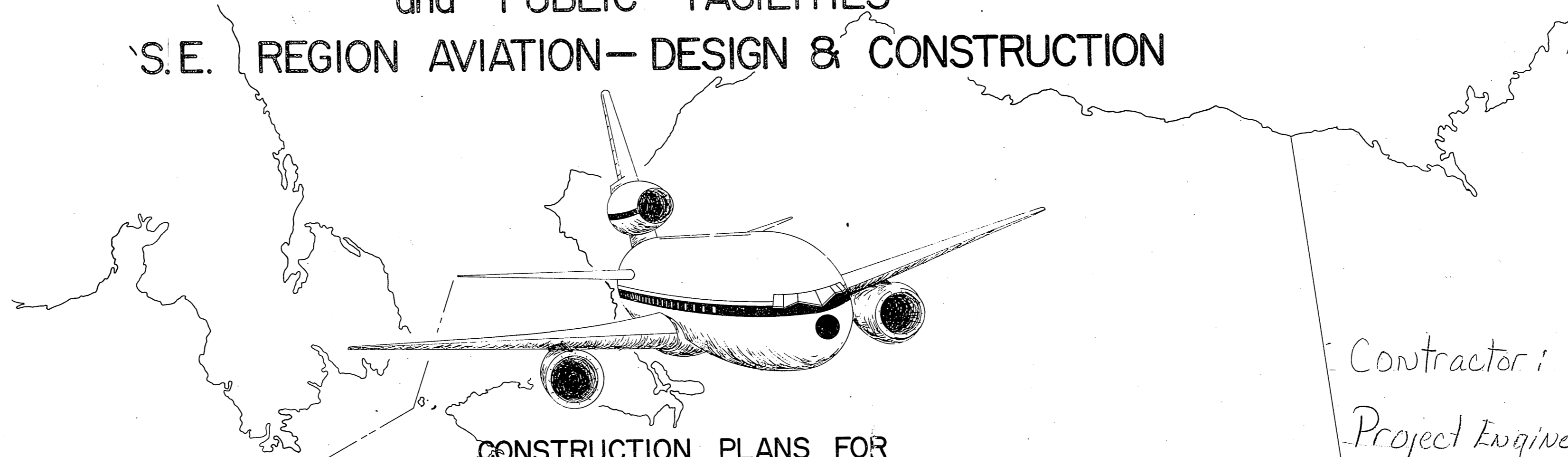


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
and PUBLIC FACILITIES
S.E. REGION AVIATION—DESIGN & CONSTRUCTION



As Built

Contractor: Glacier Bear Fencing
Project Engineer: Paul Jones
Date Began: 3-26-84
Date Complete: 10-15-84

