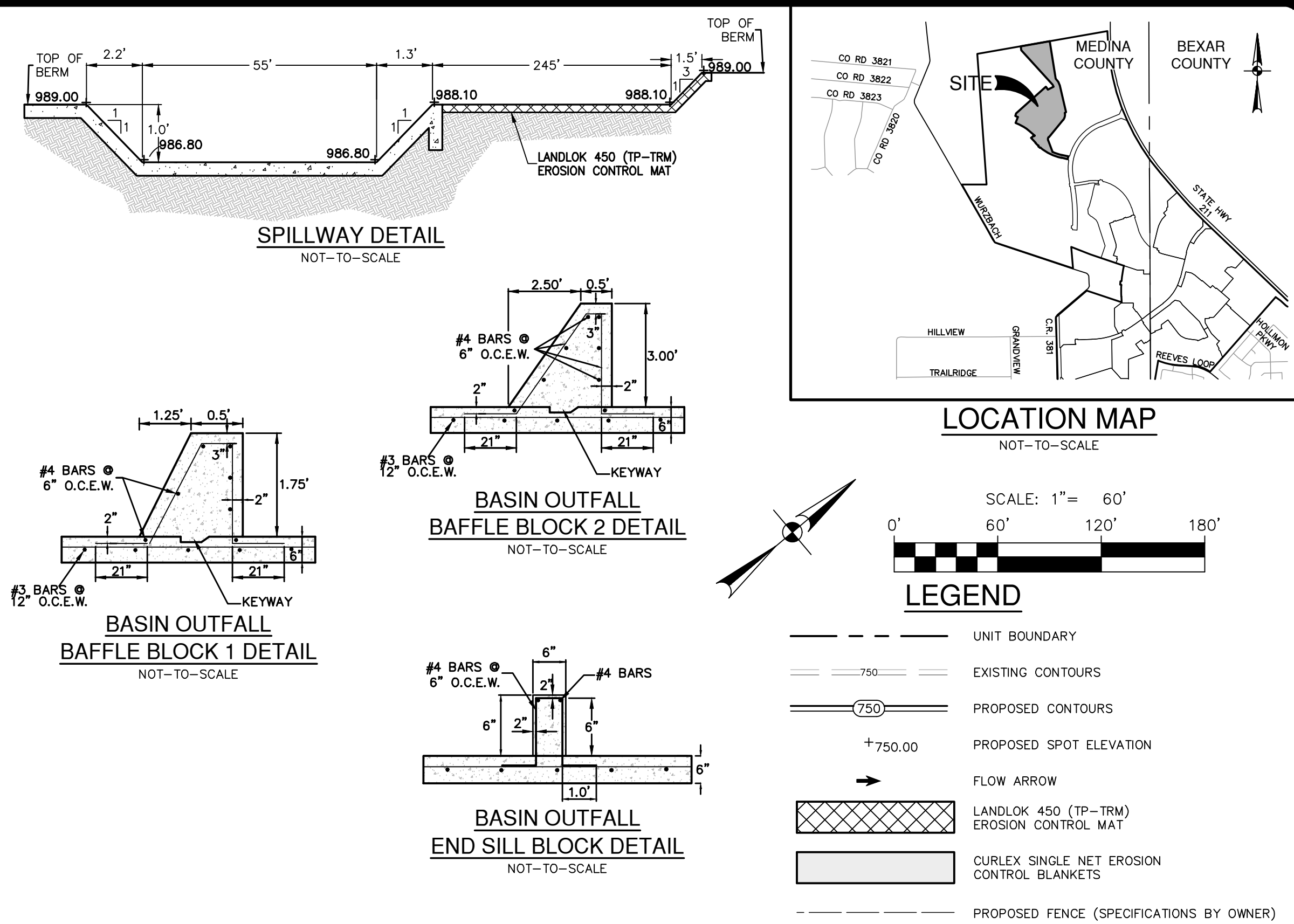
REDBIRD RANCH PHASE 2 UNIT 6M-1

MEDINA COUNTY, TEXAS

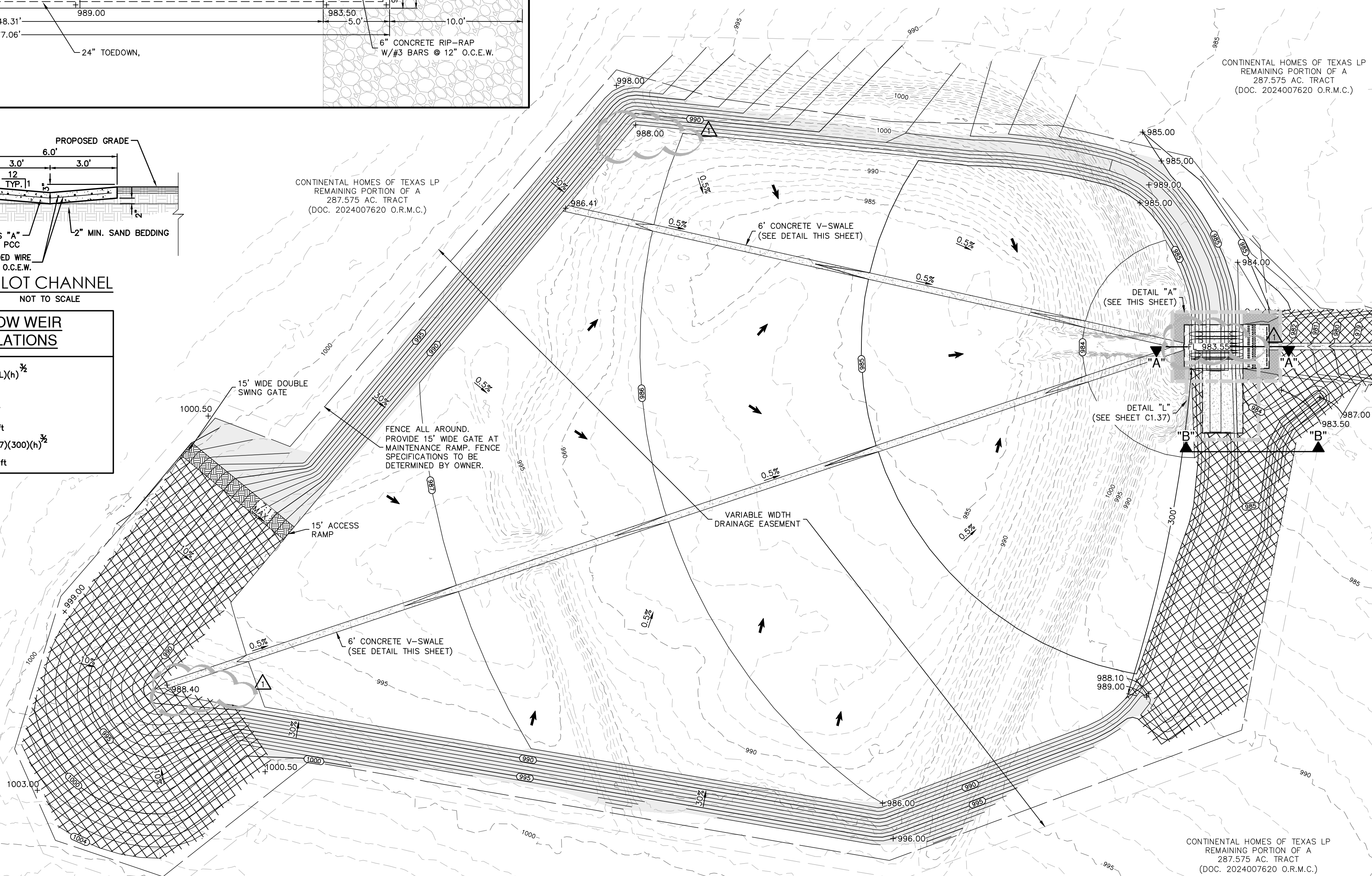
DETENTION BASIN PLAN - 1

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	GP
SHEET	C1.25

FOR PERMIT

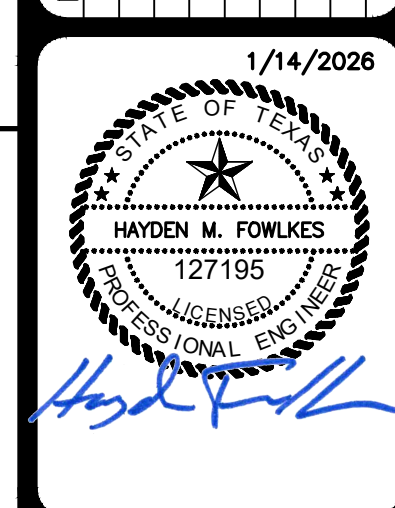


<u>OVERFLOW WEIR</u>	
<u>CALCULATIONS</u>	
Q ₁₀₀	= (C _w)(L)(h) ^{3/2}
Q ₁₀₀	= 778.1
C	= 3.087
L	= 300 ft
778.1	= (3.087)(300)(h) ^{3/2}
h	= 0.89 ft



CONTRACTOR, DESIGN OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL ENGINEER, GEOTECHNICAL SAFETY EQUIPMENT CONSULTANT, OR ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT AREA TO IDENTIFY AND EVALUATE POTENTIAL HAZARDS TO THE EXISTING SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S RESPONSIBILITY FOR IDENTIFYING AND EVALUATING POTENTIAL HAZARDS AND PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IDENTIFICATION OF ANY EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM ACCORDANCE WITH OSHA STANDARDS GOVERNING THE SEQUENCE AND ACTIVITIES OF INDIVIDUALS AND AROUND TRENCH EXCAVATION.

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[illegible]

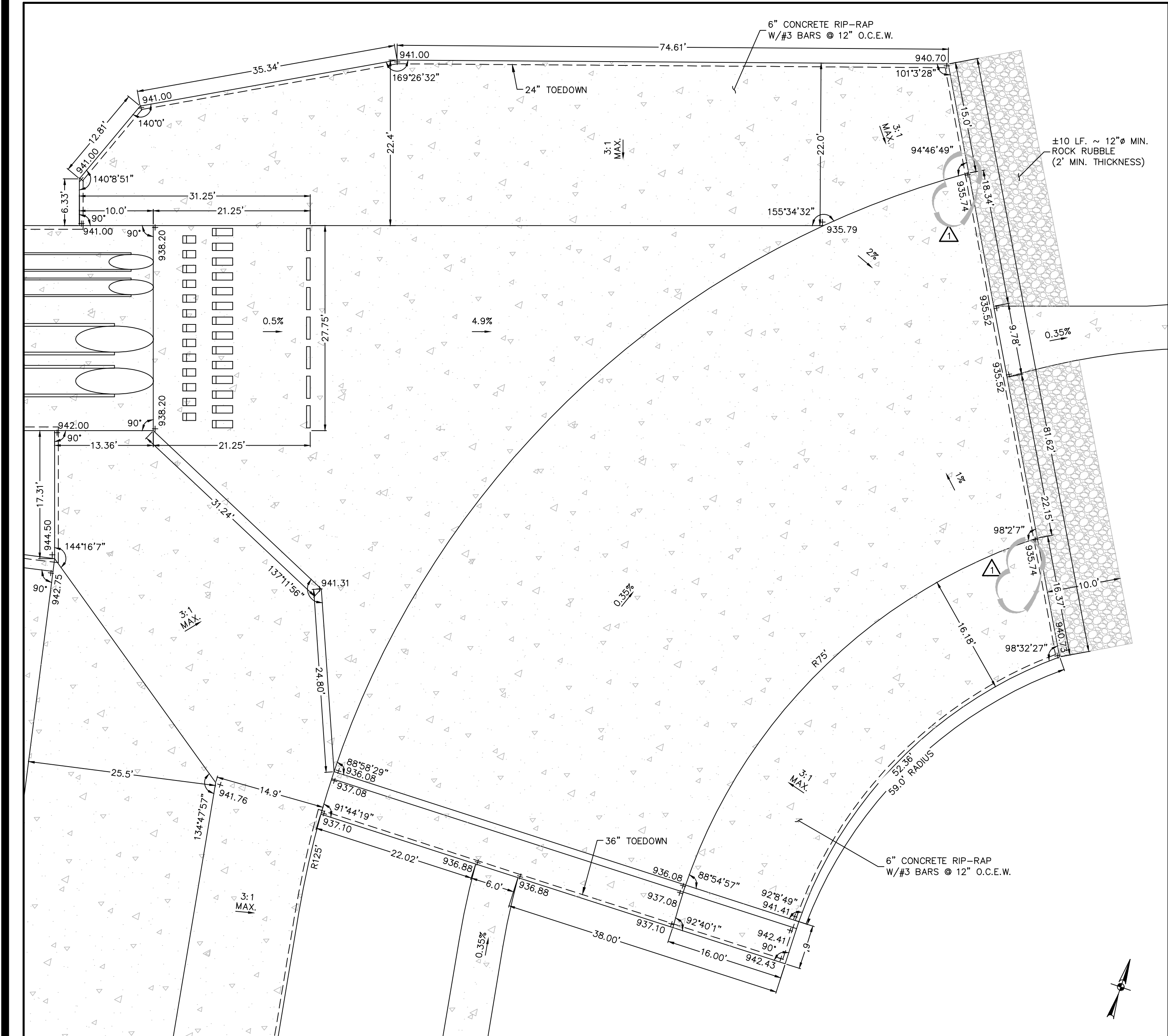
PAPE-DAWSON
1872 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78131 | 530.832.5933
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 10028600

REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS
DETENTION BASIN PLAN - 2

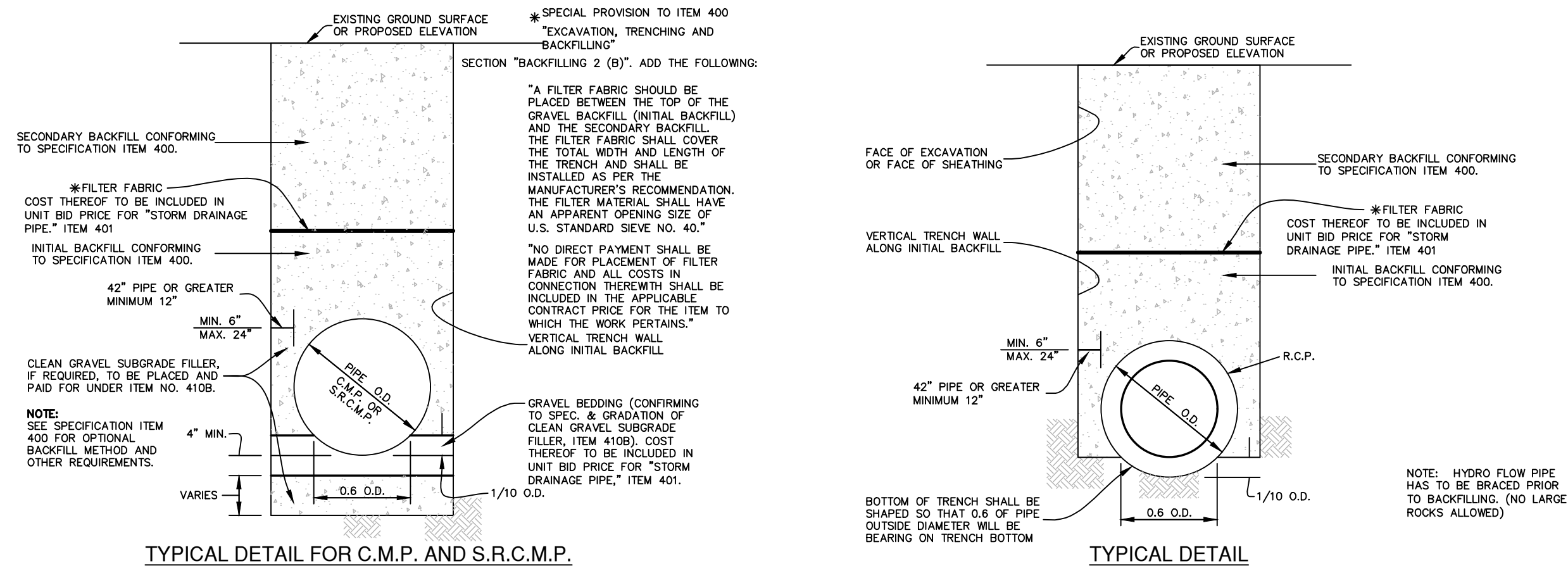
PLAT NO. N/A
JOB NO. 30004-39
DATE NOVEMBER 2025
DESIGNER GC
CHECKED *[Signature]* DRAWN JM
SHEET C1.26

FOR PERMIT

Date: Jan 14, 2026 9:11pm User ID: msathens@delus
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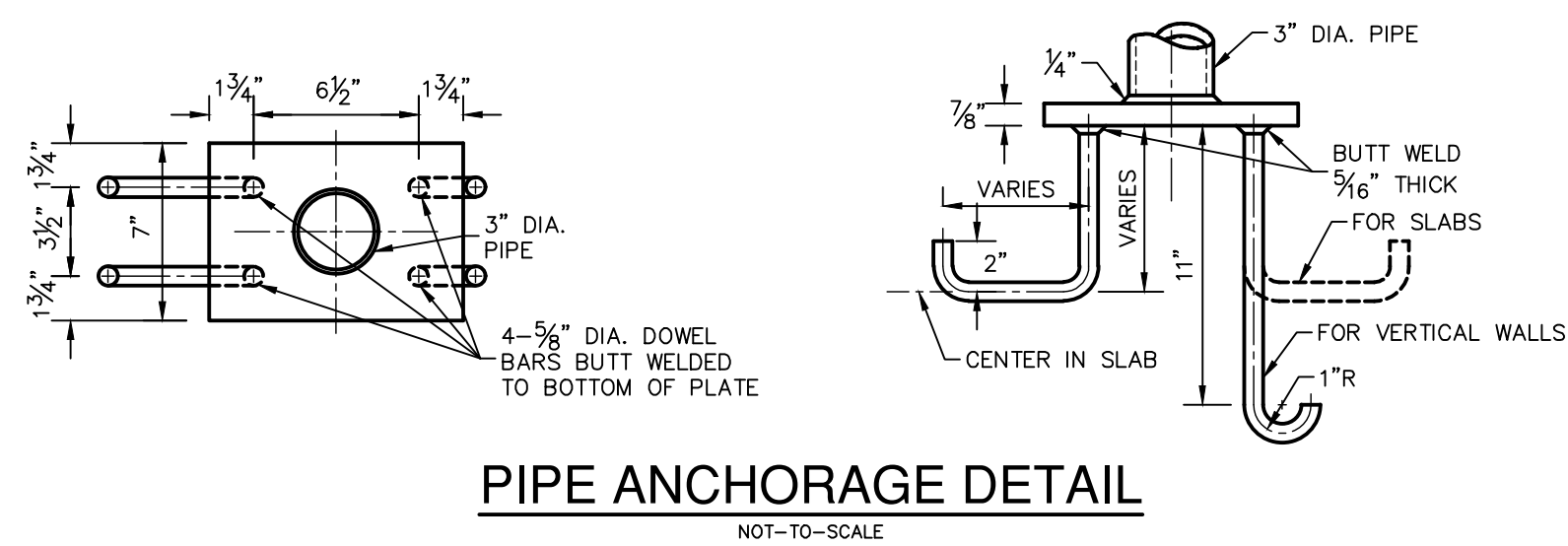


DETAIL "J"
1" = 10'



