



BLADERUNNER FARMS DRIVEWAY PERMIT PACKAGE

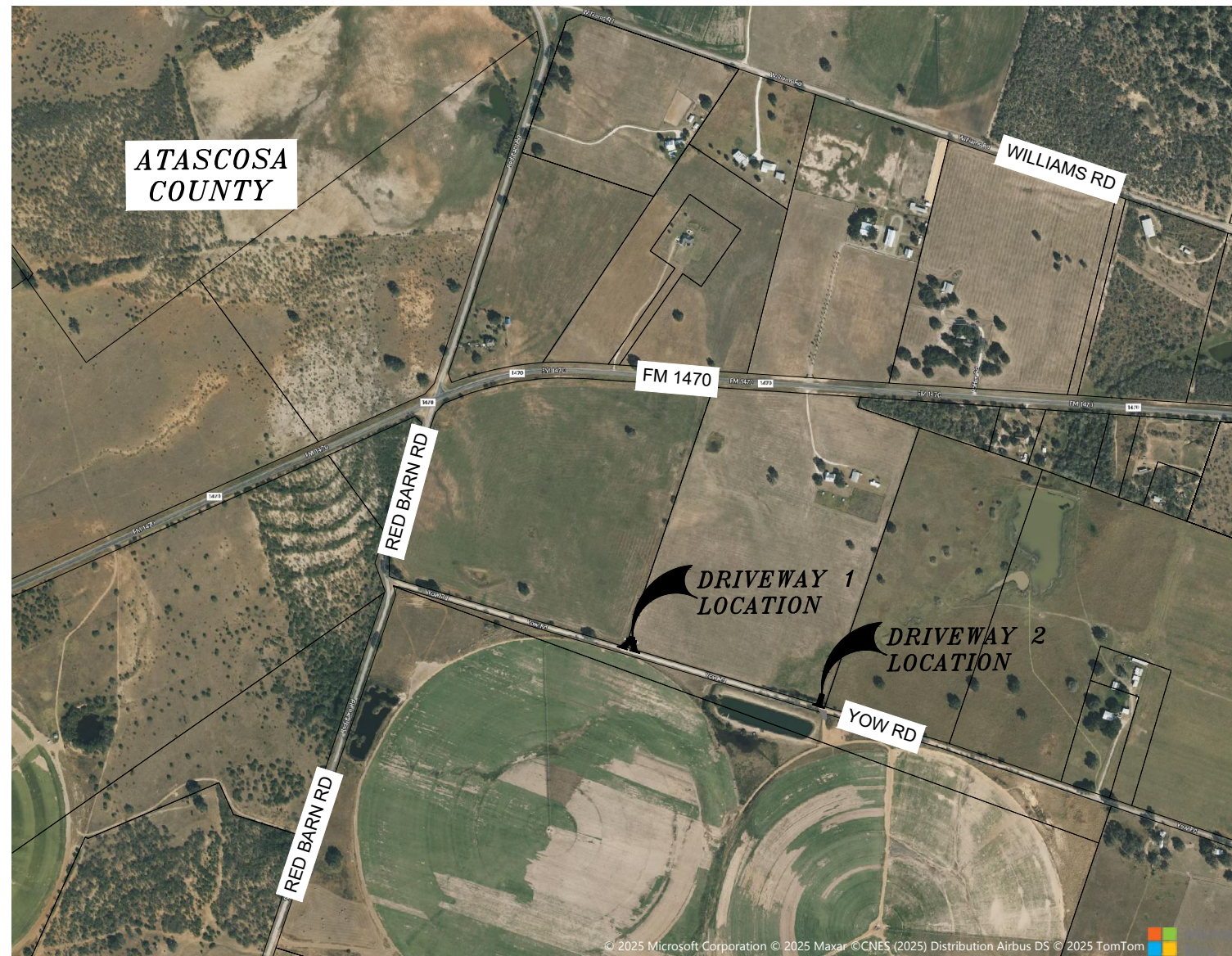
YOW ROAD ATASCOSA COUNTY, TX

DRIVEWAY 1 PERMIT CHECKLIST

LEGAL DESCRIPTION: ABS A00590 WM MORROW SV-1197, 56.45 ACRES
ACREAGE: 56.45 ACRES
SURVEY NAME: MORROW, W
PID'S: 14534
DRIVEWAY CLASSIFICATION: GRASS FARM
DRAWING OF PROPOSED DRIVEWAY 1: SEE SHEET C1.0

DRIVEWAY 2 PERMIT CHECKLIST

LEGAL DESCRIPTION: ABS A00590 WM MORROW SV-1197, 56.45 ACRES
ACREAGE: 56.45 ACRES
SURVEY NAME: MORROW, W
PID'S: 14536
DRIVEWAY CLASSIFICATION: GRASS FARM
DRAWING OF PROPOSED DRIVEWAY 2: SEE SHEET C1.1



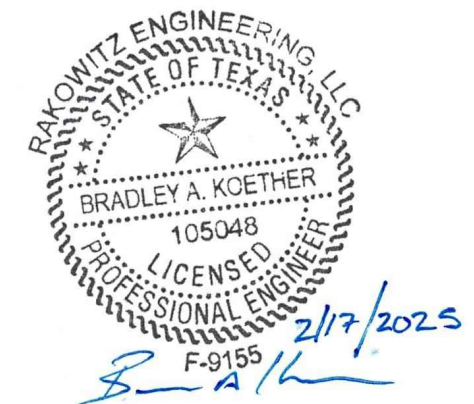
LOCATION MAP
1" = 1,000'

