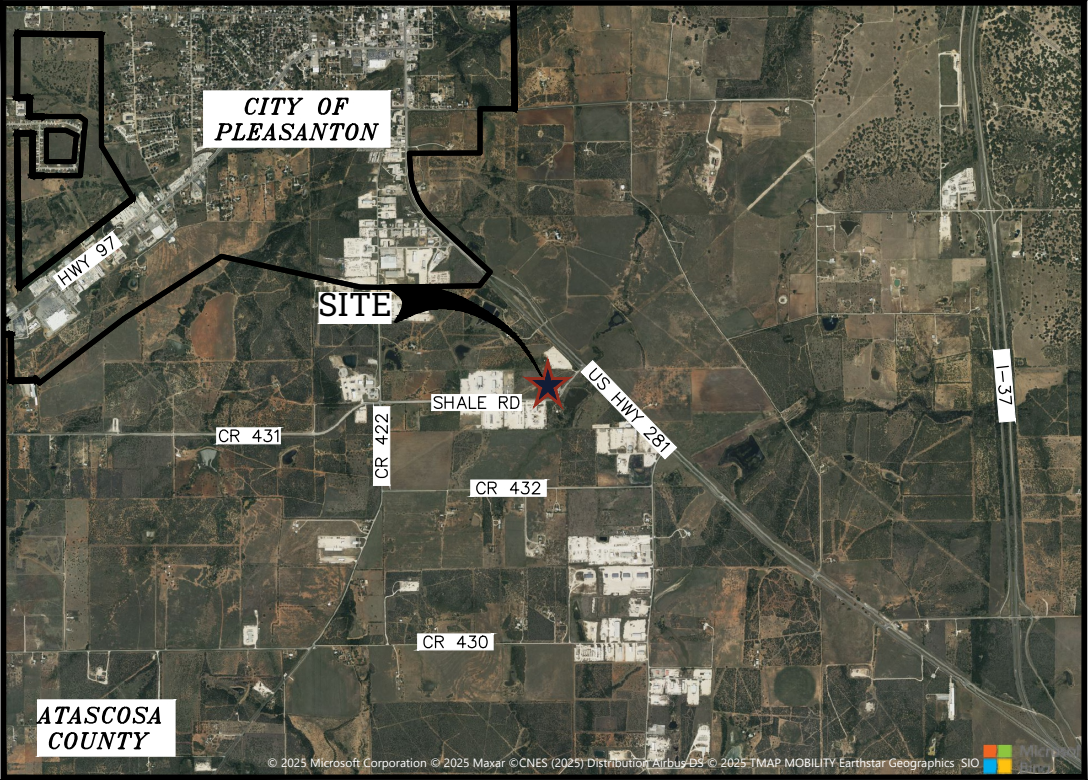


COOK MANAGER, LLC DRIVEWAY PERMIT PACKAGE SHALE RD

DRIVEWAY PERMIT CHECKLIST:

LEGAL DESCRIPTION: TIMBERCREEK S/D LOT 1A 4.23
 ACREAGE: 4.23 ACRES
 SURVEY NO: DE LA GARZA, M
 PID: 164402
 DRIVEWAY CLASSIFICATION: OILFIELD
 # OF DRIVEWAYS: (2) DRIVEWAYS
 DRAWING OF PROPOSED DRIVEWAYS: SEE SHEET C2.0



LOCATION MAP
1" = 5000'

SHEET INDEX

| Description | Sheet Number |
|-----------------------|--------------|
| COVER SHEET | 1 |
| DRIVEWAY LAYOUT | 2 |
| DRAINAGE AREA MAP | 3 |
| TRAFFIC CONTROL NOTES | 4 |

PREPARED FOR:

**COOK MANAGER, LLC
 1843 US HWY 181 N
 FLORESVILLE, TEXAS 78114**



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



Date: Nov 20, 2025, 5:06pm User ID: CAD1-2022
 File: N:\Projects\2025\25-3769 Q2ALS CR431 Driveway for Justin Cook\Civil\25-3769 COVER.dwg

