

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	D3 FENCE REPAIR 2014-1	DEKALB	7	1
ILLINOIS			CONTRACT NO. 66D05	

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. SITE PLAN FOR WATERMAN MAINTENANCE FACILITY
- 5 - 7. CHAIN LINK FENCE DETAILS

**STANDARDS**

- |           |  |
|-----------|--|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                               |
| 701001-02 | OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY                     |
| 701006-04 | OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701901-02 | TRAFFIC CONTROL DEVICES  |

**DEPARTMENT OF TRANSPORTATION**

**DIVISION OF HIGHWAYS**

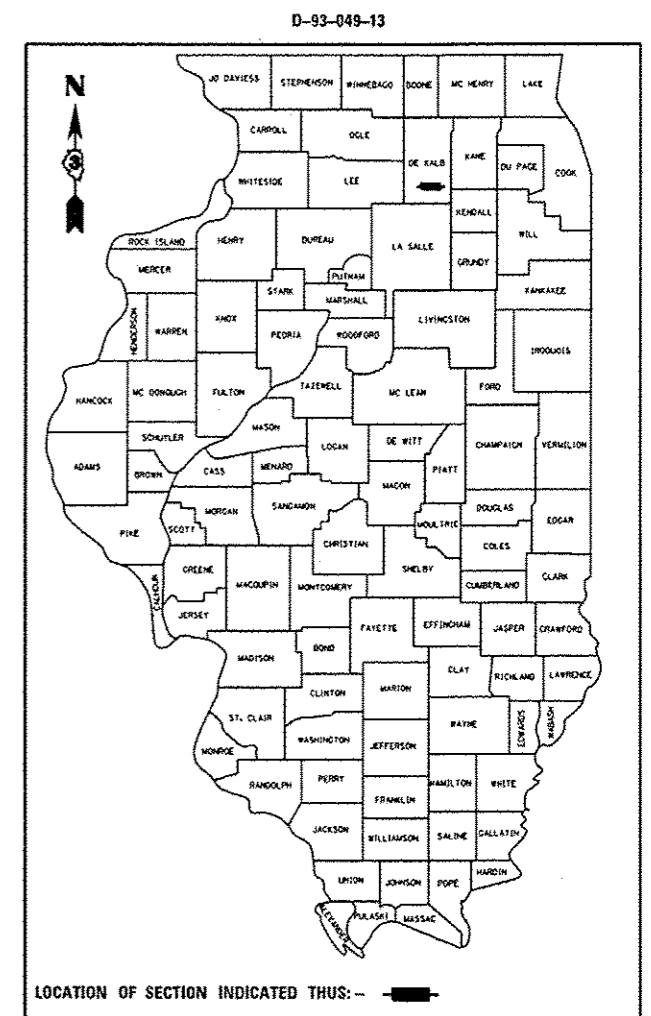
**PROPOSED  
HIGHWAY PLANS**

**FAP 573 (US 30)  
SECTION D3 FENCE REPAIR 2014-1**

**FURNISHING AND INSTALLING CHAIN  
LINK SECURITY FENCE**

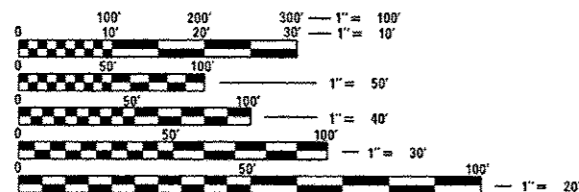
**DEKALB COUNTY**

C-93-104-13



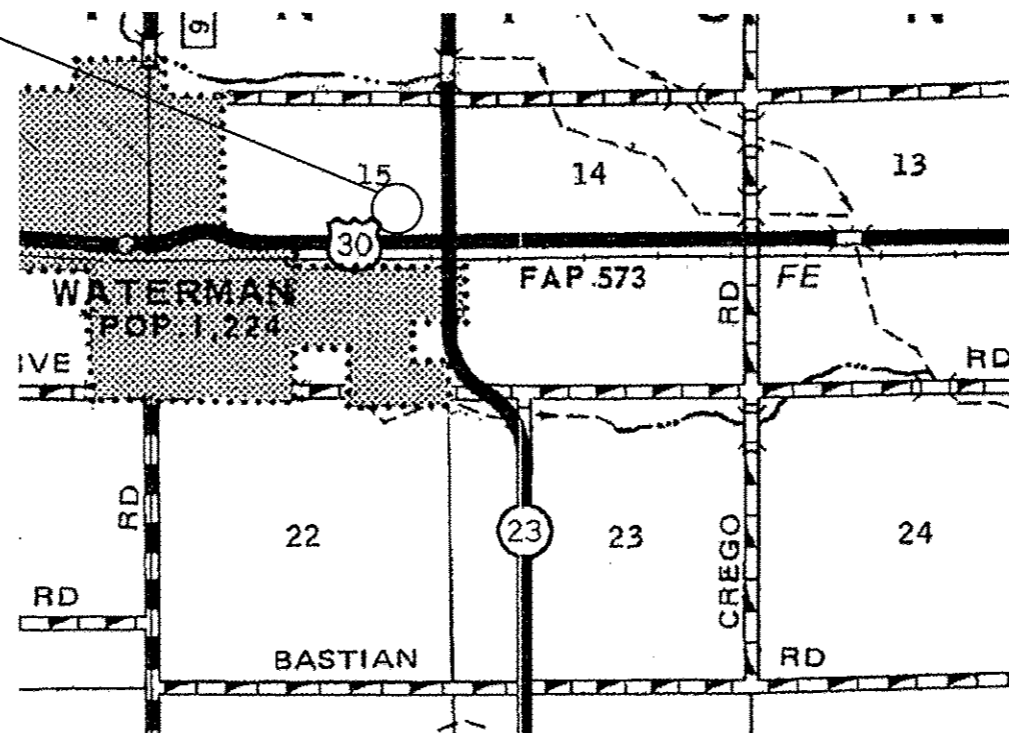
**PROJECT LOCATION**

IDOT DISTRICT 3  
WATERMAN MAINTENANCE FACILITY



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811



DISTRICT 3 NO. 815-434-6131

PROJECT ENGINEER: JOE KANNEL P.E.

UNIT CHIEF: RON WOODSHANK

TOWNSHIP: WATERMAN

CONTRACT NO. 66D05

**FUNCTIONAL CLASSIFICATION**

RURAL - MINOR ARTERIAL

FAP 573 (US 30)

2011 ADT = 4700

P.V. = 83.7%

M.U. = 11.7%

S.U. = 4.6%

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED 7-10-2013  
*Paul A. Tate*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Aug 16 2013  
*John D. Baranzelli P.E.*  