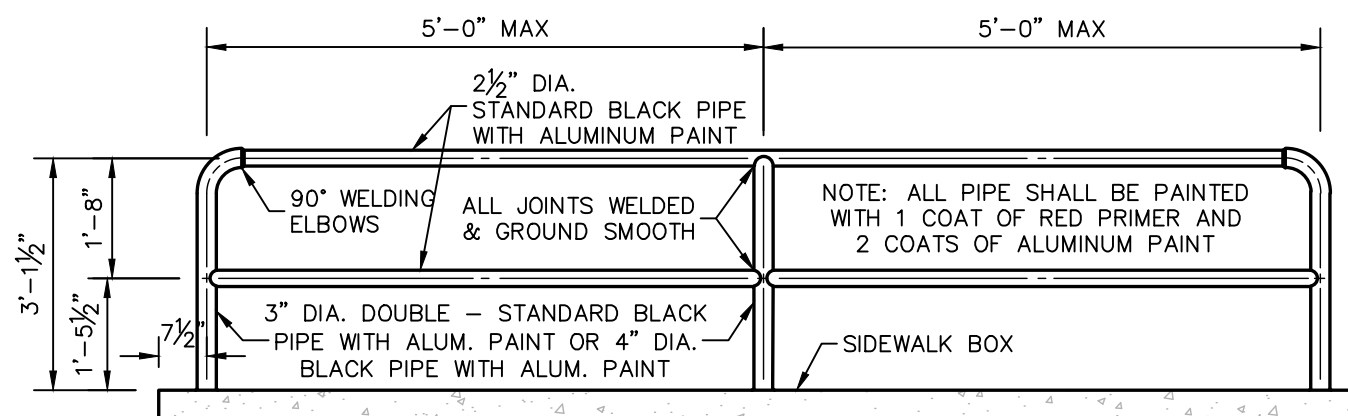
PIPE BEDDING AND BACKFILL DETAILS

NOT-TO-SCALE



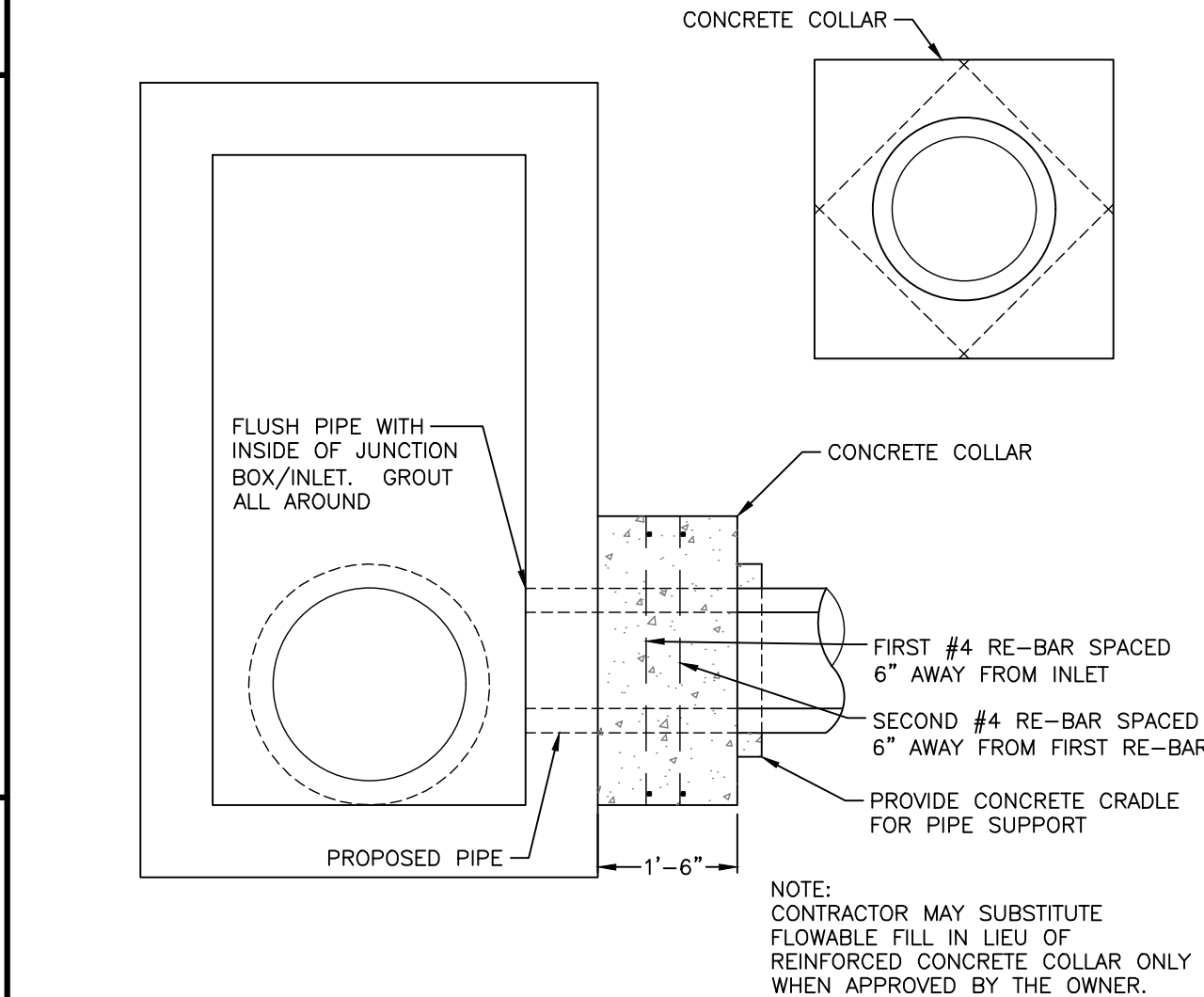
WELDING ELBOWS

NOT-TO-SCALE



PIPE RAILING DETAIL

NOT-TO-SCALE



CONCRETE COLLAR DETAIL

NOT-TO-SCALE



CURLEX® EROSION CONTROL BLANKETS INSTALLATION GUIDELINES

Before installing Curlex blankets, the seedbed shall be inspected by the Owner's Representative to ensure it has been properly compacted and fine graded to remove any existing rills. It shall be free of obstructions, such as tree roots, projections such as stones, and other foreign objects. The contractor shall proceed when satisfactory conditions are present. After the area has been properly shaped, seeded, fertilized, and compacted, remove the Curlex protective cover. Next, locate the start of the roll, making sure the roll is facing toward the area to be covered, and then roll out the product. The product shall be rolled out flat, even, and smooth without stretching the material then anchored to the subgrade.

Slopes: It is recommended the blankets be installed vertically on the slope; however, on short slopes it may be more practical to install horizontally across the width of the application when agreed upon by the Engineer prior to installation. If more than one width is required, simply abut the edges of the vertically installed blankets together and secure them with a common row of staples. Overlapping adjacent sides of Curlex blankets is not required when installed vertically on slopes. Curlex blankets shall be trenched at the head of the slope if the blanket cannot be extended three feet over the slope crest or if overland flow is anticipated from upslope areas.

Channels: Curlex blankets shall be centered to offset a seam in the middle of the waterway. They shall be installed in the same direction as the water flow. The adjoining blankets shall be installed away from the center of channel and overlapped. Curlex blanket installation should continue up the side slopes three feet above the anticipated high water elevation. Flanks exposed to runoff, or sheet flow, must be protected by a check slot or trenched. Curlex blankets shall be trenched at the start of the channel. Curlex blankets shall be anchored using a staggered staple pattern at end of roll overlaps and end of roll terminations.

Disclaimer: Curlex is a system for erosion control and revegetation on slopes and channels. American Excelsior Company (AEC) believes that the information contained herein to be reliable and accurate for use in erosion control and re-vegetation applications. However, since physical conditions vary from job site to job site and even within a given job site, AEC makes no performance guarantees and assumes no obligation or liability for the reliability or accuracy of information contained herein for the results, safety, or suitability of using Curlex, or for damages occurring in connection with the installation of any erosion control product whether or not made by AEC or its affiliates, except as separately and specifically made in writing. These guidelines are subject to change without notice.

850 Avenue H East | Arlington, Texas 76011
Phone 1-800-777-SOIL | Fax 817-385-3585 | www.Curlex.com

W0315R1116



MATERIAL SPECIFICATIONS CURLEX® I

Materials:

Great Lakes Aspen (naturally seed free)
Polypropylene Netting
Stitching Thread
QuickGRASS® (green excelsior – optional)

Typical Roll Sizes:

Width:	4.0 ft (1.2 m)	8.0 ft (2.4 m)	16.0 ft (4.9 m)
Length:	112.5 ft (34.29 m)	112.5 ft (34.29 m)	112.5 ft (34.29 m)
Area:	50.0 yd ² (41.8 m ²)	100.0 yd ² (83.6 m ²)	200.0 yd ² (167.2 m ²)
Weight:	36.5 lb (16.6 kg)	73.0 lb (33.1 kg)	146.0 lb (66.2 kg)

Description:

Curlex I erosion control blanket (ECB) is a natural, stitched excelsior blanket that provides a temporary organic cover to reduce erosion, protect seeds, enhance germination, and hasten re-vegetation. Curlex I is furnished in rolls with polyethylene wrapping to protect against the elements prior to installation, and may be ordered in Master-Bals of fifteen rolls banded together to minimize material handling requirements. Curlex I is also available as QuickGRASS (green pigment). Curlex I shall be manufactured in the U.S.A.

Curlex I has a design soil loss ratio (event-based RUSLE C factor) of .018 and is typically suitable for slopes up to 2H:1V. Curlex I is rated for channel flows up to 7.0 ft/s (2.1 m/s) and 1.75 lb/ft² (84 Pa) shear stress.

Physical Properties:

Fiber: Great Lakes Aspen (naturally seed free)
Fiber Size: Curled, interlocking fibers with barbed edges
80% of fibers a minimum of 6 in (15.2 cm) long
0.038 in ± 0.008 in wide x 0.018 in ± 0.003 in thick
(0.97 mm ± 0.20 mm wide x 0.46 mm ± 0.08 mm thick)
Weight: 0.73 lb/yd² (0.40 kg/m²) ± 10% @ 22% Moisture
Thread Pattern: No more than 4.0 in (10.2 cm) transverse stitch spacing
Net Material: Polypropylene (green with eco-biodegradable and UV degrader additives or white with UV degrader additive)
Net Openings: 1.0 in wide x 2.0 in long (25.4 mm wide x 50.8 mm long)
Net Configuration: Top side only

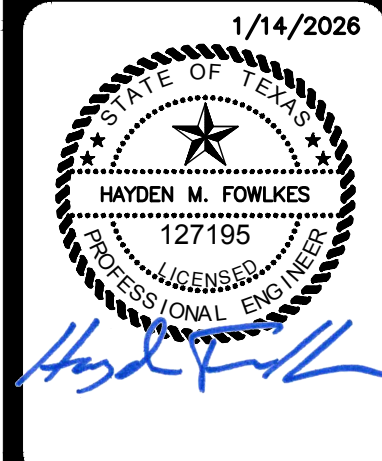
*Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen excelsior is 22%.



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Phone 1-800-777-SOIL | Fax 817-385-3585 | www.Curlex.com

W0516R1116

DATE	01/09/26
REVISION	
NO.	
1	SPOT ELEVATIONS UPDATED



PAPE – DAWSON
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TEXAS SURVEYING FIRM #470 | TEXAS ENGINEERING FIRM #10028800

REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS
DRAINAGE DETAILS

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	DRAWN GP
SHEET	C1.30

FOR PERMIT

CONTRACTOR'S NOTE: The use of this standard is approved by the Texas Department of Transportation for use as a minimum standard. No warranty of any kind is made by the State of Texas or the Department of Transportation for its application to other projects or for its use in connection with any project. The use of this standard is at the contractor's risk.

TYPICAL SECTION
Used for curbs over 1'-0" to 3'-0"

BARS V (#4)
Spaced at 12" Max

BARS L (#5)
Spaced at 12" Max

BARS U (#4)
Spaced at 12" Max

**OPTIONAL
BARS L (#5)** ① ②
Spaced at 12" Max

BARS K (#4)
Spaced at 12" Max

- ① "C" is equal to the culvert top slab thickness. For precast boxes with slabs less than 7"-thick, see SCP-RD standard for additional details.
- ② Adjust normal culvert slab bars as necessary to clear obstruction.
- ③ Place bars I as shown. Tilt hook as necessary to maintain cover.
- ④ Place normal culvert curb bars #W4 at abutment. Adjust as necessary to clear obstruction.
- ⑤ Additional bars #W4 as required to maintain 12" Max spacing.
- ⑥ Replace normal culvert curb bars K with one bar U and two bars V as shown spaced at 12" Max. Adjust length of bars V as necessary to maintain clear cover.
- ⑦ Optional bars L are to be used only for precast box culverts with 3'-0" closure pour.
- ⑧ Quantities shown are for Contractor's information only. Quantities are per linear foot of curb length. The value shown can be interpolated for intermediate values of curb height, "C". Quantity includes bars K (when applicable).

TABLE OF ESTIMATED CURB QUANTITIES (ft)			
Curb Height "C"	Curb Length (L/LF)	Reinforcing Steel (LB/LF)	Concrete (CY/LF)
1'-0"	0.007	8.8	
1'-6"	0.006	14.3	
2'-0"	0.014	15.4	
2'-6"	0.003	17.2	
3'-0"	0.111	18.8	
3'-6"	0.130	21.2	
4'-0"	0.148	22.3	
4'-6"	0.167	24.6	
5'-0"	0.185	25.6	

CONSTRUCTION NOTES:
Adjust reinforcing steel as necessary to provide 1" cover.
For vehicle safety, top of the curb must not project more than 3" above the finished grade.

MATERIAL NOTES:
Provide Grade 60 reinforcing steel.
Provide Class "C" concrete ($f'_c = 3,600$ psi) minimum for curbs.

GENERAL NOTES:
Designed according to AASHTO LRFD Bridge Design Specifications.
These extended curb details have sufficient strength to show for future retrofit of Type TB31 or TB31S railing.
These details are suitable for use with PMA, PMA and PMA type callouts. These details are not suitable for the mounting of other rail types. For new construction, use TB31 or TB31S railing, use the TB31-CW standard.
This Curb is considered as part of the Box Culvert for payment.

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bar dimensions shown are cut-to-out of bar.

Bridge Overlay Standard

EXTENDED CURB DETAILS

FOR BOX CULVERTS WITH CURBS OVER 1'-0" TO 5'-0" TALL

ECD

Rev.	Issued/Lgt.	In.	Exp.	In.	FADT	In.	FADT	In.	GAT
SC-001	February 2020	100%	EXP.	100%	100%	100%	100%	100%	100%
APPROVED									
E.C.D. Engineer Name John Doe TB31-CW									

NOTES: 1. This drawing is to be used in conjunction with the Texas Department of Transportation Standard Specifications for Road and Bridge Construction, 2011 Edition, and the Texas Department of Transportation Standard Specifications for Materials, 2011 Edition. 2. The quantities shown are for two Type PW-1 wings. Adjust concrete volume for Type PW-2 wings. To determine estimated quantities for two wings, multiply the tabular values by 2. Quantities shown do not include weight of Bars D.

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

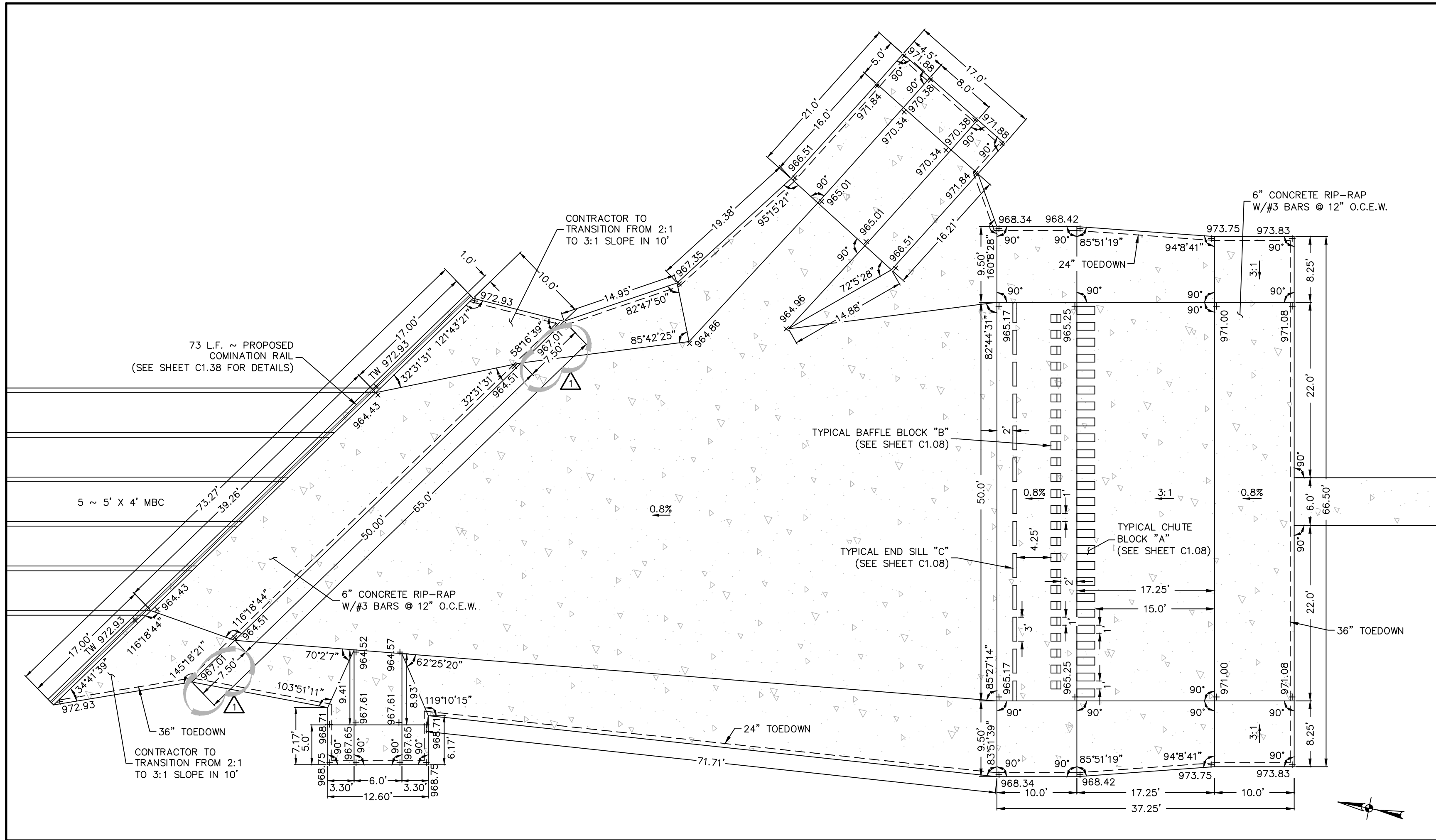
Dimensions				Variable Reinforcing		Estimated Quantities per ft. of wing (2-wings)		Estimated Quantities per ft. of (seawall-totowall)			
Maximum Wingwall Height	W	X	Y	Z	Bars J		Reinft. (lb/ft.)	Cnft. (CY/ft.)	Reinft. (lb/ft.)	Cnft. (CY/ft.)	
					Spa	U	Spa	U	Spa	U	Spa
2'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	48.64	0.465	4.45	0.011	
2'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	49.31	0.424	6.85	0.071	
3'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	49.98	0.444	6.85	0.071	
3'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	53.92	0.462	6.85	0.071	
3'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	53.98	0.480	6.85	0.071	
4'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	55.57	0.532	6.85	0.071	
4'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	58.71	0.568	6.85	0.071	
5'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	63.45	0.632	6.96	0.075	
5'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	67.46	0.668	6.96	0.075	
6'-0"	4'-4"	2'-0"	1'-0"	8"	#5	1'-0"	80.67	0.730	7.07	0.078	
6'-0"	4'-4"	2'-0"	1'-0"	8"	#5	1'-0"	85.05	0.768	7.07	0.078	
7'-0"	5'-0"	2'-0"	1'-0"	8"	#5	1'-0"	92.15	0.864	8.07	0.093	
7'-0"	5'-0"	2'-0"	1'-0"	8"	#5	1'-0"	94.44	0.902	8.07	0.093	
8'-0"	5'-6"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
8'-0"	5'-6"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
9'-0"	6'-0"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
10'-0"	6'-0"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
11'-0"	7'-0"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
12'-0"	7'-0"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
13'-0"	8'-0"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
14'-0"	8'-0"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
15'-0"	8'-0"	2'-0"	1'-0"	8"	#5	#5	63	1.042	8.13	0.095	
16'-0"	9'-11"	3'-0"	1'-11"	1'-2"	#9	#6	67	2.052	2.448	11.47	0.279

