

JEFFERSON COUNTY, TEXAS ENGINEERING DEPARTMENT

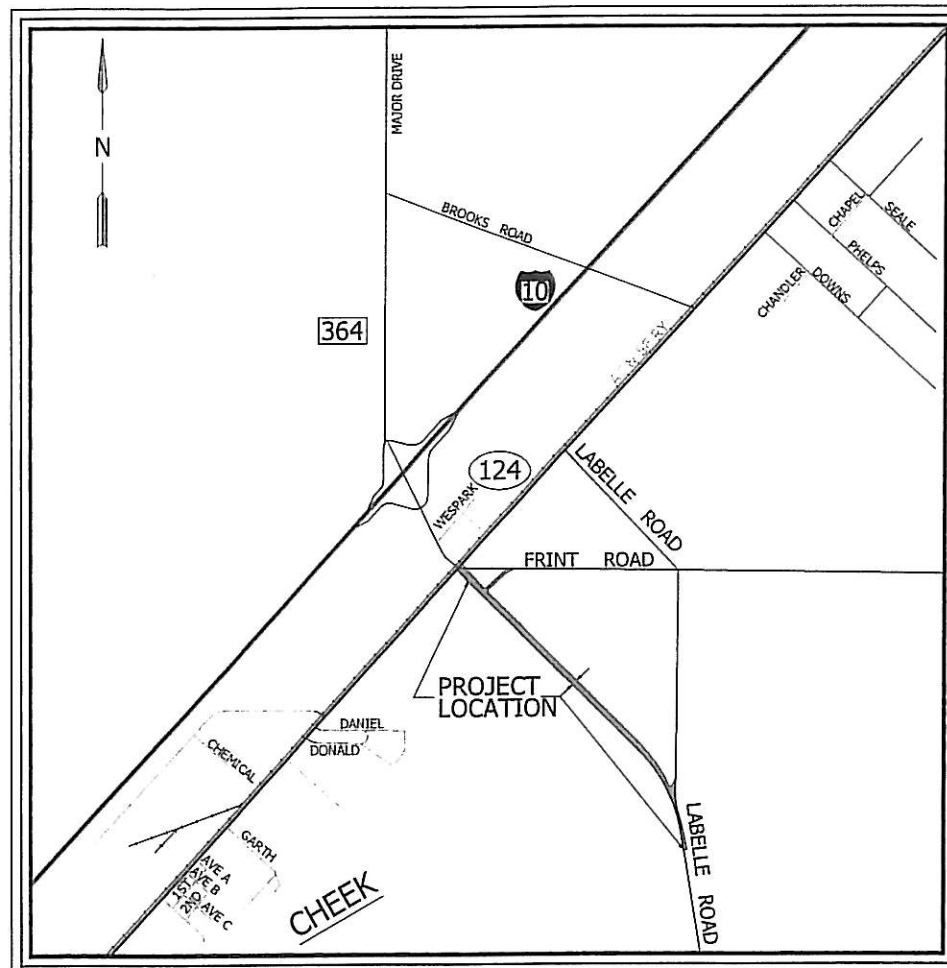
PLANS OF PROPOSED LABELLE ROAD EXTENSION RIGHT-OF-WAY FENCING

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE SUMMARY SHEET
3	GENERAL NOTES
4	PROJECT LAYOUT SHEET
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FINAL PLANS

DATE OF LET : _____
 DATE WORK BEGAN: _____
 DATE WORK COMPLETED: _____
 CONTRACTOR: _____
 USED ____ OF ____ DAYS ALLOTTED
 PROJECT COST: _____
 RESPONSIBLE ENGINEER FOR CONSTRUCTION
 AND FINAL PLAN PREPARATION: _____
 _____ DATE



PROJECT LOCATION
LAYOUT SCALE: N.T.S.



Bradley Steven Stafford
 BRADLEY STEVEN STAFFORD, P.E.
 REGISTERED PROFESSIONAL ENGINEER NO. 70807
 P.E. 1-30-13
 DATE

* THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE
 HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE
 SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF
 TRANSPORTATION, JUNE 1, 2004 AND SPECIFICATION ITEMS
 LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED
 CONTRACT PROVISIONS FOR ALL FEDERAL CONSTRUCTION CONTRACTS
 (FORM FHWA 1273, DECEMBER 1993)

APPROVED FOR LETTING

 DIRECTOR OF ENGINEERING



JEFFERSON COUNTY


LABELLE ROAD EXTENSION RIGHT-OF-WAY FENCING

SHEET 1 OF 1

DESIGN	J.D.		SHEET NO.
CHECKED	D.R.		1

ESTIMATE SUMMARY SHEET

					ITEM	CODE	SPL		DESCRIPTION	UNIT	TOTAL QUANTITY
					500	2001	011		MOBILIZATION	LS	1.00
					502	2001	033		BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2.00
					550	2003			CHAIN LINK FENCE (REMOVE)	LF	294.00
					552	2003			WIRE FENCE (TY C)	LF	15822.00
					552	2005			GATE (TY 1)	EA	4.00
					552				WIRE FENCE (REMOVE)	LF	2294.00
									Alternate 1		
					552	2001			WIRE FENCE (TY A)	LF	15822.00


JEFFERSON COUNTY

**LABELLE ROAD
EXTENSION
RIGHT-OF-WAY
FENCING**

ESTIMATE SUMMARY SHEET

SHEET 1 OF 1

DESIGN

J.D.

SHEET NO.

CHECKED

D.R.

2

Project Number:

Sheet: _____

County: Jefferson County

Project: Labelle Rd Fencing

General Notes:

The base bid for this project will include galvanized barbed wire fence with metal posts (Type "C" Fence). Each bidder will also submit an alternate bid for galvanized barbed wire fence with wood posts (Type "A" Fence). If none of the base bids are within the project budget, then the alternate bids will be used to determine the low bidder.

Provide a Contractor's Responsible Person and a phone number for emergency contact.

Assume ownership for all designated waste material and dispose of it at a place off of the right of way, as approved by the engineer.

Item 6: Control of Materials

The Contractor will be responsible for all testing or having testing performed by an acceptable testing company. Consider this work to be subsidiary to the various bid items of the contract.

Item 502: Barricades, Signs, and Traffic Handling

Remove all traffic control devices from the project area when they are not in use.

Item 550: Chain Link Fence

Removal of a gate on a chain link fence will be paid per linear foot as removal of chain link fence.

Item 552: Wire Fence

Removal of existing barbed wire fence shown on the plans will be paid for by the linear foot under this item.