ENGINEER OF DESIGN AND ENVIRONMENT

Aug 16 2013  
*Omer Osman P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

**GENERAL NOTES**

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815-434-8417) TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) SYSTEM.

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

DATE: 7-9-13

PREPARED BY: Dan Brown  
DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY: Heidi J...  
DISTRICT CONSTRUCTION ENGINEER

Wayne Phillips  
DISTRICT MATERIALS ENGINEER

Bruce A. Huber  
DISTRICT OPERATIONS ENGINEER

FILE NAME :	USER NAME :	DESIGNED -	YOGESH PATEL	REVISED -	
c:\pwwork\pwwork\woodshank\1\8336671\366005-shd-detailed.dgn	woodshankr1	DRAWN -	YOGESH PATEL	REVISED -	
		CHECKED -	RON WOODSHANK	REVISED -	
		DATE		REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 30	D3 FENCE REPAIR 2014-1	DEKALB	7	2
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 66D05	
ILLINOIS FED. AID PROJECT				

100% CDB FUNDS

CONSTR. CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	0044	RURAL
67100100	MOBILIZATION	L SUM	1			1
X6640560	CHAIN LINK FENCE, 6' (SPECIAL)	FOOT	792			792

2

FILE NAME *	USER NAME * woodshankr1	DESIGNED - YOGESH PATEL	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pr_work\pwwork\woodshankr1\08336671\0366005-shr-detail.dgn	DRAWN - YOGESH PATEL	REVISED -	US 30			D3 FENCE REPAIR 2014-1	DEKALB	7	3	
PLOT SCALE * 100.0000' / in.	CHECKED - RON WOODSHANK	REVISED -	CONTRACT NO. 66005							
PLOT DATE * 7/2/2013	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.			