SHEET INDEX

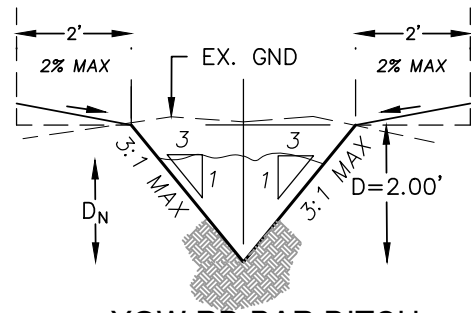
Description	Sheet Number
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DRIVEWAY 2 LAYOUT	3
DRAINAGE AREA MAP	4
DRAINAGE CALCULATIONS (1 OF 2)	5
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PREPARED FOR:

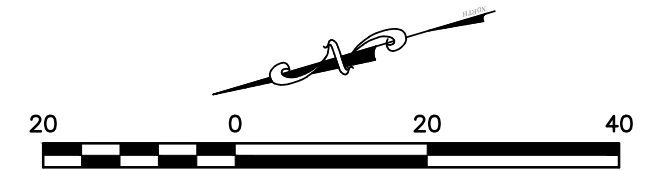
BLADERUNNER FARMS
802 HOWARD RD
POTEET, TX 78065
210-885-5608



830-281-4060
Texas Registered Engineering Firm F-9155
Texas Registered Surveying Firm 101812-00



YOW RD BAR DITCH
NOT-TO-SCALE



SCALE OF FEET
1" = 20'

LEGEND

- PROPERTY BOUNDARY
- x ————— EXISTING FENCELINE
- EDGE OF ROADWAY

ATASCOSA COUNTY

APPROXIMATE DRIVEWAY LOCATION:
LAT: N029° 04' 04.08"
LONG: W098° 32' 00.2"

EXISTING LIVE OAK TREE

YOW RD

±1,227' TO SE PROPERTY CORNER

±1,519' TO PROPERTY CORNER AT RED BARN RD INTERSECTION

CONTRACTOR TO RE-GRADE BAR DITCH TO MAINTAIN POSITIVE FLOW AS NECESSARY. (SEE PROPOSED BAR DITCH SECTION - THIS SHEET)

CONTRACTOR TO RE-GRADE AREA TO DIRECT FLOW TOWARDS THE PROPOSED CULVERT.

PROPOSED ALL-WEATHER PAVEMENT SECTION: TXDOT ITEM NO. 247 TYPE A FLEXIBLE BASE COMPACTED IN PLACE TO 9" FINAL THICKNESS. MATERIAL SHALL BE PLACED IN MAXIMUM 6" THICK LOOSE LIFTS.

BLADERUNNER FARMS
46.45 ACRES
PID:14536

HERRMAN HAREN H TRUSTEE
46.45 ACRES
PID:14534

±55 L.F. (4) 18" CMP
W/ 3:1 PRE-FAB CONCRETE S.E.T.'S
0.5% MIN. CULVERT SLOPE.
12" COVER MIN. ABOVE CULVERT.

DRIVEWAY 1



REVISIONS		
DATE	NO.	DESCRIPTION



BLADERUNNER FARMS
YOW RD, ATASCOSA COUNTY, TX

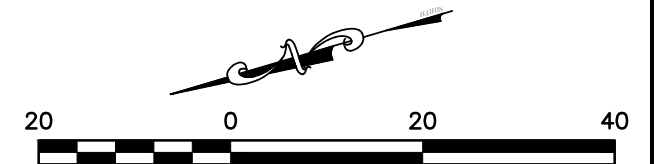
DRIVEWAY PERMIT PACKAGE
DRIVEWAY 1 LAYOUT

100% SUBMITTAL	PROJECT NO.: 24-3416B	DATE: FEB. 2025
DRWN. BY: CTA	DSGN. BY: CTA	CHKD. BY: JJC
SHEET NO. 2 OF 7		

Date: Feb 19, 2025, 8:30am User ID: CAD1-2022
File: N:\Projects\2024\24-3416 Atascosa County - Yow and Red Barn Road\CIVIL\Driveway\24-3416B Bladerunner Driveway Plans.dwg

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Date: Feb 19, 2025, 8:30am User ID: CAD1-2022
 File: N:\Projects\2024\24-3416 Atascosa County - Yow and Red Barn Road\CIVIL\Driveway\24-3416B Bladerunner Driveway Plans.dwg

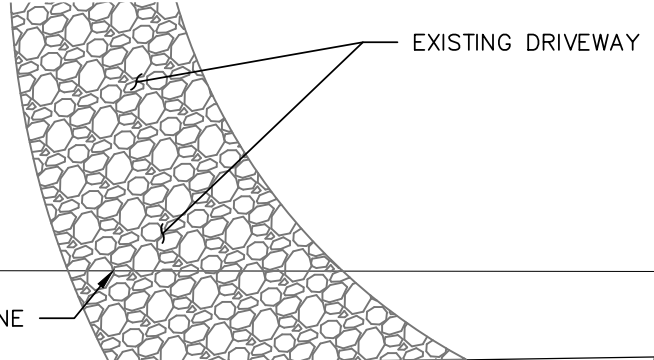


SCALE OF FEET
 1" = 20'

LEGEND

- PROPERTY BOUNDARY
- x ——— EXISTING FENCELINE
- EDGE OF ROADWAY

ATASCOSA COUNTY



EXISTING DRIVEWAY

APPROXIMATE DRIVEWAY LOCATION:
 LAT: N029° 04' 00.47"
 LONG: W098° 31' 46.5"

APPARENT R.O.W. LINE

APPARENT R.O.W. LINE

YOW RD

78.0'

±1,246'
 TO
 NW PROPERTY
 CORNER

EXISTING YOW RD
 CULVERT CROSSING

APPARENT R.O.W. LINE

APPARENT R.O.W. LINE

FLOW

R25.0'

R25.0'

CONTRACTOR TO REMOVE
 ~70LF OF EXISTING FENCE.