© COPYRIGHT RAKOWITZ ENGINEERING 2025

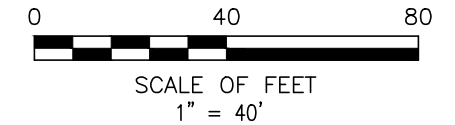
Date: Nov 20, 2025, 5:06pm User ID: CAD1-2022
 File: N:\Projects\2025\25-3769 Q2ALS CR431 Driveway for Justin Cook\Civil\25-3769 DRIVEWAY LAYOUT.dwg

ATASCOSA
 COUNTY

PARTNERS LLC
 24.95 ACRES
 PID: 164403

EXISTING DRIVEWAY

WMK PROPERTIES LLC
 9.60 ACRES
 PID: 164406



APPARENT R.O.W. LINE

SHALE RD

APPARENT R.O.W. LINE

APPARENT R.O.W. LINE

R25'

FLOW

FLOW

EXISTING CULVERT
 CROSSING

EXISTING DRIVEWAY

KCRT LLC
 4.92 ACRES
 PID: 79498

JOLY CAPITAL LLC
 4.23 ACRES
 PID: 164402

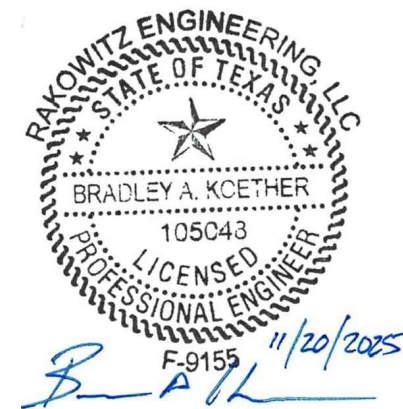
PROPOSED ALL-WEATHER PAVEMENT SECTION:
 TXDOT ITEM NO. 247 TYPE A FLEXIBLE BASE
 COMPACTED IN PLACE TO 9" FINAL THICKNESS.
 MATERIAL SHALL BE PLACED IN MAXIMUM 6"
 THICK LOOSE LIFTS.

CONTRACTOR TO GRADE
 DRIVEWAYS TO MAINTAIN
 POSITIVE FLOW AS
 NECESSARY.

FLOW

FLOW

CONNCHA RODOLFO &
 MARIE HELEN
 4.61 ACRES
 PID: 164405



| REVISIONS | | |
|-----------|-----|-------------|
| DATE | NO. | DESCRIPTION |
| | | |
| | | |

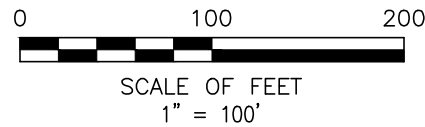
RAKOWITZ
 Engineering & Surveying
 Cook Manager, LLC
 SHALE RD, ATASCOSA COUNTY, TX
 DRIVEWAY PERMIT PACKAGE

100% SUBMITTAL PROJECT NO. 25-3769 DATE NOV. 2025
 DRWN. BY: CTA DSGN. BY: CTA CHKD. BY: BAK SHEET NO. 2 OF 4

| TIME OF CONCENTRATION SUMMARY | | | | |
|-------------------------------|-------------------------|-----------------------------------|--------------------------|----------|
| DRAINAGE AREA | SHEET FLOW (LF @ SLOPE) | SHALLOW CONCENTRATED (LF @ SLOPE) | CHANNEL FLOW (LF @ VEL.) | Tc (MIN) |
| DA-1 | 80 LF @ 1.25% | - | 883 LF @ 6 ft/s | 11 MIN |

- NOTES:
- 1) TIME OF CONCENTRATION (Tc) CALCULATED USING TR-55 METHOD.
 - 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.

| RATIONAL METHOD DRAINAGE CALCULATIONS | | | | |
|---------------------------------------|----------------------|-----------------------------------------------------|--------------|-----------------------------------|
| DRAINAGE AREA | RUNOFF COEFFICIENT C | 10-YEAR RAINFALL INTENSITY I ₁₀ (IN./HR) | AREA (ACRES) | 10-YEAR PEAK FLOW Q ₁₀ |
| DA-1 | 0.52 | 6.721 | 1.00 | 3.495 CFS |



