



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
DESIGN DIVISION  
NASHVILLE, TENNESSEE 37243-0348

**INSTRUCTIONAL BULLETIN NO. 08-09**

**Regarding the New and Revised Right-of-Way Stock Fence Standard Drawings**

The new standard drawing S-F-10C is approved for use on ROW Fence for Bridge and Culverts and S-F-10D is approved for use on ROW Fence Locations at Interchanges. The existing standard drawings S-F-10, S-F-10A, S-FG-11, and S-FG-20 are revised. All subject standard drawings are **effective** for the October 31, 2008 letting (August 27, 2008 Turn-In Date)

Until the drawings are added to the standard drawings, they are to be printed with the plans. The drawings shall be identified on the lower left side of the index sheet **“To be printed with plans”**.

Copies of the new and revised standard drawings are attached. The Metric version of the subject Standard Drawing may be obtained by calling the Quality Assurance and Standards Office at (615)741-2806.

This bulletin **voids** Instructional Bulletin 01-24.

**ROADWAY STANDARD DRAWINGS – ENGLISH**

<u>Drawing Number</u>	<u>Current Revision Date</u>	<u>Drawing Title</u>
S-F-10	1-24-08	Standard ROW Stock Fence
S-F-10A	1-24-08	Standard ROW Stock Fence with Timber Posts
S-F-10C		ROW Fence for Bridge and Culverts
S-F-10D		ROW Fence Locations at Interchanges
S-FG-11	1-24-08	Standard Stock Fence Gate
S-FG-20	1-24-08	Examples of Water Gates and Water Crossings

Original signed by Jeff C. Jones  
Jeff C. Jones, Civil Engineering Director  
Design Division

June 25, 2008  
JCJ:arh  
Attachment

REV. 1-17-76: CHANGED DRAWING NUMBER FROM 707-03-10(89) TO 707-03-10.  
 REV. 1-19-76: REMOVED CHAIN LINK SHEET DETAILS AND SPECIES FROM THIS SHEET.  
 REV. 1-1-77: CHANGED DEPARTMENT NAME.  
 REV. 12-2-75: ADDED ITEM NO. 8 FOR END BRACED LINE AND CORNER POSTS.  
 FROM 10" TO 8".

REV. 7-17-81: CHANGED ITEM NO. TO AGREE WITH NEW SPECIFICATION BOOK.  
 REV. 1-24-08: REDREW SHEET AND UNBROKEN ALL FENCE POSTS, CHANGED TIE WIRE AND CHAIN LINK FENCE TO 5'-F-10C.

REV. 3-3-65: ADDED NOTE REGARDING BRACKET TYPE RODS AND FITTINGS.  
 REV. 1-1-77: CHANGED DEPARTMENT NAME.  
 REV. 12-2-75: ADDED ITEM NO. 8 FOR END BRACED LINE AND CORNER POSTS.  
 FROM 10" TO 8".

1-STRAND OF 1/2" GAGE TWISTED STEEL LINE WITH 4 GAGE 4-POINT BARBS AT 5'-C-C MAXIMUM TO BE PLACED 4'-6" ABOVE THE GROUND.

2 STRANDS, 2-12.5 GAGE TWISTED STEEL LINE 1/4 GAGE 4 PT. BARBS 5' C.C. MAX.

DIAGONAL BRACE 2"x2"x1/4" L OR 1.25" STD. PIPE FASTEN WITH A MIN. OF 5 CLAMPS PER POST



END POST  
 ITEM NO. 707-03.02

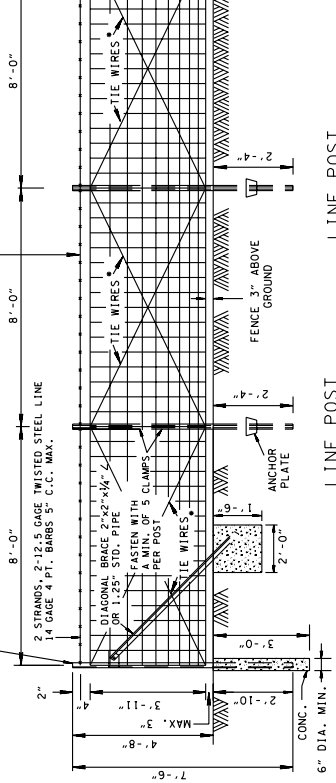
NOTE REGARDING TIE WIRES:  
 NO. 9 GAGE DOUBLE STRAND GALVANIZED TIE WIRE TWISTED TO SINGING TIGHTNESS, DOUBLE WRAPPED AROUND POSTS.

8'-0"

8'-0"

8'-0"

8'-0"



LINE POST  
 ITEM NO. 707-03.01

8'-0"

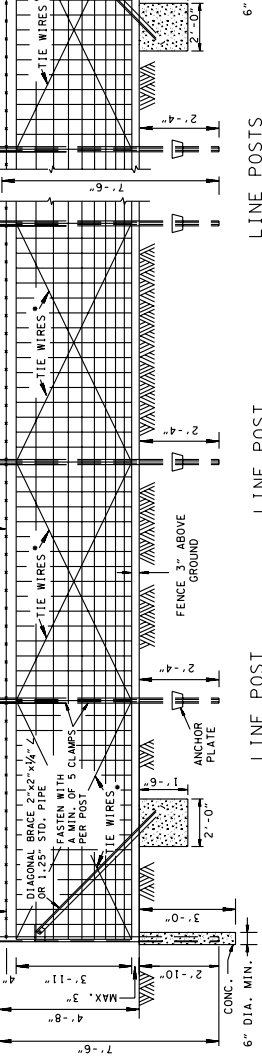
8'-0"