CONSTRUCTION PLANS FOR

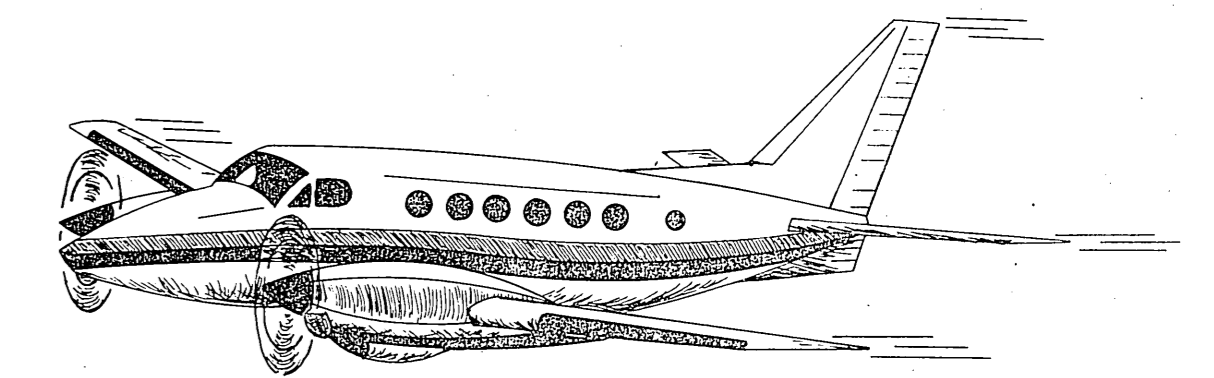
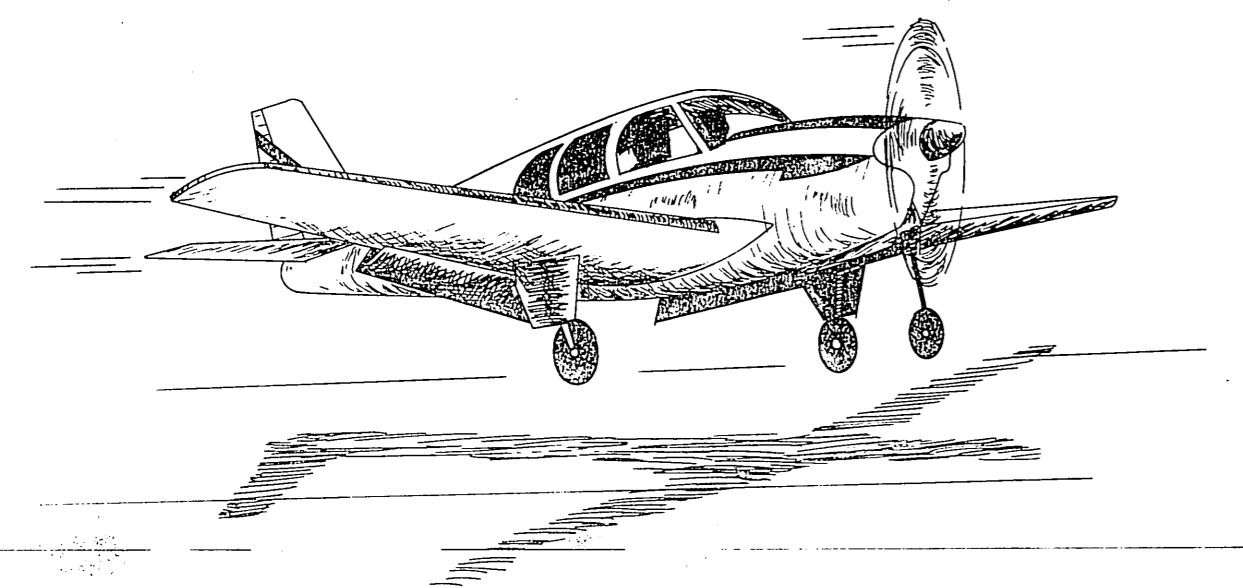
WRANGELL AIRPORT