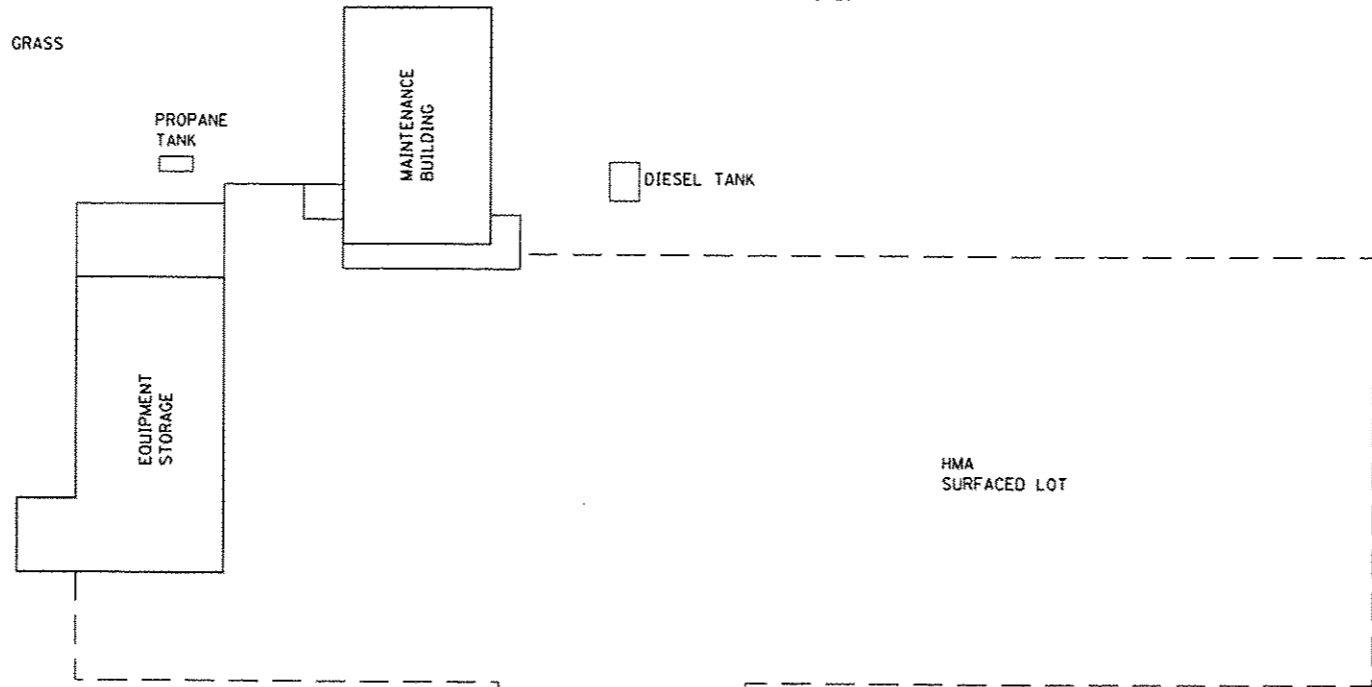
3/4" IRON PIPE  
STA. 625+49.5, 240' LT

3/4" IRON PIPE  
STA. 629+84.5, 240' LT

418'-6"  
PROPOSED

185'-10"  
PROPOSED

187'-0"  
PROPOSED



1/2" REBAR W/METAL IDOT SURVEY  
CAP STA. 625+49.5, 52' LT  
ROW MARKER 1.0' SOUTH

1/2" REBAR W/METAL IDOT SURVEY  
CAP STA. 625+49.5, 40' LT  
ROW MARKER 1.5' SOUTH

3/4" Iron Pipe  
Sta. 629+84.5, 40' LT

625+00

U.S. 30

630+00

**NOTES**

PLAN DIMENSIONS AND FENCE LAYOUT SHALL BE VERIFIED IN THE FIELD TO THE SATISFACTION OF THE ENGINEER PRIOR TO ORDERING OF ANY MATERIALS.

**LEGEND**

- · - · - PROPOSED FENCE
- x - x - EXISTING FENCE
- EXISTING PROPERTY PIPE/PIN
- ⊗ R.O.W. MARKER
- ⊞ TELEPHONE RISER
- POWER POLE

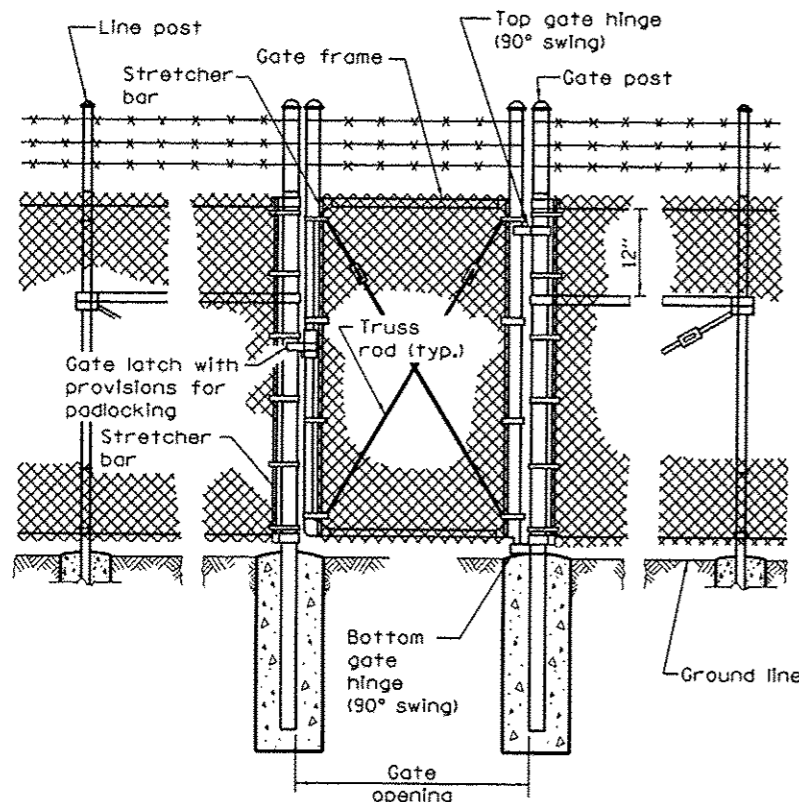
FILE NAME *	USER NAME * woodshankr1	DESIGNED - YOGESH PATEL	REVISED -
c:\pv_work\pvidot\woodshankr1\d0330671\0366009-shr-details.dgn		DRAWN - YOGESH PATEL	REVISED -
		CHECKED - RON WOODSHANK	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