PARTIAL ELEVATION - PW-1

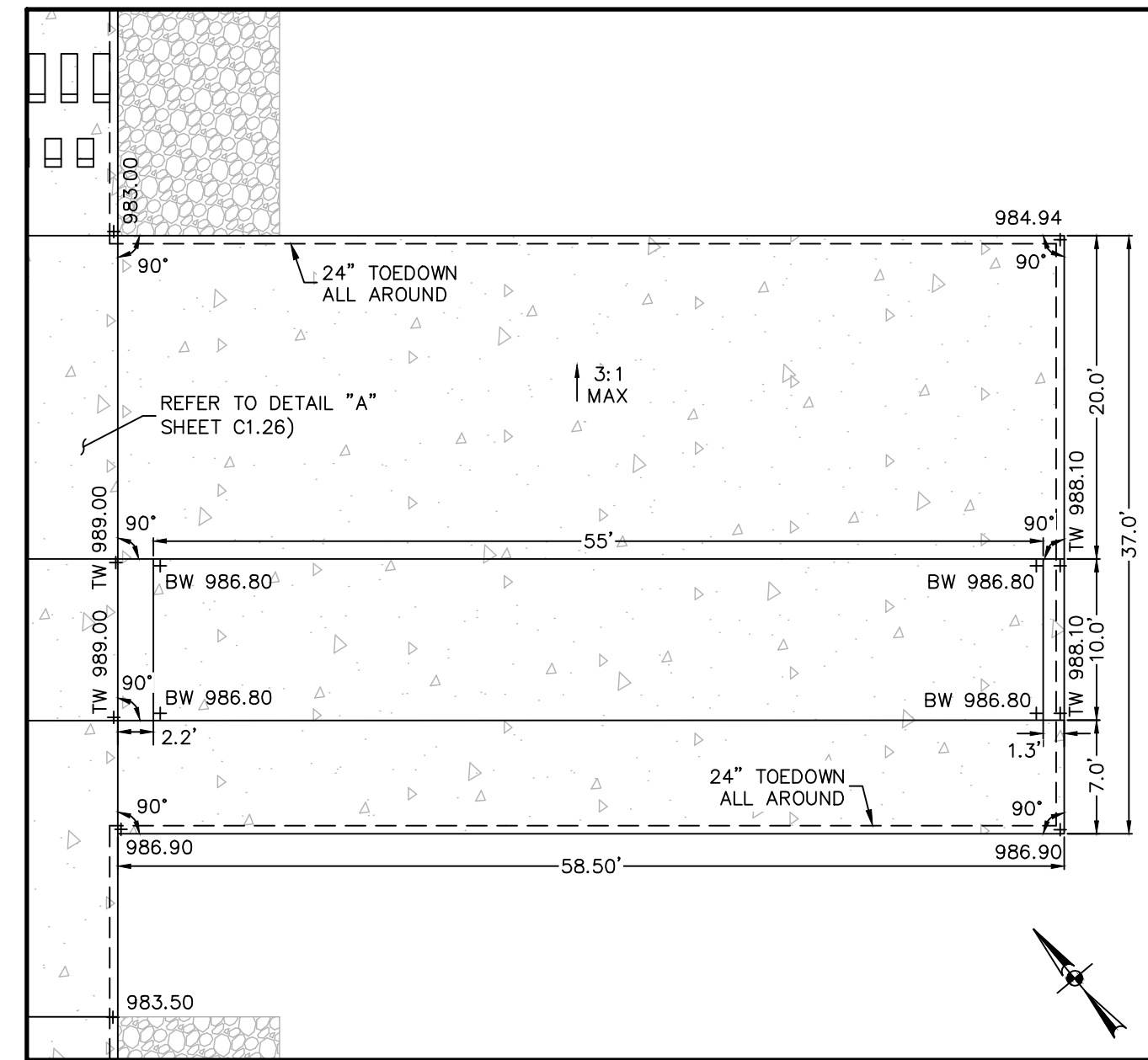
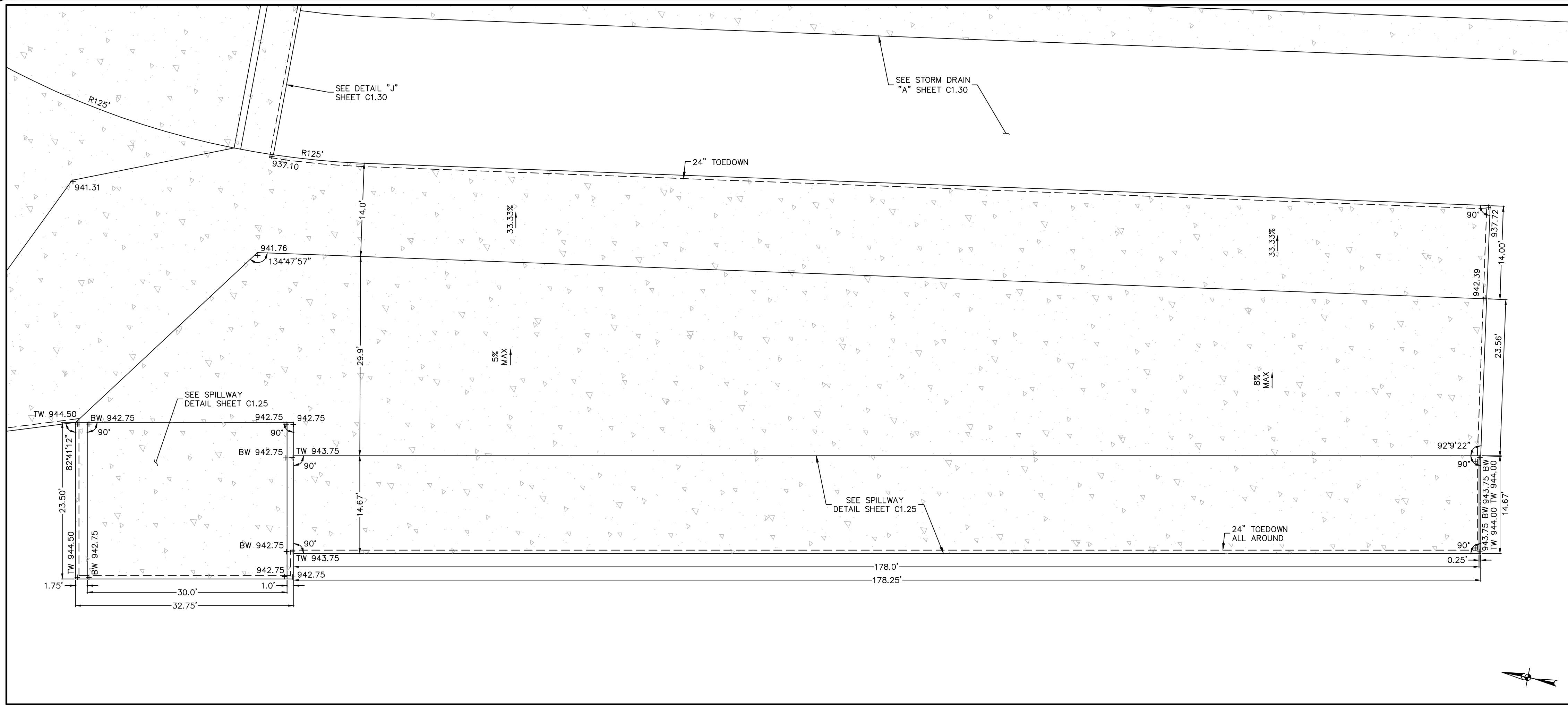
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DETAIL "K"
1" = 10'

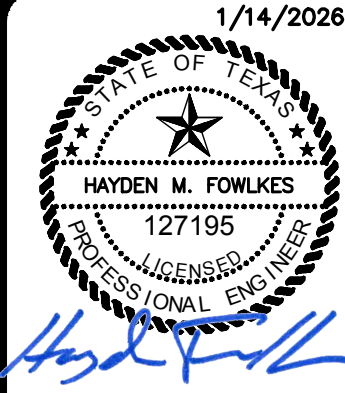


DETAIL "L"
1" = 10'

REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS
DRAINAGE DETAILS

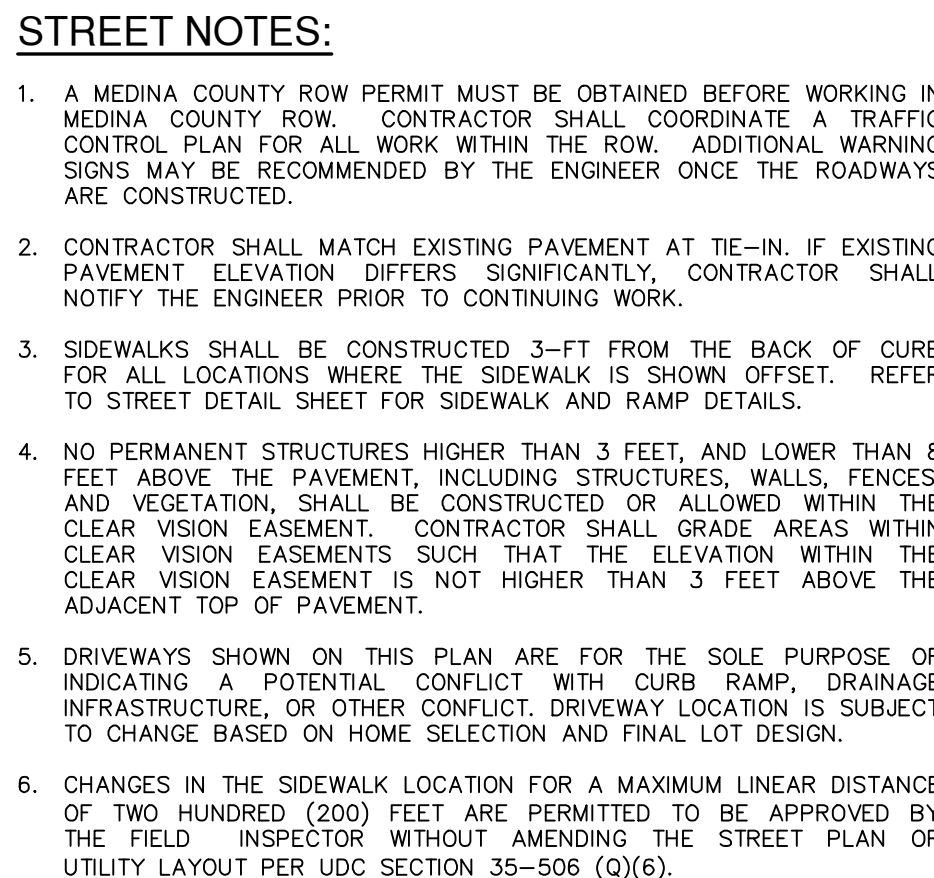
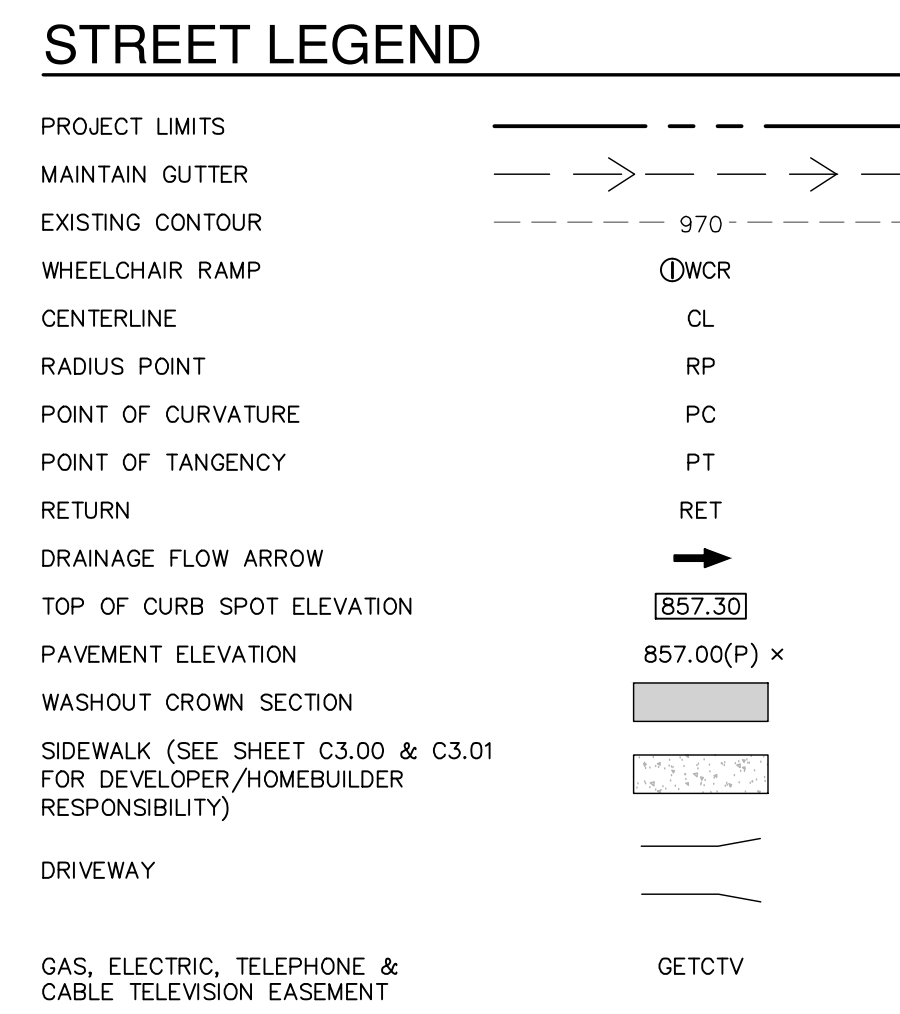
PLAT NO. N/A
JOB NO. 30004-39
DATE NOVEMBER 2025
DESIGNER GC
CHECKED DRAWN GP
SHEET C1.37

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NO.	REVISION	DATE
1	SPOT ELEVATIONS UPDATED	1/14/26

FOR PERMIT



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PAVEMENT SECTION DETAIL									
STREET NAME	STATION	TYPE "D" HMAC	TYPE "C" HMAC	AGGREGATE BASE	TREATED SUBGRADE	GEOGRID (TENSAR TRIAX TX5)	CBR	STRUCTURAL NUMBER	
LILAC ROLLER	STA 1+00.00 TO 13+13.72	2"	2"	16"	8*	NO	2.5	2(.44) = 0.88 2(.44) = 0.88 16(.14) = 2.24 8(.08) = 0.64	4.64
MAGPIPE STARLING	STA 1+00.00 TO 4+76.99	2"	2"	16"	8*	NO	2.5	2(.44) = 0.88 2(.44) = 0.88 16(.14) = 2.24 8(.08) = 0.64	4.64
MAGPIPE STARLING	STA 4+76.99 TO 16+07.89	2"	—	10"	6*	NO	2.5	2(.44) = 0.88 10(.14) = 1.4 6(.08) = 0.48	2.76
GOLDEN ORIOLE	STA 1+00.00 TO 7+89.89	2"	—	10"	6*	NO	2.5	2(.44) = 0.88 10(.14) = 1.4 6(.08) = 0.48	2.76
PAINTED BUNTING	STA 1+00.00 TO 11+59.25	2"	—	10"	6*	NO	2.5	2(.44) = 0.88 10(.14) = 1.4 6(.08) = 0.48	2.76
BLUETHROAT FINCH	STA 1+00.00 TO 8+78.65	2"	—	10"	6*	NO	2.5	2(.44) = 0.88 10(.14) = 1.4 6(.08) = 0.48	2.76
*SEE SUBGRADE NOTES									

GENERAL NOTES:

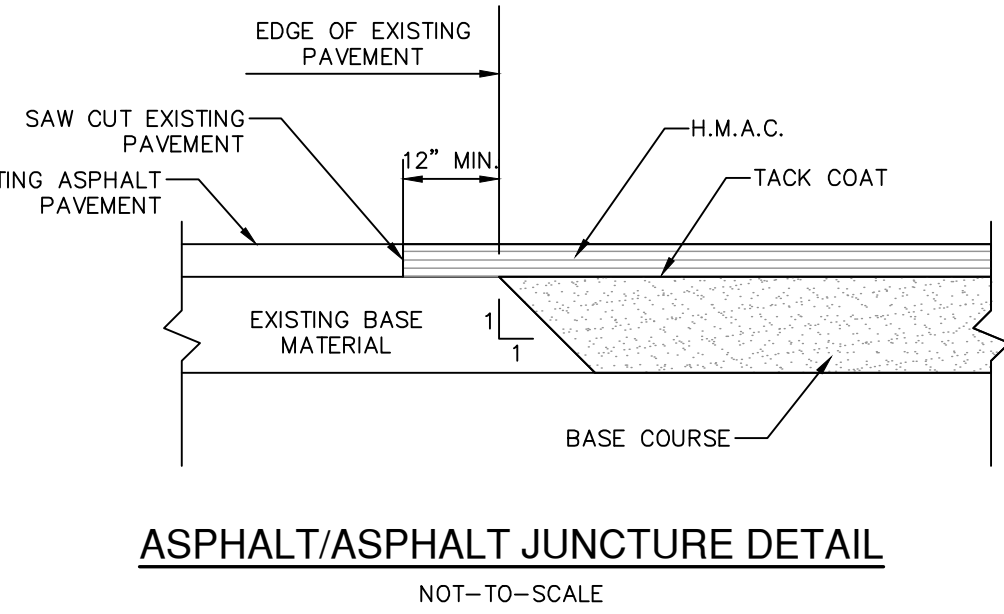
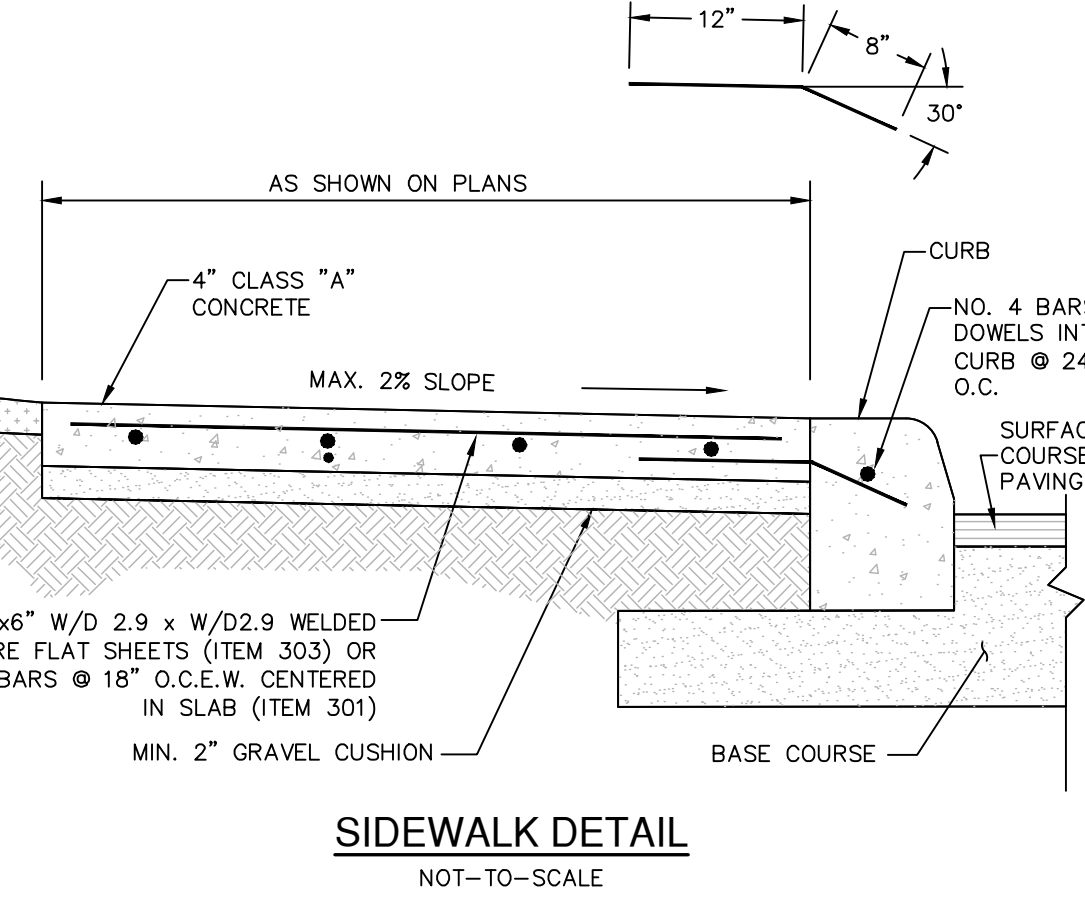
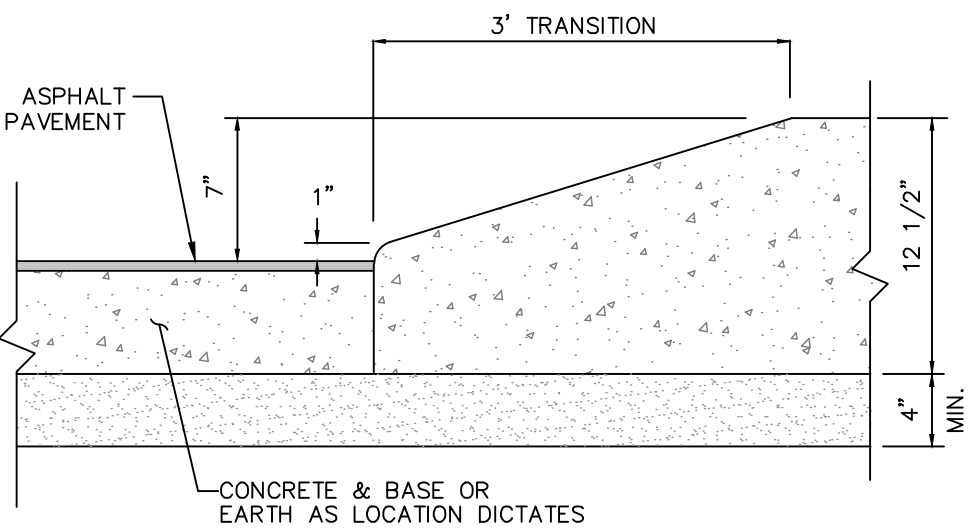
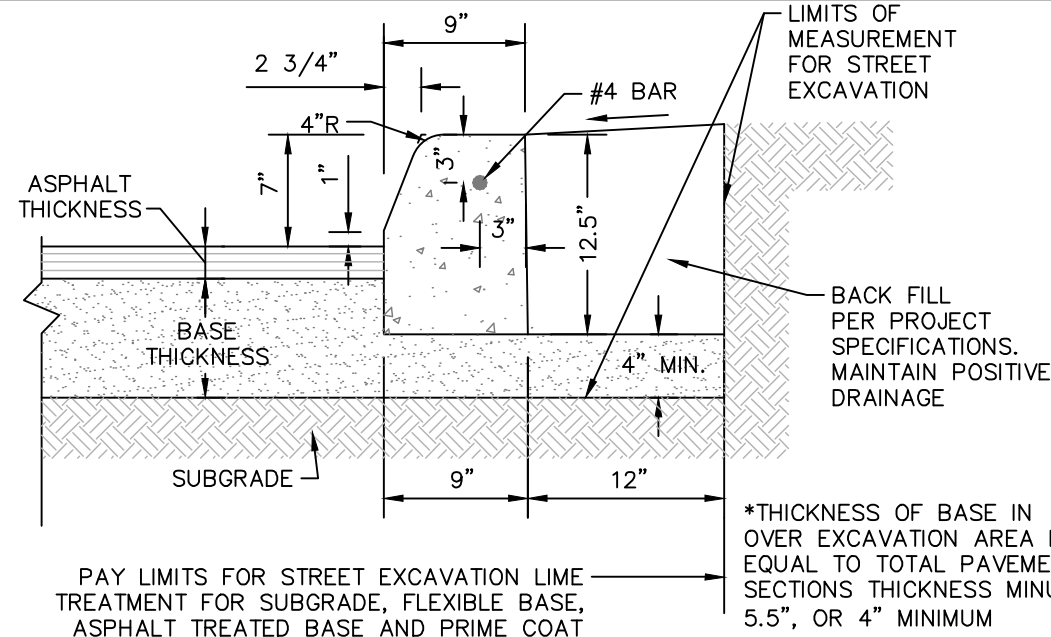
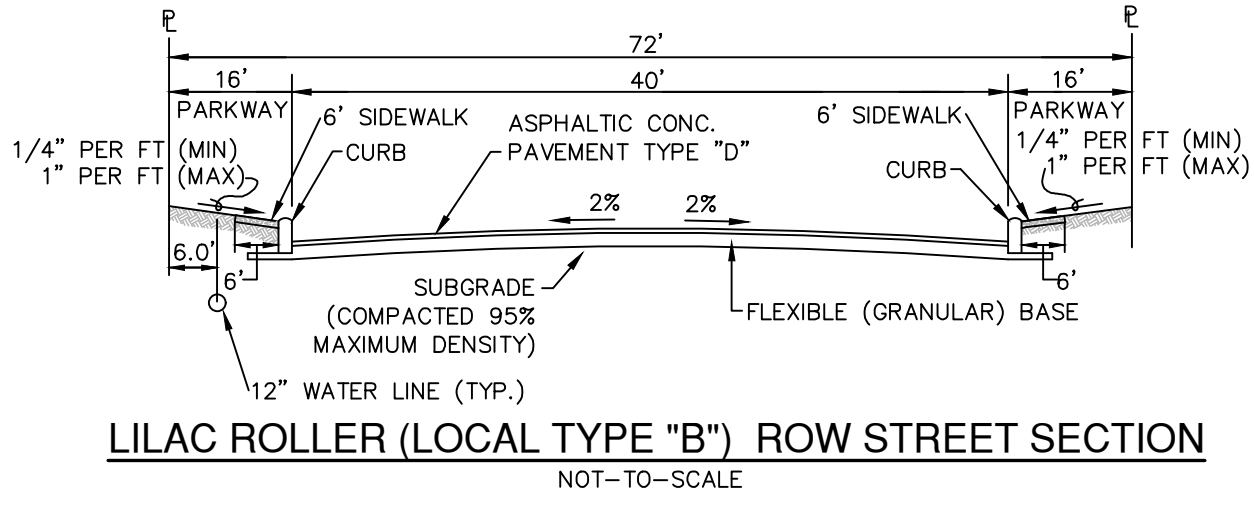
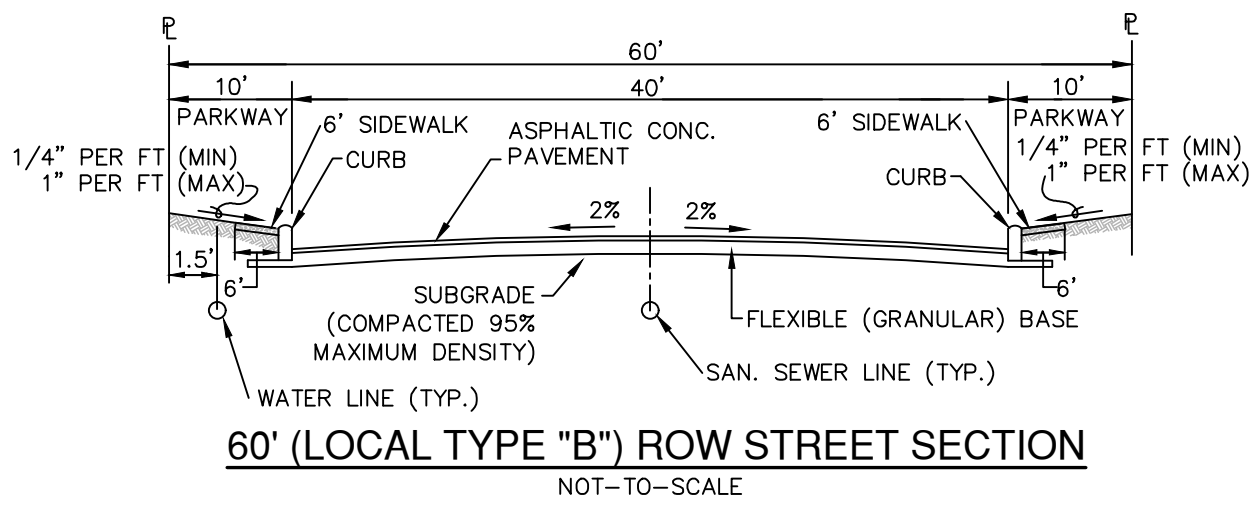
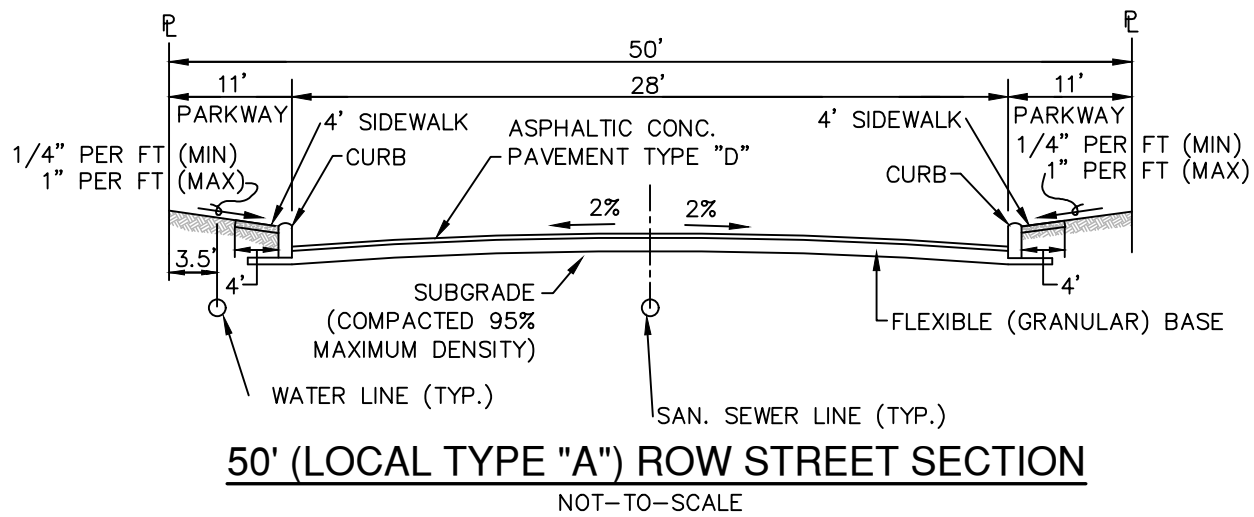
- CONTRACTOR SHALL REFERENCE THE PROJECT PAVEMENT DESIGN REPORT PREPARED BY INTEC OF SAN ANTONIO, LP DATED MAY 1, 2024, PROJECT NO. S241065.
- CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEER TO VERIFY THE SUBGRADE CONDITION PRIOR TO PLACING ANY BASE MATERIAL. GEOTECHNICAL ENGINEER SHALL DETERMINE THE SUBGRADE CONDITION AND IF LIME STABILIZATION IS REQUIRED.
- GEOTECHNICAL ENGINEER SHOULD VERIFY THE STREET SUBGRADE AT THE TIME OF CONSTRUCTION PRIOR TO PLACEMENT OF AGGREGATE BASE.
- THE FLEXIBLE BASE COURSE SHOULD BE CRUSHED LIMESTONE AGGREGATE OR GRAVEL CONFORMING TO TxDOT STANDARD SPECIFICATIONS, ITEM 247, TYPE A, GRADES 1 OR 2.
- THE GENERAL FILL MATERIALS SHOULD BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES THICK AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY TEST METHOD ASTM D 698 AT A MOISTURE CONTENT WITHIN 3 PERCENT OF THE OPTIMUM WATER CONTENT.
- SIGNIFICANT PAVEMENT DISTRESS HAS BEEN OBSERVED DURING CONSTRUCTION PHASE WITH THE COMBINATION OF CONSTRUCTION TRAFFIC AND IRRIGATION WATER / RAIN WATER GETTING UNDERNEATH THE ASPHALT.
- IF WATER IS ALLOWED TO GET UNDERNEATH THE ASPHALT / CONCRETE OR IF MOISTURE CONTENT OF THE BASE OR SUBGRADE CHANGES SIGNIFICANTLY, THEN PAVEMENT DISTRESS WILL OCCUR. MOISTURE PENETRATION UNDERNEATH THE ASPHALT PAVEMENT SURFACE SHOULD BE REDUCED. ONE OF THE FOLLOWING METHODS SHOULD BE USED:
 - DEEPER CURBS, SUCH AS CURBS EXTENDING A MINIMUM OF 3 INCHES INTO SUBGRADE.
 - COMPACTED CLAYS BACKFILLED AGAINST THE CURBS.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL MATERIAL TESTING WITH THE PROJECT GEOTECHNICAL ENGINEER. TESTING SHALL BE PAID FOR BY THE OWNER.

STREET SUBGRADE NOTES:

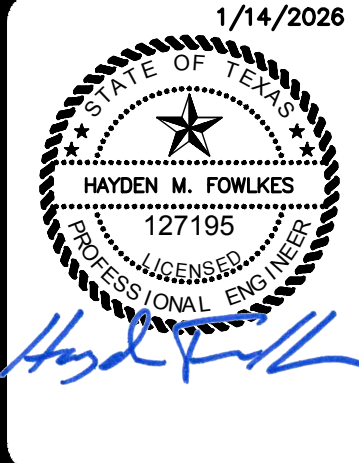
- CUT AND FILL DATA ARE NOT AVAILABLE AT THIS TIME.
- FILL USED TO RAISE THE GRADE:
 - APPROVED FILL MATERIAL FREE SHOULD HAVE A MINIMUM CBR VALUE OF 2.5 AND A MAXIMUM PLASTICITY INDEX VALUE OF 55 (ON SITE MATERIAL). LIME APPLICATION RATES SHOULD BE RE-EVALUATED AND TESTED FOR SULFATE CONTENT PRIOR TO USE OF THE FILL MATERIAL.
 - THE FILL MATERIAL SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER, FREE OF DELETERIOUS MATERIAL, AND THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN SIZE. THE MATERIAL SHOULD BE PLACED AND COMPACTED AS PER APPLICABLE CITY / COUNTY GUIDELINES.
- BASED ON THE THICKNESS OF THE CLAYS ENCOUNTERED IN THE BORINGS, WE ANTICIPATE THE FINAL PAVEMENT SUBGRADE PLASTICITY INDEX VALUE TO BE EITHER LESS THAN OR EQUAL TO 20 OR GREATER THAN 20.
- IF THE SUBGRADE PLASTICITY INDEX VALUES ARE LESS THAN OR EQUAL TO 20, AS PER CITY OF SAN ANTONIO OR BEXAR COUNTY REQUIREMENTS, SUBGRADE STABILIZATION IS NOT NEEDED.
- IF THE FINAL STREET SUBGRADE PLASTICITY INDEX VALUES ARE GREATER THAN 20, THEN THE SUBGRADE SHOULD BE STABILIZED.
 - SUBGRADE SHOULD BE STABILIZED USING LIME OR CEMENT. LIME APPLICATION RATES ARE PRESENTED HERE. PLEASE CONTACT INTEC FOR CEMENT APPLICATION RATES.
 - STABILIZED TO A DEPTH OF 6 OR 8 INCHES USING 7 PERCENT LIME CONTENT.
 - THE SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS HIGHER THAN 3000 PPM, AN ALTERNATE PROCEDURE WILL BE NEEDED.
 - LIME APPLICATION RATE OF 32 LBS PER SQ YARD FOR 6-INCH DEPTH OF STABILIZATION IS RECOMMENDED.
 - LIME APPLICATION RATE OF 43 LBS PER SQ YARD FOR 8-INCH DEPTH OF STABILIZATION IS RECOMMENDED.
 - CEMENT MAY BE USED IN LIEU OF LIME. CEMENT APPLICATION RATE SHOULD BE DETERMINED AT THE TIME OF CONSTRUCTION.

LIME NOTES:

- FOR LIME STABILIZATION CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED ON THE FIELD:
- AFTER INITIAL MIXING THE SOIL-LIME MIXTURE SHALL MELLOW FOR A PERIOD OF TWO TO THREE (2-3) DAYS. MAINTAIN MOISTURE DURING MELLOWING.
 - AFTER MELLOWING AND FINAL MIXING, THE PULVERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE NON-SLAKING AGGREGATES RETAINED ON THE 3/4 INCH SIEVE FROM THE SAMPLE):
 - MINIMUM PASSING 1 1/2" SIEVE 100
 - MINIMUM PASSING 3/4" SIEVE 85
 - MINIMUM PASSING NO. 4 SIEVE 60
 - SAMPLE SOIL-LIME MIXTURE FOR DETERMINATION OF MAXIMUM DRY DENSITY (MDD), IN THE LABORATORY, MOLD SPECIMENS TO 95% OF MDD AT OPTIMUM MOISTURE CONTENT AND VERIFY UCS TO BE AT LEAST 160 PSI IN ACCORDANCE WITH PROCEDURE OUTLINED IN THE BEXAR COUNTY FLEXIBLE PAVEMENT DESIGN CRITERIA GUIDE FOR MIXTURE DESIGN.
 - COMPACT AND CHECK FIELD DENSITY (MINIMUM OF 95% OF MDD REQUIRED).
 - CURE FOR AN ADDITIONAL 2 TO 5 DAYS (TOTAL MELLOWING AND CURING TIME SHOULD TOTAL AT LEAST 5 DAYS).
 - VERIFY DEPTH OF LIME STABILIZED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN +/- 1.0 INCH.



NO.	REVISION	DATE
1	STREET NOTES UPDATED	1/14/26



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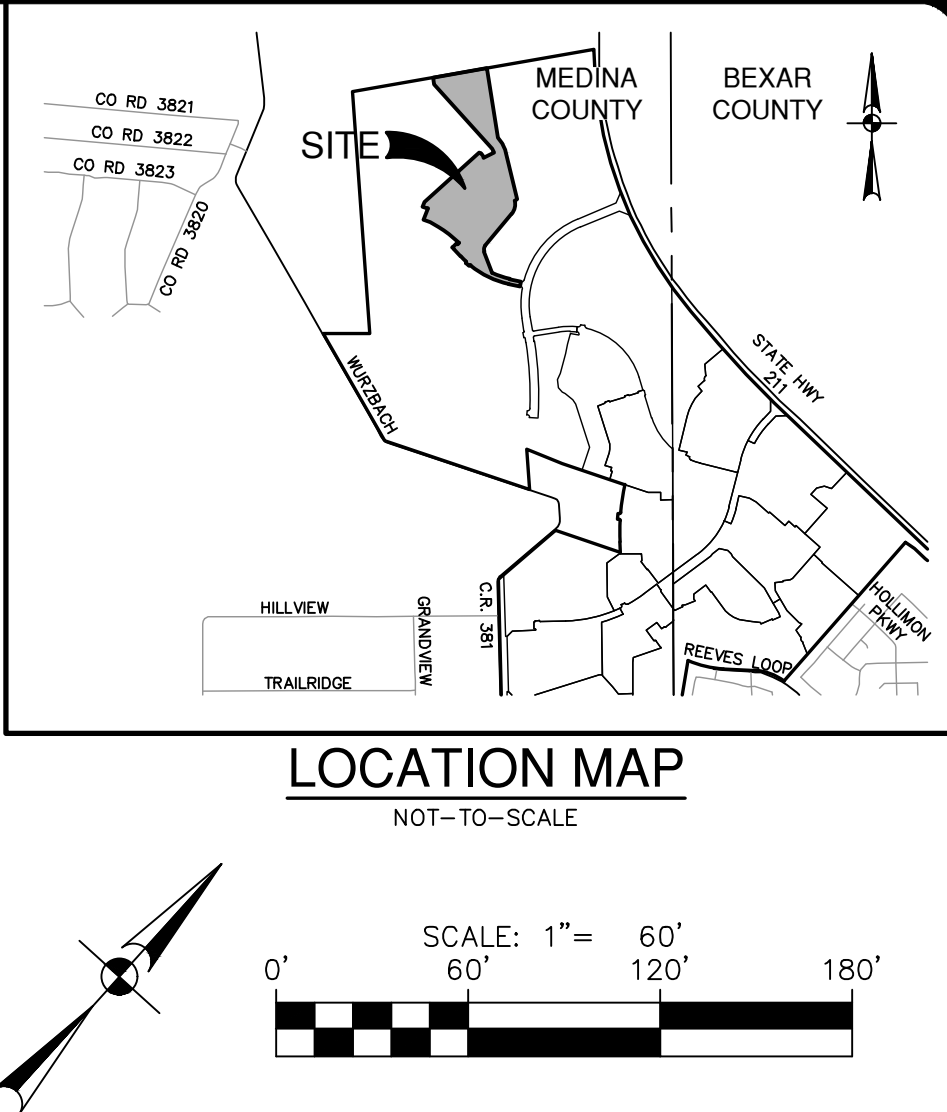
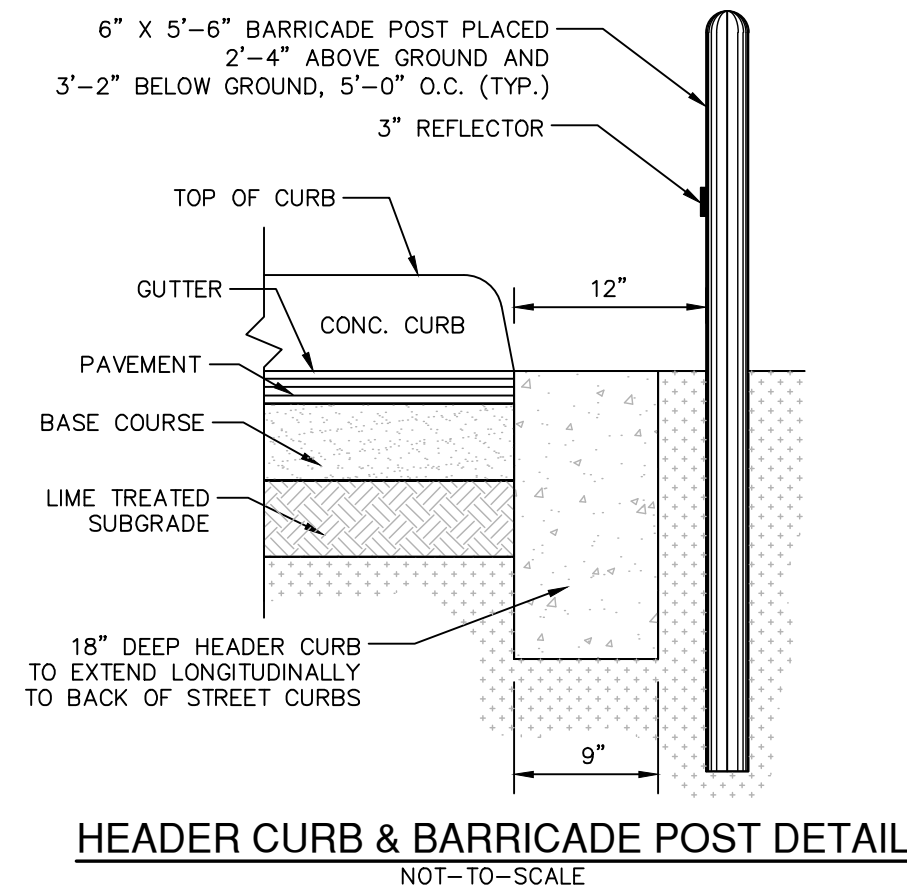
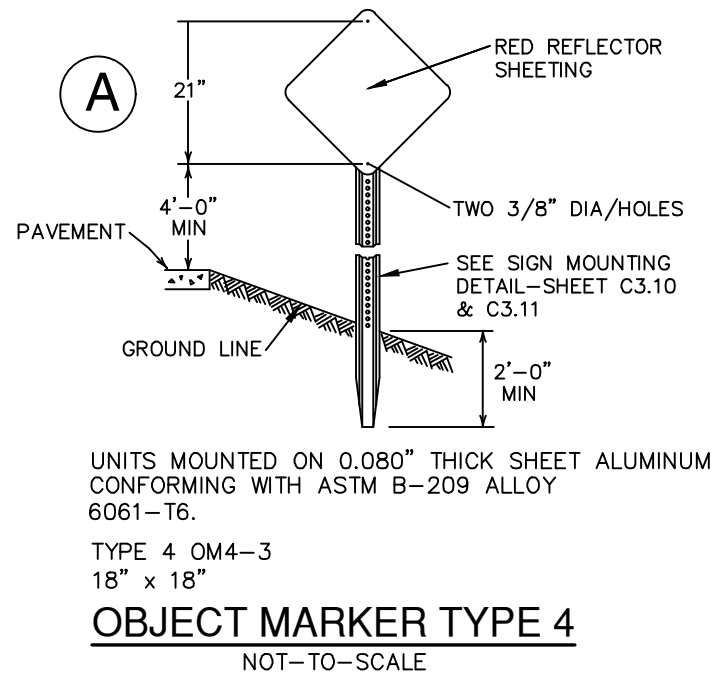
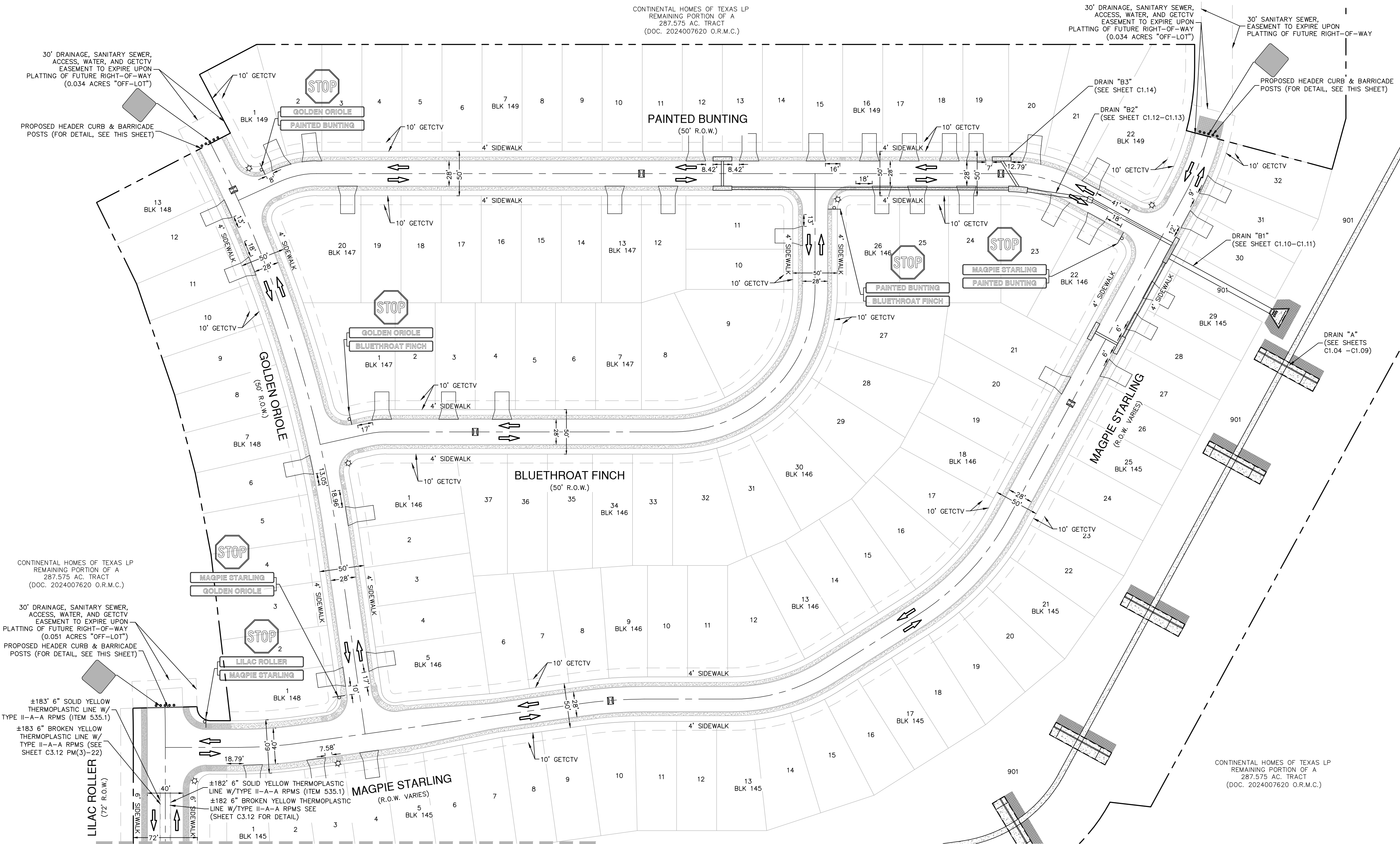
REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS
TYPICAL STREET DETAILS