AIRPORT SAFETY FENCE

AIRPORT IMPROVEMENT PROGRAM
83-1-3-02-03-23-02-83

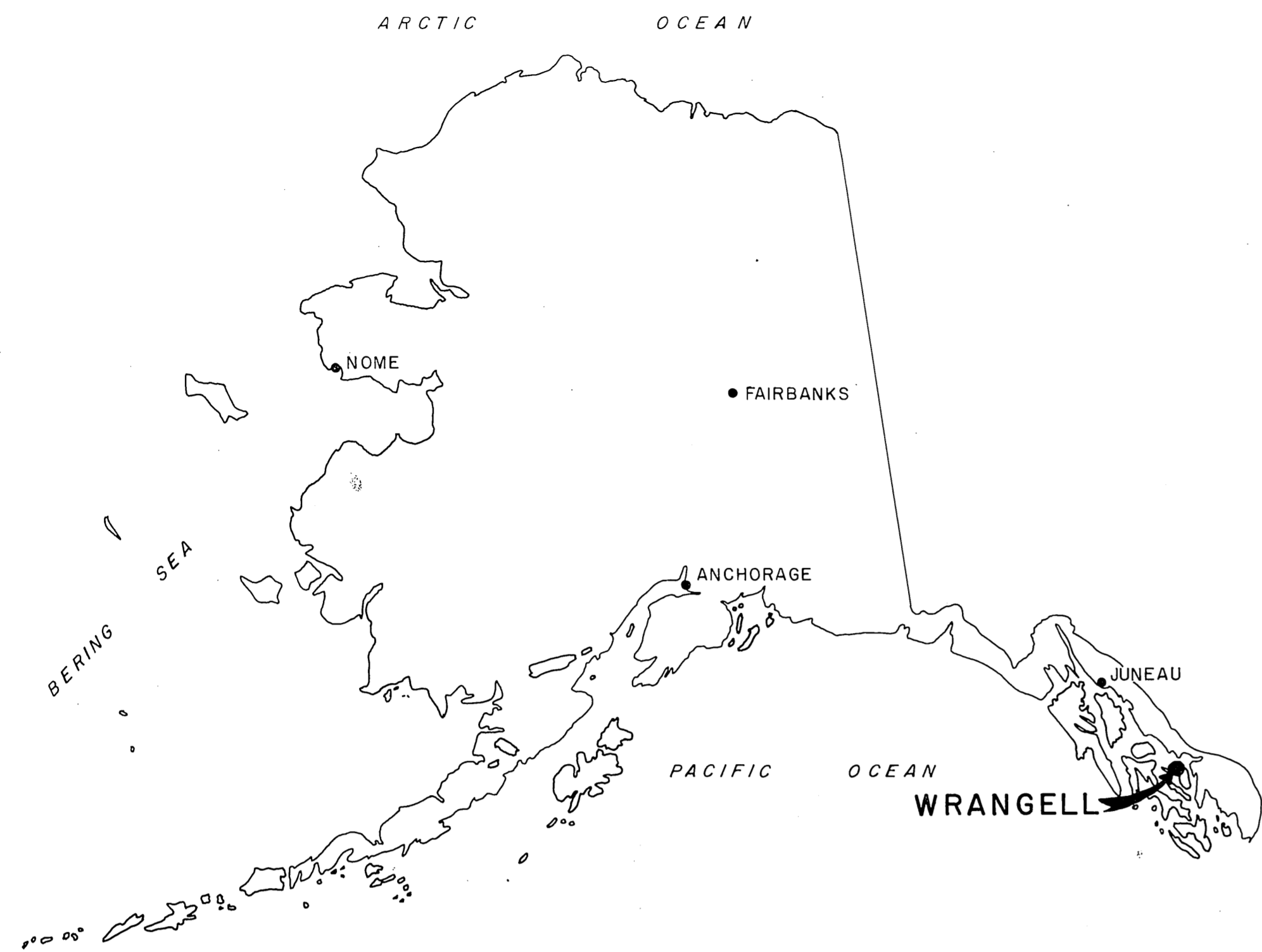
STATE NO. D-46772

SPONSORED BY
THE STATE OF ALASKA
1983

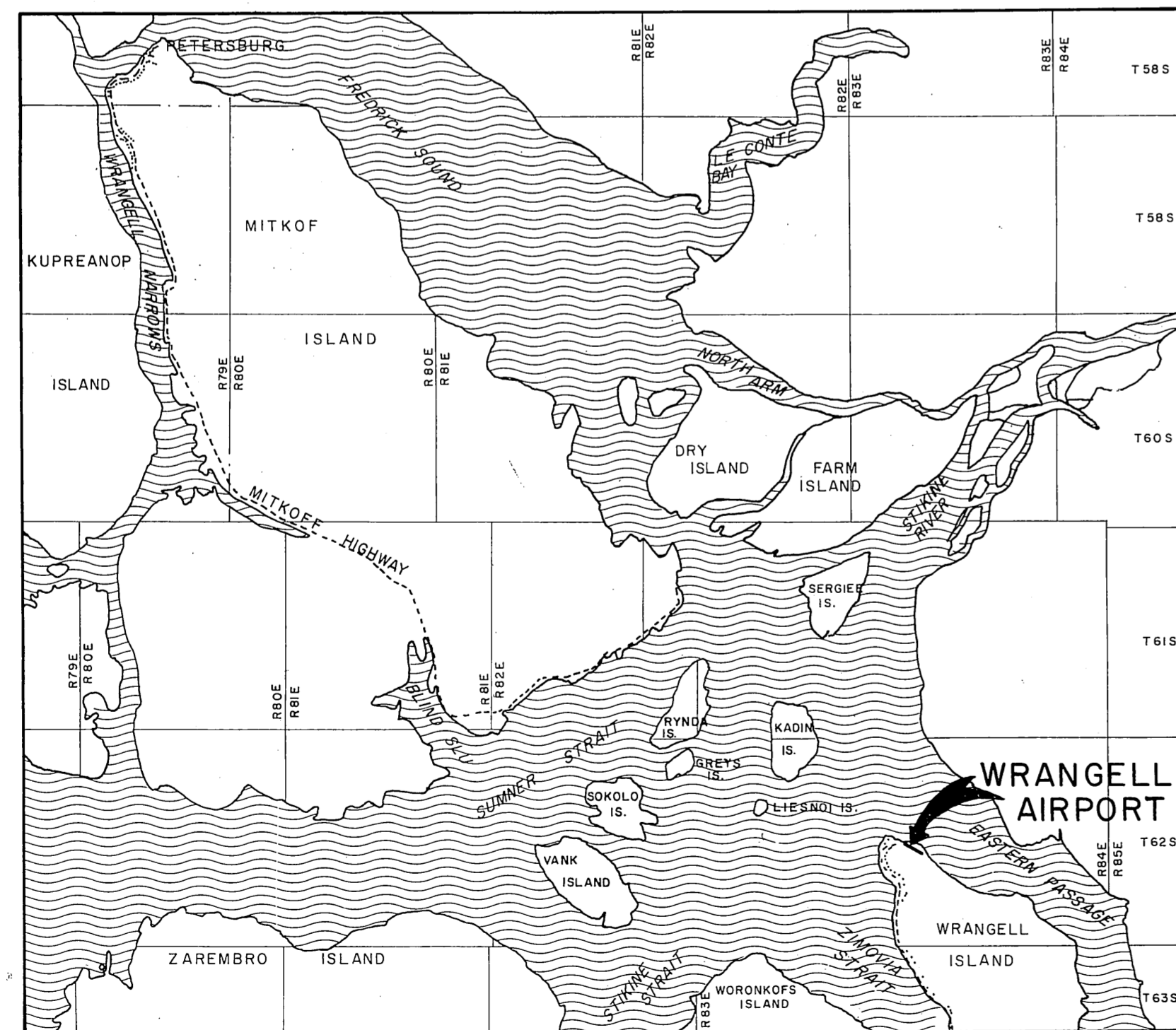


APPROVED
Charles S. Matlock
CHARLES S. MATLOCK, DIRECTOR, S.E. REGION DESIGN & CONSTRUCTION
DATE 8-18-83

APPROVED
Wallace K. Williams
WALLACE K. WILLIAMS, CHIEF, S.E. REGION HIGHWAY & AVIATION DESIGN & CONSTRUCTION
DATE 4-29-83



LOCATION MAP
NO SCALE



VICINITY MAP