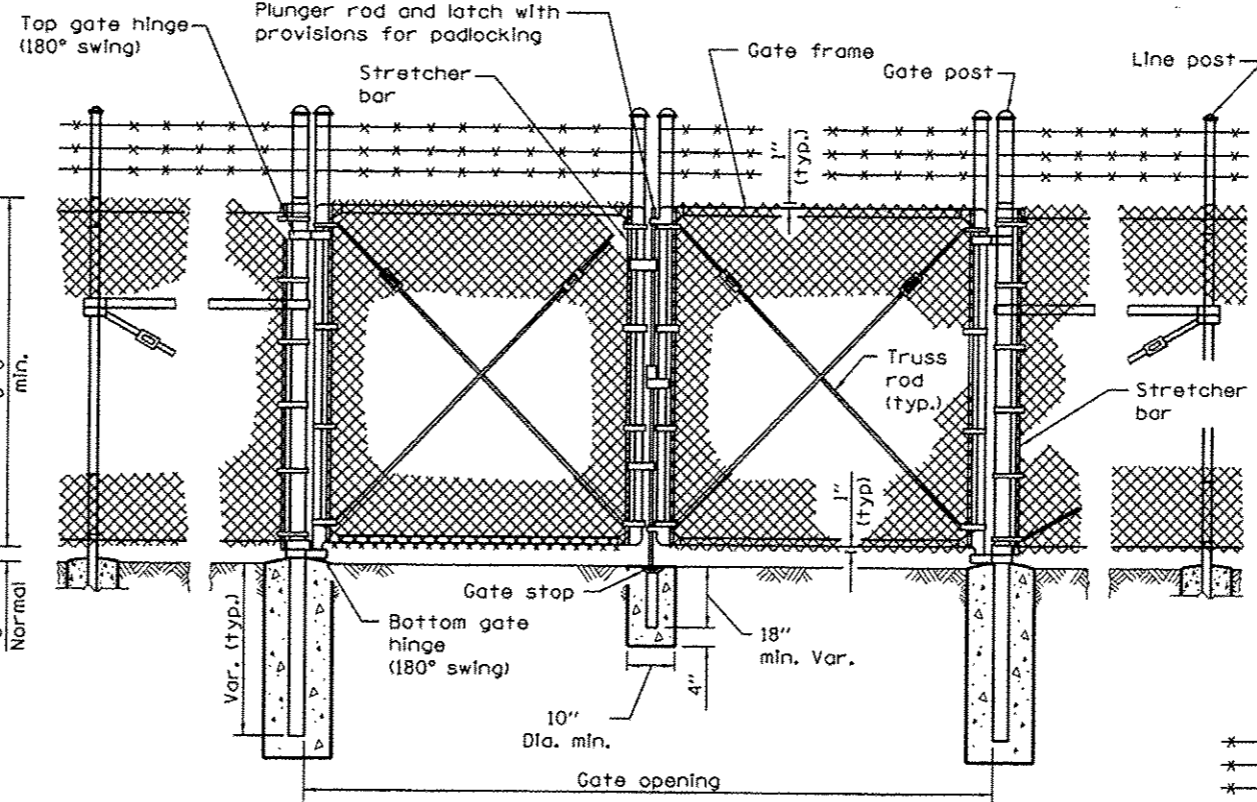
**SITE PLAN  
WATERMAN MAINTENANCE FACILITY**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 30	D3 FENCE REPAIR 2014-1	DEKALB	7	4
CONTRACT NO. 66D05				
ILLINOIS FED. AID PROJECT				

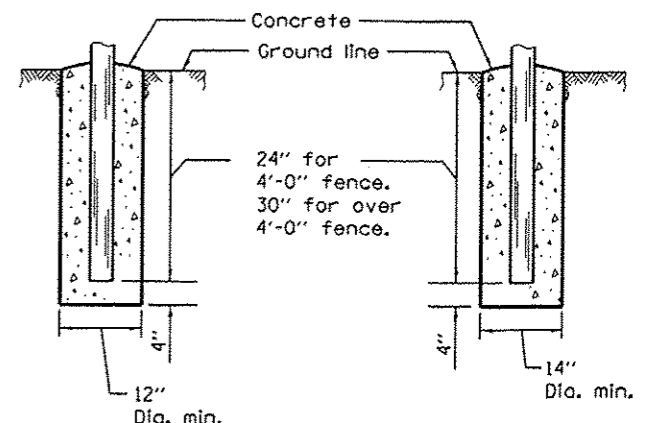
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.