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

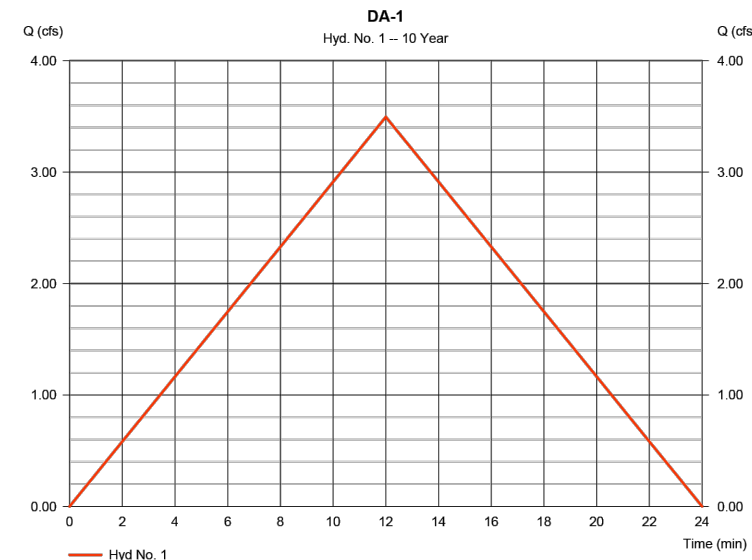
Thursday, 11/20/2025

Hyd. No. 1

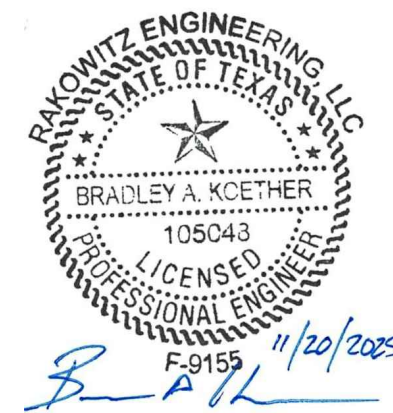
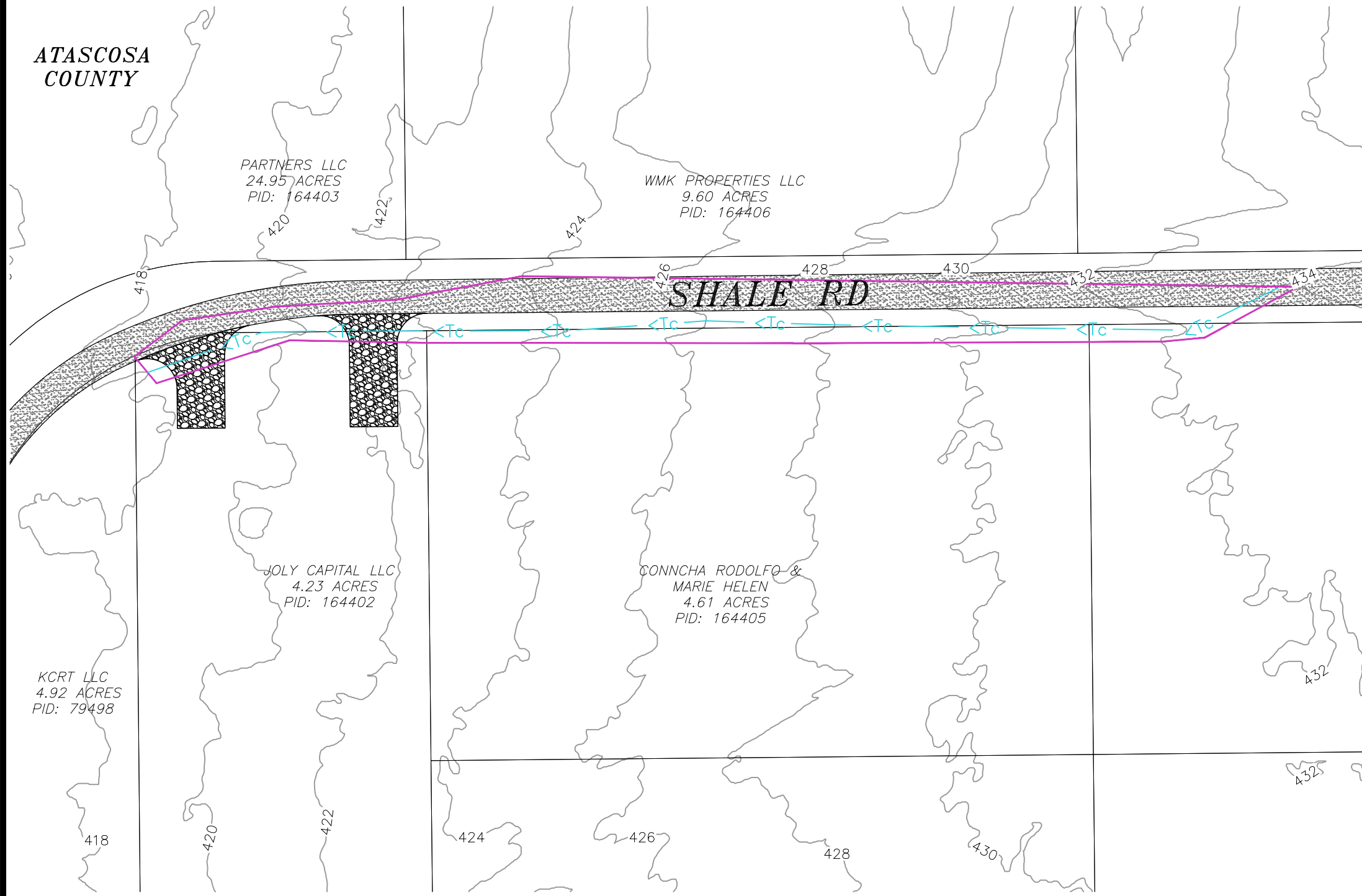
DA-1