8'-0"

8'-0"

8'-0"

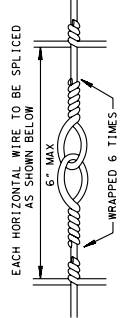
8'-0"



LINE POST  
 ITEM NO. 707-03.01

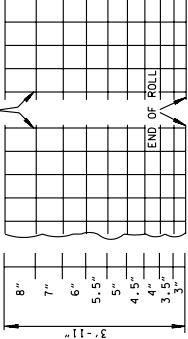
BRACED LINE POST  
 ITEM NO. 707-03.02

REQUIRED, AT 324" MAX. INTERVALS FOR FIRST ROLL FROM THE BEGINNING CORNER 330" MAXIMUM HEREFTER THE STACING WILL BE FROM A 6" OFFSET OF FABRIC TO THE BEGINNING OF THE BRACED LINE POST ASSEMBLY. FOR ATTACHING THE STRETCHING DEVICE, AND FOR SPLICING TO THE NEXT ROLL.



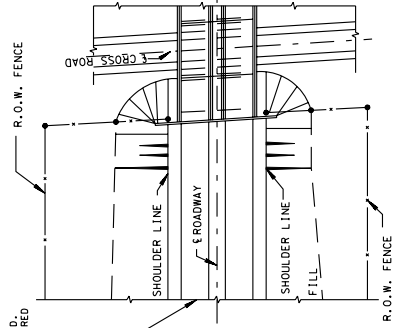
SPLICE DETAIL FOR FENCE

THESE WIRES TO BE REMOVED

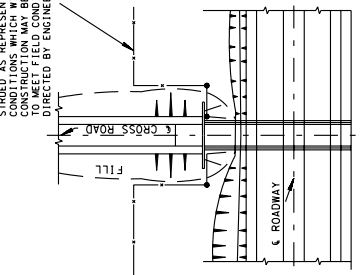


FARM FENCE WIRE DETAILS

NOTE: THESE INSTALLATION SCHEMES ARE TO BE CONSIDERED AS REPRESENTATIVE OF ALL CONDITIONS WHICH WILL BE ENCOUNTERED. FIELD CONDITIONS AS SHOWN SHOULD BE MET TO MEET FIELD CONDITIONS AND/OR AS DIRECTED BY ENGINEER.



PLAN ROADWAY OVER CROSS ROAD



PLAN ROADWAY UNDER CROSS ROAD

**GENERAL NOTES**

- A WIRE FABRIC WILL MEET REQUIREMENTS FOR ASTM A-116 FOR NO. 11 FABRIC, DESIGN NO. 1047-6-11, CLASS III COATING.
- B SEE STANDARD DRAWING S-F-20 FOR DETAILS OF FENCING OVER DITCHES AND AT OTHER ABRUPT DEPRESSIONS.
- C SEE STANDARD SPECIFICATIONS, SUB-SECTION 707.05 REGARDING FURNISHING AND PLACING ADDITIONAL BRACED LINE POSTS WHERE TERRAIN IS IRREGULAR.
- D FENCE TO BE ANGLED TO EDGE OF CULVERTS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
- E PAYMENT WILL BE MADE UNDER:  
 ITEM NO. 707-03-01-STOCK FENCE PER LIN. FT.  
 ITEM NO. 707-03-02-END BRACED LINE & CORNER POST ASSEMBLIES (STOCK FENCE) PER EACH

REVISIONS  
 APPROVAL NOT REQUIRED

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION

STANDARD  
 RIGHT-OF-WAY  
 STOCK FENCE

6-1-59 S-F-10

REV. 7-17-81: CHANGED ITEM NO. TO AGREE WITH NEW SPECIFICATION BOOK.

REV. 1-24-08: REDREW SHEET AND ADDED NOTE ①.

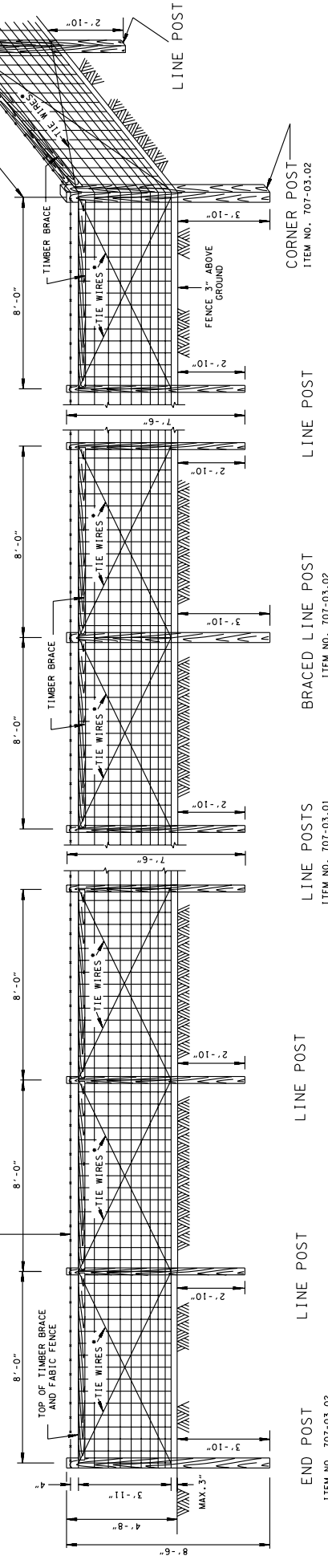
REV. 1-1-76: CHANGED DRAWING NUMBER FROM RD-F-101(68), (SHEET 2) TO S-F-100.