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	DRAWN GP
SHEET	C2.10

FOR PERMIT

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SYMBOL	ITEM NUMBER
	UNIT BOUNDARY
	CURB INLET
	PROPOSED DRIVEWAY
	TRAFFIC FLOW ARROW
	SIDEWALK (HOMEBUILDER RESPONSIBILITY)
	SIDEWALK (STEWORCK CONTRACTOR/DEVELOPER RESPONSIBILITY)
	STREET SIGN
	R1-1 30"x30"
	TYPE II BLUE RAISED PAVEMENT MARKERS - NO SEPARATE PAY ITEM (N.T.S.)
	OM-3 (531.56) END OF ROAD MARKER
	R2-1 24"x30"

DRIVEWAY NOTE:
DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB, RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.

TRENCH EXCAVATION SAFETY PROTECTION:
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

DATE
1/14/26

NO. REVISION
1 DRIVEWAYS ADJUSTED

1/14/2026

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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

REDBIRD RANCH PHASE 2 UNIT 6M-1

MEDINA COUNTY, TEXAS

OVERALL SIGNAGE PLAN

PLAT NO.
N/A

JOB NO.
30004-39

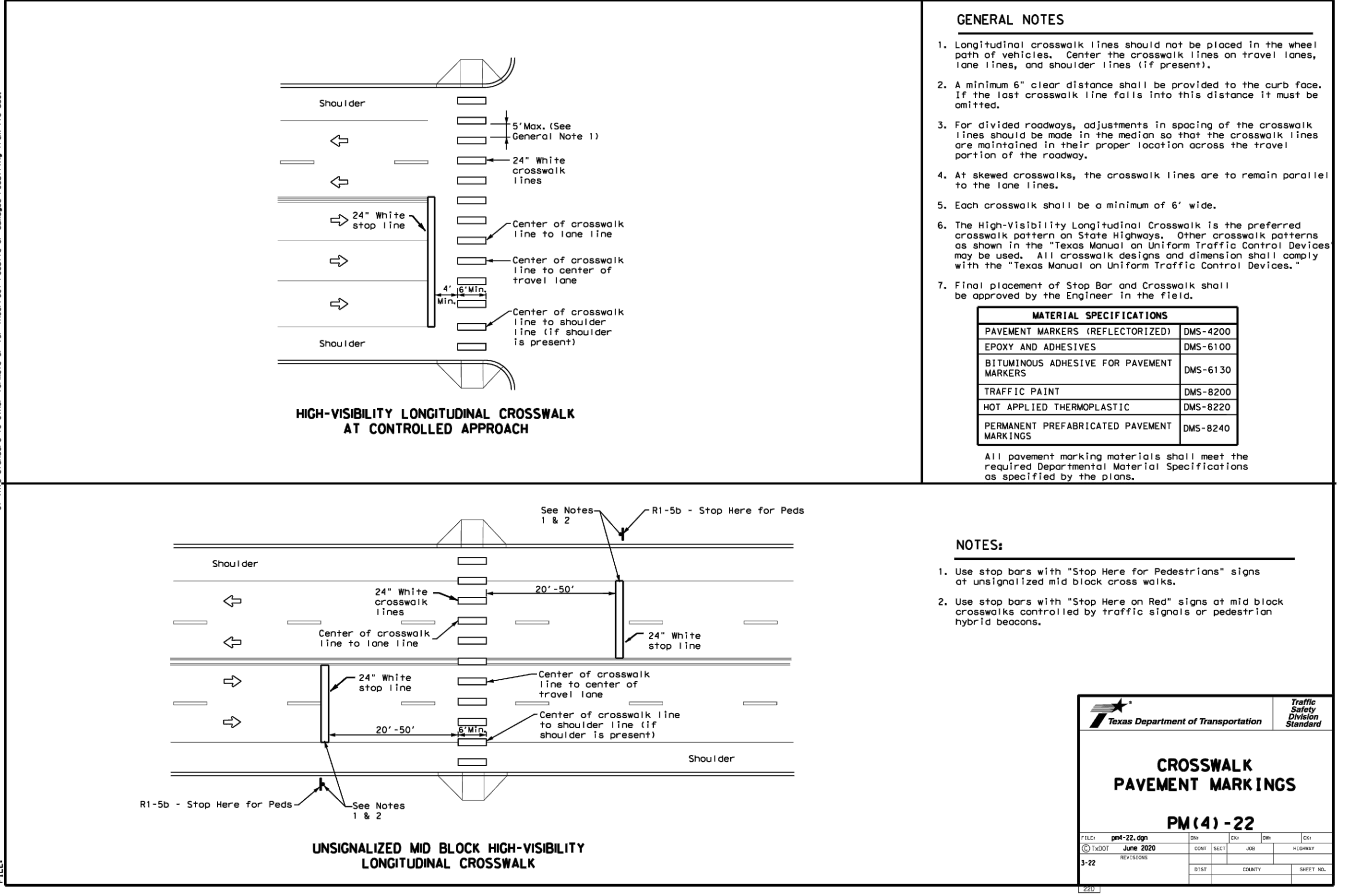
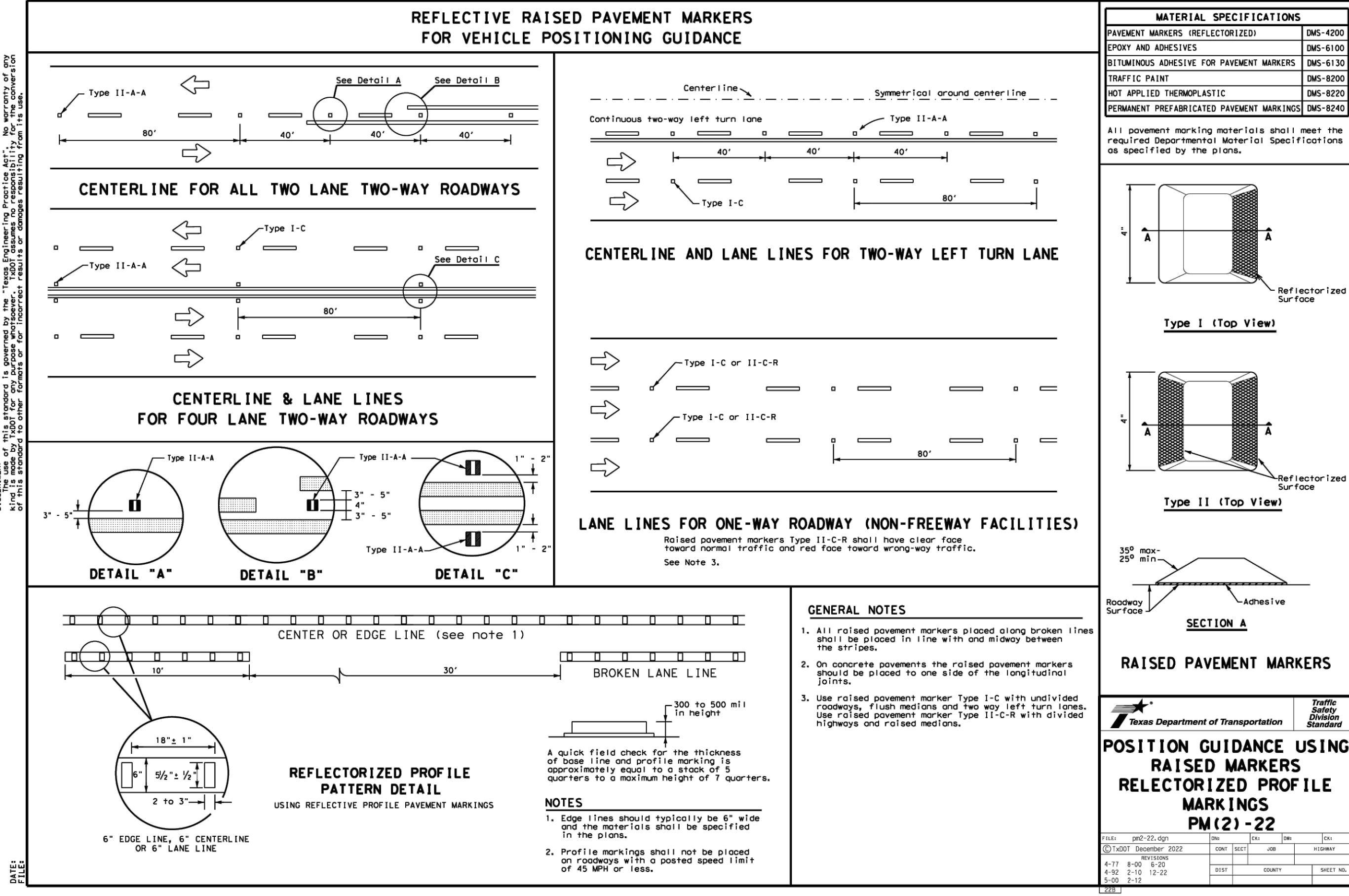
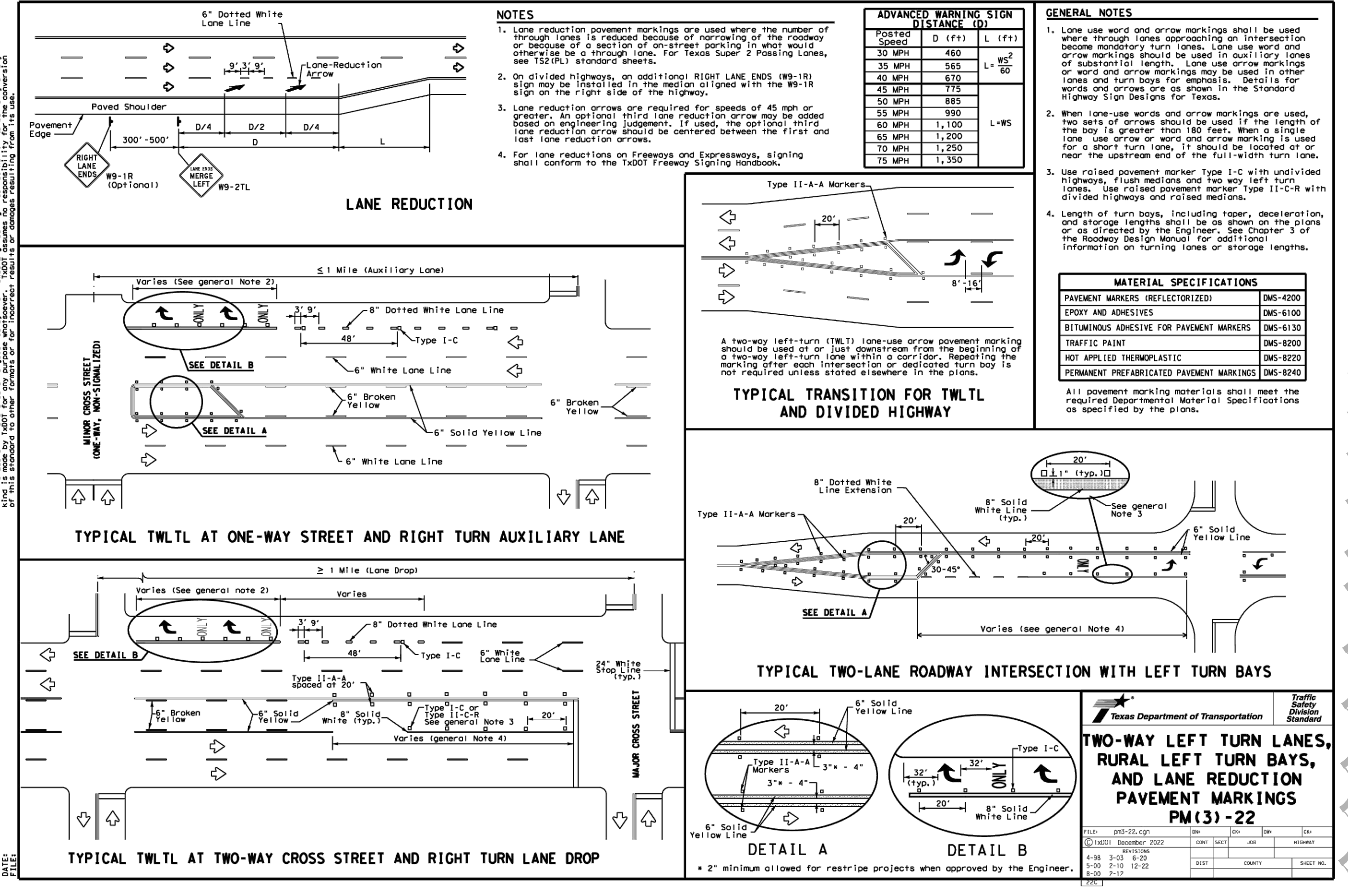
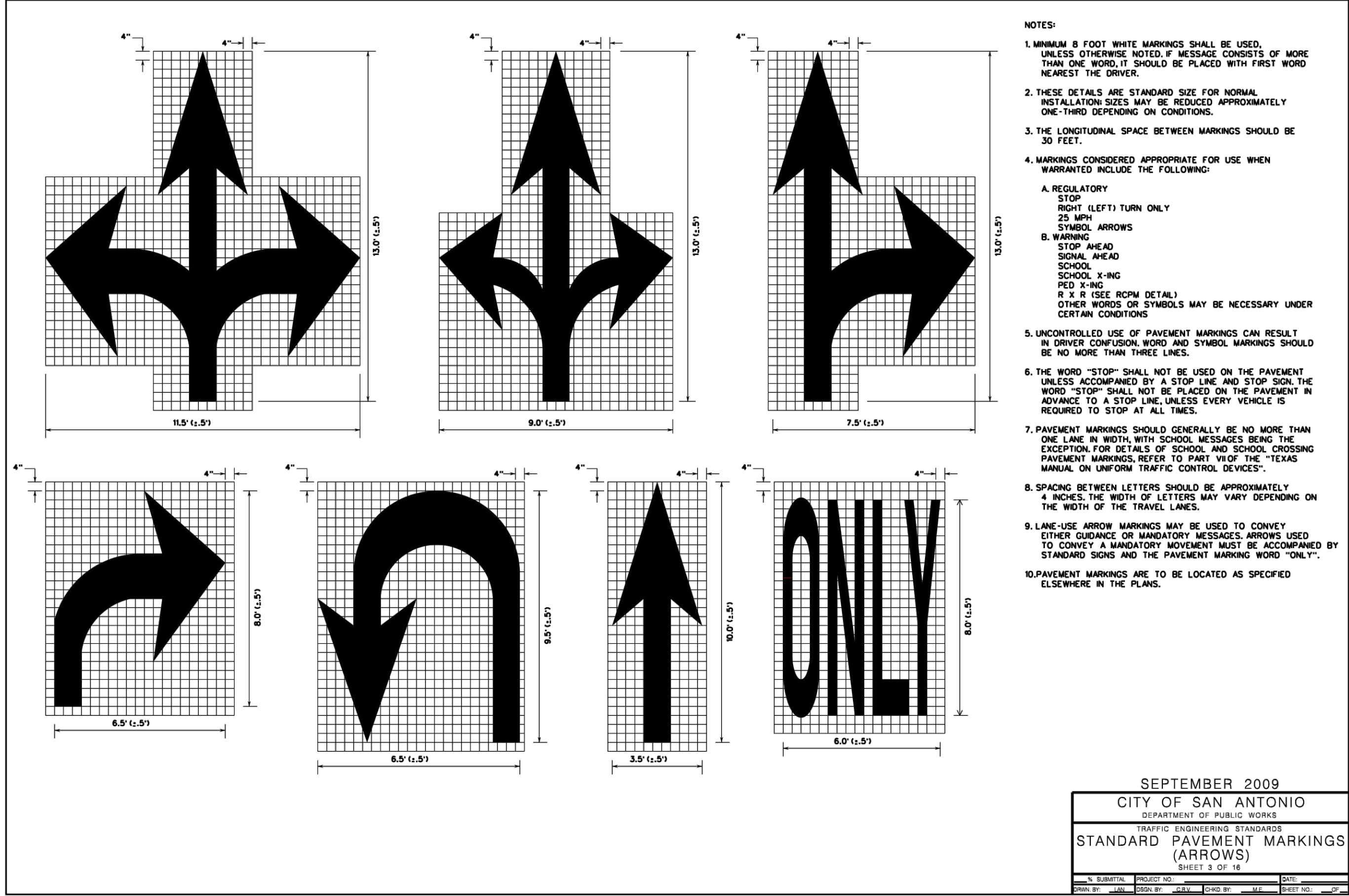
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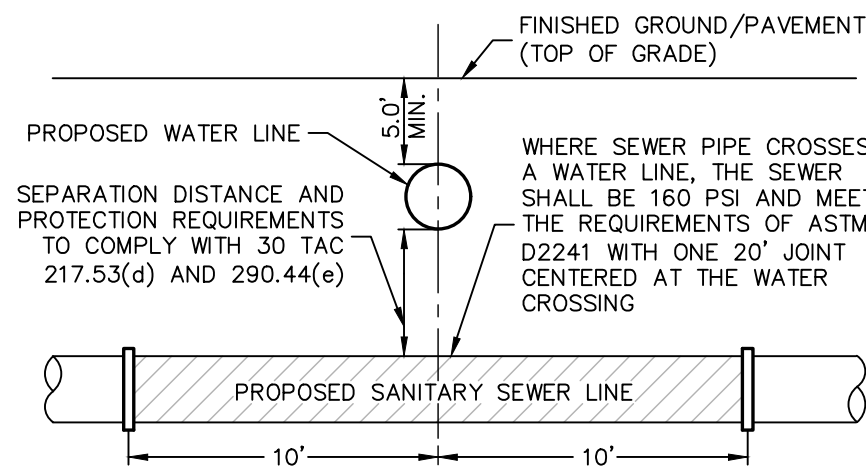
DESIGNER
GC

