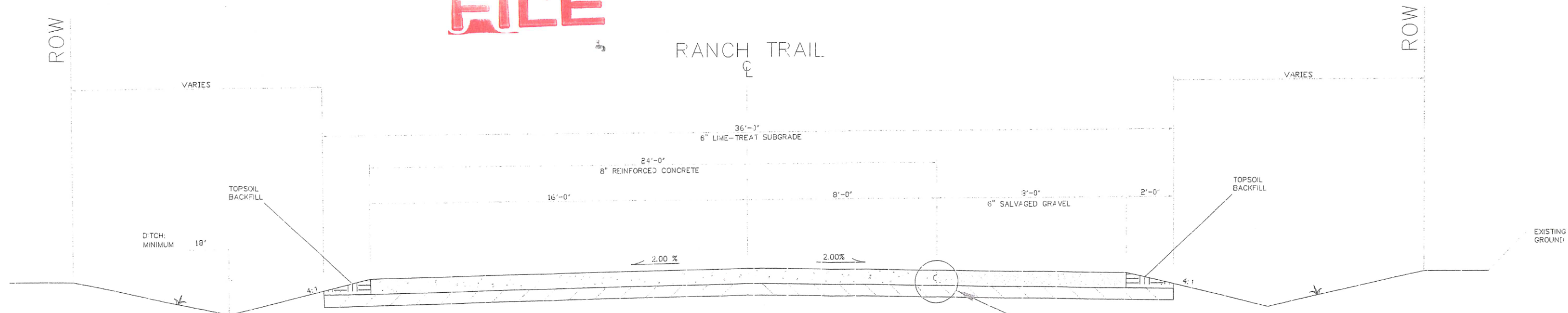


FILE

RANCH TRAIL



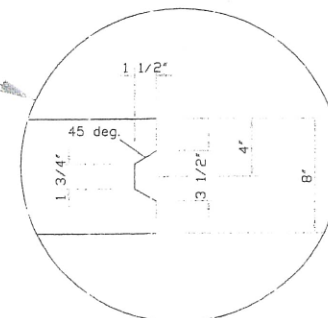
1. CONCRETE PAVEMENT SHALL ATTAIN 3,600 PSI COMPRESSIVE STRENGTH AT 28 DAYS. A MINIMUM OF SIX SACKS OF CEMENT PER CUBIC YARD OF CONCRETE SHALL BE USED, MACHINE POURED. (MINIMUM 6.5 SACK IF HAND POURED.)

2. CONCRETE PAVEMENT SHALL BE REINFORCED WITH A MINIMUM OF #4 (HALF-INCH) DEFORMED STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 40,000 PSI, SPACED AT 24 INCHES, LONGITUDINALLY AND TRANSVERSELY. MINIMUM CONCRETE COVER ON STEEL BARS SHALL BE 2 INCHES. MAXIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTER OF STEEL BAR SHALL BE 6 INCHES.

3. EXPANSION JOINTS SHALL BE PLACED AT STATIONS: 5+00 AND 10+00, PLUS OR MINUS 50 FEET. EXPANSION JOINTS SHALL CONFORM TO N.C.T.C.O.G. STANDARDS DETAIL DRAWING NO. 2C50, OR REVISED BY CITY.

4. CONTRACTOR SHALL SALVAGE THE EXISTING GRAVEL OR CRUSHED-STONE MATERIAL AND USE IT TO CONSTRUCT EIGHT FOOT WIDE GRAVEL PAVEMENT IMMEDIATELY ADJACENT TO THE EAST EDGE OF CONCRETE PAVEMENT. GRADE SHALL CONFORM TO PROFILE OF THE CONCRETE PAVEMENT. CROSS-SLOPE ADJUSTMENTS SHALL BE MADE AS NECESSARY, TO TIE INTO EXISTING DRIVEWAYS.

5. ALL DISTURBED AREAS NOT RECEIVING PAVEMENT SHALL RECEIVE GRASS SEEDING, ACCORDING TO CH. 4 CITY OF ROCKWALL STANDARDS OF DESIGN AND CONSTRUCTION.



KEYWAY
N.T.S.