REV. 2-26-77: DELETED BARBED WIRE AT BOTTOM OF FENCE. CHANGED POST SPACING ON BRACED LINE POSTS AND CORNER POSTS FROM 10' TO 8'. ADDED NOTES REGARDING FENCING OVER DITCHES AND IRREGULAR TERRAIN.

REV. 7-1-72: CHANGED DEPARTMENT NAME.

REV. 12-7-75: ADDED ITEM NO.'S FOR END BRACED LINE AND CORNER POST.

1-STRAND OF 12½ GAGE TWISTED STEEL LINE WITH 14 GAGE 4 POINT BARBS AT 5" C-C MAXIMUM TO BE PLACED 4'-6" ABOVE THE GROUND.



END POST  
ITEM NO. 707-03.02

LINE POST  
ITEM NO. 707-03.02

LINE POST  
ITEM NO. 707-03.01

LINE POSTS  
ITEM NO. 707-03.01

BRACED LINE POST  
ITEM NO. 707-03.02

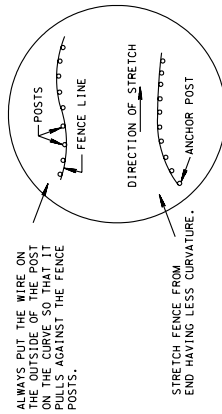
LINE POST  
ITEM NO. 707-03.02

LINE POST  
ITEM NO. 707-03.02

CORNER POST  
ITEM NO. 707-03.02

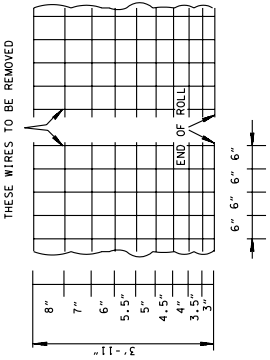
REQUIRED - AT 324" MAX. INTERVALS FOR FIRST ROLL FROM THE BEGINNING CORNER 330" MAXIMUM THEREAFTER. THIS SPACING WILL PERMIT A 6' LENGTH OF FABRIC TO EXTEND BEYOND THE BRACED LINE POST ASSEMBLY, FOR ATTACHING SPLICING TO THE NEXT ROLL.

NOTE REGARDING TIE WIRES: 1. TIE WIRE SHOULD BE SINGLY WRAPPED, DOUBLE WRAPPED AROUND POSTS.

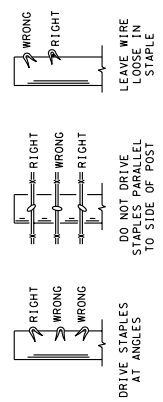


DETAIL OF FENCING ON CURVE

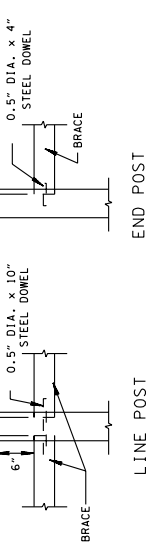
TYPE	SIZE		LENGTH
	ROUND (O.D.A.)	SQUARE (EDGE WIDTH)	
LINE POST	3½"	3½"	7'-6"
BRACED LINE POST	5"	5"	8'-6"
CORNER POST			
END POST			
TIMBER BRACE	3½"	3½"	7'-9"



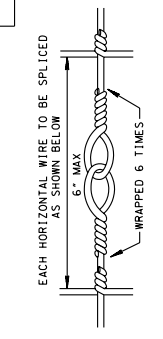
FARM FENCE WIRE DETAILS



STAPLING DETAILS



TIMBER BRACING DETAILS



SPlice DETAIL FOR FENCE

GENERAL NOTES

- WIRE FABRIC WILL MEET REQUIREMENTS FOR ASTM A-116 FOR NO. 11 FARM, DESIGN NO. 1047-6-11, CLASS III COATING.
- USE EITHER ROUND POST AND ROUND BRACING OR SQUARE POST AND SQUARE BRACING.
- USE 1.5" LONG NO. 9 GAGE GALVANIZED STAPLES FOR TIMBER POSTS.
- AT ABRUPT CHANGES IN GRADE OR ALIGNMENT STAPLE EVERY LINE WIRE. AT OTHER ABRUPT CHANGES IN GRADE OR ALIGNMENT STAPLE EVERY ALTERNATE LINE WIRE IN THE BOTTOM HALF. SEE STAPLING DETAILS.
- SEE STANDARD DRAWING S-FG-20 FOR DETAILS OF FENCING OVER DITCHES AND AT OTHER ABRUPT DEPRESSIONS.
- SEE STANDARD SPECIFICATIONS, SUB-SECTION 707.05 REGARDING FURNISHING AND PLACING ADDITIONAL BRACED LINE POSTS WHERE TERRAIN IS IRREGULAR.
- SEE S-F-100 FOR FENCING AT BRIDGES AND CULVERTS.
- IF BARBED WIRE IS BEING USED FOR STOCK FENCE, IT IS TO BE FIVE STRAND BARBED WIRE AND TOP STRAND OF BARBED WIRE IS TO BE PLACED 54" ABOVE THE GROUND. THE BOTTOM STRAND OF BARBED WIRE IS TO BE PLACED 6" ABOVE THE GROUND. THE SPACING BETWEEN STRANDS OF BARBED WIRE IS TO BE PLACED NOT LESS THAN 10" ABOVE THE GROUND. PAYMENT WILL BE MADE UNDER ITEM NO. 707-03.14, FIVE STRAND BARBED WIRE FENCE, PER LINEAR FOOT.
- PAYMENT WILL BE MADE UNDER: ITEM NO. 707-03.01-STOCK FENCE PER LIN. FT. ITEM NO. 707-03.02-END, BRACED LINE & CORNER POST ASSEMBLIES (STOCK FENCE) PER EACH