CONTRACTOR TO MAINTAIN
 POSITIVE DRAINAGE AWAY
 FROM YOW RD

80.1'

FLOW

FLOW

CONTRACTOR TO MAINTAIN
 POSITIVE DRAINAGE AWAY
 FROM YOW RD

79.9'

PROPOSED ALL-WEATHER PAVEMENT SECTION:
 TXDOT ITEM NO. 247 TYPE A FLEXIBLE BASE
 COMPACTED IN PLACE TO 9" FINAL THICKNESS.
 MATERIAL SHALL BE PLACED IN MAXIMUM 6"
 THICK LOOSE LIFTS.

HEFFERNAN THOMAS DONALD
 37.43 ACRES
 PID:14539

BLADERUNNER FARMS
 46.45 ACRES
 PID:14536



DRIVEWAY 2

28.0'

REVISIONS		
DATE	NO.	DESCRIPTION



BLADERUNNER FARMS
 YOW RD, ATASCOSA COUNTY, TX

DRIVEWAY PERMIT PACKAGE
 DRIVEWAY 2 LAYOUT

100% SUBMITTAL	PROJECT NO.: 24-3416B	DATE: FEB. 2025
DRWN. BY: CTA	DSGN. BY: CTA	CHKD. BY: JJC
SHEET NO.: 3 OF 7		

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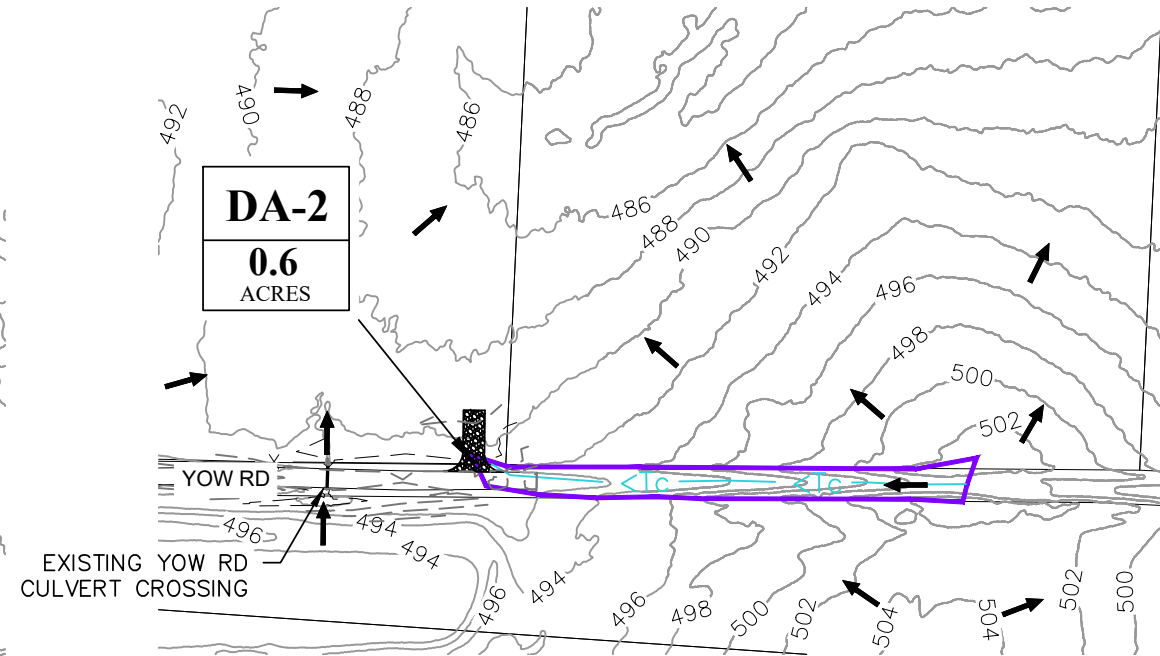
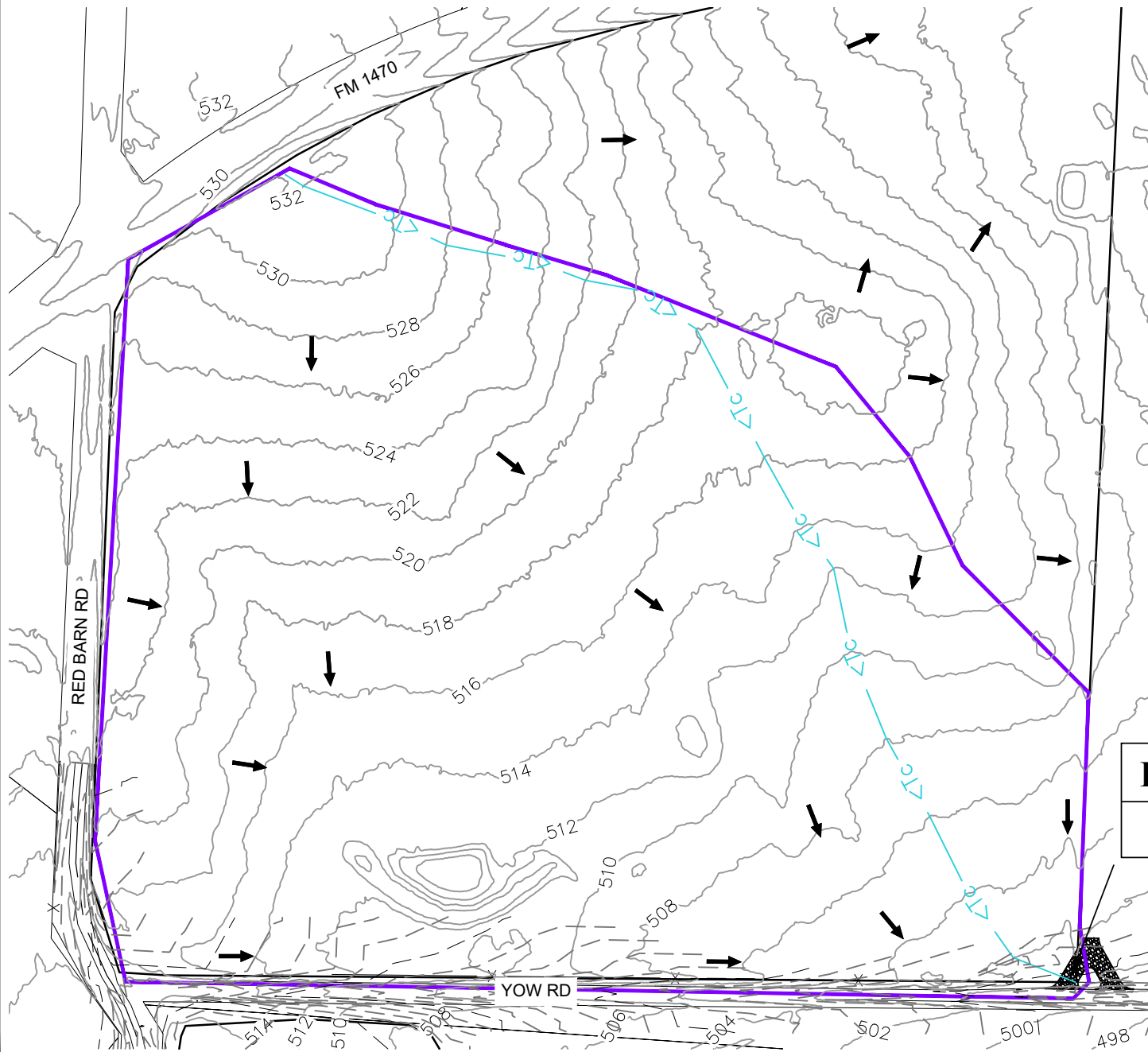
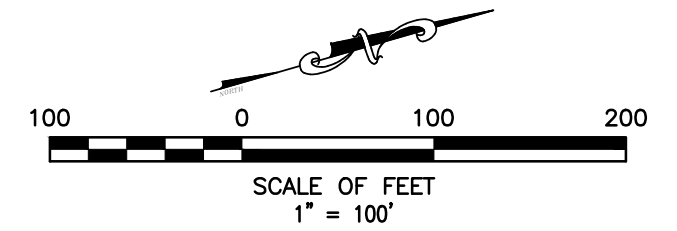
Date: Feb 19, 2025, 8:30am User ID: CAD1-2022
 File: N:\Projects\2024\24-3416 Atascosa County - Yow and Red Barn Road\CIVIL\Drainage\24-3416B Driveway Drainage.dwg