ROAD SECTION & NOTES

APPROVED FOR
CONSTRUCTION

NOV 11 2004

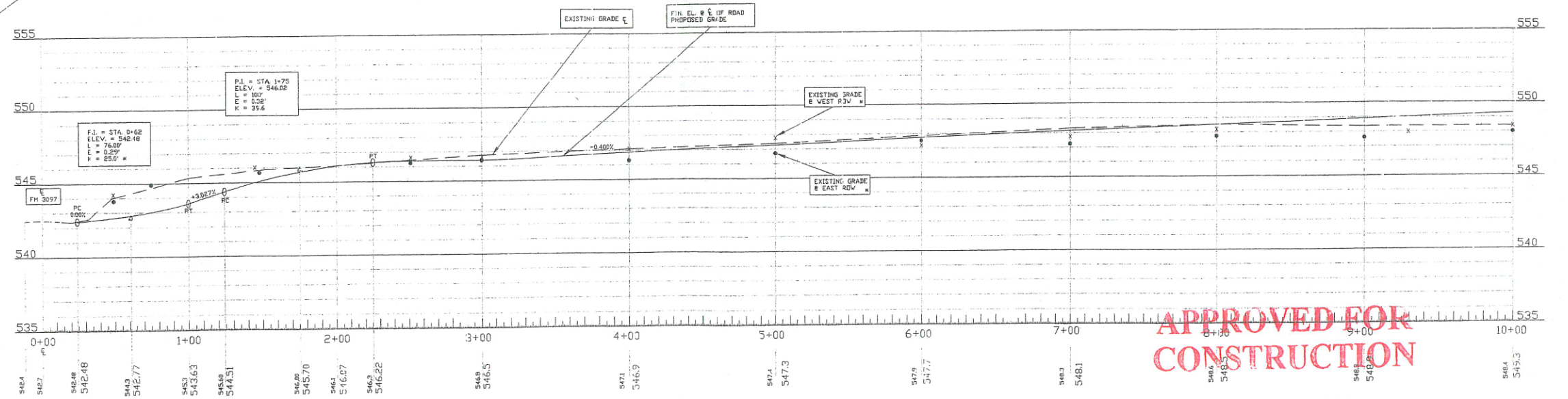
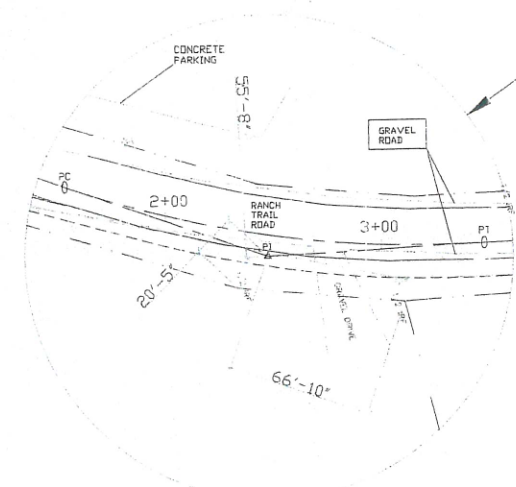
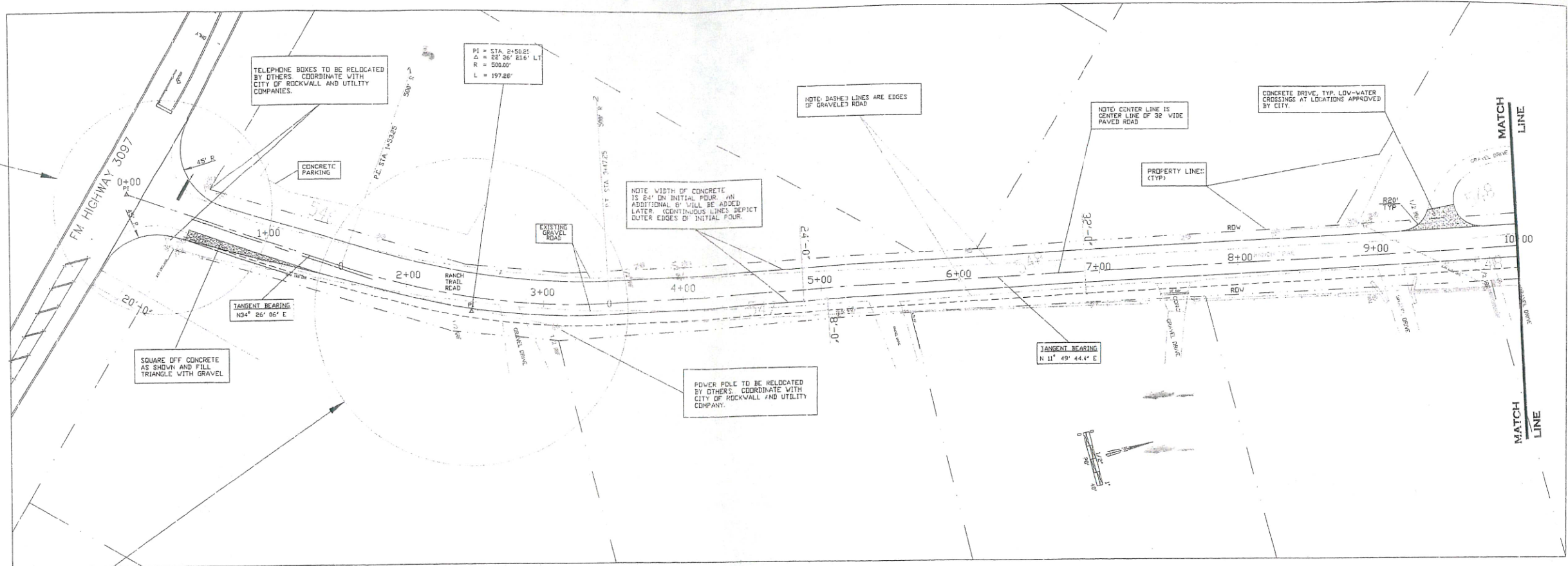
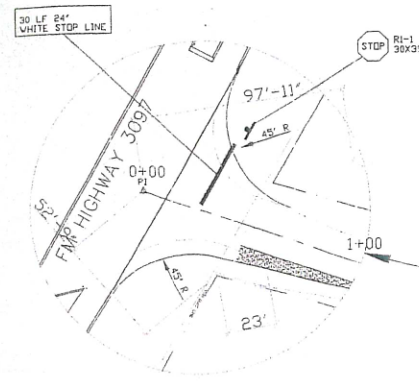
City of Rockwall Engineering Dept.
City Engineer: CAF