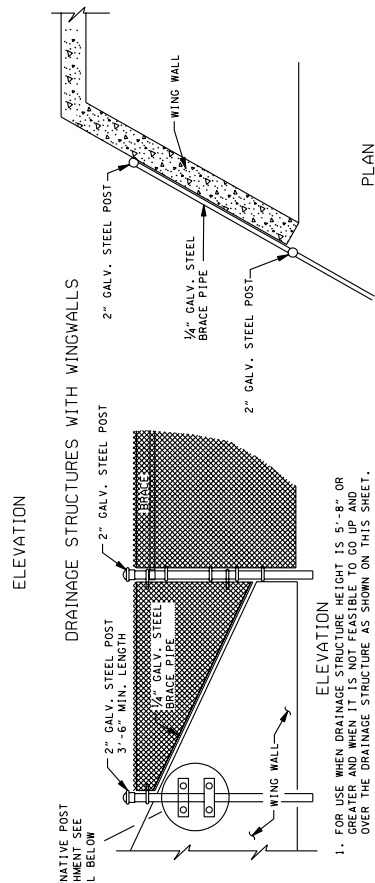
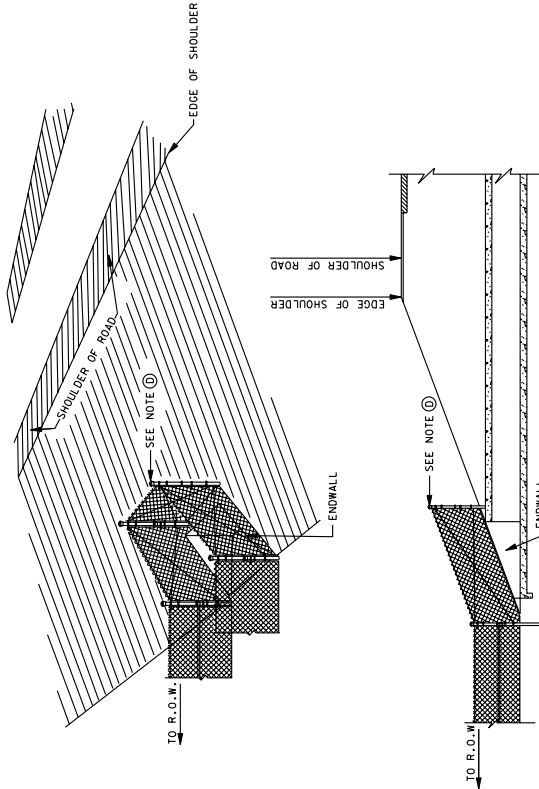
MINOR REVISION - FMA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

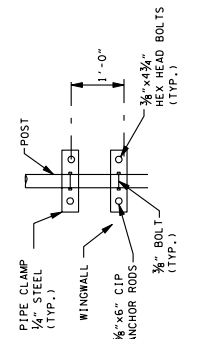
STANDARD  
RIGHT-OF-WAY  
STOCK FENCE WITH  
TIMBER POSTS

1-1-68  
S-F-10A

FENCE UP AND OVER DRAINAGE STRUCTURES WITHOUT WINGWALLS

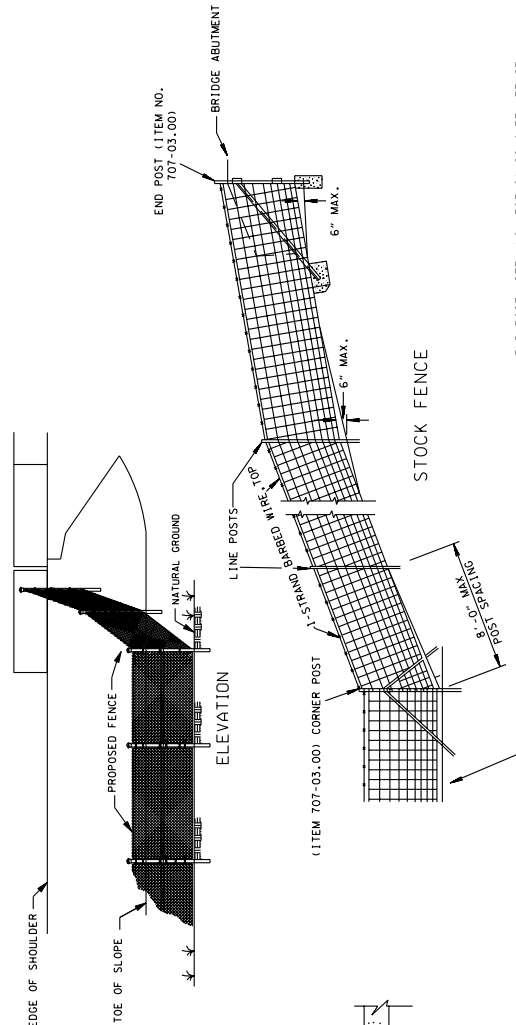
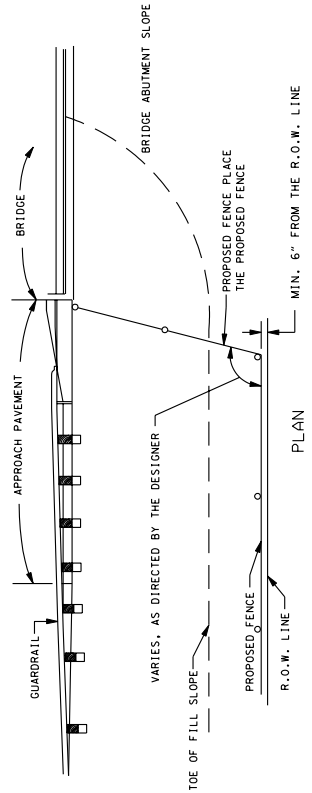


- FOR USE WHEN DRAINAGE STRUCTURE HEIGHT IS 5'-8" OR MORE. THIS OPTION IS SHOWN ON THIS SHEET.
- FENCING TERMINALS AT RETAINING WALL DETAIL ON S-F-100 MAY BE USED AS AN ALTERNATE.