- NOTES:**
- 1) TIME OF CONCENTRATION (Tc) CALCULATED USING HYDRAFLOW HYDROGRAPHS TR-55 METHOD. DETAILED TR-55 CALCULATIONS CAN BE FOUND IN THE DRAINAGE REPORT IN EXHIBIT 8.
 - 2) RAINFALL INTENSITIES DERIVED FROM NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES FOR TEXAS.
 - 3) RUNOFF COEFFICIENTS TAKEN FROM TXDOT HYDRAULIC DESIGN MANUAL, TABLE 4-10.

Drainage Area	Acreage	Tc (min)			C _w	Storm Event	I (in/hr)	Q (cfs)
		Sheet Flow (min)	Shallow Concentrated (min)	TOTAL (min)				
DA-1	39.7	20	14	34	0.15	10-YR	4.058	24.17
						25-YR	4.906	29.21
						100-YR	6.21	36.98
DA-2	0.6	-	-	10	0.15	10-YR	7.181	0.646
						25-YR	8.571	0.771
						100-YR	10.662	0.96

LEGEND

- PROPERTY BOUNDARY
- X — EXISTING FENCELINE
- 956 — EXISTING 2' CONTOUR
- EDGE OF PAVEMENT
- DRAINAGE BOUNDARY
- <Tc — TC PATH
- ← FLOW ARROW