SCALE: 1/2" = 1'	DATE: 9-16-04	BY: JB	DESCRIPTION: REVISED NOTES
DRAWN BY: Jerry Baskin			
DATE: 8-27-04			
SOFTWARE: AutoCAD 14			
FILE NAME: BTR-2.1 ROAD SECTION & NOTES			
DRAWING LAYOUT: 72x48			
PLOT SCALE: 1 = 24			

John D. Wright
NOV. 5, 2004

Wright Engineering 9609 La Rochelle Greenville, TX 75402	
SUBMITTER: JERRY KISSICK	
LOCATION: RANCH TRAIL ROAD & F.M. 3097 (HORIZON RD.)	
CITY: ROCKWALL, TEXAS	
PROJECT: ROAD SECTION & NOTES	

DRAWING NO:
RTR-1.0



APPROVED FOR CONSTRUCTION

NOV 11 2004

City of Rockwall Engineering Dept.
City Engineer: _____

DESIGN SPEED = 30 MPH
MIN HORIZONTAL RADIUS = 500 FT.
MIN K (SAG) = 40
MIN K (CREST) = 30

VERTICAL CURVE AT STATION 1+62 IS A STOP CONDITION FOR SOUTH-BOUND TRAFFIC, AND A TURN CONDITION FOR NORTH-BOUND TRAFFIC. K OF 25 IS SUFFICIENT FOR 30 MPH.