**SINGLE GATE ARRANGEMENT**

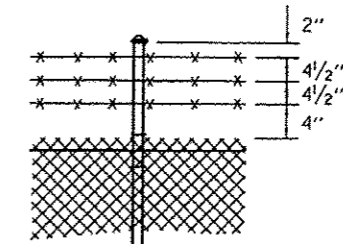


**DOUBLE GATE ARRANGEMENT**

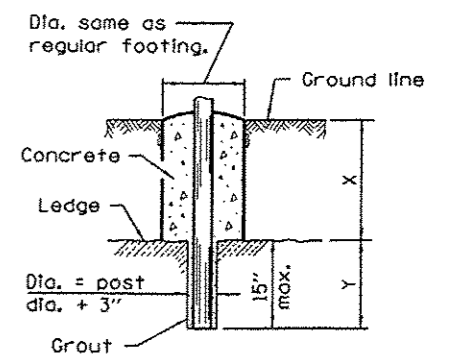


**FOOTING FOR LINE POST**

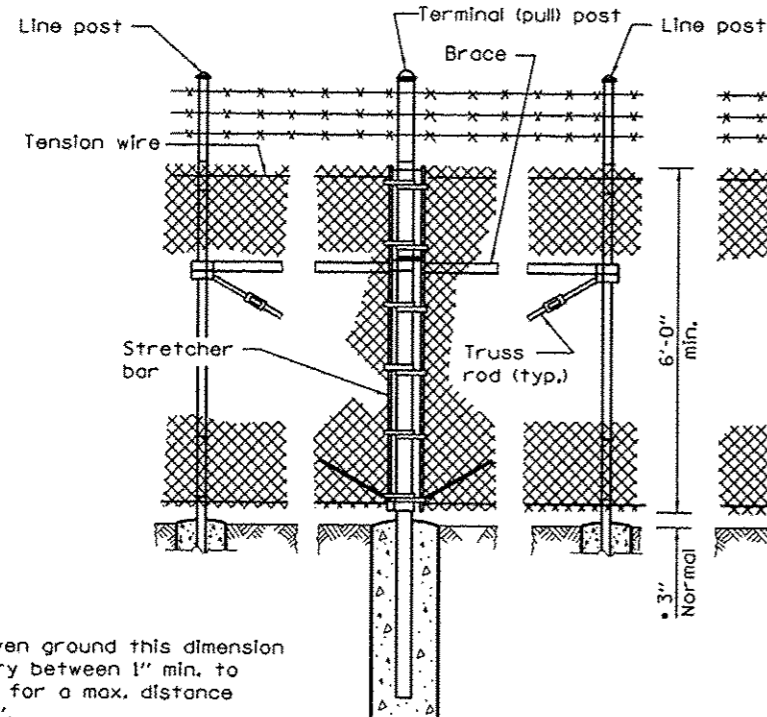
**FOOTING FOR GATE & TERMINAL POST**



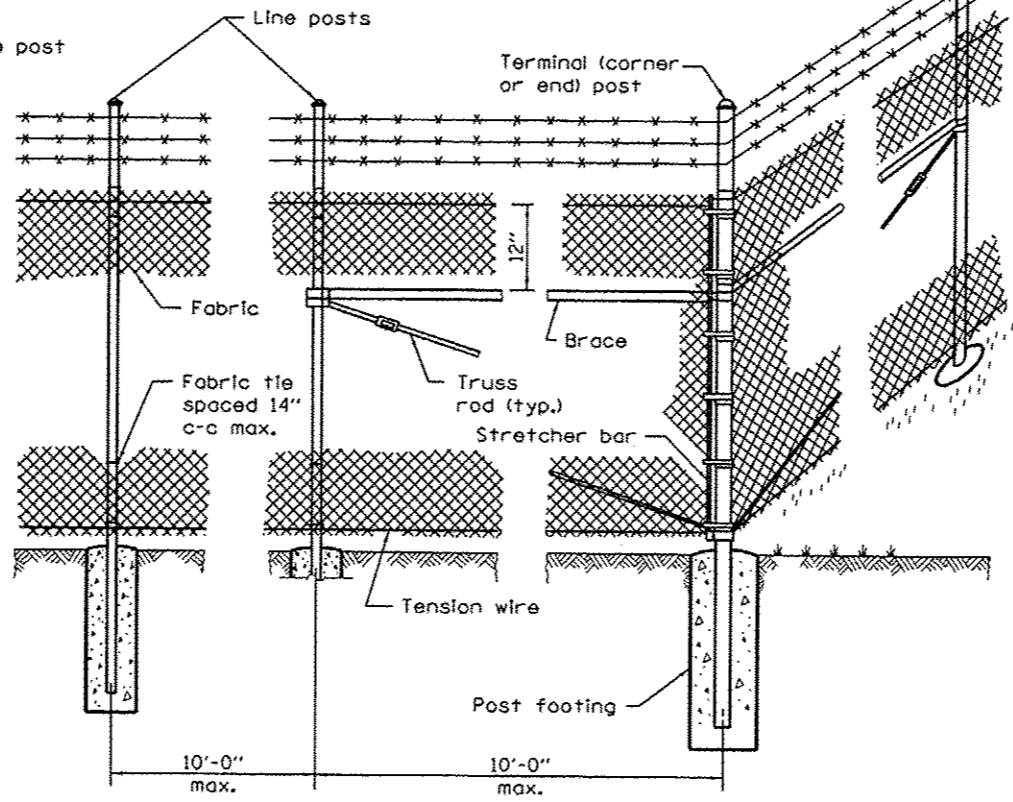
**BARBED WIRE SPACING DETAIL**



**FOOTING FOR POST IN ROCK LEDGE**



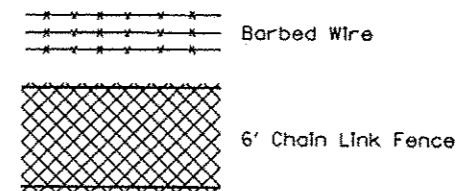
**PULL POST ARRANGEMENT**



**LINE POST ARRANGEMENT**

**CORNER OR END POST ARRANGEMENT**

**LEGEND**



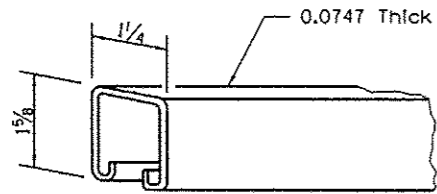
**GENERAL NOTES**

Pull posts shall be placed at locations determined by the Engineer. They shall be placed at 660' intervals between posts to which the ends of the fabric are clamped or midway between such posts when the distance is less than 1320' and greater than 660'.