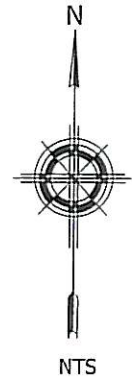
JEFFERSON COUNTY

LABELLE ROAD
EXTENSION
RIGHT-OF-WAY
FENCING

GENERAL NOTES

SHEET 1 OF 1

DESIGN	J.D.		SHEET NO.
CHECKED	D.R.		3

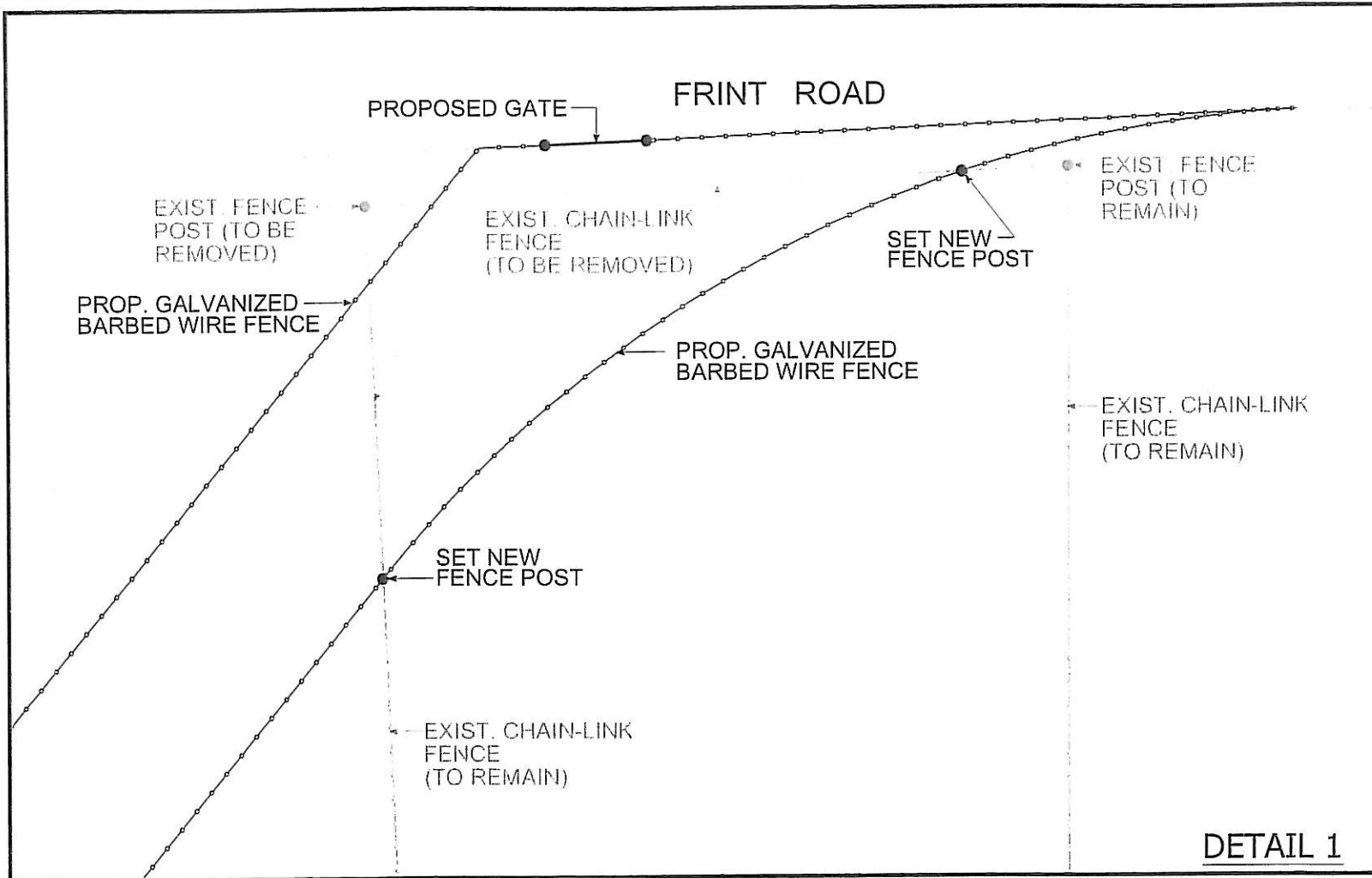


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 1-30-13
 DATE

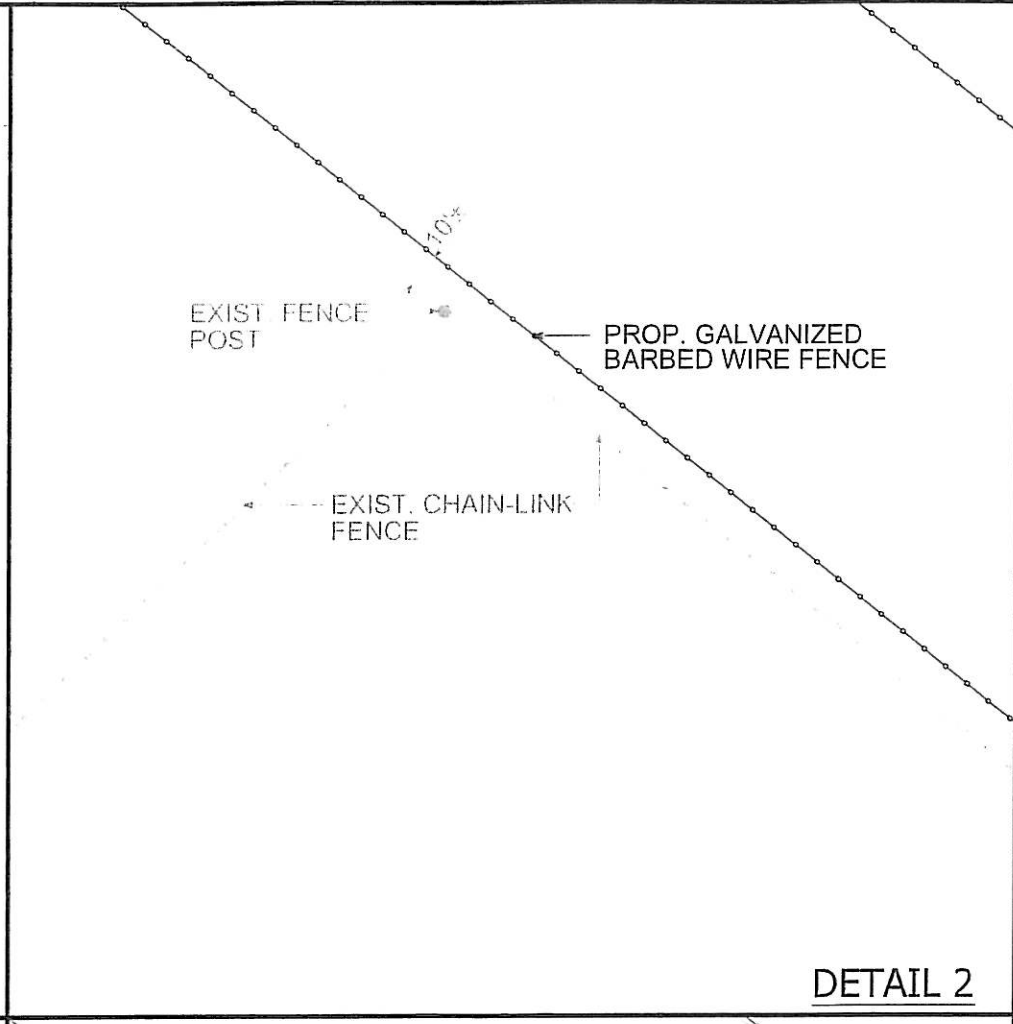
 JEFFERSON COUNTY

**LABELLE ROAD
 EXTENSION
 RIGHT-OF-WAY