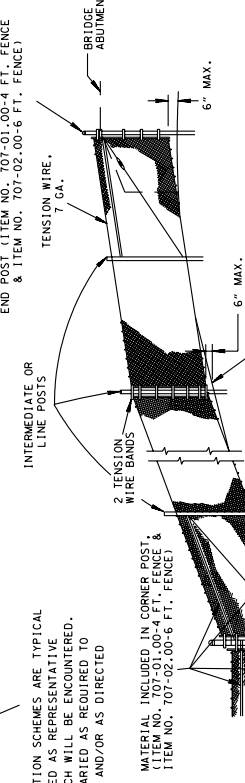


PIPE CLAMP CONNECTION DETAIL  
(NOT A PAY ITEM)

FENCING TERMINALS AT BRIDGE ABUTMENTS



NOTE: THESE INSTALLATION SCHEMES ARE TYPICAL AND NOT TO BE CONSTRUED AS REPRESENTATIVE OF ALL CONDITIONS WHICH WILL BE ENCOUNTERED. CONSTRUCTION MAY BE VARIED AS REQUIRED TO MEET FIELD CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.

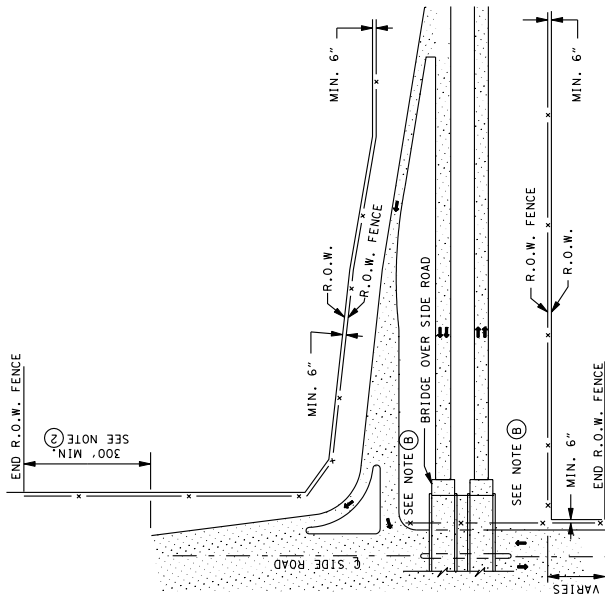
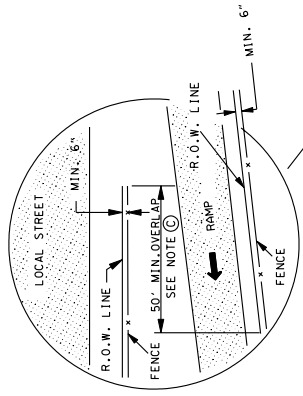


BREAK-IN FENCE AT THIS POST MAY BE OMITTED IF THE POST IS TO BE BROKEN AND IF OMISSION AND METHOD OF ERECTION ARE APPROVED BY THE ENGINEER.

SEE DWG. NO. S-F-108 FOR CHAIN LINK FENCE DETAILS AND SPECS.