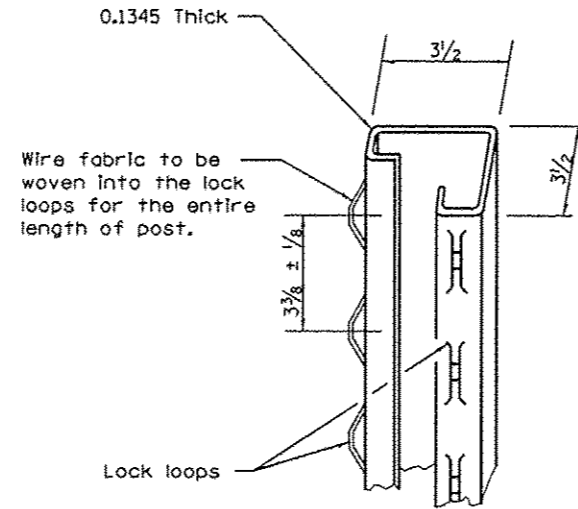
X + Y shall not exceed 24", 30", or 36", as applicable. When X is 0 - 9", 15", or 21", then Y = 15" and the post shall be shortened as required. When X exceeds 9", 15", or 21", then Y shall be decreased correspondingly.

All dimensions are in inches unless otherwise shown.

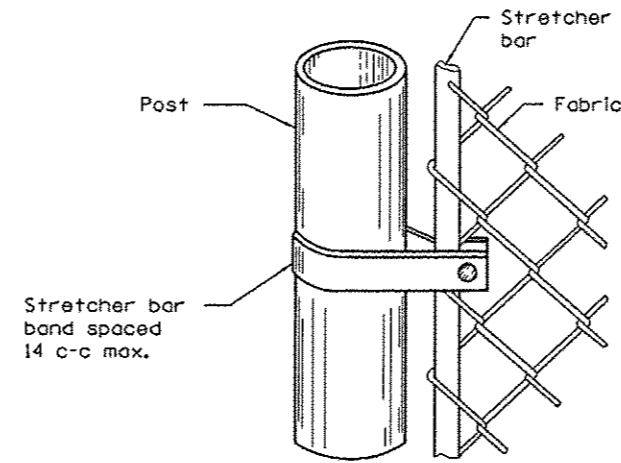
FILE NAME: c:\p\work\spidat\woodshankr\1d8336671	USER NAME: woodshankr	DESIGNED: YOGESH PATEL	REVISED:	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CHAIN LINK FENCE DETAILS</b>	F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
		DRAWN: YOGESH PATEL	REVISED:			US 30	D3 FENCE REPAIR 2014-1	DEKALB	7	5	
		CHECKED: RON WOODSHANK	REVISED:			CONTRACT NO. 66005					
		DATE:	REVISED:			SCALE:	SHEET 1 OF 3 SHEETS	STA.:	TO STA.:	(ILLINOIS) FED. AID PROJECT	



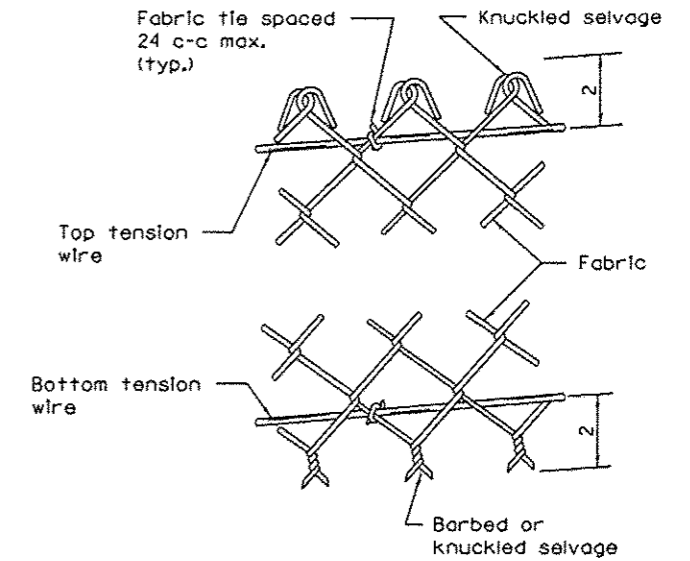
**ROLL FORMED SECTION OF BRACE**



**ROLL FORMED SECTION OF TERMINAL & GATE POST**



**METHOD OF FASTENING STRETCHER BAR TO POST**



**METHOD OF TYING FABRIC TO TENSION WIRES**

LINE POST	
Section	lbs./ft.
Pipe Type A 1.90 O.D.	2.72
Pipe Type B 1.90 O.D.	2.28
Pipe Type C 1.90 O.D.	2.26
H 1.875x1.625	2.72
□	1.60
I	2.30