 FENCING**
 PROJECT LAYOUT
 SHEET 1 OF 1

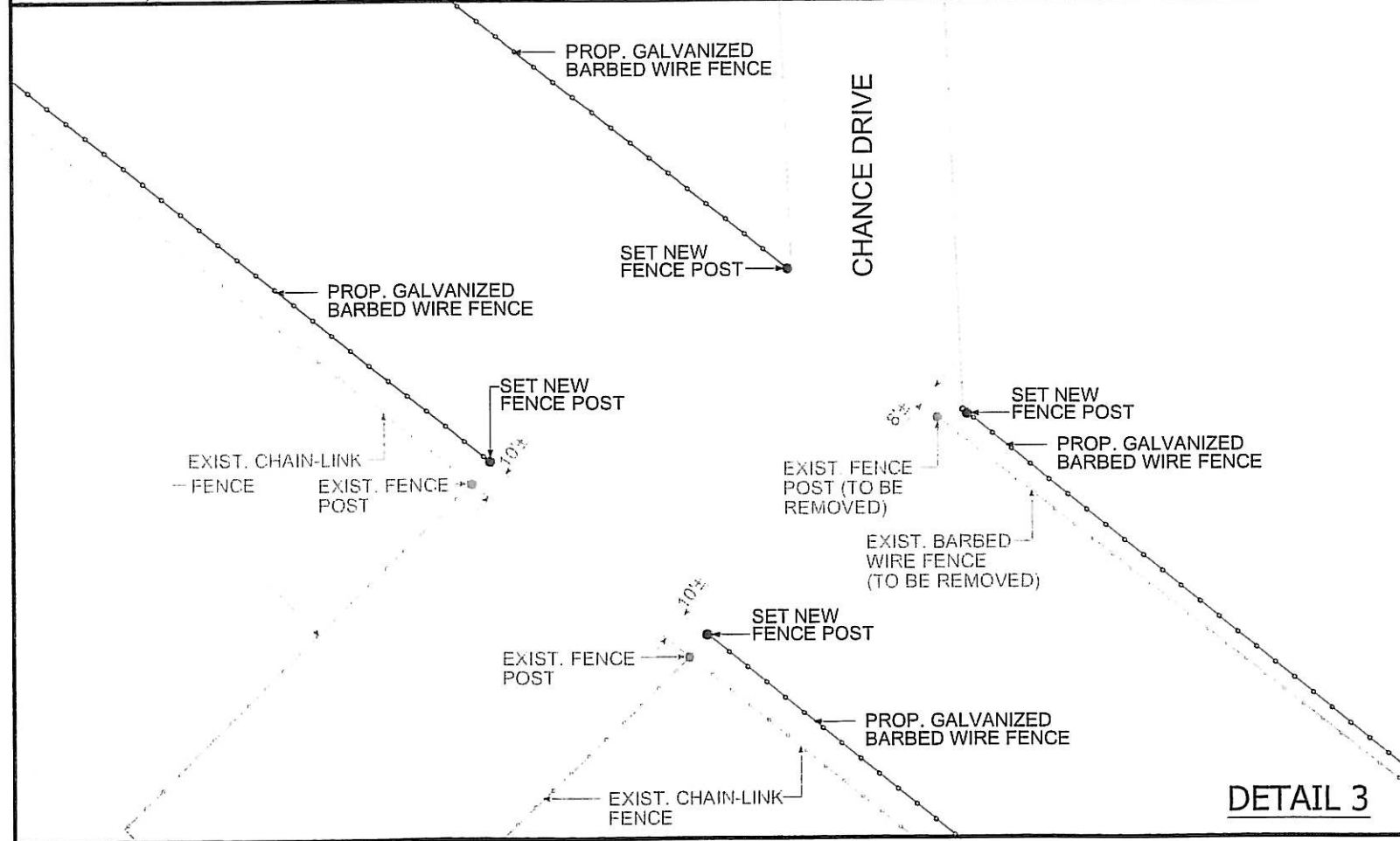
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CHECKED	D.R.	



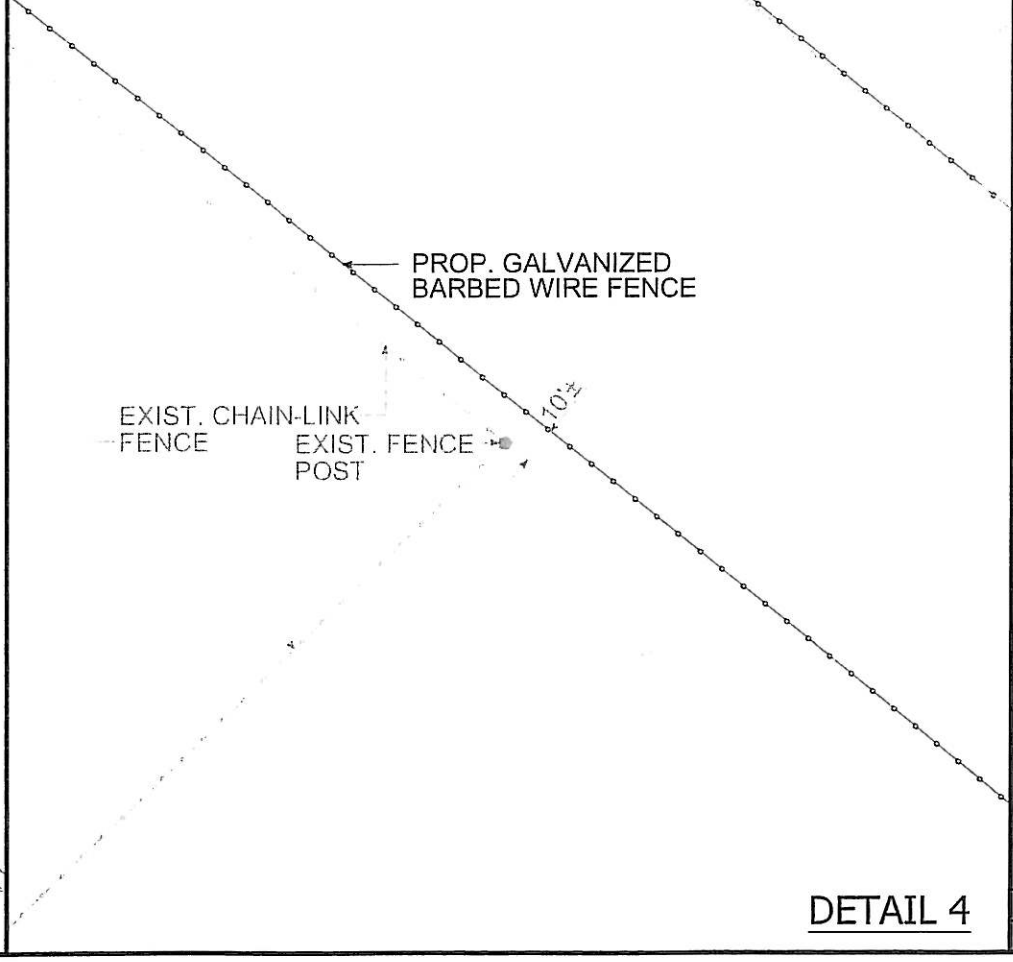
DETAIL 1



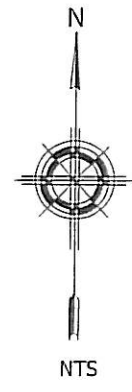
DETAIL 2



DETAIL 3



DETAIL 4



Bradley Steven Stafford P.E.
 BRADLEY STEVEN STAFFORD, P.E.
 REGISTERED PROFESSIONAL ENGINEER NO. 70807