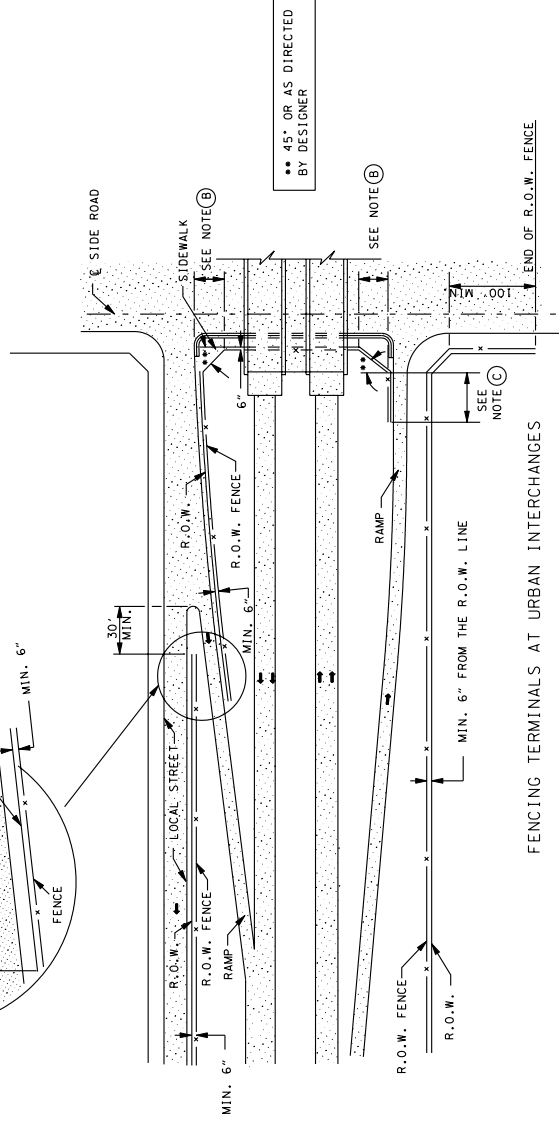
GENERAL NOTES

- RIGHT-OF-WAY FENCE SHALL CONFORM TO NOTES AND DETAILS SPECIFIED ON STANDARD DRAWING NO. S-F-108 FOR URBAN AREAS AND S-F-10 AND S-F-10A FOR RURAL AREAS.
- SEE S-FG-20 FOR WATER CROSSING DETAILS.
- EXPLORE EVERY OPTION NOT TO DISTURB EXISTING VEGETATION DURING THE INSTALLATION OF THE FENCE.
- THE ELEVATION OF THE FENCE POST TOP SHALL BE LOWER THAN THE ROADWAY SHOULDER AND THE NEAREST PORTION OF THE FENCE SHALL BE OUTSIDE THE CLEAR ZONE.

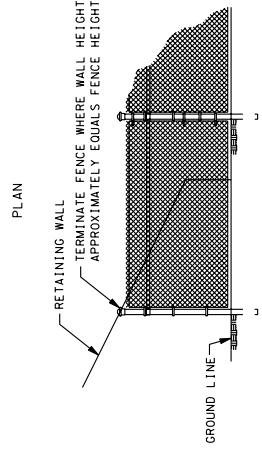
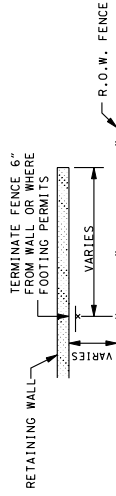


FENCING TERMINALS AT RURAL INTERCHANGES  
 APPLIES TO BRIDGE OVER CROSSROAD AND CROSSROAD OVER INTERSTATE  
 (BRIDGE OVER CROSSROAD SHOWN)

- FENCING TERMINALS AT RURAL INTERCHANGES GENERAL NOTES
- RIGHT-OF-WAY FENCE SHALL CONFORM TO NOTES AND DETAILS SPECIFIED ON STANDARD DRAWING NO. S-F-108.
  - RIGHT OF WAY FENCE ALONG THE CROSSROAD WILL EXTEND A MINIMUM 300 FEET BEYOND THE END OF THE ACCELERATION OR DECELERATION TAPER, WITH THE TAPER MOST REMOTE FROM THE PROJECT ESTABLISHING THE END FOR BOTH SIDES OF THE ROADWAY. IN THE ABSENCE OF A TAPER THE RADIUS POINT OF THE RAMP RETURN WILL BE USED WITH THE ABOVE CRITERIA.
  - FOR INTERCHANGE QUADRANTS HAVING NO RAMP THE RIGHT OF WAY FENCE WILL EXTEND ALONG THE CROSSROAD TO A POINT OPPOSITE THE LIMIT OF LIMITED ACCESS RIGHT OF WAY ESTABLISHED BY THE RAMP TAPER OR RADIUS POINT AS NOTED ABOVE.



FENCING TERMINALS AT URBAN INTERCHANGES



- FENCING TERMINALS AT URBAN INTERCHANGES GENERAL NOTES
- RIGHT-OF-WAY FENCE SHALL CONFORM TO NOTES AND DETAILS SPECIFIED ON STANDARD DRAWING NO. S-F-10 AND S-F-10A.
  - THE INDICATED DISTANCE SHALL BE SUFFICIENT TO PROVIDE SATISFACTORY SIGHT DISTANCE FOR THE TRAFFIC FROM THE RAMP.
  - END SECTIONS OF THE R.O.W. FENCE SECTIONS SHALL BE OVERLAPPED, MIN. 50'.
  - R.O.W. FENCE SHALL BE PLACED MIN. 6" FROM THE R.O.W. LINE.

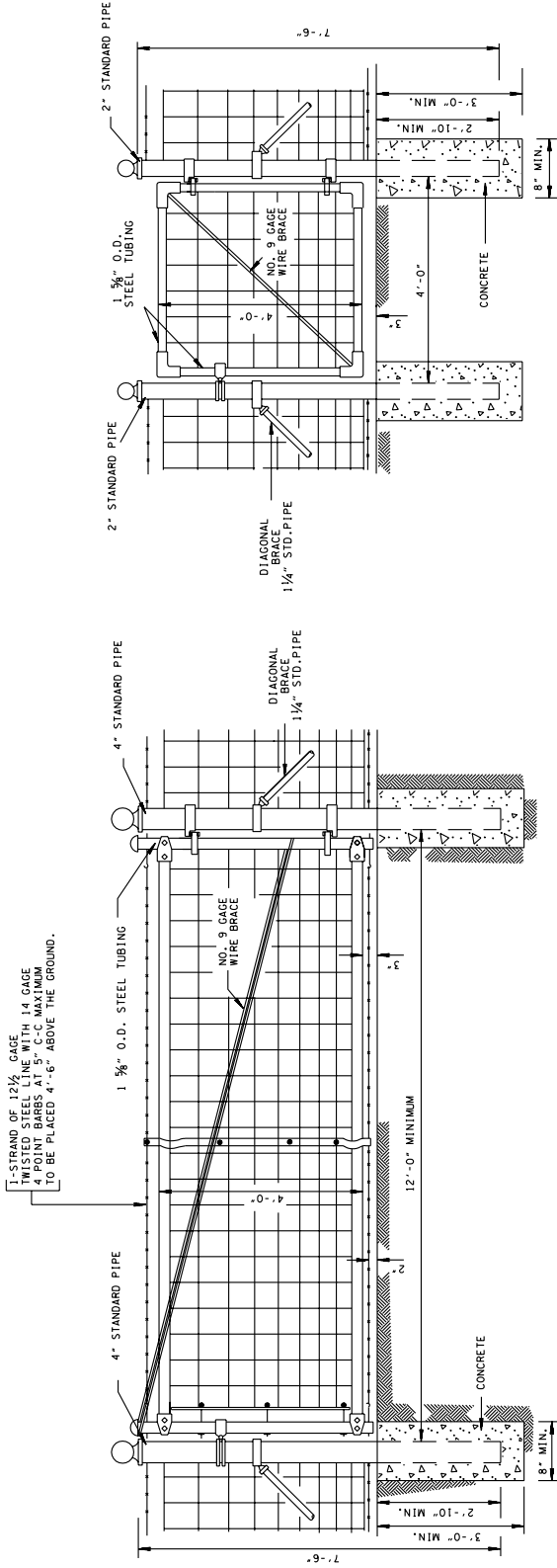
REV. 7-1-72: CHANGED DEPARTMENT NAME.  
 REV. 1-1-76: CHANGED DRAWING NUMBER FROM RD-F-111(68) TO S-F-111.  
 REV. 5-2-80: ADDED PAY ITEMS.  
 REV. 1-24-08: REDREW SHEET AND CHANGED LENGTH OF ALL FENCE POSTS.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION

STANDARD  
 STOCK FENCE  
 GATE

1-1-68  
 S-FG-11

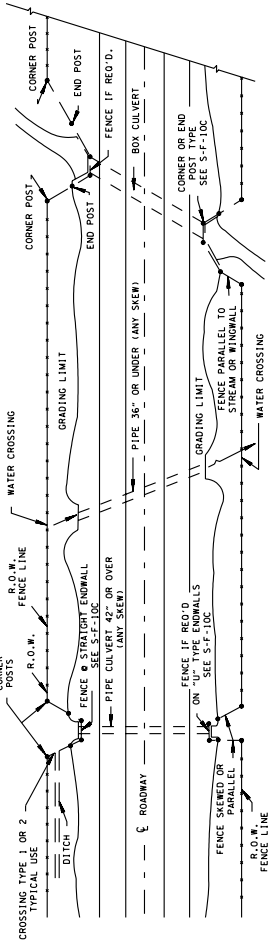


STOCK FENCE DRIVE GATE (12' X 4')

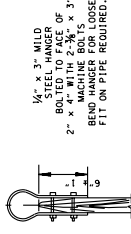
STOCK FENCE WALK GATE (4' X 4')

DESCRIPTION	CONSTRUCTION
<p>STOCK FENCE DRIVE GATE SHALL BE A TUBULAR STEEL FRAME 4 FEET HIGH AND OF SPECIFIED LENGTH WITH WIRE FABRIC FILLER WITHIN THE GATE FRAME, AND WITH TWO STRANDS OF BARBED WIRE ABOVE THE FRAME AND ONE STRAND OF BARBED WIRE BELOW THE FRAME, AND SHALL BE CONSTRUCTED OF THE MATERIALS INDICATED BELOW.</p> <p>STOCK FENCE WALK GATE SHALL BE A TUBULAR STEEL FRAME 4 FEET HIGH AND OF SPECIFIED LENGTH WITH WIRE FABRIC FILLER WITHIN THE GATE FRAME, AND SHALL BE CONSTRUCTED OF THE MATERIALS INDICATED BELOW.</p>	<p>GATES SHALL BE INSTALLED AT THE LOCATIONS INDICATED IN THE PLANS BETWEEN AND FASTENED TO PROPERLY SPACED GATE POSTS, WHICH SHALL BE SET IN THE GROUND A FULL 34 INCHES. THE POSTS AND BRACES IN DIAGONAL BRACES SHALL EXTEND 3 FEET OR MORE BELOW THE SURFACE OF THE GROUND.</p>
<p>MATERIALS</p>	<p>PAYMENT WILL BE MADE UNDER :</p>
<p>DRIVE GATE: THE GATE SHALL CONSIST OF 1 5/8" O.D. HIGH CARBON STEEL TUBING FASTENED AT EACH CORNER WITH MALLEABLE IRON OR PRESSURE TREATED BRACKETS BOLTED TO THE TUBULAR FRAME. THE GATE SHALL BE MADE UP OF TWO 1/2" X 1/2" CHANNEL IRONS BOLTED TOGETHER, AND SHALL BE BRACED DIAGONALLY WITH A NO. 9 ANGLE IRON. THE END MEMBERS OF THE GATE SHALL HAVE TWO EQUALLY SPACED VERTICAL BRACES. THE END MEMBERS OF THE GATE SHALL BE PROVIDED WITH METAL CAPS.</p> <p>WALK GATE: THE WALK GATE SHALL CONSIST OF 1 5/8" O.D. HIGH CARBON STEEL TUBING FASTENED AT EACH CORNER WITH MALLEABLE IRON OR PRESSURE TREATED BRACKETS BOLTED TO THE TUBULAR FRAME. THE GATE SHALL BE MADE UP OF TWO 1/2" X 1/2" CHANNEL IRONS BOLTED TOGETHER, AND SHALL BE BRACED DIAGONALLY WITH A NO. 9 ANGLE IRON. THE END MEMBERS OF THE GATE SHALL HAVE TWO EQUALLY SPACED VERTICAL BRACES. THE END MEMBERS OF THE GATE SHALL BE PROVIDED WITH METAL CAPS.</p>	<p>ITEM NO. 707-03.20 GATE (STOCK FENCE) (DESCRIPTION) PER EACH        ITEM NO. 707-03.21 GATE (STOCK FENCE) (DESCRIPTION) PER EACH        ETC. FOR VARIOUS DESCRIPTIONS.</p>

REV. 7-1-72: CHANGED DEPARTMENT NAME.  
 REV. 1-1-76: CHANGED DRAWING NUMBER FROM R04-F-2016811, (SHEET 2) TO 5-FG-20.  
 REV. 5-2-90: ADDED PAY ITEMS.  
 REV. 1-24-08: REDREW SHEET AND CHANGED LENGTH OF ALL FENCE POSTS.