CHECKED
DRAWN GP

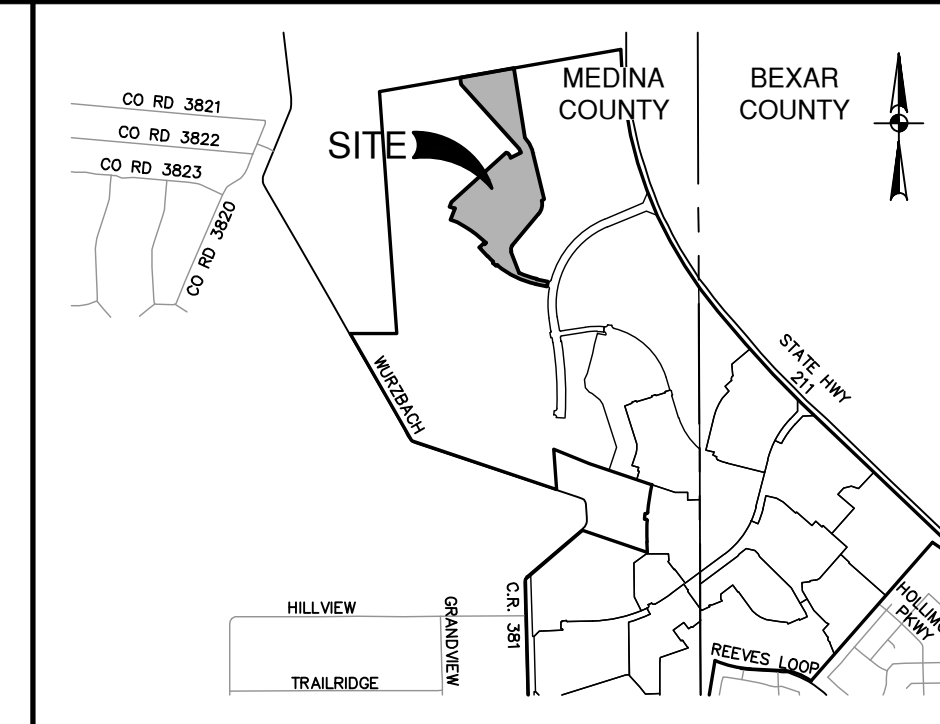
SHEET
C3.00

FOR PERMIT

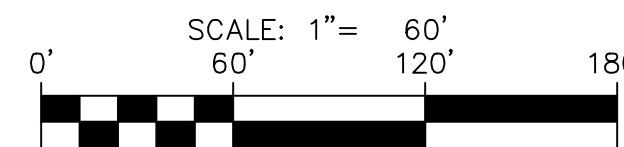




TYPICAL SANITARY
SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE



LOCATION MAP
NOT-TO-SCALE



WATER LEGEND

PROJECT LIMITS	EXISTING WATER	PROPOSED WATER
EXISTING WATER	EXISTING SEWER	PROPOSED SEWER
PROPOSED SEWER	PROPOSED WATER	PROPOSED 3/4" SINGLE SERVICE WITH 5/8" METER
PROPOSED WATER	PROPOSED 1" DUAL SERVICE WITH 5/8" METER	SINGLE IRRIGATION SERVICE (REF. PLAN VIEW FOR SIZE)
JOINT RESTRAINT		

WATER QUANTITIES TABLE

ITEM	UNIT	QUANTITY
8" WATER LINE	LF	3742
12" WATER LINE	LF	1402
3/4" SINGLE SERVICE, SHORT	EA	56
1" SINGLE SERVICE, LONG	EA	68
LUES	EA	124
FIRE HYDRANT	EA	8
TEST STATION	EA	8
IRRIGATION METER	EA	1

- 1 - STANDARD FIRE HYDRANT
1 - 8" X 6" ANCHOR TEE, M.J.
6" D.I. PIPE, CUT AS REQ'D
1 - 6" 1/4 ANCHOR BEND, M.J.
1 - 6" GATE VALVE, M.J.
1 - 6" VALVE BOX, COMPLETE
(SEE YANCEY DETAIL W-20, SHEET C4.10)
TEST STATION
- 1 - 2 1/2" FLUSH VALVE (SEE YANCEY DETAIL W-32, SHEET C4.10)
1 - 8" GATE VALVE, M.J.
1 - 6" VALVE BOX, COMPLETE

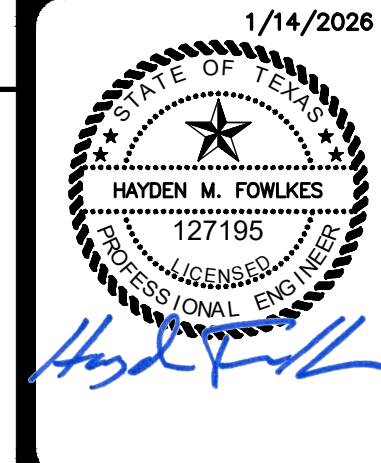
JOINT RESTRAINT NOTE:

CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN. CONTRACTOR SHALL INSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5' FT OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING. JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY SAWS APPROVED PROGRAMS. THERE WILL BE NO SEPARATE PAY ITEM FOR RETAINER GLANDS AND OTHER JOINT RESTRAINING HARNESSES AND GASKETS, BUT SHALL BE SUBSIDIARY TO THE UNIT COST PER LINEAL FOOT OF PIPE INSTALLED.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

NO.	REVISION	DATE
1	ADDED AND REVISED WATER METER LOCATIONS, REMOVED GATE VALVE	1/14/26



PAPE-DAWSON

1677 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78132 | 830.632.5533
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

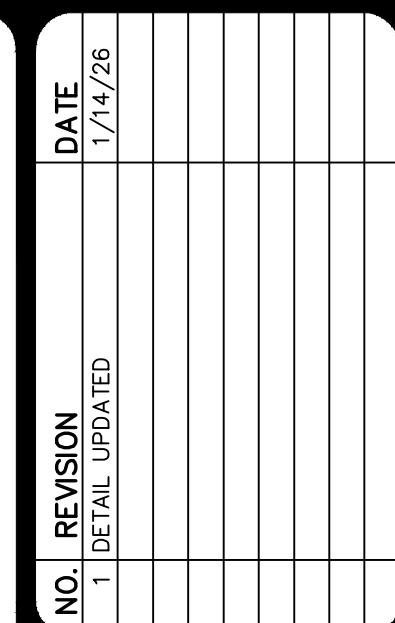
REDBIRD RANCH PHASE 2 UNIT 6M-1

MEDINA COUNTY, TEXAS


OVERALL WATER DISTRIBUTION PLAN

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	DRAWN AG
SHEET	C4.00

FOR PERMIT



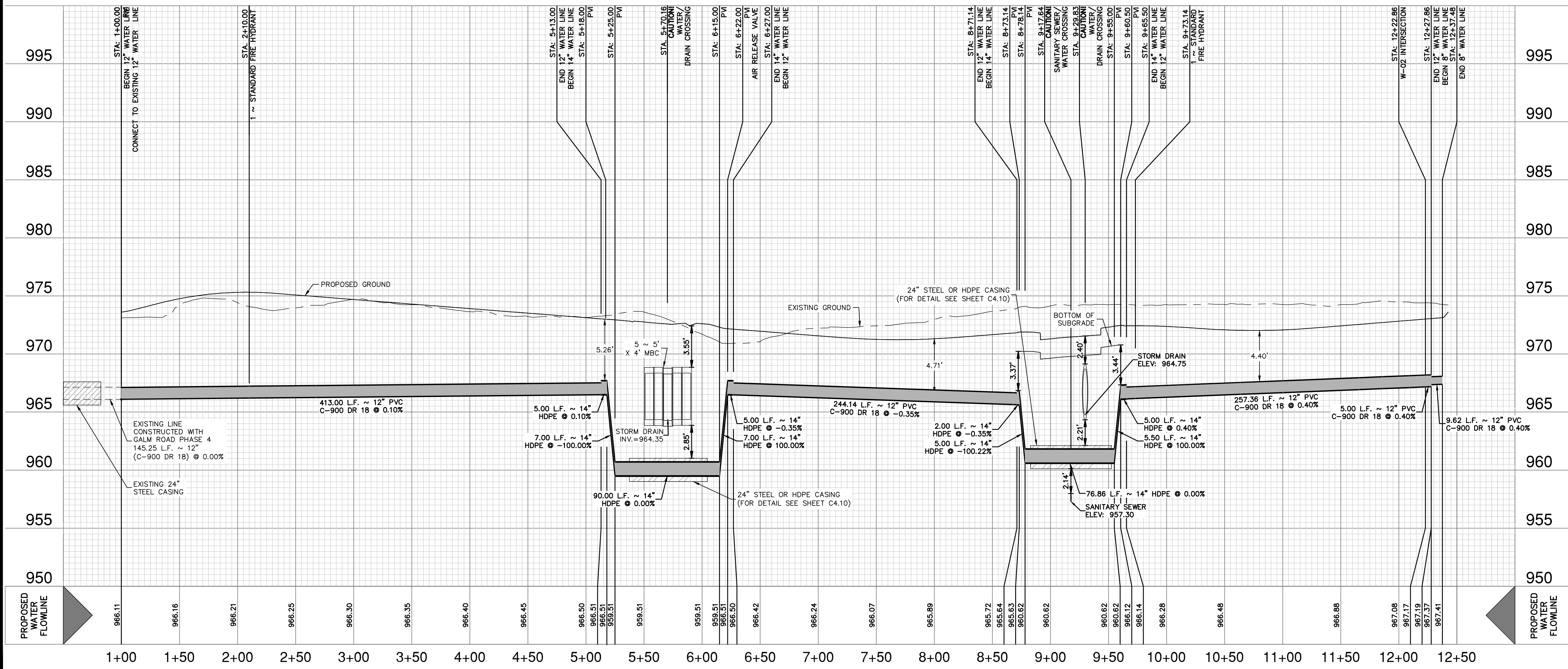
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEES OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANTS. IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT THE CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEM, PROGRAMS, AND PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS, AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION, EMPLOYMENT OF SAFETY PERSONNEL, AND PROCEDURES FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ALL TRENCH EXCAVATION WORK AND SHALL MONITOR THE PROGRESS OF ALL TRENCH ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

PLAT NO. N/A
JOB NO. 30004-39
DATE NOVEMBER 2025
DESIGNER GC
CHECKED  DRAWN AG
SHEET **C4.01**

FOR PERMIT

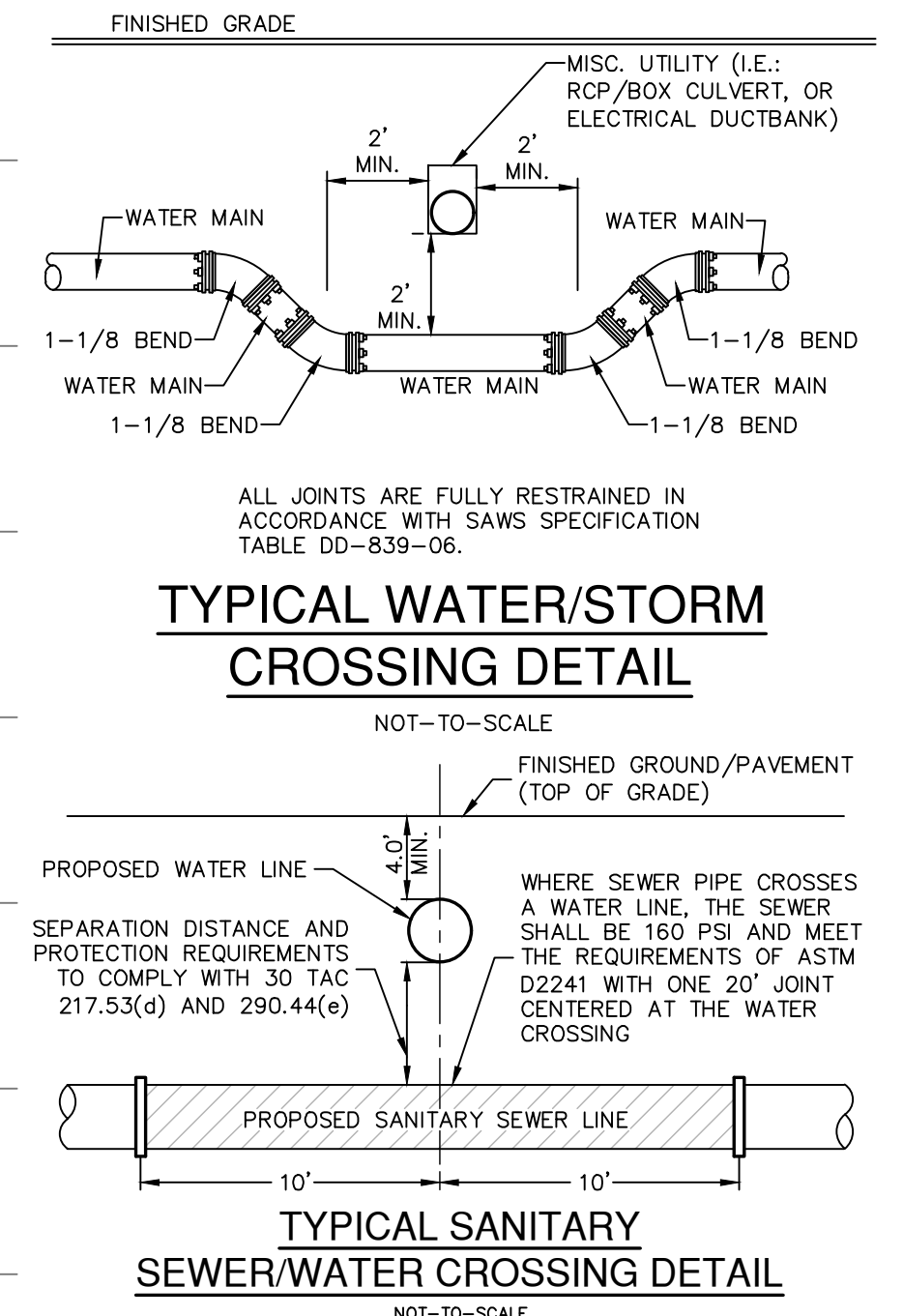
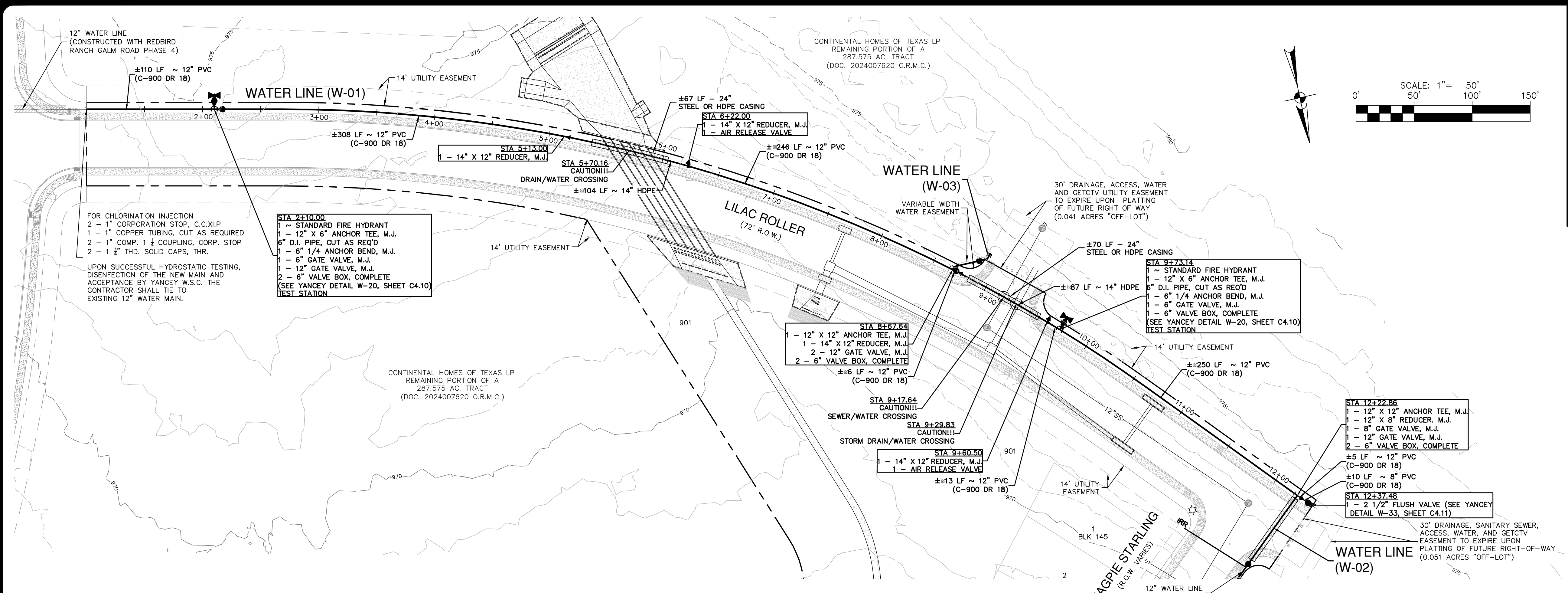
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12 INCH WATER MAIN "W-01"
STA 1+00.00 TO 12+37.48

VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'



TYPICAL WATER/STORM CROSSING DETAIL

NOT-TO-SCALE

FINISHED GROUND/PAVEMENT (TOP OF GRADE)

PROPOSED WATER LINE

SEPARATION DISTANCE AND PROTECTION REQUIREMENTS TO COMPLY WITH 30 TAC 217.53(d) AND 290.44(e)

WHERE SEWER PIPE CROSSES A WATER LINE, THE SEWER SHALL BE 160 PSI AND MEET THE REQUIREMENTS OF ASTM D2241 WITH ONE 20" JOINT CENTERED AT THE WATER CROSSING

TYPICAL SANITARY SEWER/WATER CROSSING DETAIL

NOT-TO-SCALE

FINISHED GROUND/PAVEMENT (TOP OF GRADE)

PROPOSED SANITARY SEWER LINE

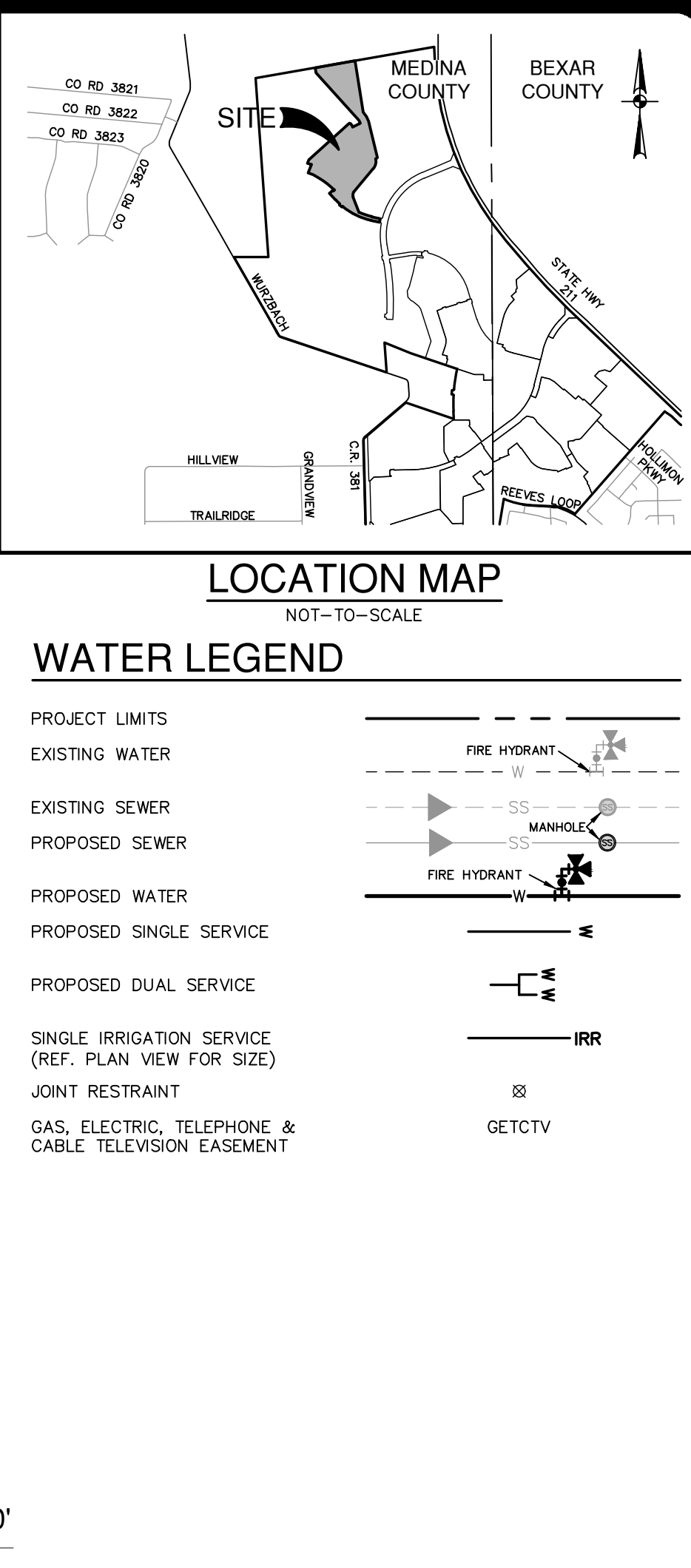
SEPARATION DISTANCE AND PROTECTION REQUIREMENTS TO COMPLY WITH 30 TAC 217.53(d) AND 290.44(e)

JOINT RESTRAINT NOTE:

CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOOK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN. CONTRACTOR SHALL INSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5 FT OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING. JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY SAWS APPROVED PROGRAMS. THERE WILL BE NO SEPARATE PAY ITEM FOR RETAINER GLANDS AND OTHER JOINT RESTRAINING HARNESSES AND GASKETS, BUT SHALL BE SUBSIDIARY TO THE UNIT COST PER LINEAL FOOT OF PIPE INSTALLED.