1-30-13
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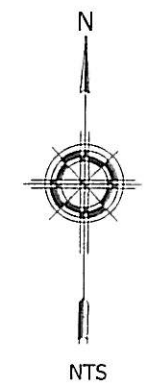
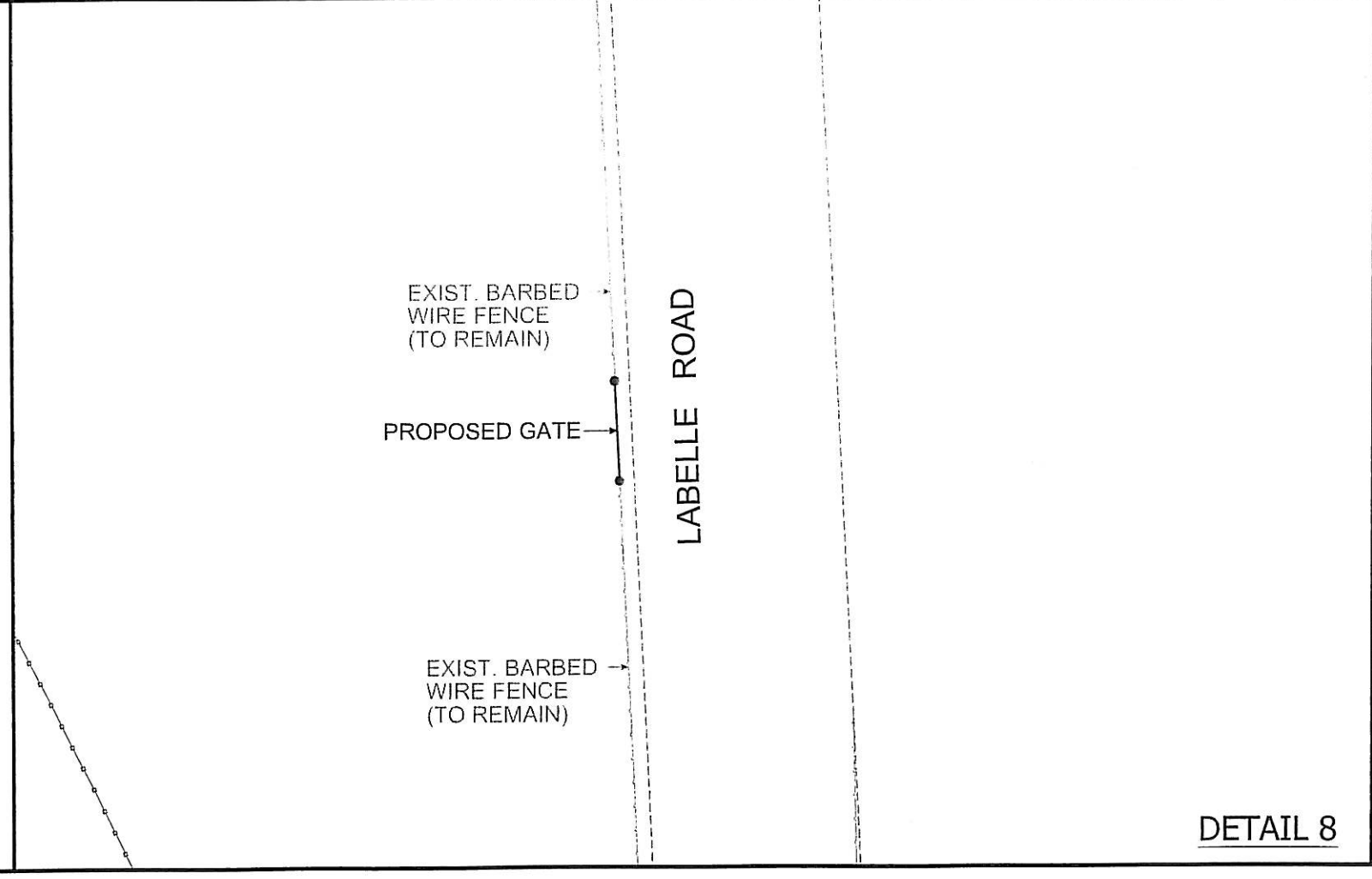
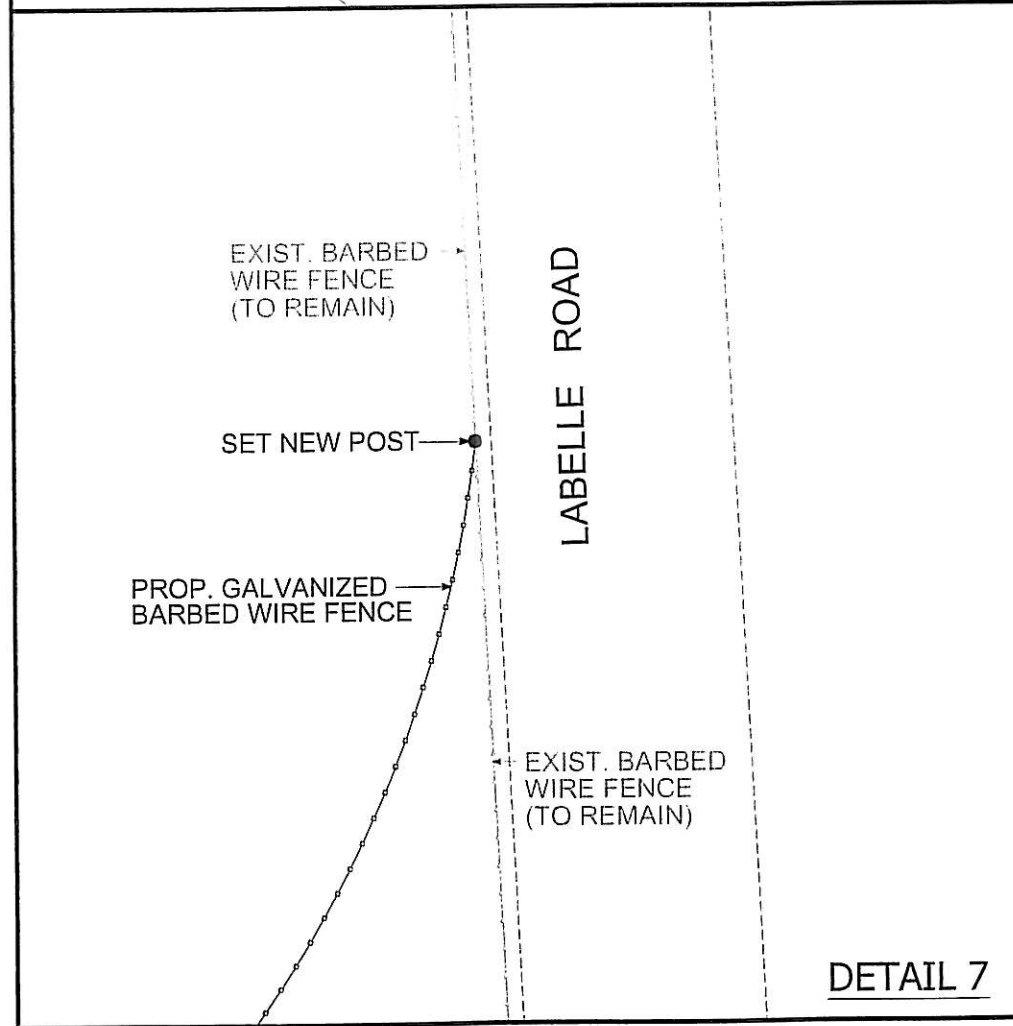
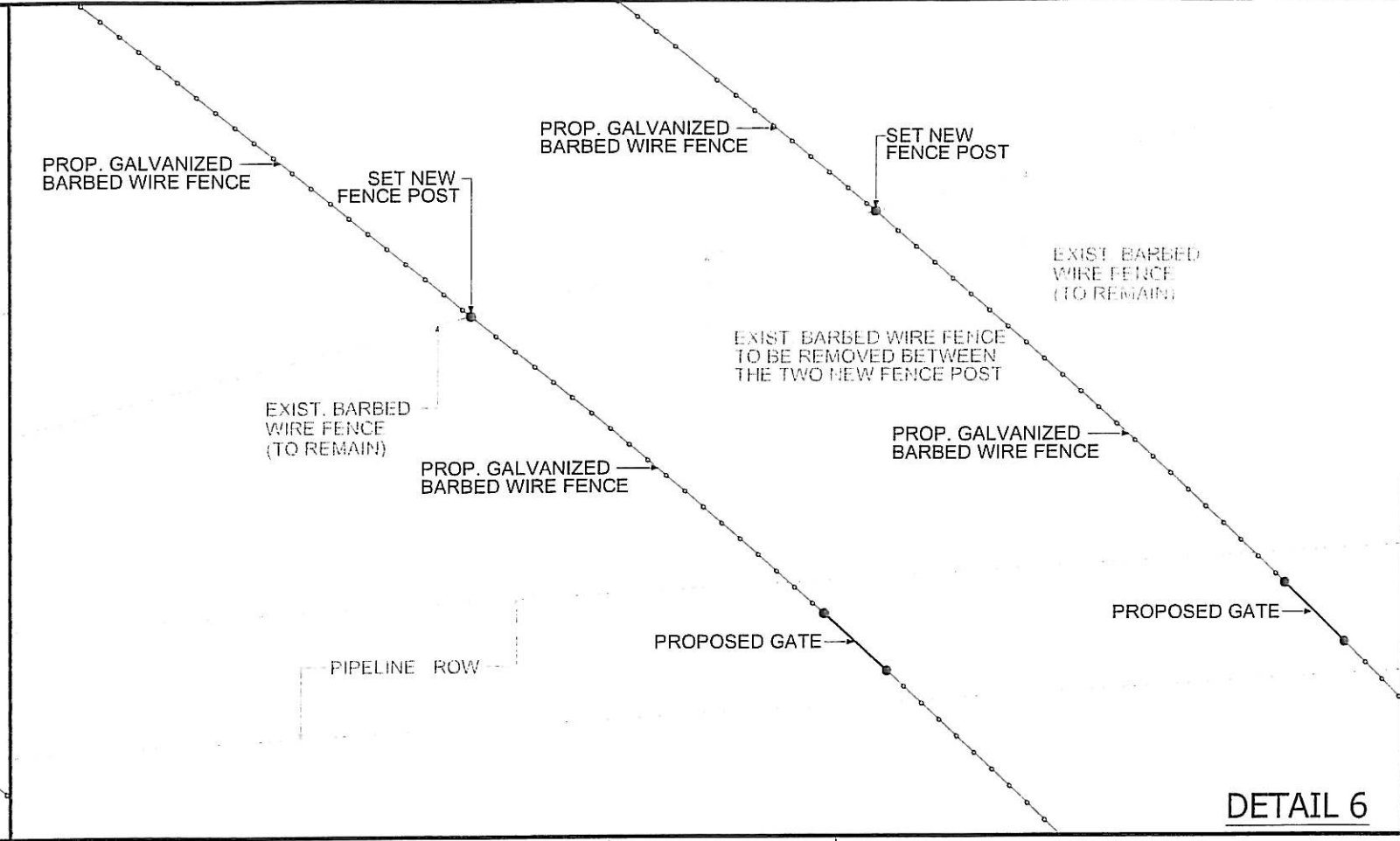
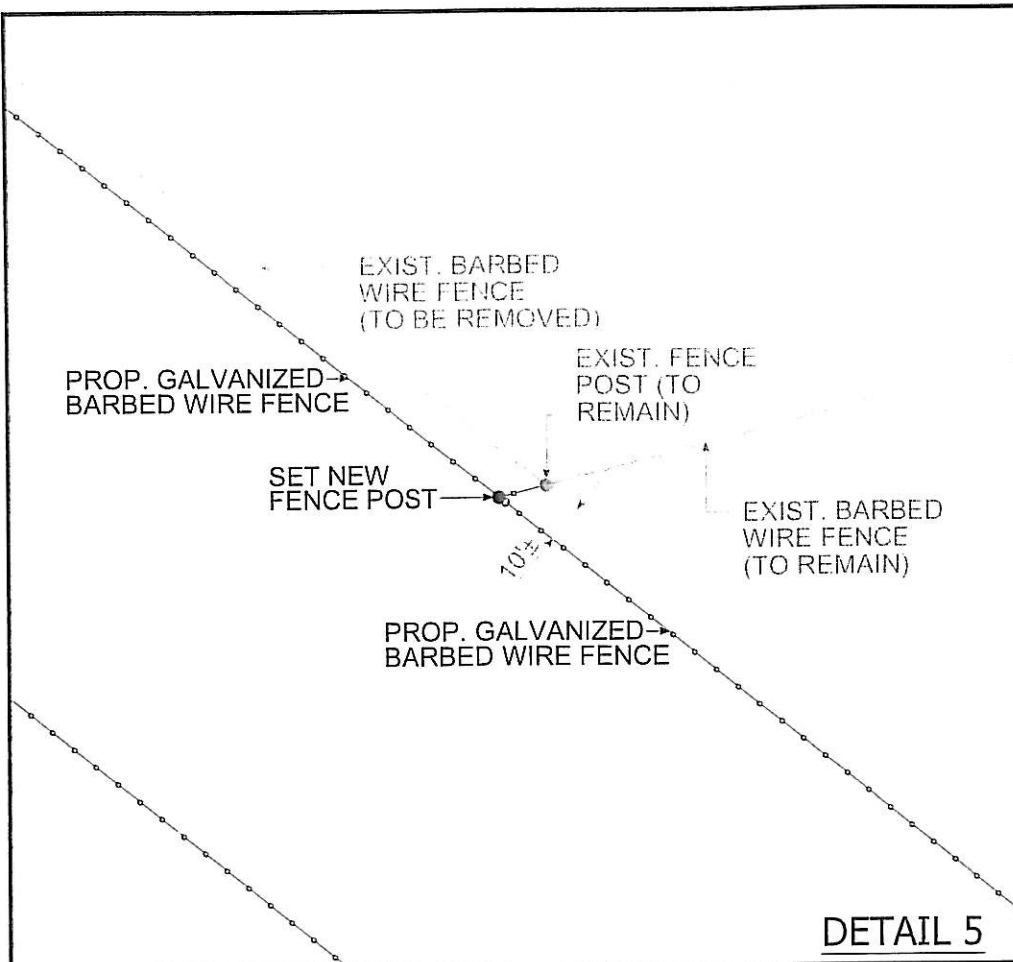