1" = 4 MILES

ESTIMATED QUANTITIES

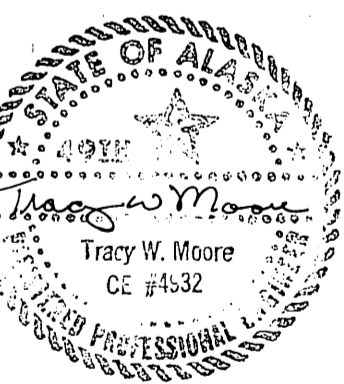
NO.	ITEM	QUANTITY	UNIT
100	MOBILIZATION & DEMOBILIZATION	ALL REQ'D	L.S.
125	ENGINEER'S VEHICLE	Deleted Co #1	EACH
200f	CLEARING & GRUBBING	ALL REQ'D	L.S.
440-1A	CHAIN LINK FENCE TYPE "A"	5857 5830	LIN. FT.
440-2A	CHAIN LINK FENCE TYPE "B"	8406 8160	LIN. FT.
440-1C	8' x 20' DRIVE-THRU GATE	1	EACH
440-2C	8' x 20' EMERGENCY ENTRY GATE	2	EACH
440-3C	6' x 20' DRIVE-THRU GATE	1	EACH
440d	8' x 6' PEDESTRIAN GATE	1	EACH