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NO.	REVISION	DATE
1	WATER LINE PROFILE UPDATED	1/14/26

1/14/2026

HAYDEN M. FOWLER
127195
PROFESSIONAL ENGINEER
TEXAS

PAPE-DAWSON
1677 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78132 | 830.632.5633
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS

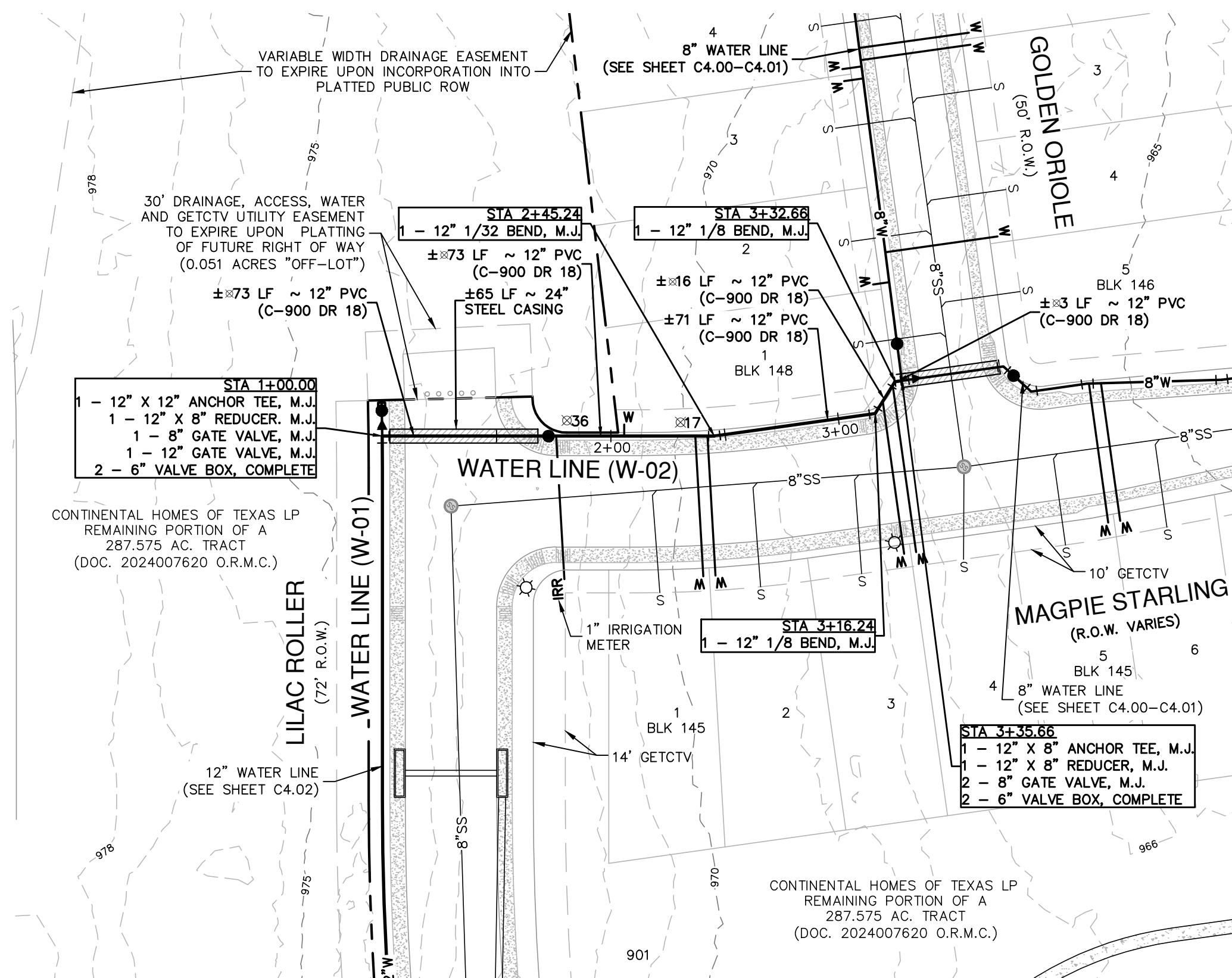
12 INCH WATER MAIN W-01
STA 1+00.00 TO 12+37.48

PLAT NO. N/A
JOB NO. 30004-39
DATE NOVEMBER 2025
DESIGNER GC
CHECKED DRAWN AA
SHEET C4.02

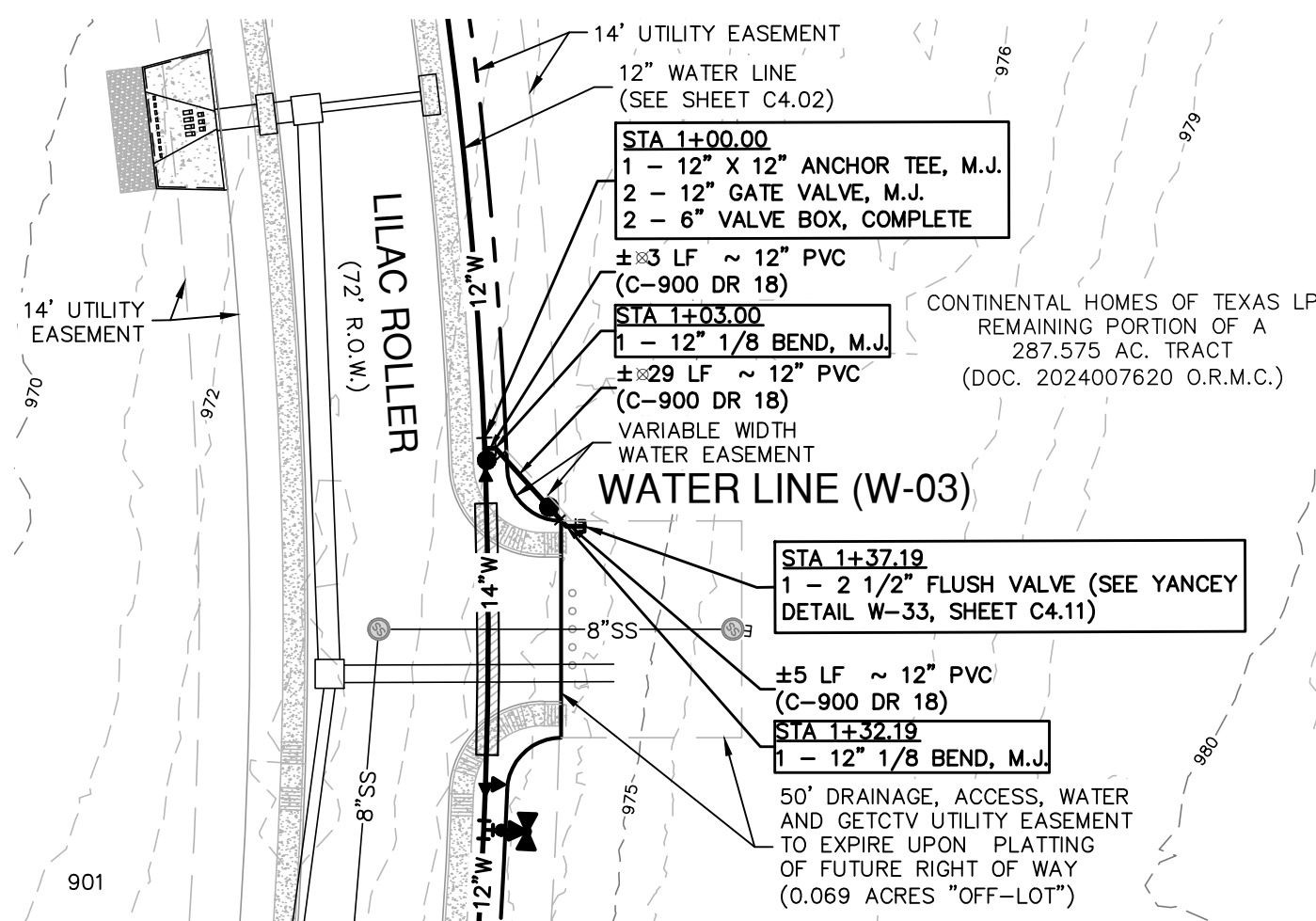
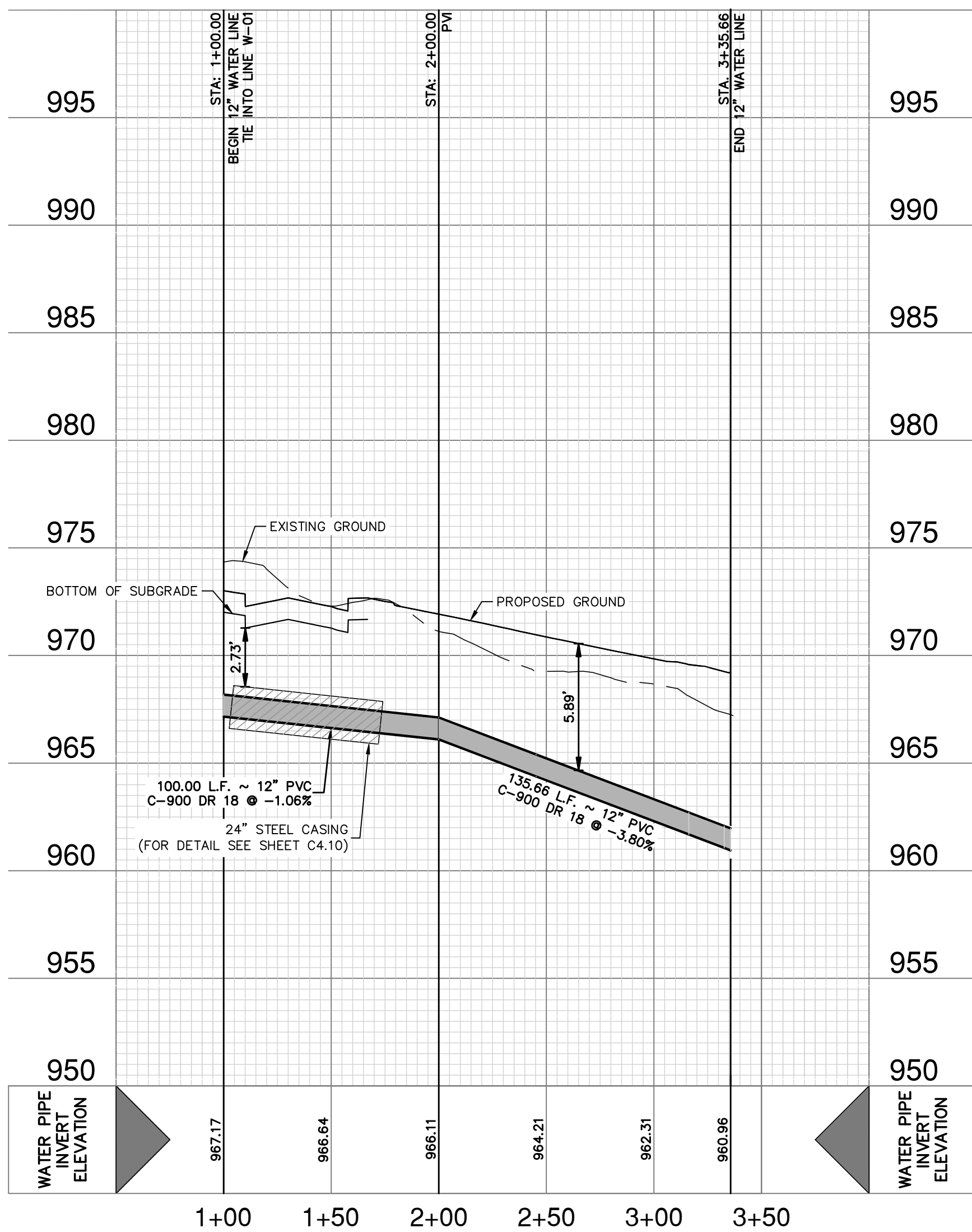
FOR PERMIT

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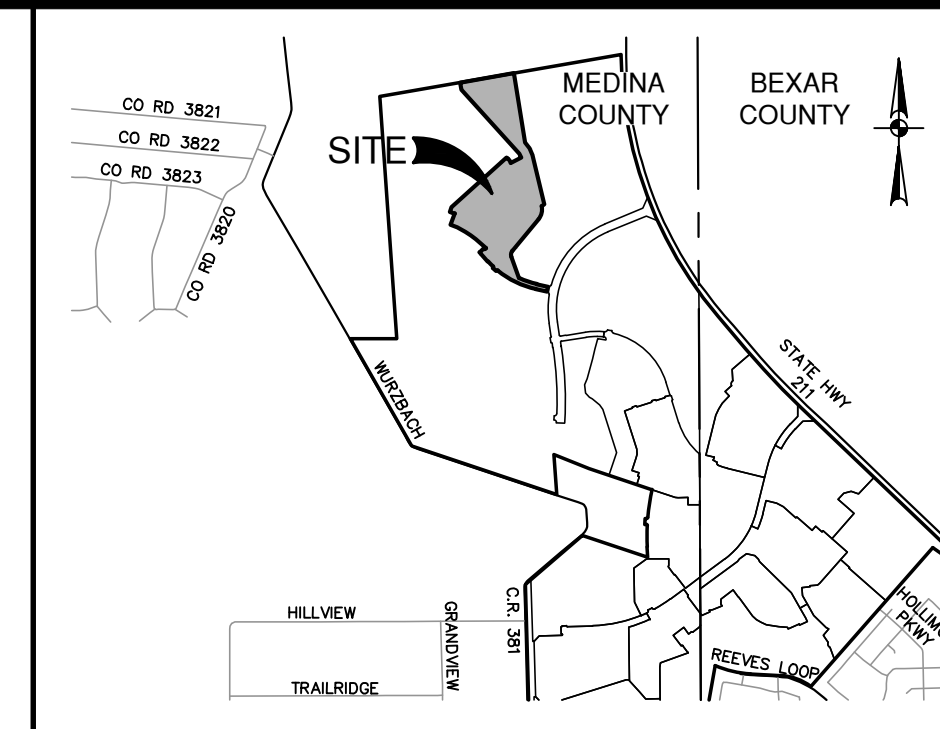
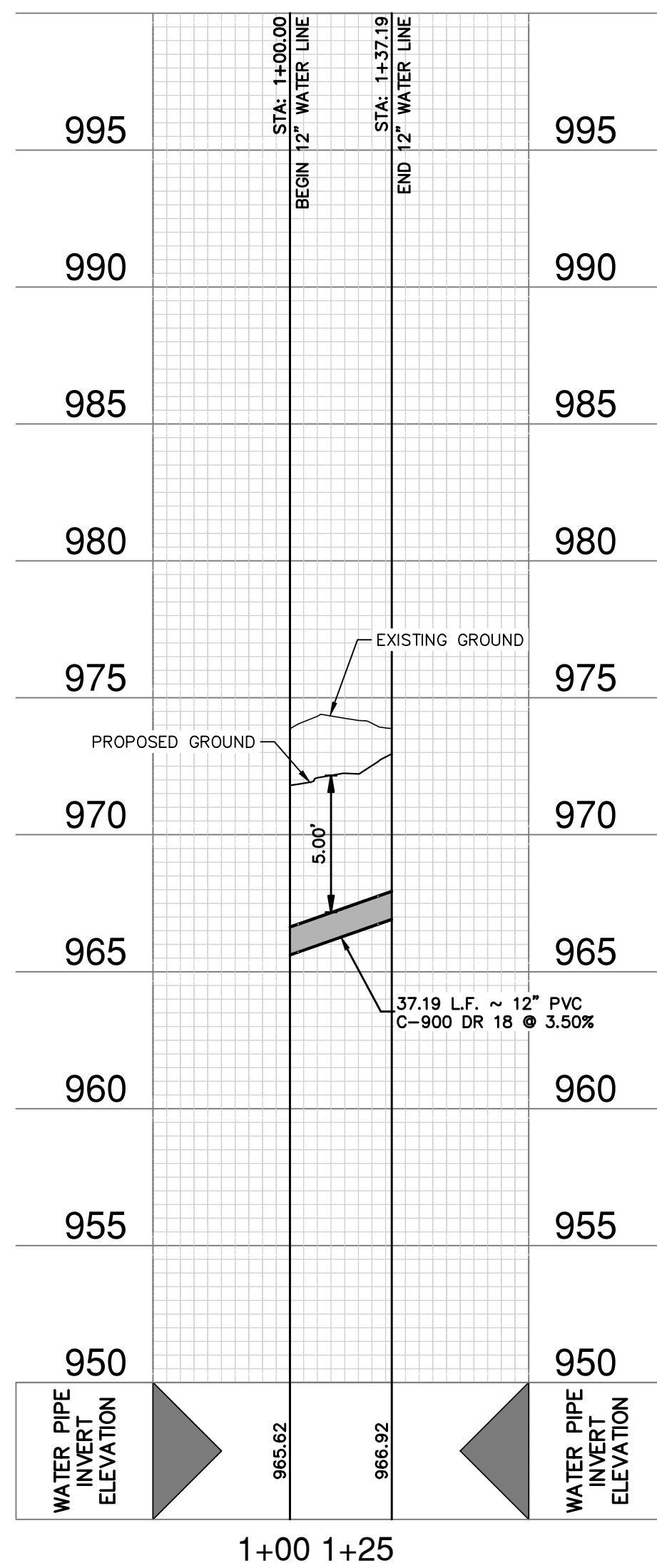
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12 INCH WATER MAIN "W-02"
STA 1+00.00 TO 3+35.66
VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'