TYPICAL LOCATION PLAN

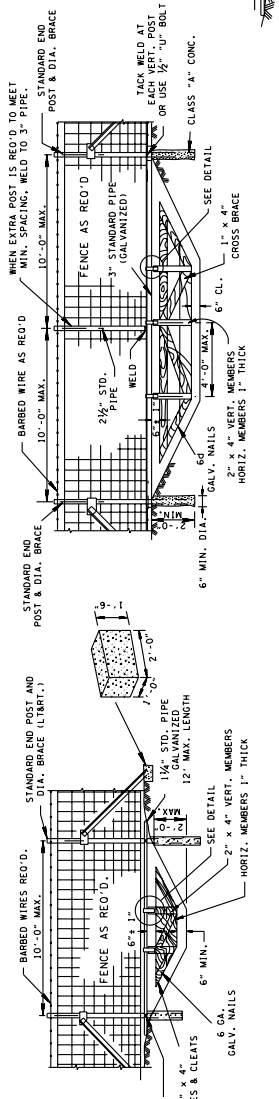


DETAIL VIEW

**GENERAL NOTES**

- GATE FOR DITCH SHALL BE ERRECTED AT LOCATIONS INDICATED IN THE PLANS OR AS INDICATED BY THE ENGINEER.
- COMPENSATION FOR WATER GATES AND WATER CROSSINGS IS INTENDED ONLY FOR ADDITIONAL MATERIAL. INCLUDES ADDITIONAL MATERIALS, EXCEPT ENDS OF POSTS, WIRE AND FERTILIZABLE FACILITIES WHICH ARE NOT PROVIDED FOR IN THE REGULAR RIGHT-OF-WAY FENCE ITEM.
- PAYMENT WILL BE MADE UNDER:
  - ITEM NO. 707-04 WATER CROSSING PER LINEAR FT.
  - ITEM NO. 707-05 WATER GATE PER SQUARE FT.
- THESE INSTALLATION SCHEMES ARE TYPICAL AND NOT TO BE CONSIDERED AS REPRESENTATIVE OF ALL CONDITIONS WHICH WILL BE ENCOUNTERED. CONSTRUCTION MAY BE AS DIRECTED BY THE ENGINEER.

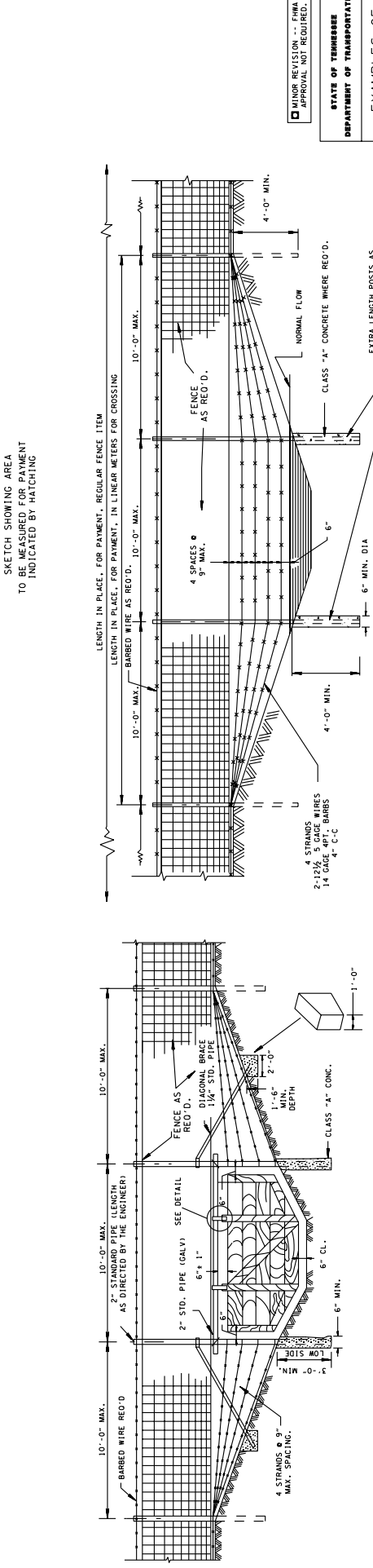
TYPICAL GATE FOR DITCH WIDTH 10' OR LESS TYPE A



TYPICAL GATE FOR DITCH WIDTH 10' OR LESS TYPE B

TYPICAL GATE FOR DITCH WIDTH 10'-20' TYPE C

TYPICAL GATE FOR DITCH WIDTH 20'-30' TYPE D



TYPICAL GATE FOR DITCH WIDTH 20'-30' TYPE C

TYPICAL GATE FOR DITCH WIDTH 10'-20' TYPE B

TYPICAL GATE FOR DITCH WIDTH 10'-20' TYPE D

DETAILS NOT SHOWN ABOVE ARE SAME AS FOR TYPE "B" GATE

WATER CROSSING