INDEX

SHEET TITLE	SHEET NO.
TITLE SHEET	1
LOCATION & VICINITY MAPS, INDEX, & ESTIMATED QUANTITIES	2
SITE PLAN	3
CHAIN LINK FENCE TYPE "A" DETAILS	4
CHAIN LINK FENCE TYPE "B" DETAILS	5
DOUBLE SWING GATE DETAILS	6
EMERGENCY ENTRY GATE	7
EMERGENCY ENTRY GATE DETAILS	8
SIGNS & ICE FREE LOCK DETAILS	9

FOR ESTIMATING PURPOSES ONLY

1. Fifty percent of the Type "A" Fence will require posts in peat areas.
2. Fifty percent of the Type "B" Fence will be in riprap areas.
3. The Contractor should investigate the fence layout in the field to determine the actual amount of work required. Changes in the figures used for estimating purposes shall not constitute a change in work or price thereof.



STATE OF ALASKA
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S.E. REGION, DIVISION OF AVIATION DESIGN & CONSTRUCTION

WRANGELL AIRPORT
LOCATION & VICINITY MAPS
INDEX & ESTIMATED QUANTITIES

APPROVED BY: *William A. Locher*
WILLIAM A. LOCHER, P.E. S.E. AVIATION DESIGN ENGINEER

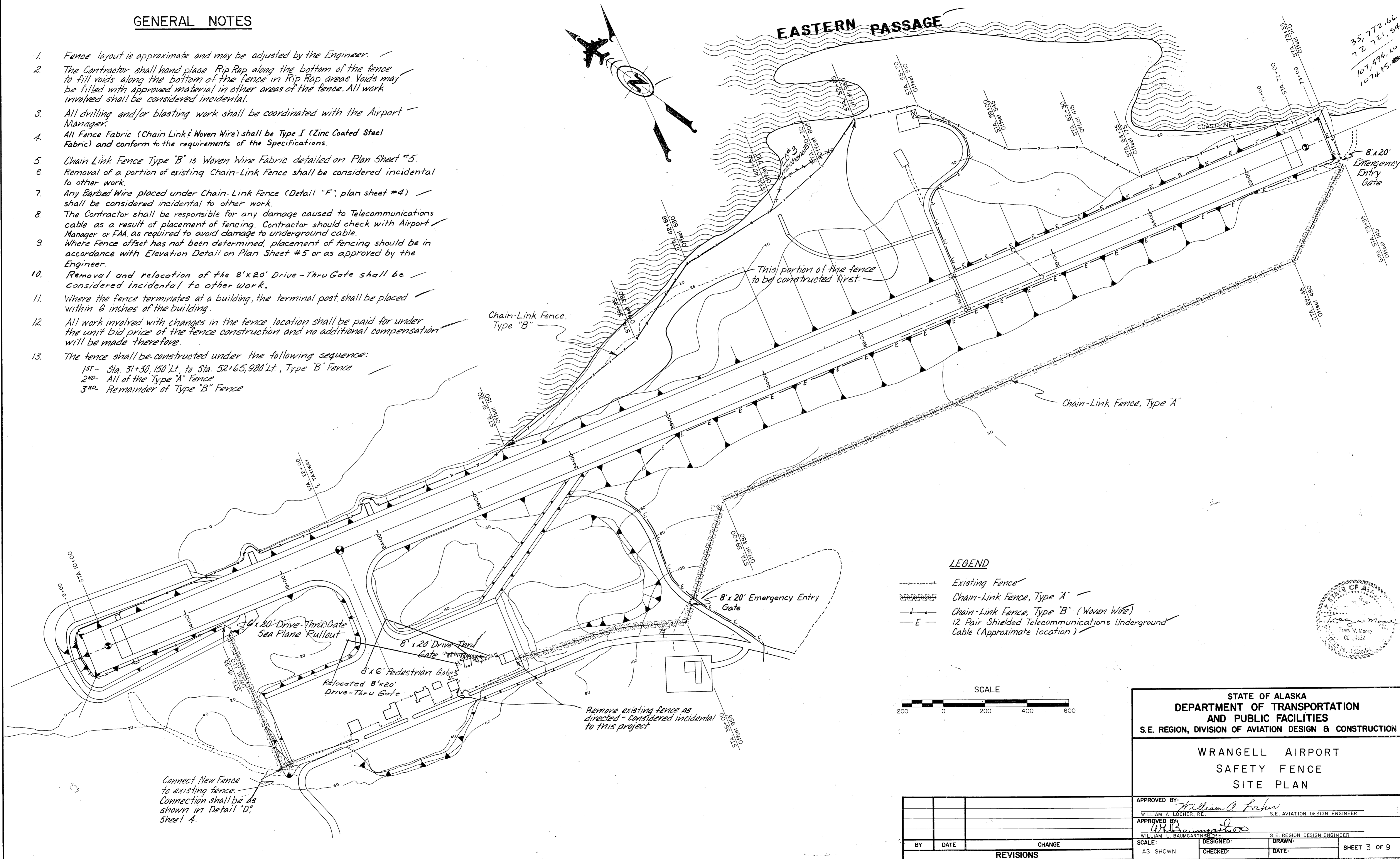
APPROVED BY: *William L. Baumgartner*
WILLIAM L. BAUMGARTNER, P.E. S.E. REGION DESIGN ENGINEER