RANCH TRAIL
SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

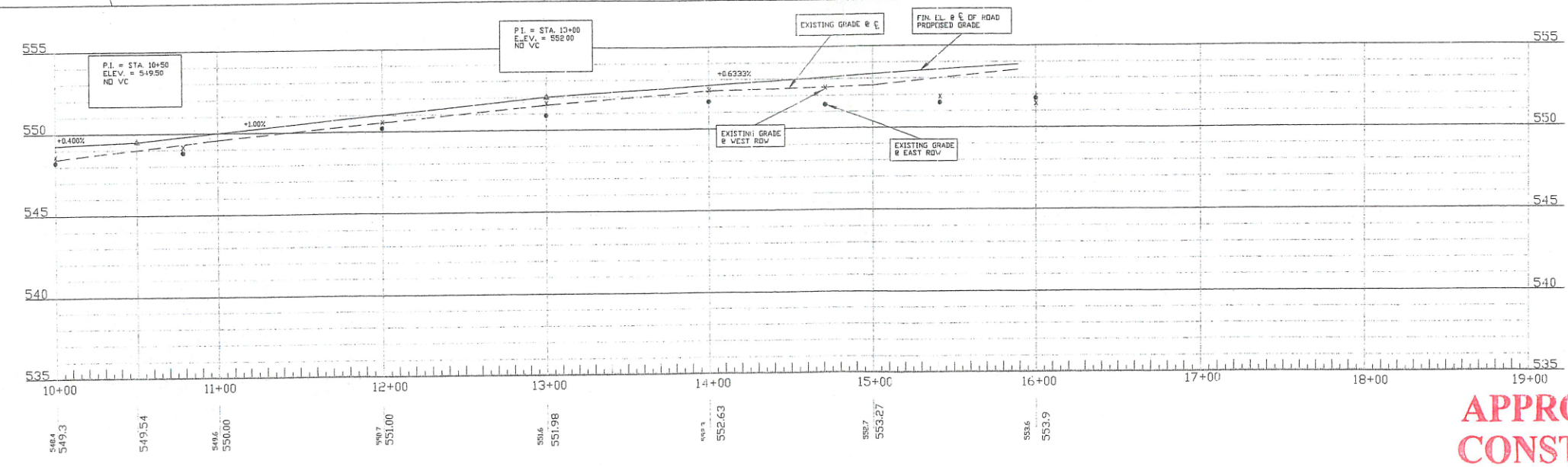
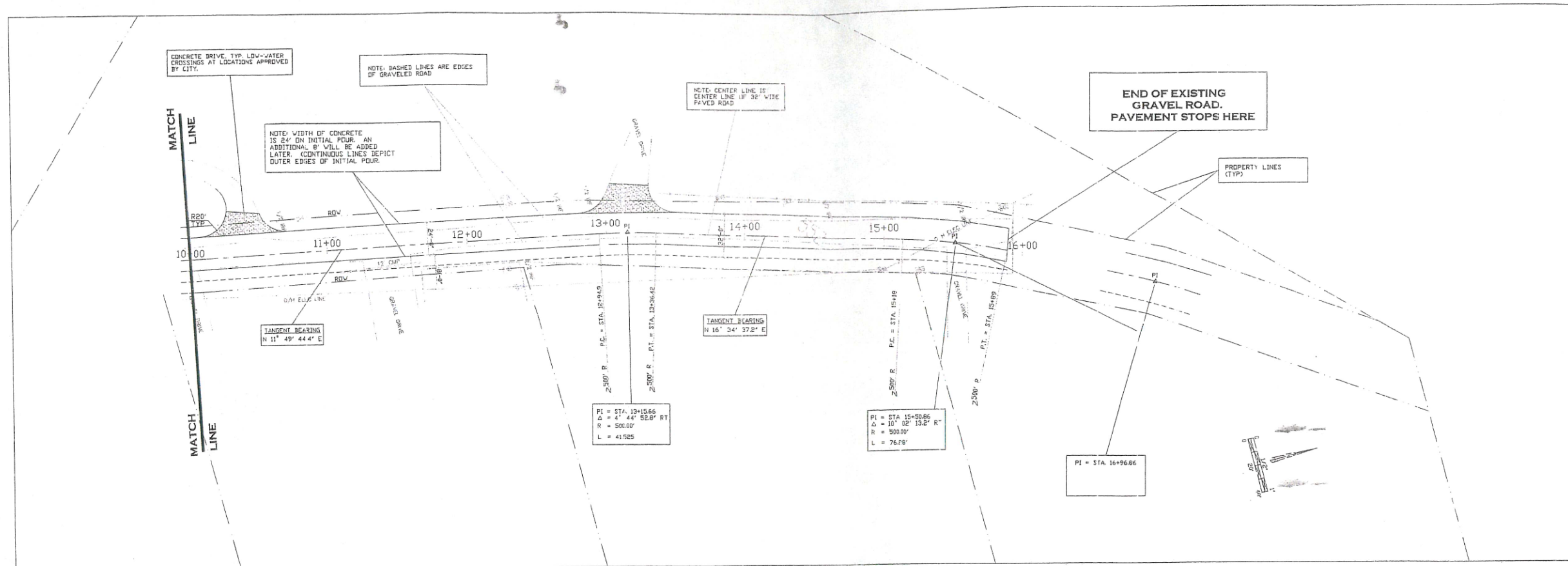
SCALE:	1" = 40'	DN:	24 X 36	REV:	DATE:	BY:	DESCRIPTION:
DRAWN BY:	Jerry Booker	1	5-10-04	JB	ADDED NOTES		
DATE:	8-27-04	2	10-1-04	JB	REMOVED CULVERTS AT SOUTH WEST END OF RANCH TRAIL ROAD		
SOFTWARE:	AUTOCAD 14						
FILE NAME:	RTR-11 ROAD A PROFILE (TDP)						
DRAWING LIMITS:	1440'x560'						
PLST SCALE:	480						



WRIGHT ENGINEERING
9609 LA ROCHELLE
GREENVILLE, TX 75402

CUSTOMER: JERRY KISSICK
CREATED: RANCH TRAIL ROAD & F.M. 3097 (HORIZON RD.)
ROCKWALL, TEXAS
DWG. TITLE: ROAD A PROFILE (TDP)