JEFFERSON COUNTY

LABELLE ROAD
 EXTENSION
 RIGHT-OF-WAY
 FENCING

DETAILS
 SHEET 1 OF 3

DESIGN	J.D.	SHEET NO. 5
CHECKED	D.R.	



Bradley Steven Stafford P.E.
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 1-30-13
 DATE



LABELLE ROAD
 EXTENSION
 RIGHT-OF-WAY
 FENCING

DETAILS
 SHEET 2 OF 3

DESIGN	J.D.	SHEET NO. 6
CHECKED	D.R.	

PROP. GALVANIZED
BARBED WIRE FENCE

SET NEW POST

EXIST. BARBED
WIRE FENCE
(TO REMAIN)

EXIST. (2) 5' x 12'
METAL GATES
(TO REMAIN)

EXIST. BARBED
WIRE FENCE
(TO REMAIN)

LABELLE ROAD

DETAIL 9

LABELLE ROAD

EXIST. BARBED
WIRE FENCE
(TO REMAIN)

SET NEW POST

EXIST. BARBED
WIRE FENCE
(TO BE
REMOVED)

PROP. GALVANIZED
BARBED WIRE FENCE

DETAIL 10

LABELLE ROAD

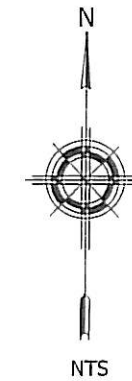
EXIST. BARBED
WIRE FENCE
(TO BE
REMOVED)

PROP. GALVANIZED
BARBED WIRE FENCE

SET NEW POST

EXIST. BARBED
WIRE FENCE
(TO REMAIN)

DETAIL 11



Bradley Steven Stafford P.E.
BRADLEY STEVEN STAFFORD, P.E.
REGISTERED PROFESSIONAL ENGINEER NO. 70807

1-30-13
DATE



JEFFERSON COUNTY

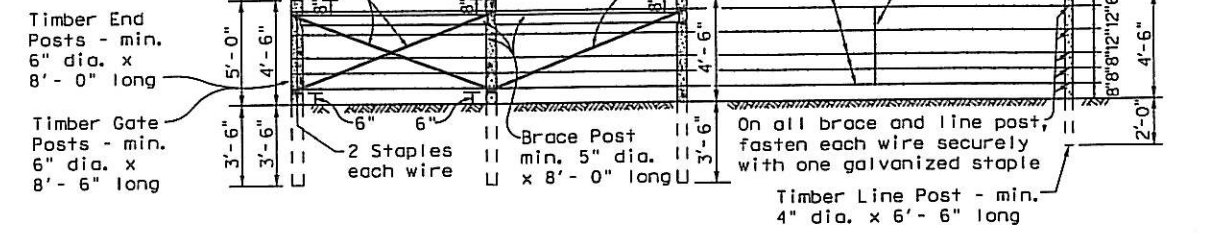
LABELLE ROAD EXTENSION RIGHT-OF-WAY FENCING

DETAILS
SHEET 3 OF 3

DESIGN	J.D.	SHEET NO. 7
CHECKED	D.R.	