| | | | |
|-----------------|-------------------------------|----------------|--------------|
| Hydrograph type | = Rational | Peak discharge | = 3.495 cfs |
| Storm frequency | = 10 yrs | Time to peak | = 12 min |
| Time interval | = 1 min | Hyd. volume | = 2,516 cuft |
| Drainage area | = 1,000 ac | Runoff coeff. | = 0.52 |
| Intensity | = 6.721 in/hr | Tc by TR55 | = 12.00 min |
| IDF Curve | = Atlas 14 Atascosa County Tx | IBF limb fact | = 1/1 |

* Composite (Area/C) = [(0.570 x 0.20) + (0.430 x 0.95)] / 1.000



ATASCOSA COUNTY



| REVISIONS | | |
|-----------|-----|-------------|
| DATE | NO. | DESCRIPTION |
| | | |

RAKOWITZ
Cook Manager, LLC
SHALE RD, ATASCOSA COUNTY, TX
DRIVEWAY PERMIT PACKAGE

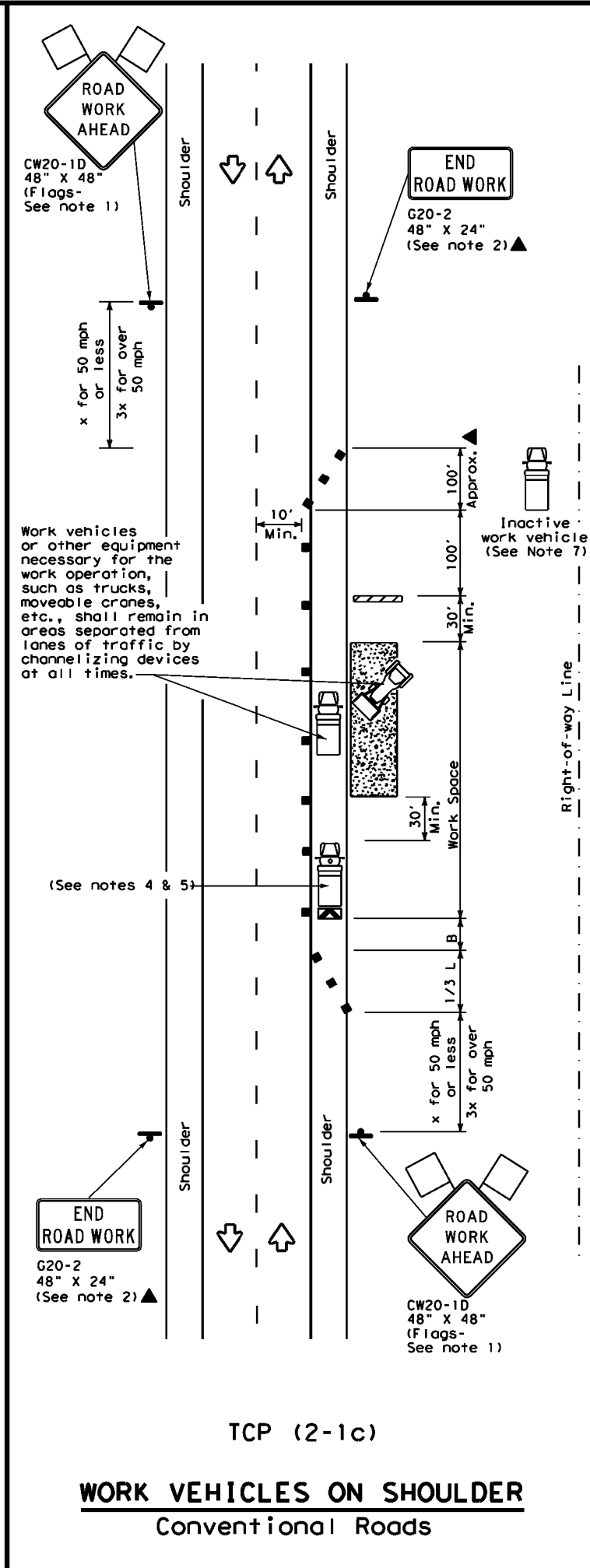
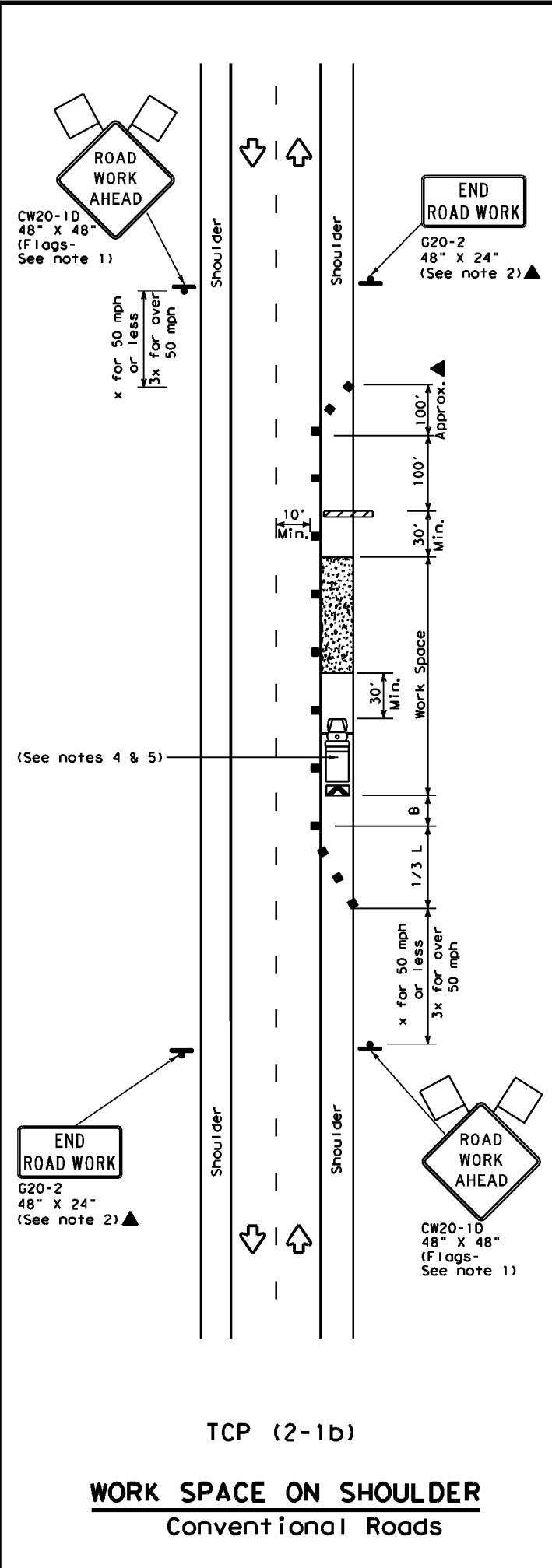
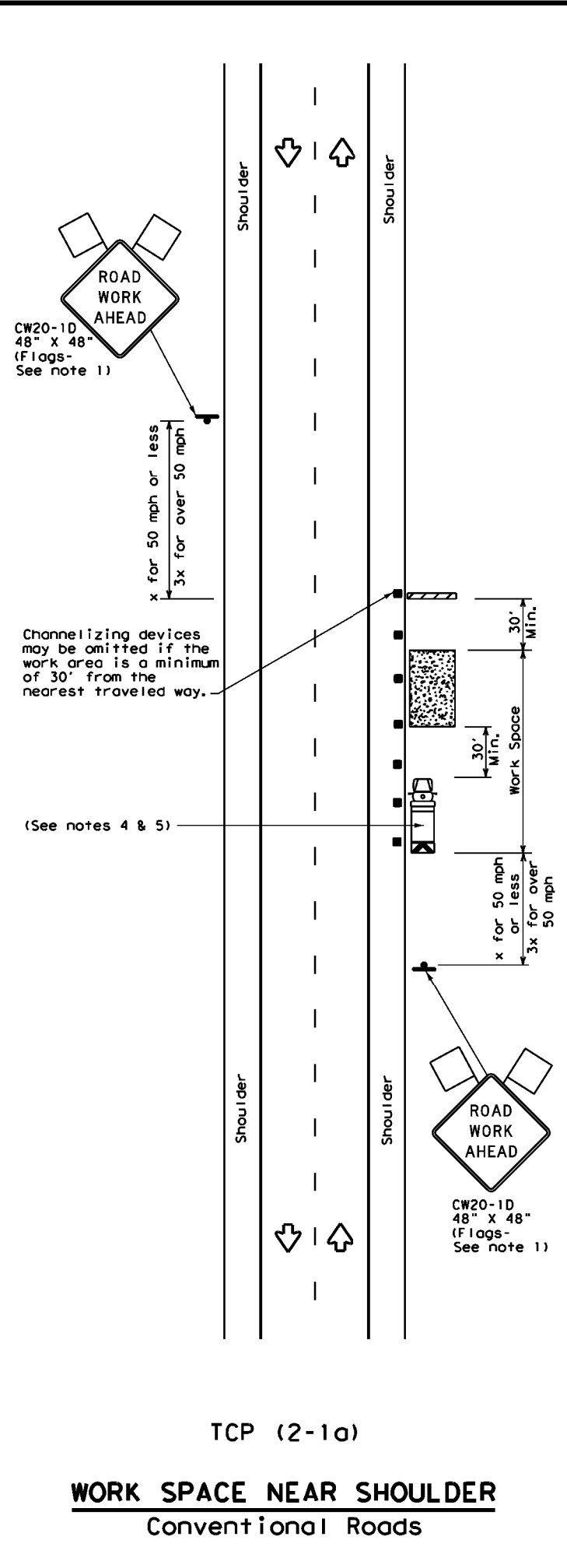
| | | |
|----------------|----------------------|-----------------|
| 100% SUBMITTAL | PROJECT NO.: 25-3769 | DATE: NOV. 2025 |
| DRWN. BY: CTA | DSGN. BY: CTA | CHKD. BY: BAK |

Date: Nov 20, 2025, 5:06pm User ID: CAD1-2022
File: N:\Projects\2025\25-3769 Q2ALS CR431 Driveway for Justin Cook\Civil\25-3769 DRAINAGE.dwg

© COPYRIGHT RAKOWITZ ENGINEERING 2025

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

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. | | |