DRAWING NO.:
RTR-11



RANCH TRAIL
 SCALE
 1" = 40' HORIZONTAL
 1" = 4' VERTICAL

**APPROVED FOR
 CONSTRUCTION**

NOV 11 2004

City of Rockwall Engineering Dept.
 City Engineer: _____

SCALE: 1" = 40' DRAWN BY: Jerry Booker DATE: 8-27-04 SOFTWARE: AutoCAD 14 FILE NAME: RTR-11 ROAD PROFILE-A DRAWING LIMITS: 1440/960 PLOT SCALE: 480	REV. DATE BY DESCRIPTION 1 9-18-04 JB REVISED NOTES		WRIGHT ENGINEERING 9609 LA ROCHELLE GREENVILLE, TX 75402 CUSTOMER: JERRY VISSICK PROJECT: RANCH TRAIL ROAD & F.M. 3097 (HORIZON RD.) LOCATION: ROCKWALL, TEXAS SHEET: ROAD PROFILE-B	DRAWING NO: FTR-12
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DRAINAGE AREA CALCULATIONS

DRAINAGE AREA LETTER	C	I In. / hr.	A Acres	Q 100 C.F.S.
A	0.9	9.8	2.48	21.8
B	0.9	9.8	0.4	3.5
C	1.6	9.8	0.12	0.7
TOTAL			3.00	26.00

- DRAINAGE AREA 'A': WEST DITCH = 12' WIDE, 1.5' DEEP, DITCH CAPACITY ON 3.4% GRADE:

$$Q = A \times 1.486 \times R^{487} S^{49} / n$$

$$= 9 \times 1.486 \times (0.7276)^{487} \times (0.004)^{49} / 0.03$$

$$= 9 \times 2.534$$

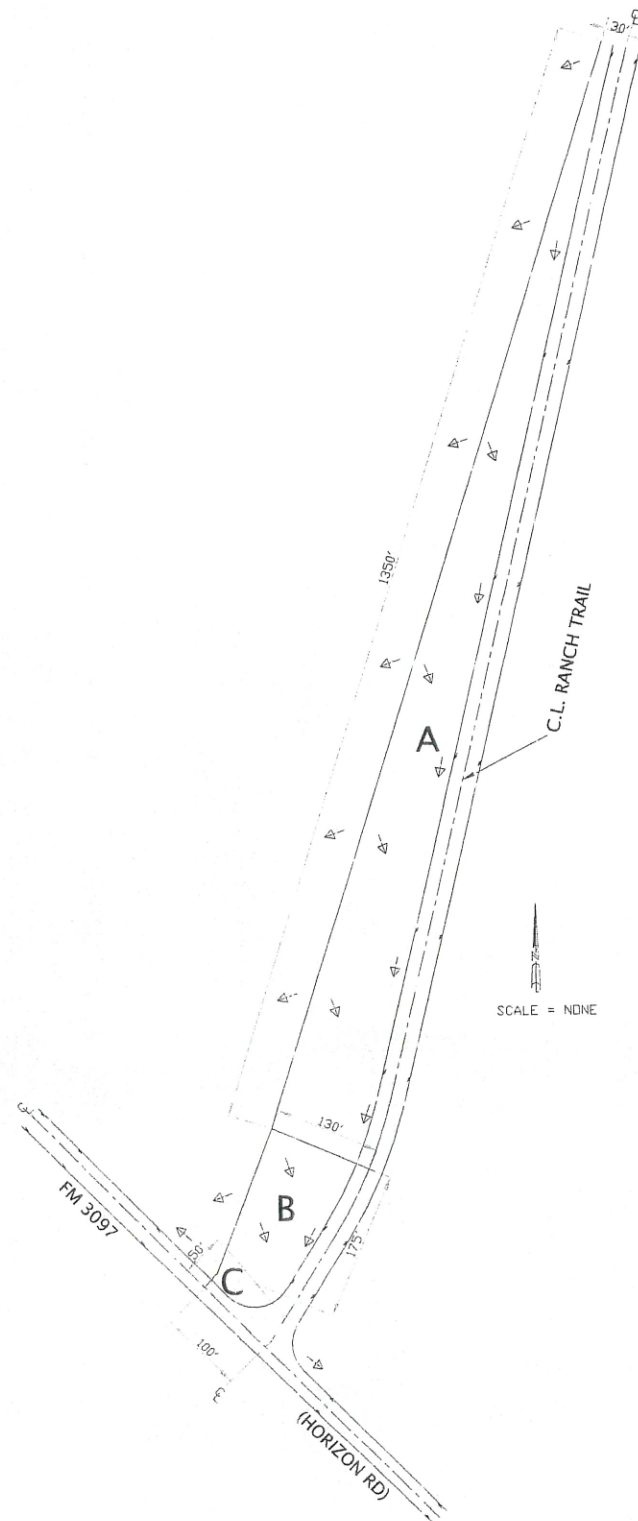
$$= 22.81 \text{ C.F.S.} > 21.8 \text{ C.F.S. OK}$$