REVISIONS		
DATE	NO.	DESCRIPTION

BLADERUNNER FARMS
 YOW RD, ATASCOSA COUNTY, TX

DRIVEWAY PERMIT PACKAGE
DRAINAGE AREA MAP

100% SUBMITTAL	PROJECT NO.: 24-3416B	DATE: FEB, 2025
DRWN. BY: CTA	DSGN. BY: CTA	CHKD. BY: JJC
SHEET NO.: 4 OF 7		

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Hydrograph Report

3

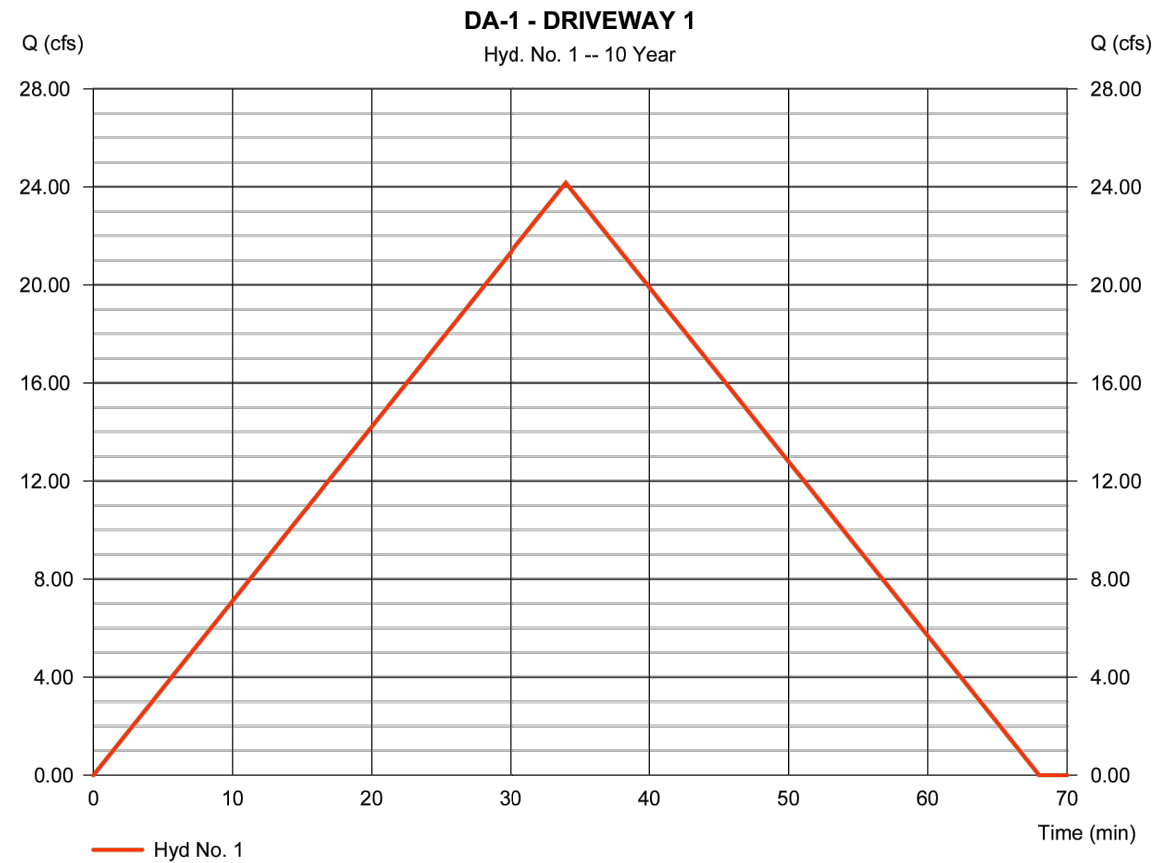
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Thursday, 02 / 13 / 2025

Hyd. No. 1

DA-1 - DRIVEWAY 1

Hydrograph type	= Rational	Peak discharge	= 24.17 cfs
Storm frequency	= 10 yrs	Time to peak	= 34 min
Time interval	= 1 min	Hyd. volume	= 49,300 cuft
Drainage area	= 39.700 ac	Runoff coeff.	= 0.15
Intensity	= 4.058 in/hr	Tc by TR55	= 34.00 min
IDF Curve	= Atlas 14 Atascosa County Tx	Desc limb fact	= 1/1



Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Thursday, Feb 13 2025

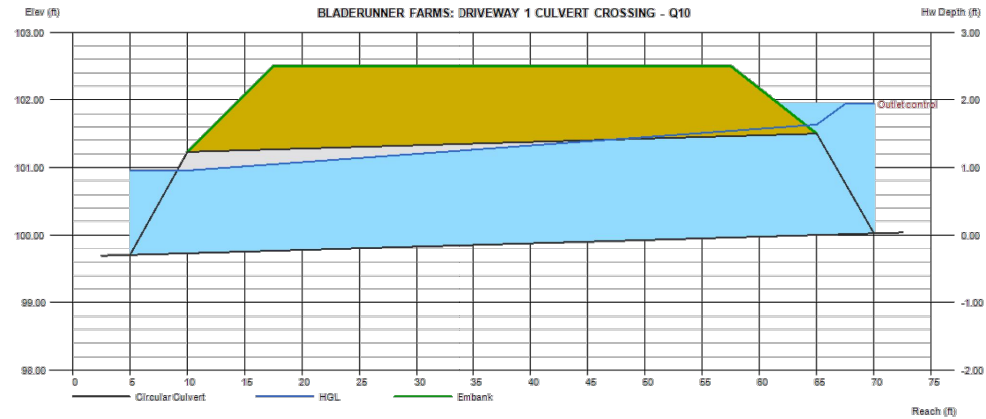
BLADERUNNER FARMS: DRIVEWAY 1 CULVERT CROSSING - Q10

Invert Elev Dn (ft)	= 99.73
Pipe Length (ft)	= 55.00
Slope (%)	= 0.50
Invert Elev Up (ft)	= 100.00
Rise (in)	= 18.0
Shape	= Circular
Span (in)	= 18.0
No. Barrels	= 4
n-Value	= 0.024
Culvert Type	= Circular Corrugate Metal Pipe
Culvert Entrance	= Mitered to slope (C)
Coeff. K,M,c,Y,k	= 0.021, 1.33, 0.0463, 0.75, 0.7

Calculations	
Qmin (cfs)	= 24.17
Qmax (cfs)	= 24.17
Tailwater Elev (ft)	= (dc+D)/2

Highlighted	
Qtotal (cfs)	= 24.17
Qpipe (cfs)	= 24.17
Qovertop (cfs)	= 0.00
Veloc Dn (ft/s)	= 3.91
Veloc Up (ft/s)	= 3.42
HGL Dn (ft)	= 100.95
HGL Up (ft)	= 101.63
Hw Elev (ft)	= 101.94
Hw/D (ft)	= 1.30
Flow Regime	= Outlet Control

Embankment	
Top Elevation (ft)	= 102.50
Top Width (ft)	= 40.00
Crest Width (ft)	= 40.00



REVISIONS		
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BLADERUNNER FARMS
YOW RD, ATASCOSA COUNTY, TX

DRIVEWAY PERMIT PACKAGE
DRAINAGE CALCULATIONS
(1 OF 2)

100% SUBMITTAL	PROJECT NO.: 24-3416B	DATE: FEB. 2025
DRWN. BY: CTA	DSGN. BY: CTA	CHKD. BY: JJC
SHEET NO.: 5 OF 7		

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Thursday, 02 / 13 / 2025

Hyd. No. 1

DA-1 - DRIVEWAY 1

Hydrograph type	= Rational	Peak discharge	= 29.21 cfs
Storm frequency	= 25 yrs	Time to peak	= 34 min
Time interval	= 1 min	Hyd. volume	= 59,597 cuft
Drainage area	= 39.700 ac	Runoff coeff.	= 0.15
Intensity	= 4.906 in/hr	Tc by TR55	= 34.00 min
IDF Curve	= Atlas 14 Atascosa County Tx	Asc/Desc limb fact	= 1/1