12 INCH WATER MAIN "W-03"
STA 1+00.00 TO 1+37.19
VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'

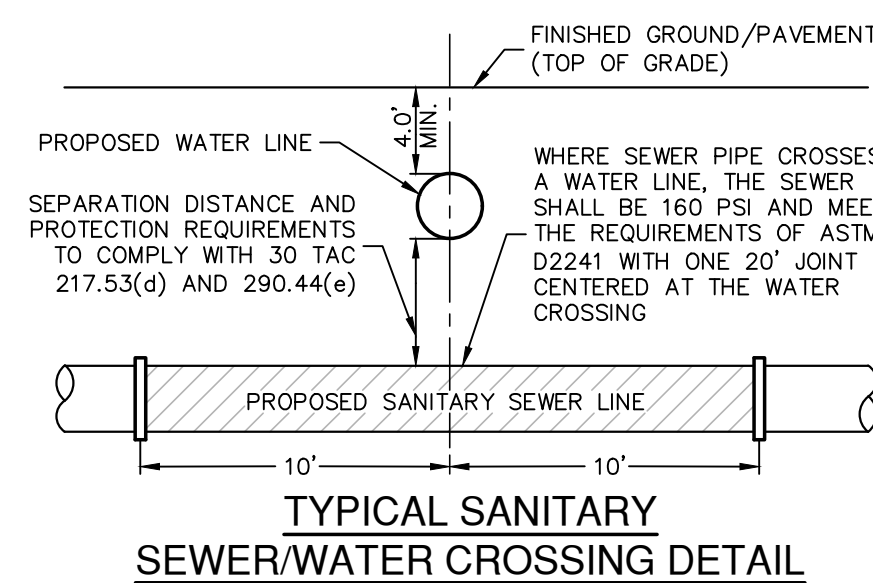
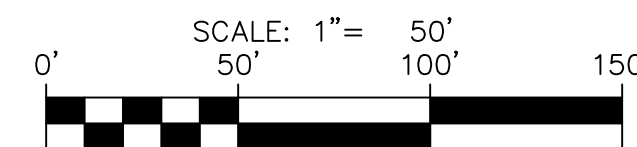


LOCATION MAP

NOT-TO-SCALE

WATER LEGEND

PROJECT LIMITS	
PROPOSED SEWER	
PROPOSED WATER	
PROPOSED SINGLE SERVICE	
PROPOSED DUAL SERVICE	
SINGLE IRRIGATION SERVICE (REF. PLAN VIEW FOR SIZE)	
JOINT RESTRAINT	
GAS, ELECTRIC, TELEPHONE & CABLE TELEVISION EASEMENT	
GETCTV	



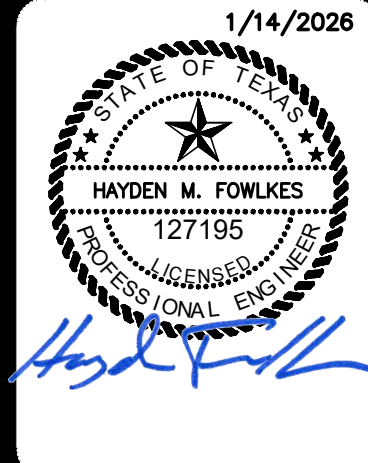
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NO.	REVISION	DATE
1	SPOT ELEVATIONS UPDATED	1/14/26



PAPE-DAWSON

1677 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78132 | 830.632.5633
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

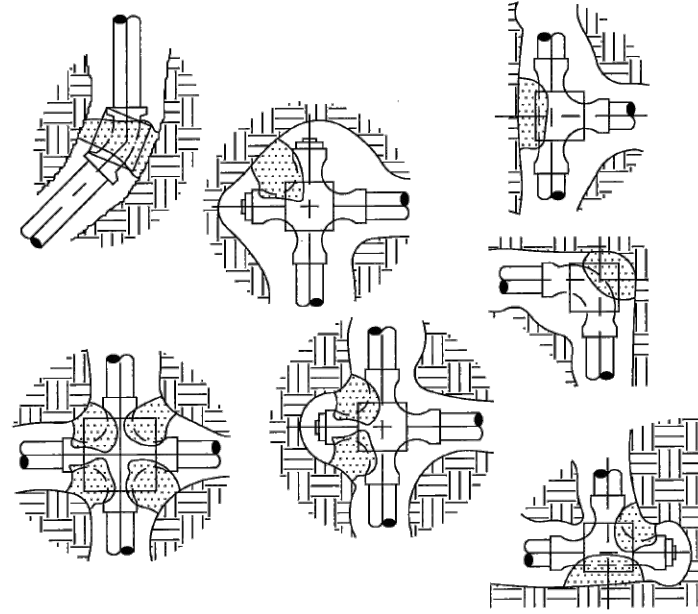
REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS

12 INCH MAIN W-02 & W-03

STA 1+00.00 TO 3+35.66 & STA 1+00.00 TO 1+37.19

PLAT NO.	N/A
JOB NO.	30004-39
DATE	NOVEMBER 2025
DESIGNER	GC
CHECKED	DRAWN AA
SHEET	C4.03

FOR PERMIT



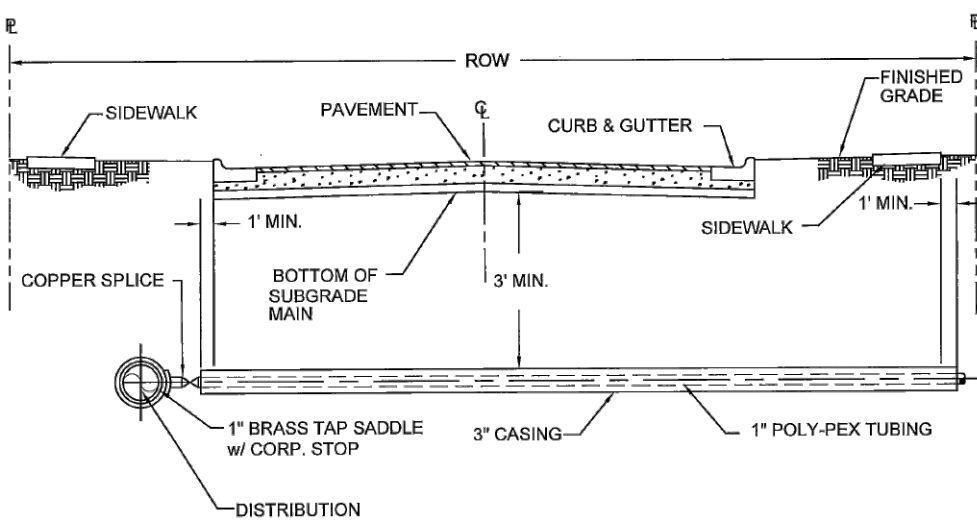
- NOTES**
1. THE EARTH BEARING SURFACE SHALL BE THE UNDISTURBED TRENCH WALL.
 2. ALL PIPE JOINTS SHALL BE KEPT FREE FROM CONCRETE.
 3. ALL THRUST BLOCKS SHALL CONTAIN A MINIMUM OF 1 1/2 CUBIC YARDS OF CONCRETE.
 4. CONCRETE SHALL BE 2000 p.s.i. AT 28 DAYS MINIMUM.
 5. ALL FITTINGS AND FITTING JOINTS MUST BE WRAPPED W/ THREE LAYERS OF 8-MIL. POLYETHYLENE IN ACCORDANCE WITH AWWA C105.
 6. 12"x12"x4" THICK CONCRETE BLOCKS SHALL BE INSTALLED DIRECTLY UNDER ALL VALVES, FITTINGS, ETC.

THRUST BLOCK ANCHORING DETAIL
SCALE: NONE REV. DATE: 2005
DWG. W-10
YANCEY W.S.C.
MEDINA COUNTY,
TEXAS

1. All fittings 4" and larger must be installed with Mega Lug.
2. The valve on a hot tap must be anchored to the hot tap saddle.
3. All ductile iron fittings, valves, etc. must have a stable foundation of concrete blocking.
4. The YWSC Construction Inspector is to inspect all construction material prior to installation. The Contractor should coordinate with Inspector on construction material shipments.
5. Typically, no valves may be installed under roadways, driveways or concrete.
6. The YWSC Construction Inspector must be present prior to and during disinfection and pressure testing.
7. Typically, no ductile iron fittings or valves shall be installed under a public roadway or concrete.
8. The YWSC Construction Inspector must be present prior to and during disinfection and pressure testing.
9. The Owner will provide water for pressure testing and disinfection testing at currently established rates. Water for other construction purposes may or may not be available. The Contractor shall coordinate with the YWSC Construction Inspector to make all arrangements for water.
10. All valve housings and meter boxes must be installed 3'-5" above finished grade for approval. Any valve housings or meter boxes installed at or below grade will not be accepted.
11. All water distribution and transmission main fittings must be ductile iron.
12. All bolts on Mechanical Joint fittings and/or Mega-Lugs must be wrapped in plastic prior to concrete being poured.
13. Adequate chlorine residuals must be recorded 24 hours before bacteriological samples may be taken.
14. Any contractor taking Yancey water for construction purposes prior to the water mains being disinfected must have an air gap at the entry point on the truck or bedflow preventor at the bottom of tanker.
15. All required water samples must be taken by the Contractor.
16. After final acceptance, by Yancey, of the water system improvements, Yancey will be provided a one-year warranty by the Contractor.
17. Upon final acceptance, by Yancey, of the water system improvements, the improvements will become sole property of Yancey.
18. Water and Wastewater services need maintain a minimum of 12" vertical separation, preferably 24".
19. All inline valves over 12" nominal size shall be butterfly valves rather than gate valves.
20. Yancey W.S.I. Construction Inspector has full responsibility of reviewing contractor's work, materials, etc. Failure to comply with YWSC specifications will result in rejection of the work & delay of service until compliance is met.
21. All water lines 2" and smaller shall be ASTM D2241, SDR 21 unless otherwise approved. All water lines 4" and larger shall be AWWA C900 DR 15.
22. All encasement material for water distribution or transmission mains shall be steel.
23. Any exceptions to this requirement must be granted by YWSC Management.
24. Minimum and Maximum cover over water lines is 4.0 feet.
25. 24" 12" gate valves shall be Mueller Company A-280 Series Resilient Wedge MJ ends. 16" and larger butterfly valves shall be Mueller.
26. Fire hydrants shall be Mueller Company Cast Iron 250, A-423.
27. Contractor to pressure test water lines at 200 psi for first 15 minutes and 150 psi for the remaining 3 hours and 45 minutes. Yancey uses 10% of AWWA water loss during pressure test.
28. Test Station shall be "Copperhead Street" (1" by Duty Adjustable Box Type)
29. Each fitting requires a minimum of two (2) joint ball joint harness contains each way, where possible.
30. All fittings require Mechanical Joint Restraints and Concrete Thrust Blocking.
31. Foster Adapters are required between all fittings.
32. Valve stem (stem) valve extensions are required on all valves and the extension nut shall be installed within 2" of finished grade.
33. Contractor shall install tracer wire (4" AWG) in all trenches, including all meter services, terminating inside the meter box.
34. All water service line shall be Mueller (FORD) by Rahr.
35. Casing weld joints must meet the American Welding Society (AWS) standards.

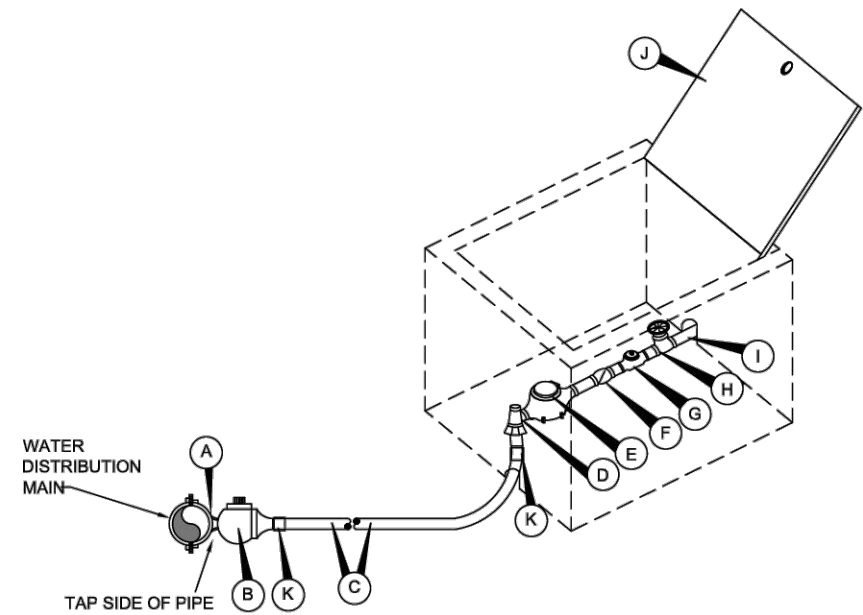
GENERAL CONSTRUCTION NOTES
SCALE: NONE REV. DATE: 04/19
DWG. W-1
YANCEY W.S.C.
MEDINA COUNTY,
TEXAS

NOTE:
UNLESS OTHERWISE REQUIRED BY THE
ROADWAY AUTHORITY, CASING PIPE
SHALL BE SCH 40 PVC.



**SERVICE LINE
BORING & ENCASEMENT DETAILS-URBAN**

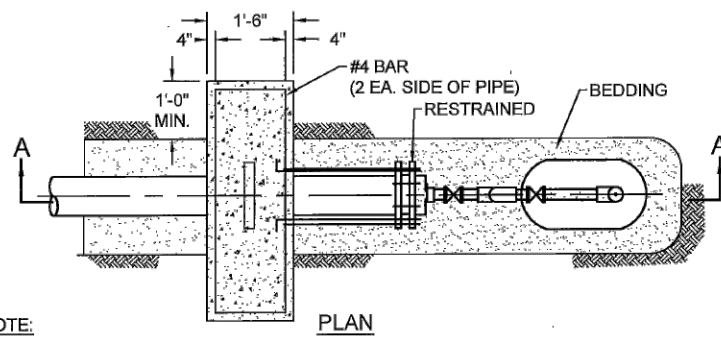
METER SERVICE DETAIL
SCALE: NONE REV. DATE: 09/15
DWG. W-6
YANCEY W.S.C.
MEDINA COUNTY,
TEXAS



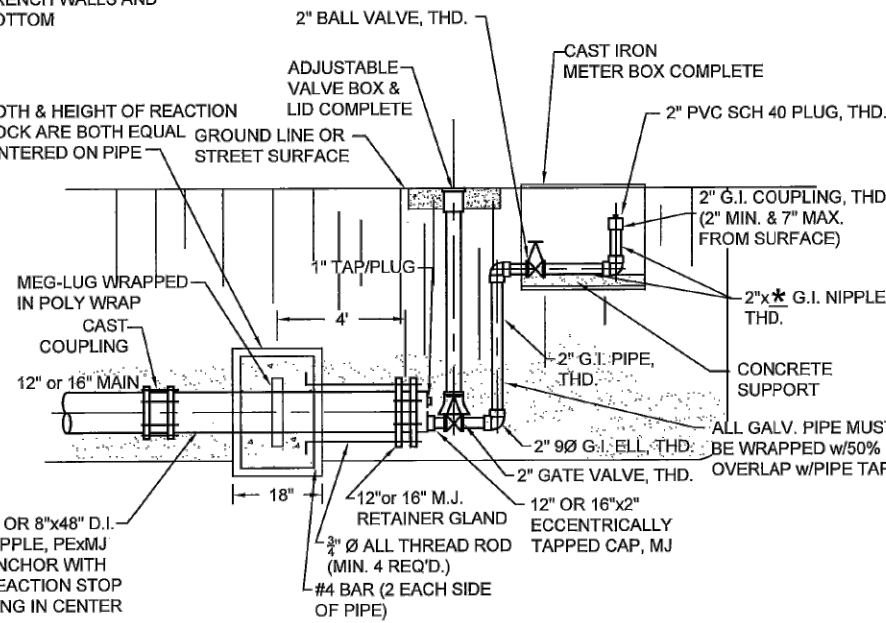
MATERIAL LIST

- | | | |
|---|---|--|
| A. BRASS SADDLE
ON LINES 4" <
1" SADDLE - FORD 30285
1" SADDLE - FORD 30285
ON LINES 6" TO 12"
1" SADDLE - FORD 30285
1" SADDLE - FORD 30285
ON LINES 14" <
1" SADDLE - FORD 30285
1" SADDLE - FORD 30285
1" SADDLE - FORD 30285 | E. WATER METER
(WILL BE PROVIDED BY YANCEY)
F. TURN PRESSURE REDUCING VALVE
(WILL BE PROVIDED BY YANCEY)
G. REGULATOR
(WILL BE PROVIDED BY YANCEY)
H. BALL VALVE CURB, NON-RISING STEM, MALE I.P.T. BY FEMALE I.P.T.
1" - FORD
2" - FORD
(WILL BE PROVIDED BY YANCEY)
I. CUSTOMER SERVICE LINE MEETING PLUMBING CODE REQUIREMENTS
(WILL BE PROVIDED BY CUSTOMER)
J. PLASTIC METER BOX W/ID MULLER
SECOND METER BOX MAY BE REQUIRED FOR 2" DIA. CHECK VALVE | K. STAINLESS STEEL INSERT
1" - FORD 82
1" - FORD 84
2" - FORD 84 |
|---|---|--|

1"-2" COMMERCIAL METER SERVICE DETAIL
SCALE: NONE REV. DATE: 03/20
DWG. W-34
YANCEY W.S.C.
MEDINA COUNTY,
TEXAS



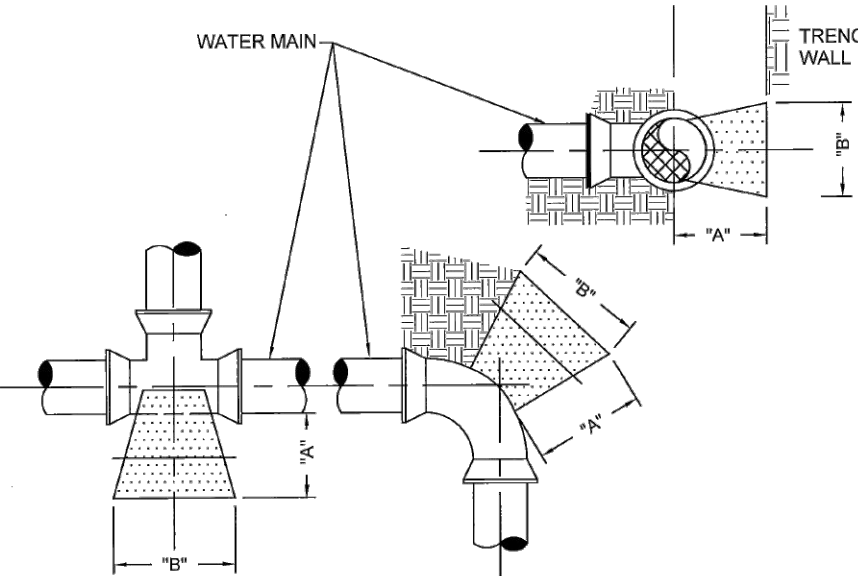
NOTE:
BLOCK TO EXTEND MIN. 12" INTO UNDISTURBED SOIL IN TRENCH WALLS AND BOTTOM



2" PERMANENT BLOW-OFF ASSEMBLY ON 12" & 16" MAINS
SCALE: NONE REV. DATE: 04/19
DWG. W-33
YANCEY W.S.C.
MEDINA COUNTY,
TEXAS

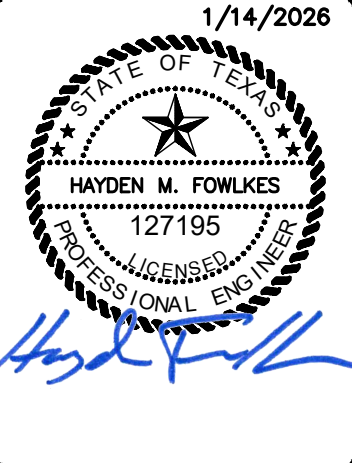
PIPE SIZE	DIMENSION "B" (SQUARE)					
	PLUGS	STEELES	BENDS	BENDS	22 1/2"	VALVES
4" & 6"	1'-3"	1'-2"	1'-0"	9"	1'-3"	1'-3"
8"	1'-9"	2'-0"	1'-6"	1'-0"	1'-6"	1'-6"
10"	2'-0"	2'-0"	1'-9"	1'-3"	2'-0"	2'-0"
12"	2'-6"	3'-0"	2'-3"	1'-6"	2'-3"	2'-3"
16"	3'-3"	4'-0"	2'-9"	2'-0"	2'-9"	2'-9"

DIMENSION "A" SHALL BE A MINIMUM OF 1'-0" BUT IS TO BE INCREASED WHERE NECESSARY TO PROVIDE BEARING AGAINST UNDISTURBED TRENCH WALL.



THRUST BLOCK DIMENSIONING DETAIL
SCALE: NONE REV. DATE: 2005
DWG. W-8
YANCEY W.S.C.
MEDINA COUNTY,
TEXAS

DATE	
NO.	
REVISION	



PAPE-DAWSON
1677 INDEPENDENCE DR. STE 102 | NEW BRAUNFELS, TX 78132 | 830.632.5633
TEXAS SURVEYING FIRM #470 | TEXAS ENGINEERING FIRM #470

REDBIRD RANCH PHASE 2 UNIT 6M-1
MEDINA COUNTY, TEXAS
OVERALL WATER DISTRIBUTION DETAILS

PLAT NO. N/A
JOB NO. 30004-39
DATE NOVEMBER 2025
DESIGNER GC
CHECKED DRAWN GP
SHEET C4.11

FOR PERMIT