- DRAINAGE AREA 'B': WEST DITCH CAPACITY ON 3.0% GRADE:

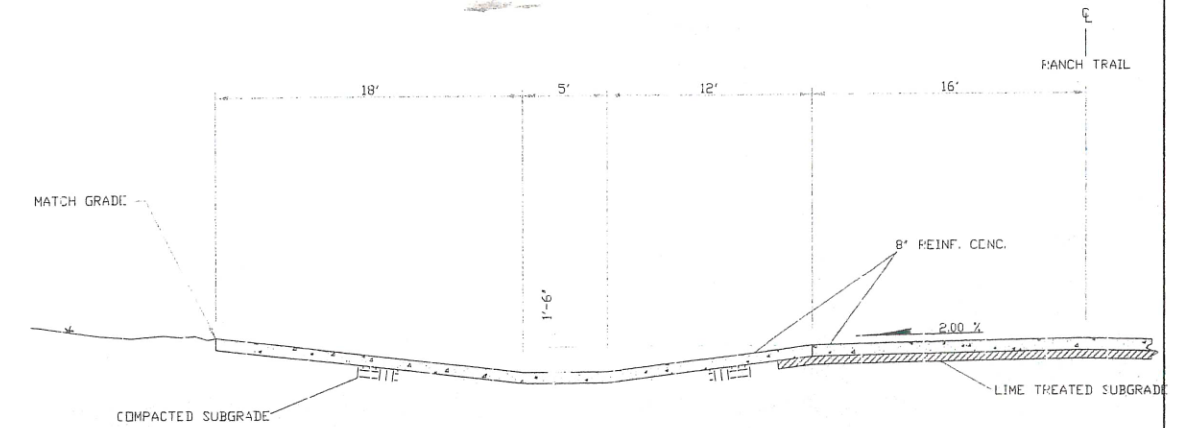
$$Q = 9 \times 1.486 \times (0.7276)^{487} \times (0.03)^{49} / 0.03$$

$$= 9 \times 6.94$$

$$= 62.5 \text{ C.F.S.} > 26.0 \text{ C.F.S. OK}$$



DRAINAGE AREA MAP



DRIVEWAY DETAIL

(VIEW N.E.)
N.T.S.

**APPROVED FOR
CONSTRUCTION**

NOV 11 2004

City of Rockwall Engineering Dept.
City Engineer: _____

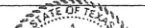


DATE: 10/7/04	BY: JB	DESCRIPTION: REVISED PER JW MARKUPS OF 10/6/04	Wright Engineering 9609 La Rochelle Greenville, TX 75402	DRAWING NO: RTR-13
DATE: 11/1/04	BY: JB	DESCRIPTION: CULVERTS AT WEST END OF RANCH TRAIL REMOVED. (THE INTERSECTION IS AT THE CREST OF THE HILL)		
DESIGNED BY: Jerry Booker	CHECKED BY: Jerry Booker	DATE: 10/6/04	DESIGNED BY: JERRY KISSICK	
SOFTWARE: AutoCAD 14			PROJECT: RANCH TRAIL ROAD & FM 3097 (HORIZON RD)	
FILE NAME: RTR-13 DRAINAGE AREA MAP			LOCATION: ROCKWALL, TEXAS	
DRAWING NUMBER: 4300,2820			DATE: 11/1/04	
PLANT SCALE: 1" = 100'			DATE: 11/1/04	