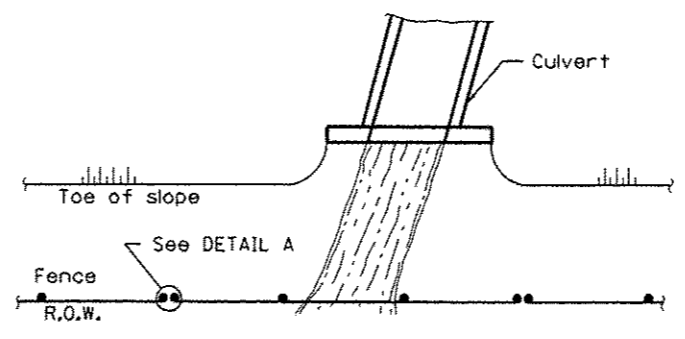
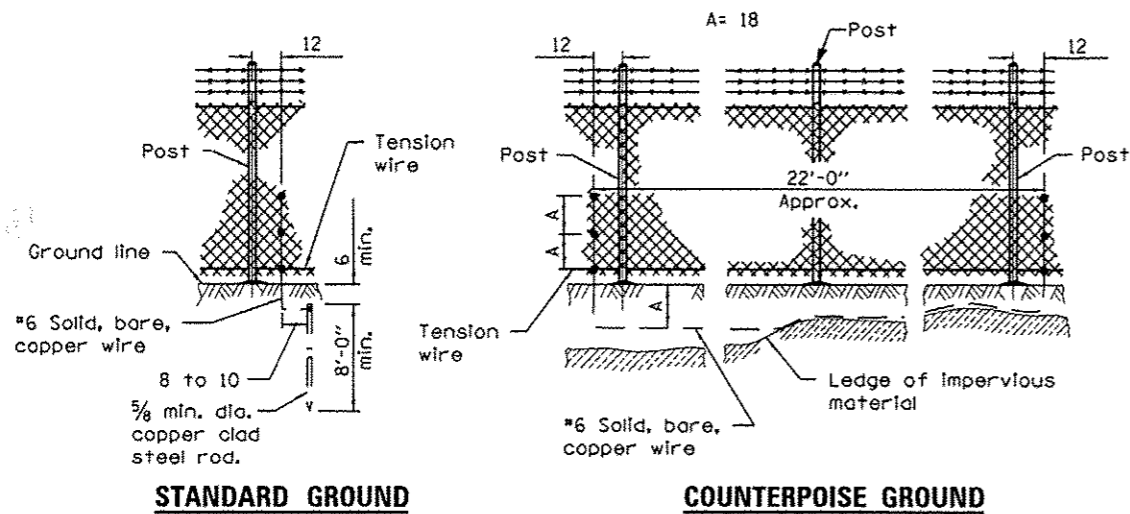
TERMINAL POST	
Section	lbs./ft.
Pipe Type A 2.375 O.D.	3.65
Pipe Type B 2.375 O.D.	3.11
Pipe Type C 2.375 O.D.	3.09
Roll Formed 3 1/2 x 3 1/2	See detail
Sq. Tubing 2 1/2 x 2 1/2	4.32

HORIZONTAL BRACES	
Section	lbs./ft.
Pipe Type A 1.66 O.D.	2.27
Pipe Type B 1.66 O.D.	1.83
Pipe Type C 1.66 O.D.	1.82
H 1.31x1.5	2.25
Roll Formed 1 5/8 x 1 1/4	See detail

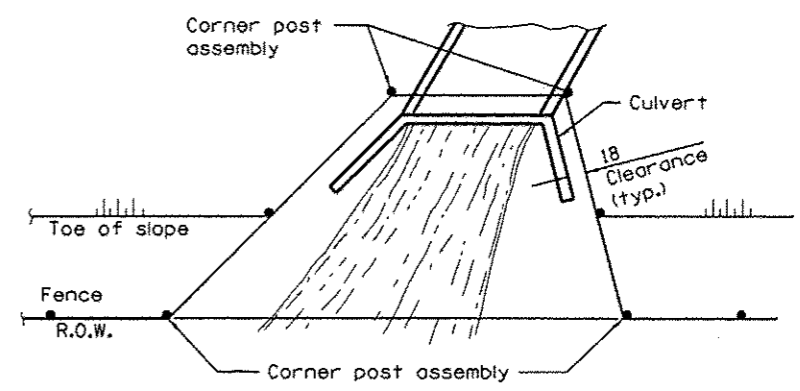
GATE FRAMES	
Section	lbs./ft.
Pipe Type A 1.66 O.D.	2.27
Pipe Type B 1.66 O.D.	1.83
Pipe Type C 1.66 O.D.	1.82

GATE POSTS •							
Gate Opening • ft.		Pipe Type A		Sq. Tubing		Pipe Type B	
Single	Double	Size (O.D.)	lbs./ft.	Size	lbs./ft.	Size (O.D.)	lbs./ft.
Up to 4	Up to 8	2.375	3.65	2 1/2	4.32	2.375	3.11
Over 4 to 8	Over 8 to 16	2.875	5.79	3	5.78	2.875	4.64
Over 8 to 12	Over 16 to 24	3.5	7.58	3	8.80	3.5	5.707

• The 3 1/2 x 3 1/2 roll formed section as detailed may be used as gate posts for single gate up to 6' and double gate up to 12'.