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Additional brace post and tie will not be required when distance to next brace post is less than 200'

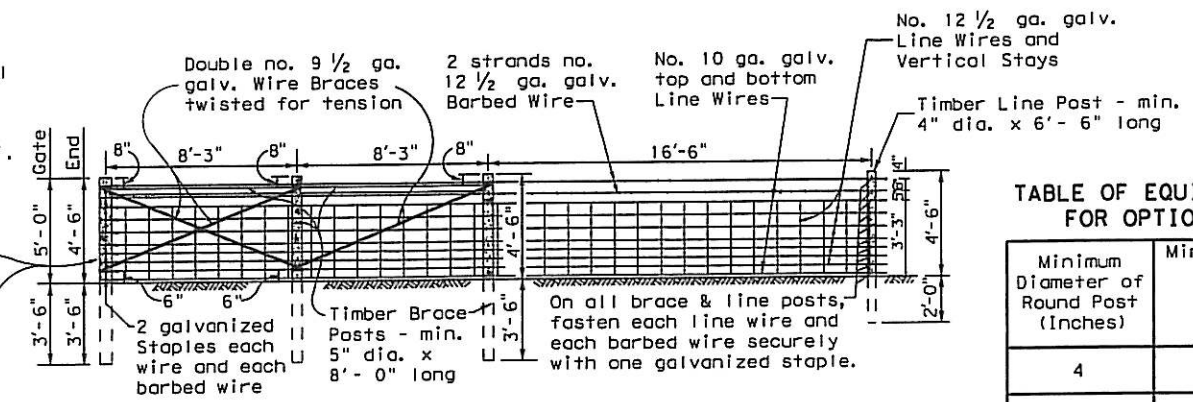


SECTION GALVANIZED BARBED WIRE FENCE WITH WOOD POSTS
Bracing Detail Used at Ends and Gates

TYPE "A" FENCE
(See General Note 6)

Additional brace post and tie will not be required when distance to next brace post is less than 200'.

Timber End Posts - min. 6" dia. x 8'-0" long
Timber Gate Posts - min. 6" dia. x 8'-6" long



SECTION GALVANIZED WOVEN WIRE FENCE WITH WOOD POSTS
Bracing Detail Used at Ends and Gates

TYPE "B" FENCE
(See General Note 6)

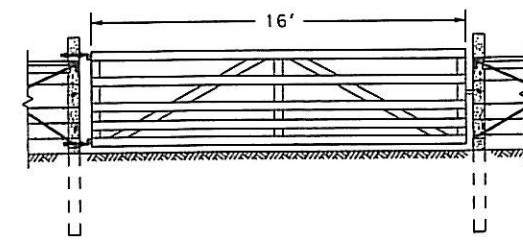
TABLE OF EQUIVALENT SIZES FOR OPTIONAL SHAPE

Minimum Diameter of Round Post (Inches)	Minimum Equivalent Dimension for Each Side of Square Post (Inches)
4	3 1/2
5	4 1/2
6	5 1/4

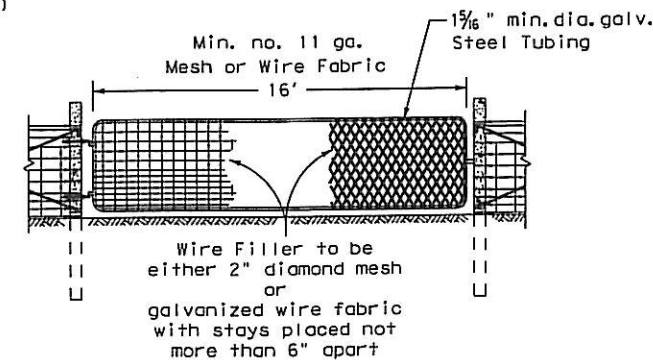
GENERAL NOTES

- Any high point which interferes with the placing of wire mesh shall be excavated to provide 2" clearance.
- Latches for Type 1 and Type 2 gates shall be good commercial quality and design latches of the spring, fork or chain type. All latches shall be suitable for the gate and shall be approved by the Engineer.
- Hinges for Type 2 gates shall be commercial design approved by the Engineer suitable for post and gate.
- Concrete shall be of the design and consistency approved by the Engineer and shall contain not less than 4 sacks of cement per cubic yard. Concrete footings are to be crowned at the top to shed water.
- If rock is encountered at a depth less than the embedded depth required, a 15" or larger diameter hole shall be drilled for the post and the post shall be set in concrete. If rock is encountered at a depth of 1'-6" or more below the ground surface, the hole shall be drilled to the required depth. If rock is encountered at a depth less than 1'-6" below the ground surface, the holes shall be drilled a minimum of 2'-0" into the rock or to the depth whichever is the lesser depth.
- Barbed Wire shall be in accordance with ASTM A 121 (Class 1) Design designation 12-2-4-1 4R or 12-2-5-1 4R, or as approved by the Engineer.
Woven Wire Fence (Type B) shall be in accordance with ASTM A 116 (Class 1) No. 12-1/2 Grade 60 (See Table 1 ASTM A 116) to the height and design shown on the plans, or as approved by the Engineer.
- The location of gates and corner posts will be as indicated elsewhere on these plans.
- Square wood posts may be used in lieu of round posts provided minimum equivalent size requirements, as shown are met. All wood posts shall be in accordance with Item 552, "Wire Fence."

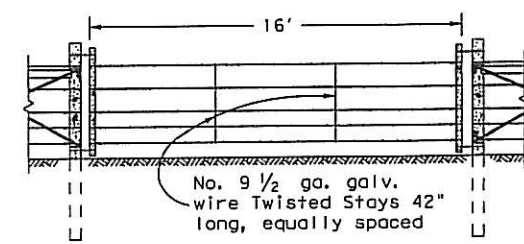
Metal gate shall consist of 5 panels not less than 4'-4" high and shall be aluminum or galvanized metal and of good quality. Gate and hardware shall meet the approval of the Engineer.