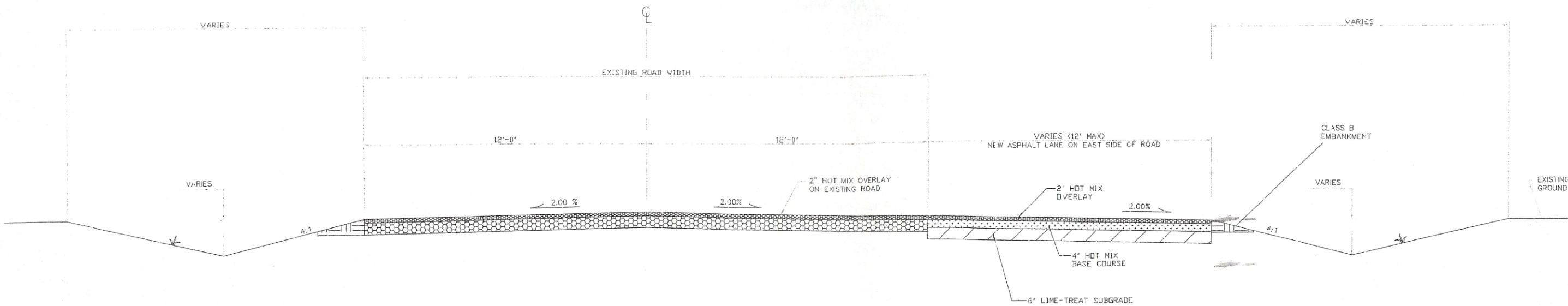


City of Rockwall Engineering Dept.
City Engineer: _____

PROPOSED TURN LANE

SCALE: 1" = 40'		DN: 84 X 36	REV.	DATE	BY	DESCRIPTION:		WRIGHT ENGINEERING 9609 LA ROCHELLE GREENVILLE, TX 75402		DRAWING NO:	
DRAWN BY:	Jerry Bookler		1	10-30-04	JDB	REVISED TO SHOW EXISTING TURN LANE TRANSITION TO THE NORTH WEST OF RANCH TRAIL. LENGTHENED TURN LANE CURVE.		DESIGNED:	JERRY KISSICK		RTR 1.4
DATE:	10-7-04							CHECKED:			
WCD NAME:	AutoCAD 14							LOCATION:	RANCH TRAIL ROAD & FM 3897 (HORIZEN RD.)		
FILE NAME:	RTR-14 TJRN LANE								ROCKWALL, TE KAS		
DRWING LINT:	1440'x960'							WCD TITLE:	PROPOSED TURN LANE		
PLOT SCALE:											

FM 3097 - (HORIZON RD)



ROAD SECTION

**APPROVED FOR
CONSTRUCTION**

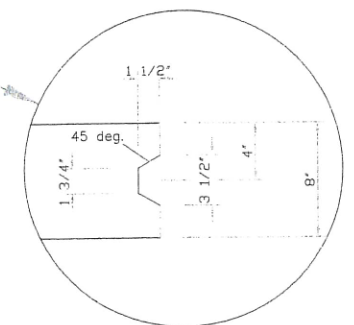
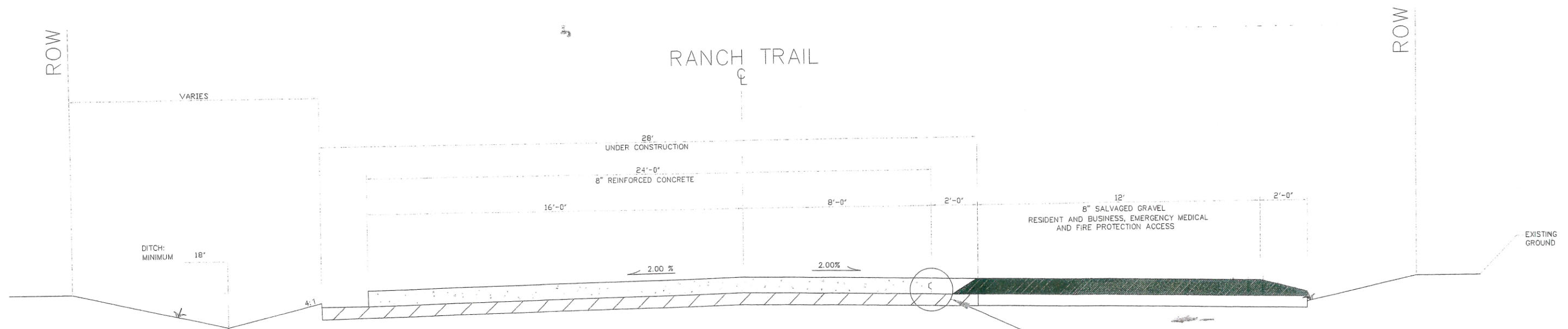
NOV 11 2004

City of Rockwall Engineering Dept.
City Engineer: _____

SCALE: 1/2" = 1'	DATE: 11-18-04	BY: JB	DESCRIPTION: REVISED NOTES
DRAWN BY: Jerry Boake			
CHECKED BY: 10-6-04			
SOFTWARE: AutoCAD 14			
FILE NAME: RTR - 2.5 ROAD SECTION			
DRAWING LENGTH: 72'-48"			
PLOT SCALE: 1" = 24'			

JOHN D. WRIGHT
67571
REGISTERED PROFESSIONAL ENGINEER
NOV. 5, 2004

Wright Engineering 9509 La Rochelle Greenville, TX 75402	DRAWING TITLE: RTR-1.5
DESIGNER: JERRY KISSICK	
CHECKED: RANCH TRAIL ROAD & F.M. 3097 (HORIZON RD.)	
ROCKWALL, TEXAS	
DATE: 11-18-04	
ROAD SECTION - FM 3097 (HORIZON RD.)	