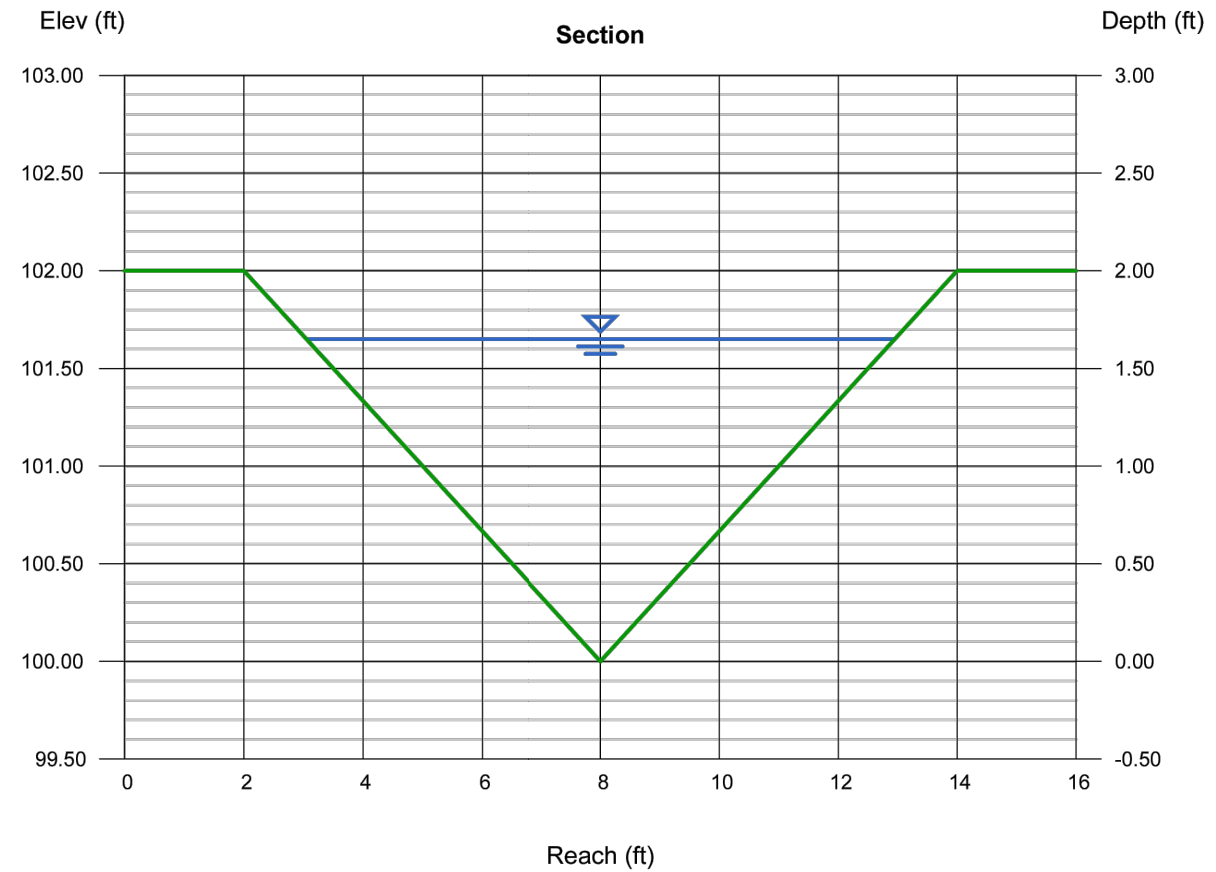
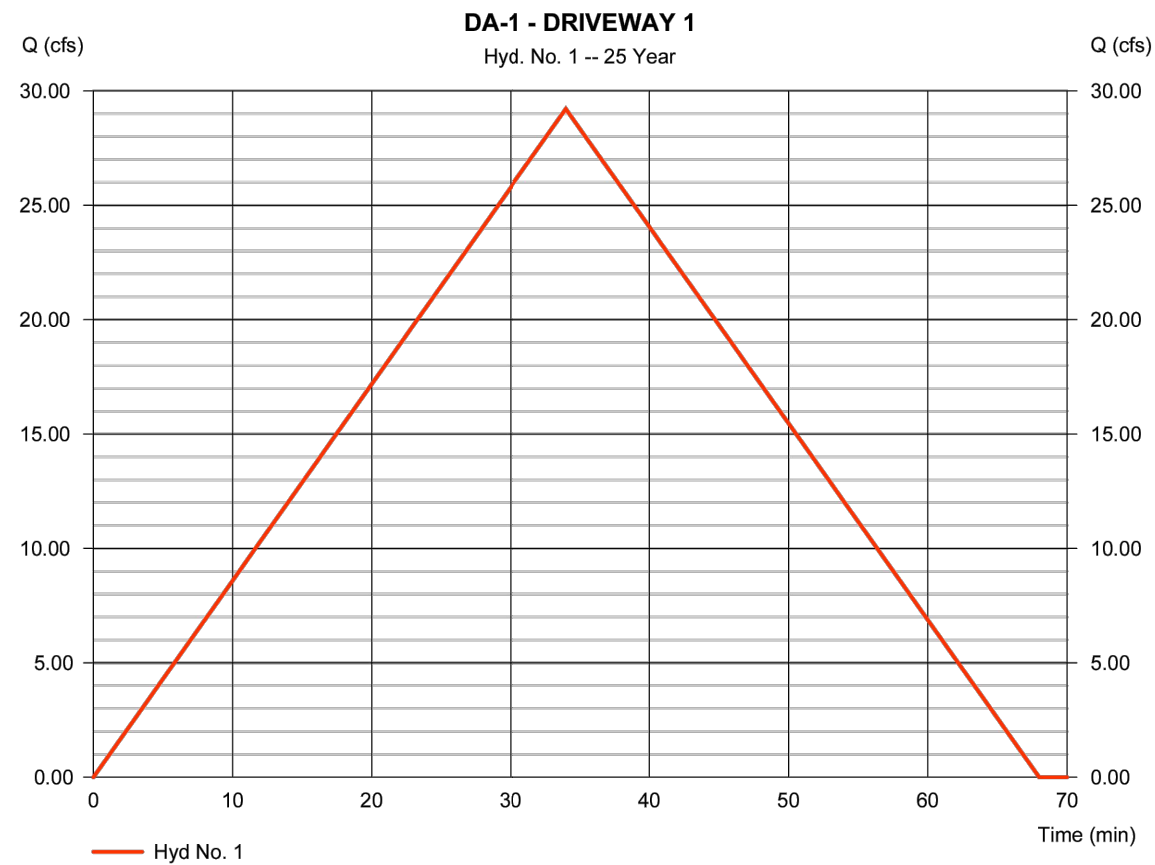
Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Thursday, Feb 13 2025