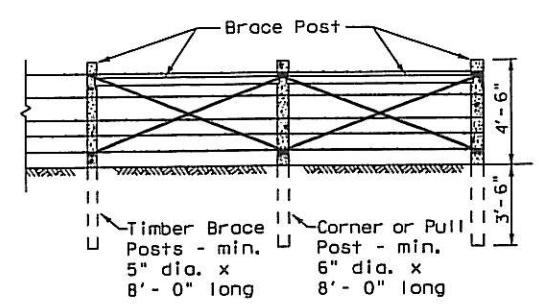
DETAIL TYPE 1 GATE



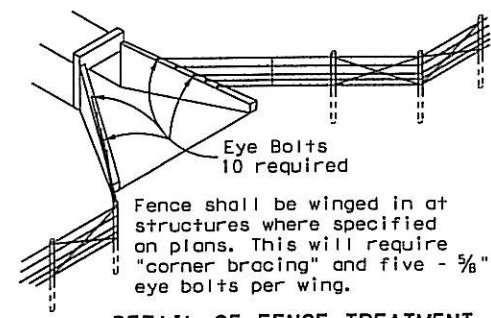
DETAIL TYPE 2 GATE



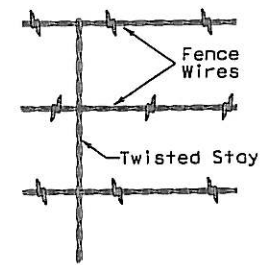
DETAIL TYPE 3 GATE



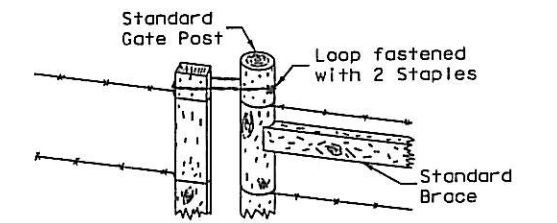
CORNER OR PULL POST ASSEMBLY



DETAIL OF FENCE TREATMENT AT STRUCTURES

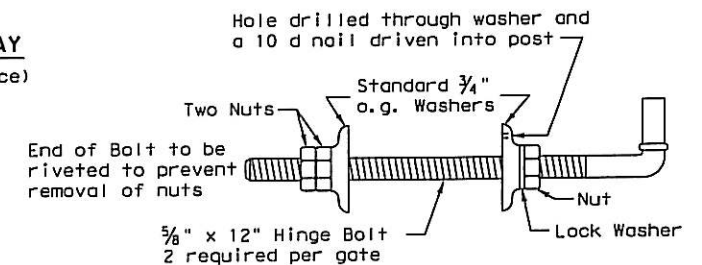


DETAIL OF STAY (Barbed wire fence)

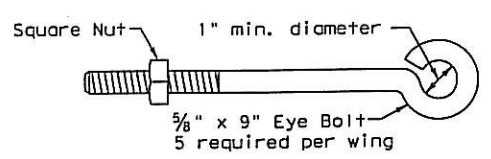


Loop to be made from two strands twisted no. 9 1/2 ga. galv. smooth wire, and to be securely fastened to gate post with two galv. staples.

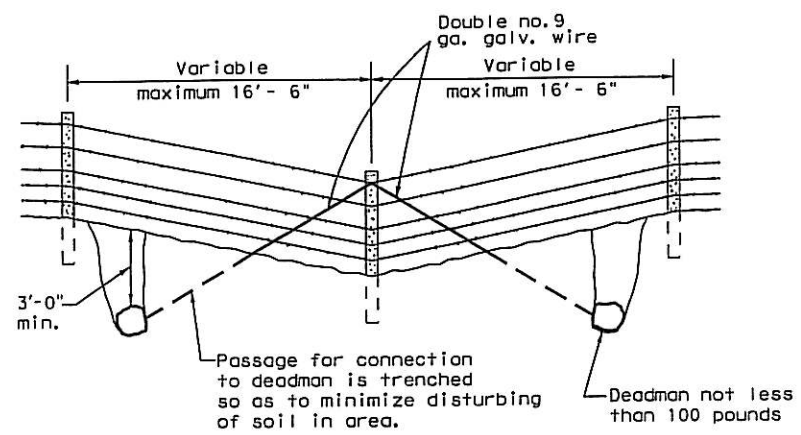
DETAIL FASTENER TYPE 3 GATE



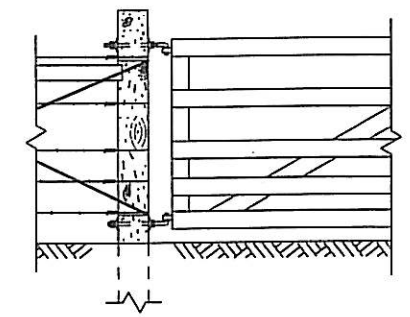
DETAIL OF GATE HINGE BOLT ASSEMBLY



DETAIL OF EYE BOLT



DETAIL OF FENCE SAG (Single Line Connection)



DETAIL SHOWING INSTALLATION OF HINGES OF TYPE 1 & 2 GATE

Texas Department of Transportation
Design Division Standard

BARBED WIRE AND WOVEN WIRE FENCE (WOOD POSTS)

WF (1) - 10

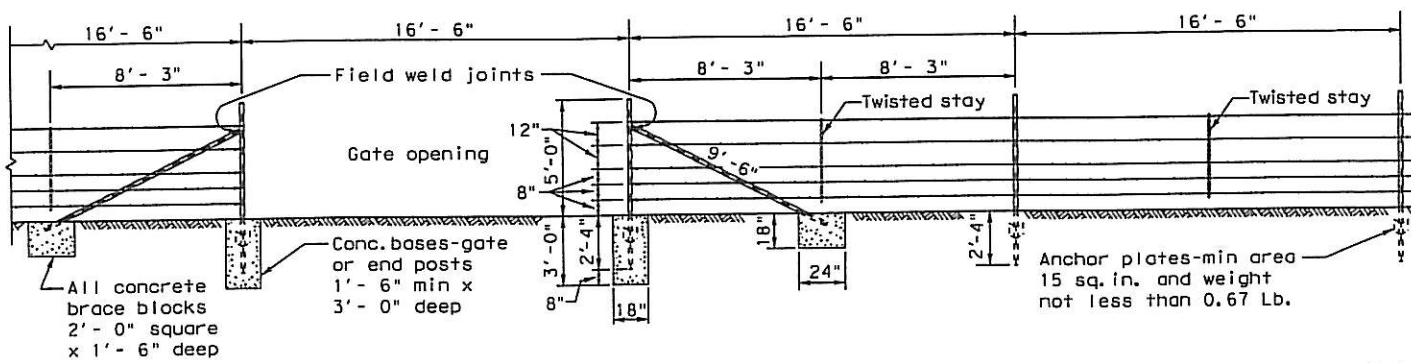
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© TxDOT 1994	COIT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	

8

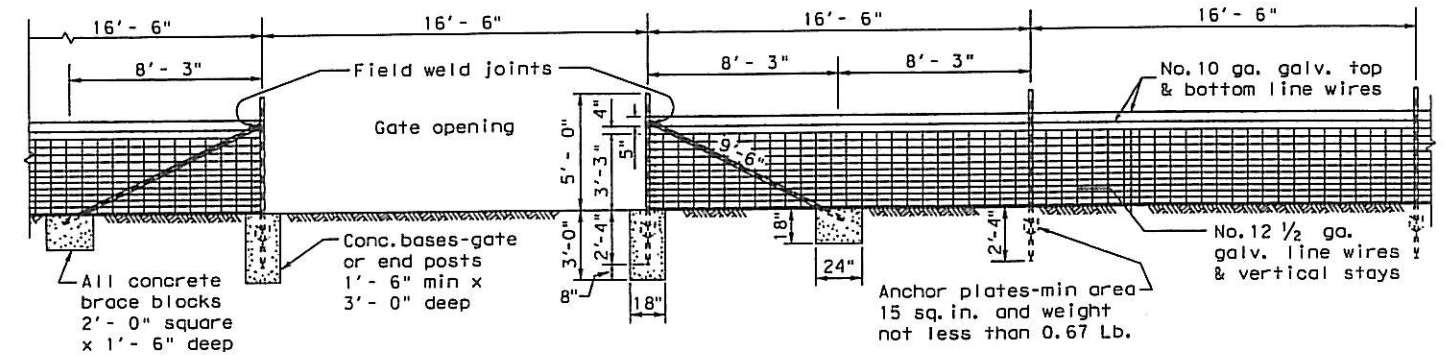
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DATE: FILE:



SECTION GALVANIZED BARBED WIRE FENCE WITH METAL POSTS
BRACING DETAIL USED AT ENDS AND GATES
TYPE "C" FENCE
(See General Note 8)



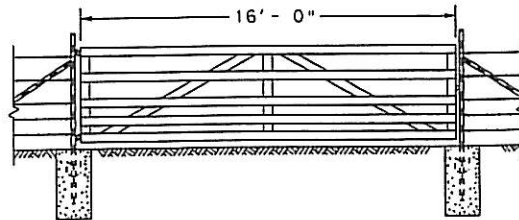
SECTION GALVANIZED WOVEN WIRE FENCE WITH METAL POSTS
BRACING DETAIL USED AT ENDS AND GATES
TYPE "D" FENCE
(See General Note 8)

Note:
For Steel pipe and T-Post requirements.
(See General Notes 6 & 7)

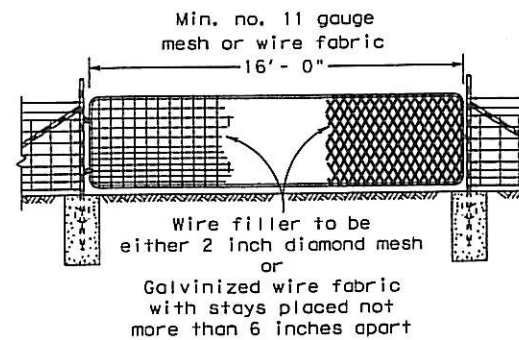
GENERAL NOTES

- Any high point which interferes with the placing of wire mesh shall be excavated to provide a 2 inch clearance.
 - Latches for Type 1 and Type 2 gates shall be good commercial quality and design latch of the spring, fork or chain type. All latches shall be suitable to the gate and shall be approved by the Engineer.
 - Hinges for Type 2 gates shall be a commercial design approved by the Engineer suitable for post and gate.
 - Concrete shall be of the design and consistency approved by the Engineer and shall contain not less than 4 sacks of cement per cubic yard. Concrete footings are to be crowned at the top to shed water.
 - Steel anchor plates shall be of a design and thickness sufficient to prevent turning of the post in firm soil.
 - Steel pipe end posts, corner and pull posts shall be a minimum of 2" Std. pipe (2.375" O.D., 0.154" wall thickness) with a 1/4" Std. pipe brace (1.660" O.D., 0.140" wall thickness), with a 2"x2"x1/4" angle, or other as approved by the Engineer. Fasteners for securing barbed wire or woven wire fence to metal posts shall be a minimum of 11 gauge galvanized steel wire. Tubular posts shall be fitted with water malleable iron caps.
 - If Steel pipe is used for posts and braces, use standard pipe in accordance with ASTM A 53, Class B or A 501. For T-Posts use steel that meets ASTM A 702. Metal line posts shall be not less than 6'-6" in length and shall weigh not less than (1.33 lbs./lin.ft.). These items shall be in accordance with Item 552, "Wire Fence."
 - Barbed Wire shall be in accordance with ASTM A 121, Class 1 Design designation 12-2-4-1 4R or 12-2-5-1 4R, or as approved by the Engineer.
- Woven Wire Fence (Type D) shall be in accordance with ASTM A 116, Class 1 No. 12-1/2 Grade 60 (See Table 1 ASTM A 116) to the height and design shown on the plans, or as approved by the Engineer.
- The location of gates and corner posts will be as indicated elsewhere in these plans.

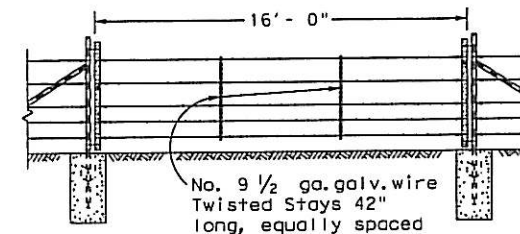
Metal gate shall consist of 5 panels not less than 4'-4" high and shall be aluminum or galvanized metal and of good quality. Gate and hardware shall meet the approval of the engineer.



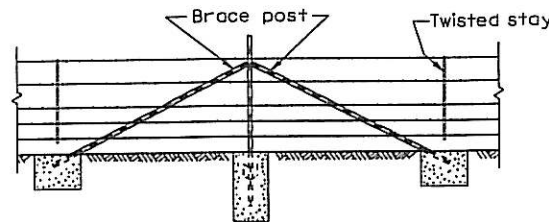
DETAIL TYPE 1 GATE



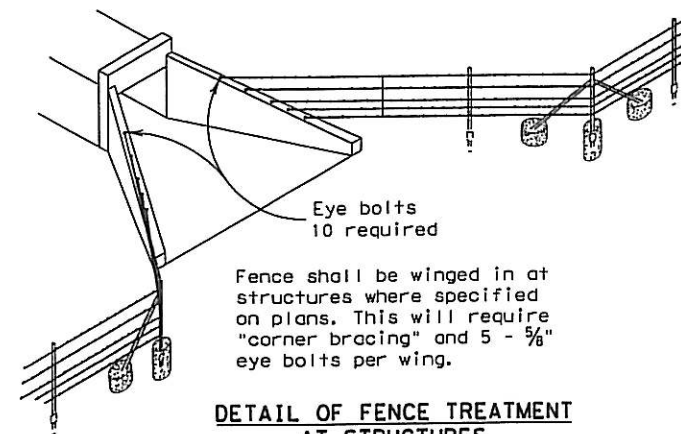
DETAIL TYPE 2 GATE



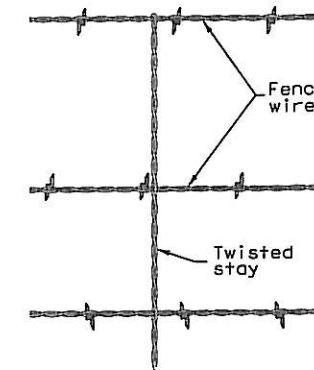
DETAIL TYPE 3 GATE



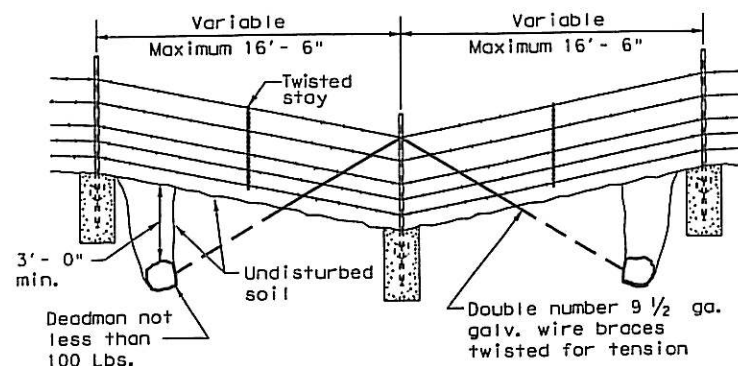
CORNER OR PULL POST ASSEMBLY



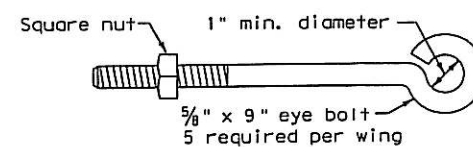
DETAIL OF FENCE TREATMENT AT STRUCTURES



DETAIL OF STAY (Barbed Wire Fence)



DETAIL OF FENCE SAG



DETAIL OF EYE BOLT

Texas Department of Transportation
Design Division Standard

BARBED WIRE AND WOVEN WIRE FENCE (STEEL POSTS)

WF (2) - 10

FILE: wf210.dgn	DATE: TxDOT	CHK: AM	DW: BD/VP	CR:
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REVISIONS	DIST	COUNTY	SHEET NO. 9	