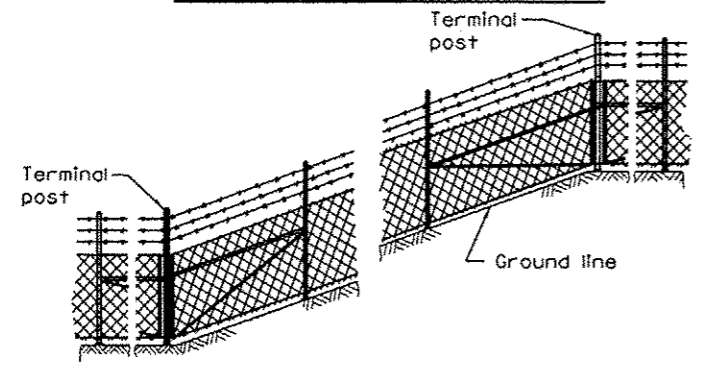


**PLAN AT STREAM CROSSING**

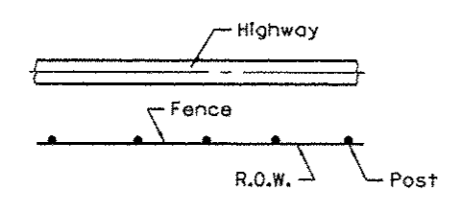


**PLAN AT HEADWALL**

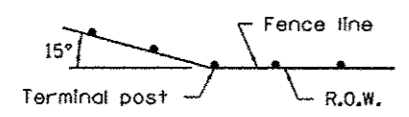
**PROTECTIVE ELECTRICAL GROUNDS**



**INSTALLATION ON SLOPES**

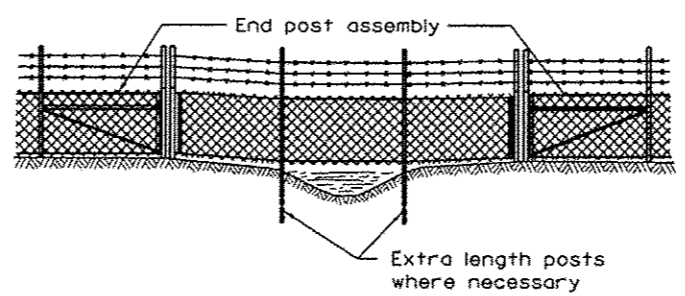


**PLAN**



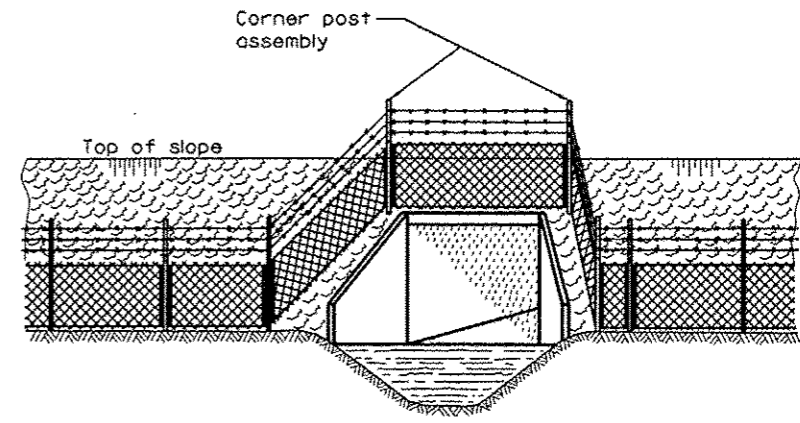
When fence line has a change in direction of 15° or more, a terminal post shall be placed as shown above.  
 Where angle is less than 15° and existing conditions require a terminal post, they shall be placed as directed by the Engineer.

**INSTALLATION AT CORNERS**



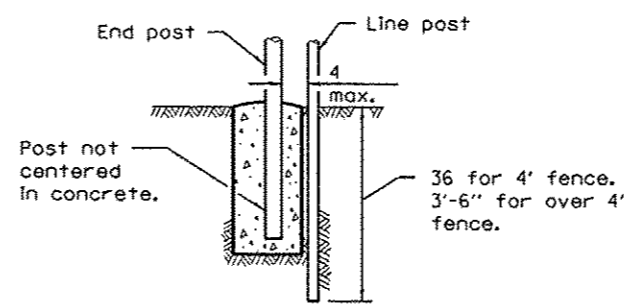
**ELEVATION INSTALLATION OVER STREAM**

The chain link fabric shall be replaced by barbed wire strands at 12 maximum centers between the double posts shown on DETAIL A when shown on the plans.



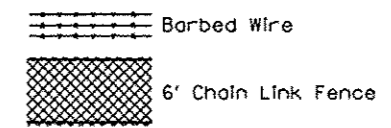
**ELEVATION INSTALLATION AROUND HEADWALL**

When the width of the culvert makes it necessary to anchor a post to the top of the culvert, a cast iron shoe or other device approved by the Engineer shall be used.



**DETAIL A**

**LEGEND**



FILE NAME =	USER NAME = woodshankr1	DESIGNED - YOGESH PATEL	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CHAIN LINK FENCE DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pvidot\woodshankr1\08335671\0366005-ahs-details.dgn		DRAWN - YOGESH PATEL	REVISED -		US 30	03 FENCE REPAIR 2014-1	DEKALB	7	7			
PLOT SCALE = 100.0000' / in.		CHECKED - RON WOODSHANK	REVISED -		CONTRACT NO. 66005							
PLOT DATE = 7/2/2013		DATE -	REVISED -		SCALE:	SHEET 3 OF 3 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				