Yow Road Bar Ditch - Q25

Triangular		Highlighted	
Side Slopes (z:1)	= 3.00, 3.00	Depth (ft)	= 1.65
Total Depth (ft)	= 2.00	Q (cfs)	= 29.21
		Area (sqft)	= 8.17
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 3.58
Slope (%)	= 1.00	Wetted Perim (ft)	= 10.44
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.43
		Top Width (ft)	= 9.90
Calculations		EGL (ft)	= 1.85
Compute by:	Known Q		
Known Q (cfs)	= 29.21		



REVISIONS		
DATE	NO.	DESCRIPTION

BLADERUNNER FARMS
YOW RD, ATASCOSA COUNTY, TX

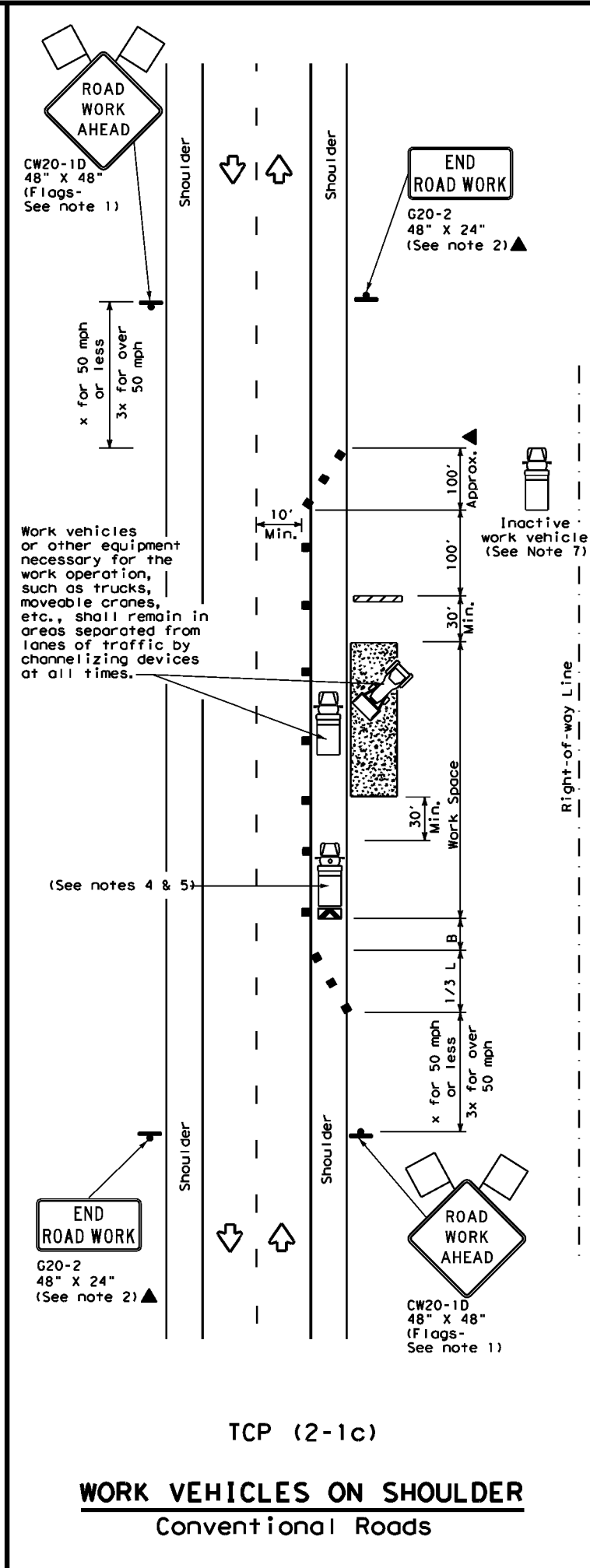
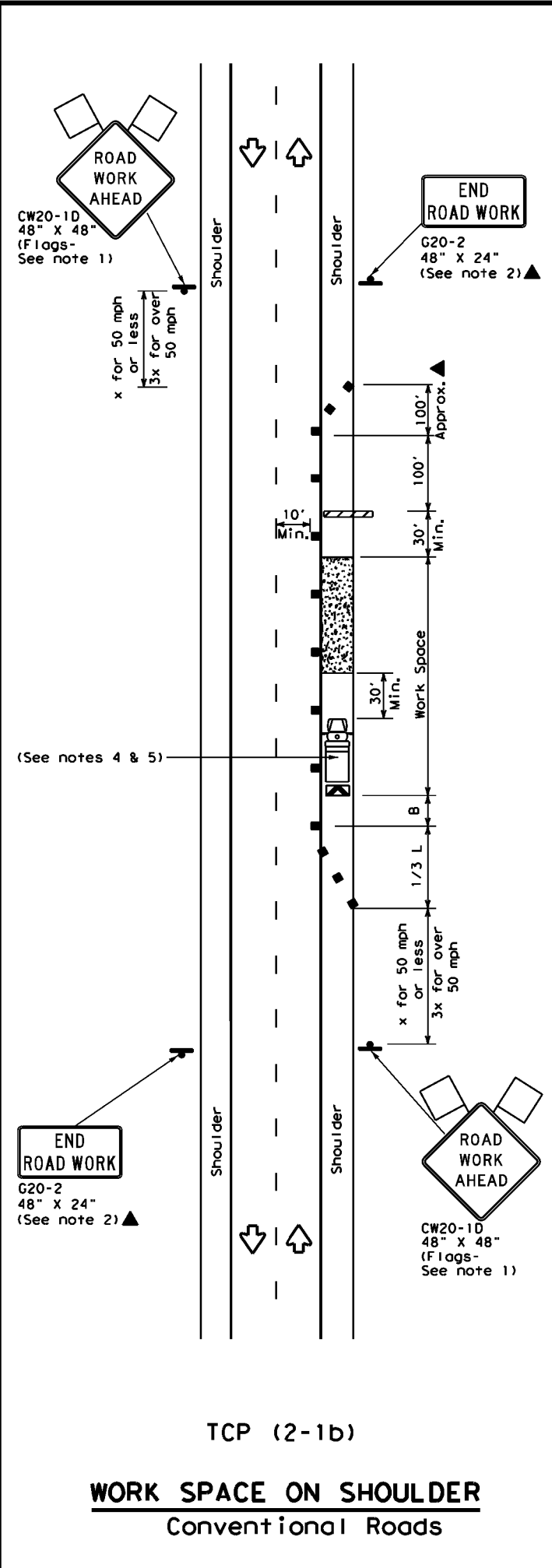
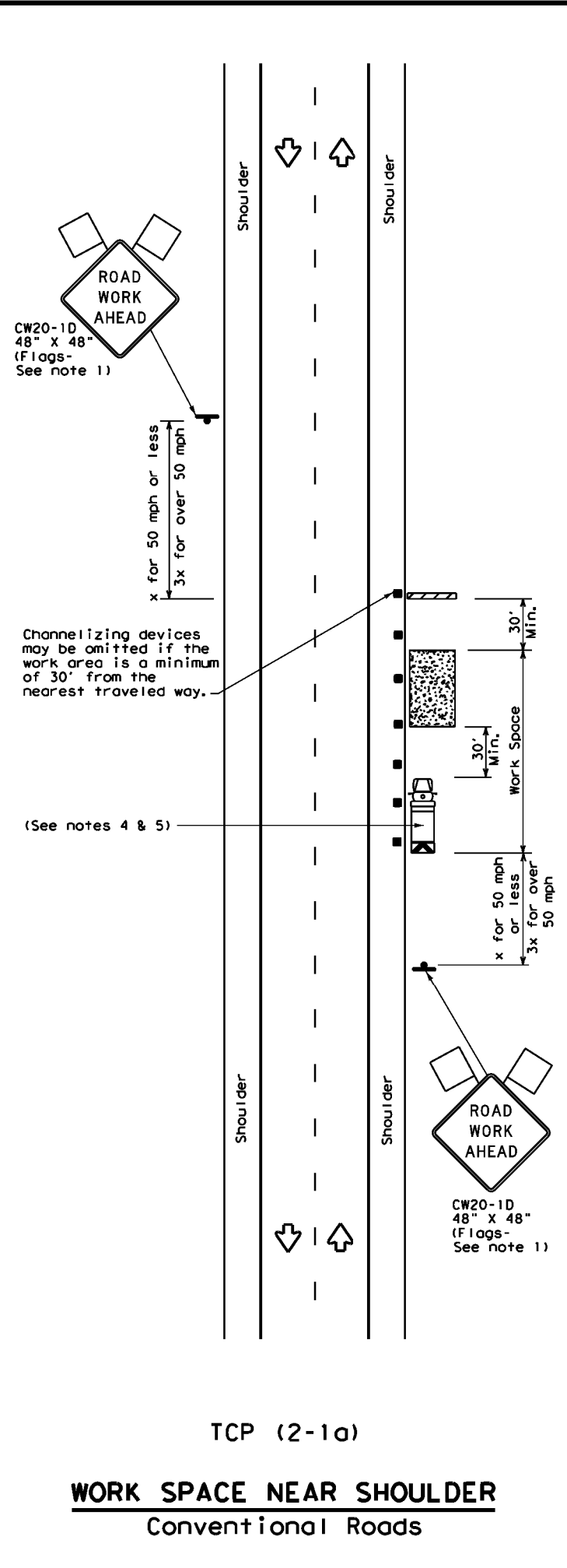
DRIVEWAY PERMIT PACKAGE
DRAINAGE CALCULATIONS
(2 OF 2)

.100% SUBMITTAL	PROJECT NO.: 24-3416B	DATE: FEB, 2025
DRWN. BY: CTA	DSGN. BY: CTA	CHKD. BY: JJC
		SHEET NO.: 6 OF 7

Date: Feb 19, 2025, 8:30am User ID: CAD1-2022
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DATE: FILE:



LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

- GENERAL NOTES**
- Flags attached to signs where shown, are REQUIRED.
 - All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
 - Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
 - Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
 - Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
 - See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
 - Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
 - CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation
Traffic Operations Division Standard

**TRAFFIC CONTROL PLAN
CONVENTIONAL ROAD
SHOULDER WORK**

TCP (2-1) - 18

FILE: tcp2-1-18.dgn	DN:	CKI:	DW:	CKI:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS				
2-94 4-98				
8-95 2-12				
1-97 2-18				
DIST	COUNTY	SHEET NO.		