SCALE: DESIGNED: DRAWN: CHECKED: DATE: SHEET 2 OF 9

BY	DATE	CHANGE
REVISIONS		

GENERAL NOTES

1. Fence layout is approximate and may be adjusted by the Engineer.
2. The Contractor shall hand place Rip Rap along the bottom of the fence to fill voids along the bottom of the fence in Rip Rap areas. Voids may be filled with approved material in other areas of the fence. All work involved shall be considered incidental.
3. All drilling and/or blasting work shall be coordinated with the Airport Manager.
4. All Fence Fabric (Chain Link & Woven Wire) shall be Type I (Zinc Coated Steel Fabric) and conform to the requirements of the Specifications.
5. Chain Link Fence Type "B" is Woven Wire Fabric detailed on Plan Sheet #5.
6. Removal of a portion of existing Chain-Link Fence shall be considered incidental to other work.
7. Any Barbed Wire placed under Chain-Link Fence (Detail "F", plan sheet #4) shall be considered incidental to other work.
8. The Contractor shall be responsible for any damage caused to Telecommunications cable as a result of placement of fencing. Contractor should check with Airport Manager or FAA as required to avoid damage to underground cable.
9. Where Fence offset has not been determined, placement of fencing should be in accordance with Elevation Detail on Plan Sheet #5 or as approved by the Engineer.
10. Removal and relocation of the 8'x20' Drive-Thru Gate shall be considered incidental to other work.
11. Where the fence terminates at a building, the terminal post shall be placed within 6 inches of the building.
12. All work involved with changes in the fence location shall be paid for under the unit bid price of the fence construction and no additional compensation will be made therefore.
13. The fence shall be constructed under the following sequence:
 - 1ST- Sta. 31+30, 150' Lt. to Sta. 52+65, 980' Lt., Type "B" Fence
 - 2ND- All of the Type "A" Fence
 - 3RD- Remainder of Type "B" Fence



35,772.66
72,721.54
107,494.20
1074.75

LEGEND

- - - Existing Fence
- Chain-Link Fence, Type "A"
- x-x- Chain-Link Fence, Type "B" (Woven Wire)
- E- 12 Pair Shielded Telecommunications Underground Cable (Approximate location)

SCALE

200 0 200 400 600

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S.E. REGION, DIVISION OF AVIATION DESIGN & CONSTRUCTION

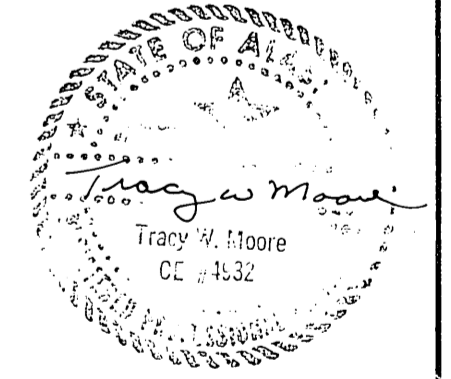
WRANGELL AIRPORT
SAFETY FENCE
SITE PLAN

APPROVED BY: *William A. Locher*
WILLIAM A. LOCHER, P.E. S.E. AVIATION DESIGN ENGINEER

APPROVED BY: *William L. Baumgartner*
WILLIAM L. BAUMGARTNER, P.E. S.E. REGION DESIGN ENGINEER