RANCH TRAIL CROSS SECTION CONSTRUCTION PHASING PLAN

1/2" = 1'

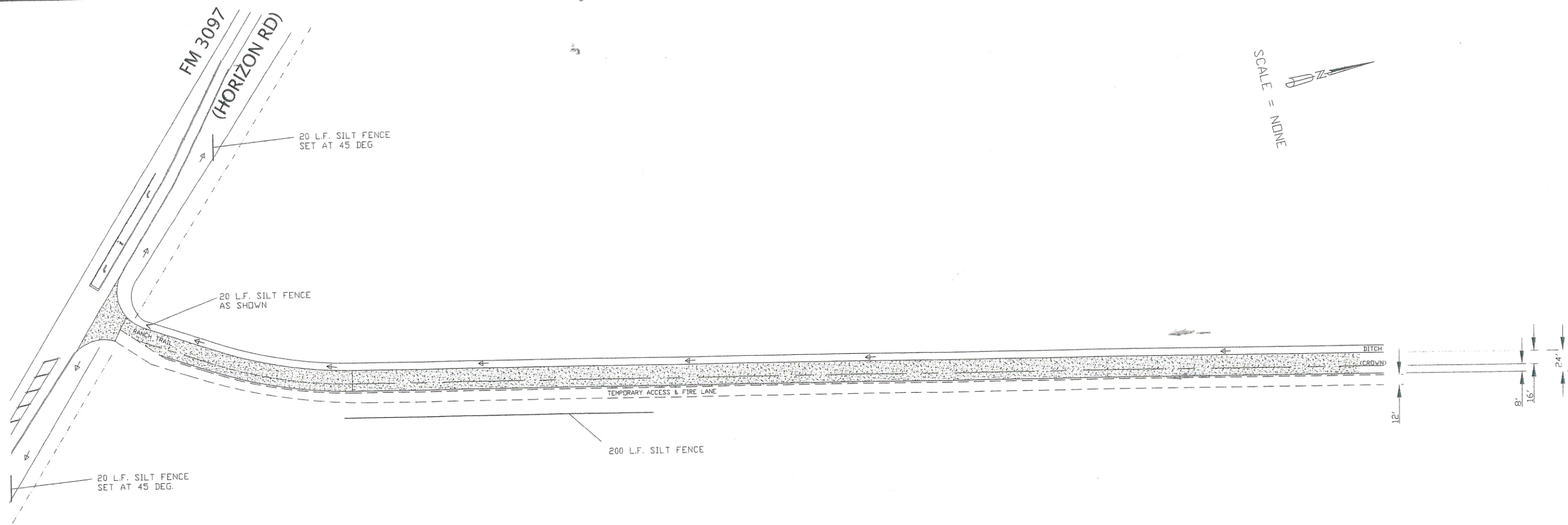
**APPROVED FOR
CONSTRUCTION**

NOV 11 2004

City of Rockwall Engineering Dept.
City Engineer: _____

SCALE: 1/2" = 1'	DATE: 11-12-04	BY: Jerry Bookner	DESCRIPTION: RANCH TRAIL CROSS SECTION CONSTRUCTION PHASING PLAN	FILE NAME: RTR-1.6 CROSS SECTION CONSTRUCTION PHASING PLAN	GRAPHIC CODE: 72.46	PLOT SCALE: 1 = 24	Wright Engineering 9609 La Rochelle Greenville, TX 75402	DRAWING NO: RTR 1.6
							JERRY KISSICK	
							RANCH TRAIL ROAD & F.M. 3097 (HORIZON RD.)	
							ROCKWALL, TEXAS	
							RANCH TRAIL CROSS SECTION CONSTRUCTION PHASING PLAN	

SCALE = NONE



RANCH TRAIL ROAD CONSTRUCTION PHASING PLAN SWP-3

**APPROVED FOR
CONSTRUCTION**

NOV 11 2004

City of Rockwall Engineering Dept.
City Engineer: _____

SCALE: NONE	DN: 24X36	REV.	DATE	BY	DESCRIPTION
DRAWN BY: Jerry Booker					
FILE NAME: RTR1.7- CONST PHASING PLAN RTRD					
SOFTWARE: AutoCAD 200					
DWG. LIMITS:					
PLOT SCALE:					

Wright Engineering
9609 LA ROCHELLE
GREENVILLE, TX 754402

CUSTOMER: JERRY KISSICK
LOCATION: RANCH TRAIL ROAD & F.M. 3097 (HORIZON RD.)
ROCKWALL, TEXAS
DWG. TITLE:
DATE: 11-12-04

DRAWING NO:
RTR 1.7
SHEET OF