SCALE: AS SHOWN DESIGNED: CHECKED: DRAWN: DATE: SHEET 3 OF 9

BY	DATE	CHANGE
REVISIONS		



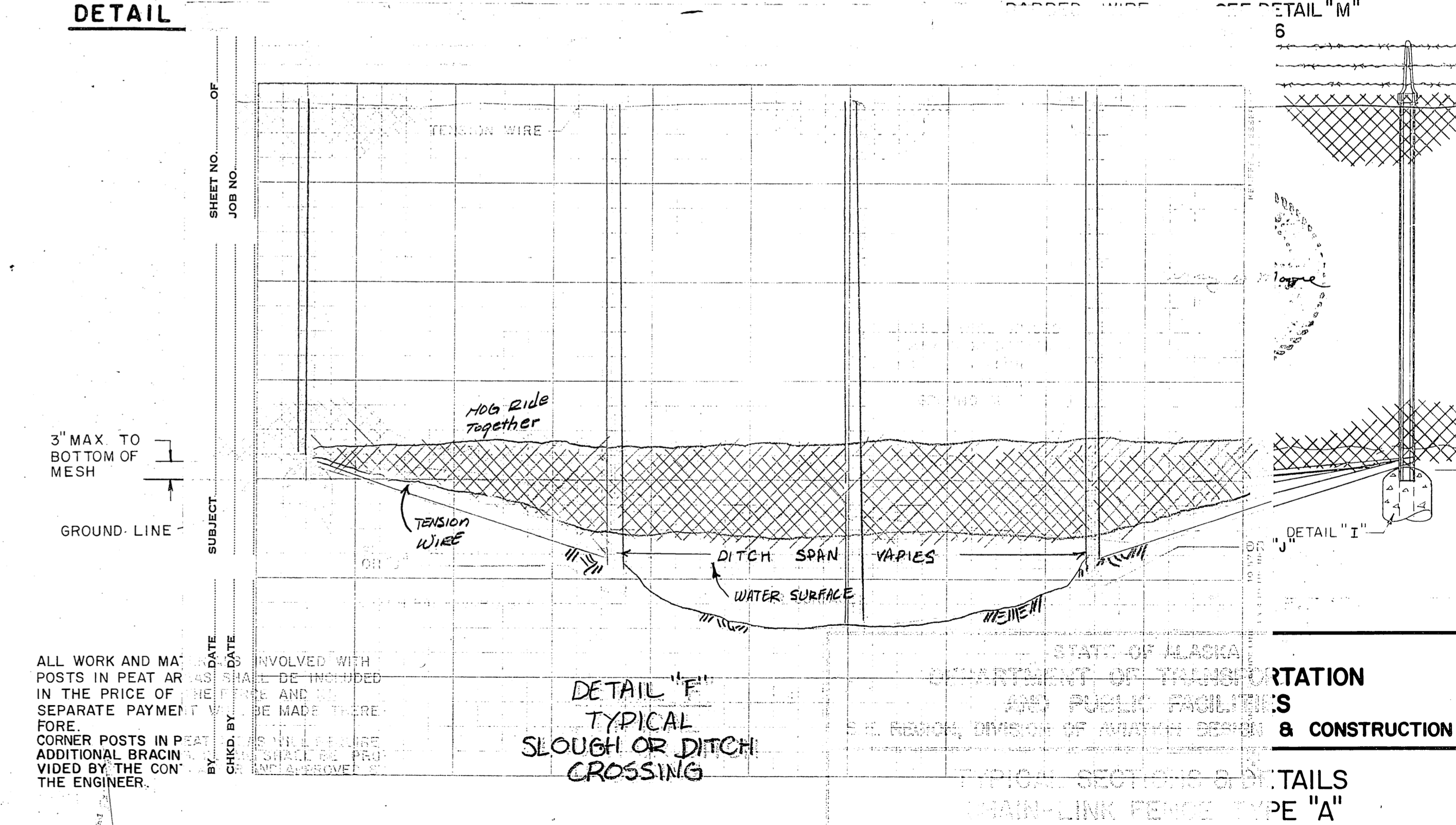
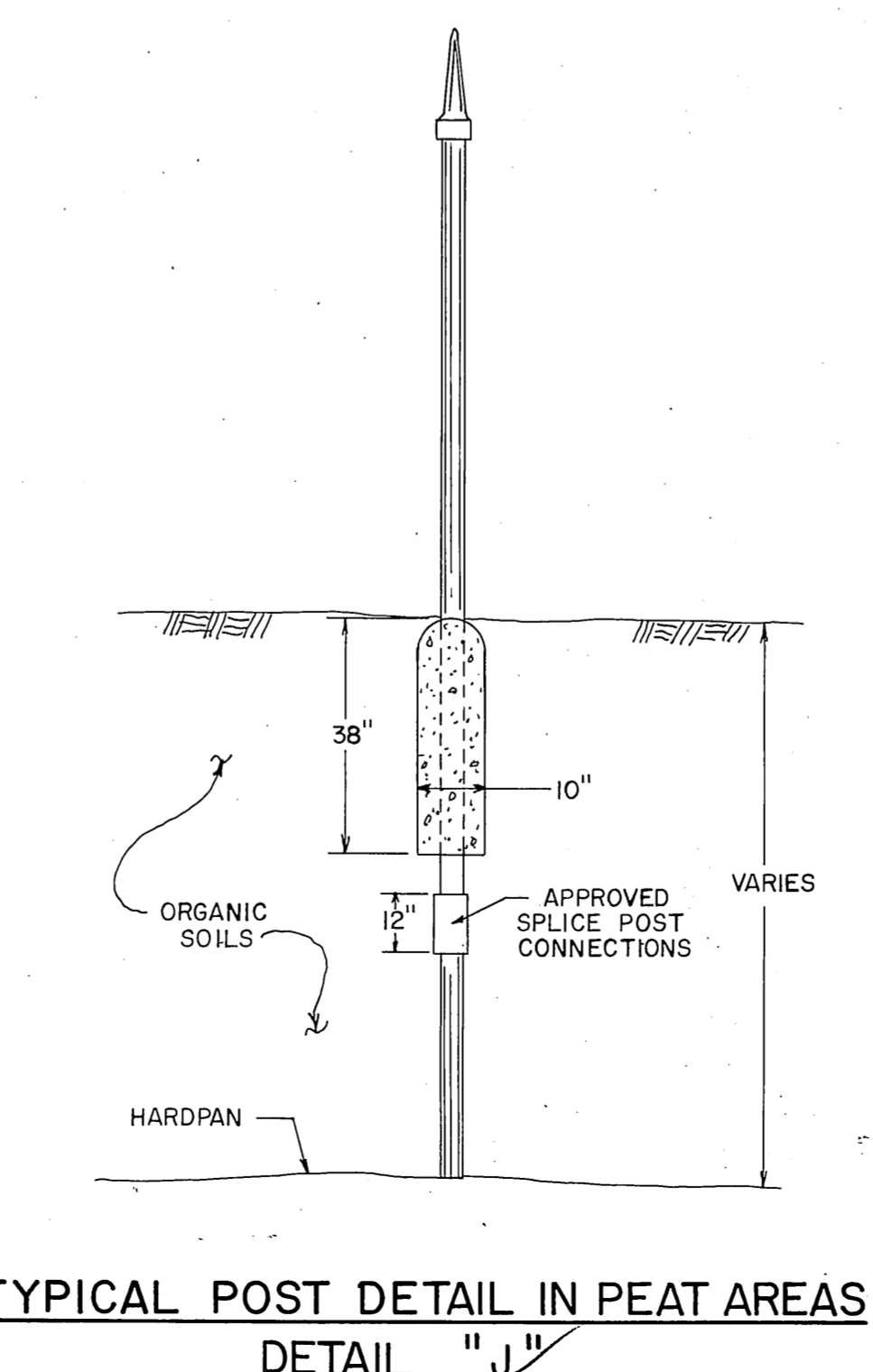
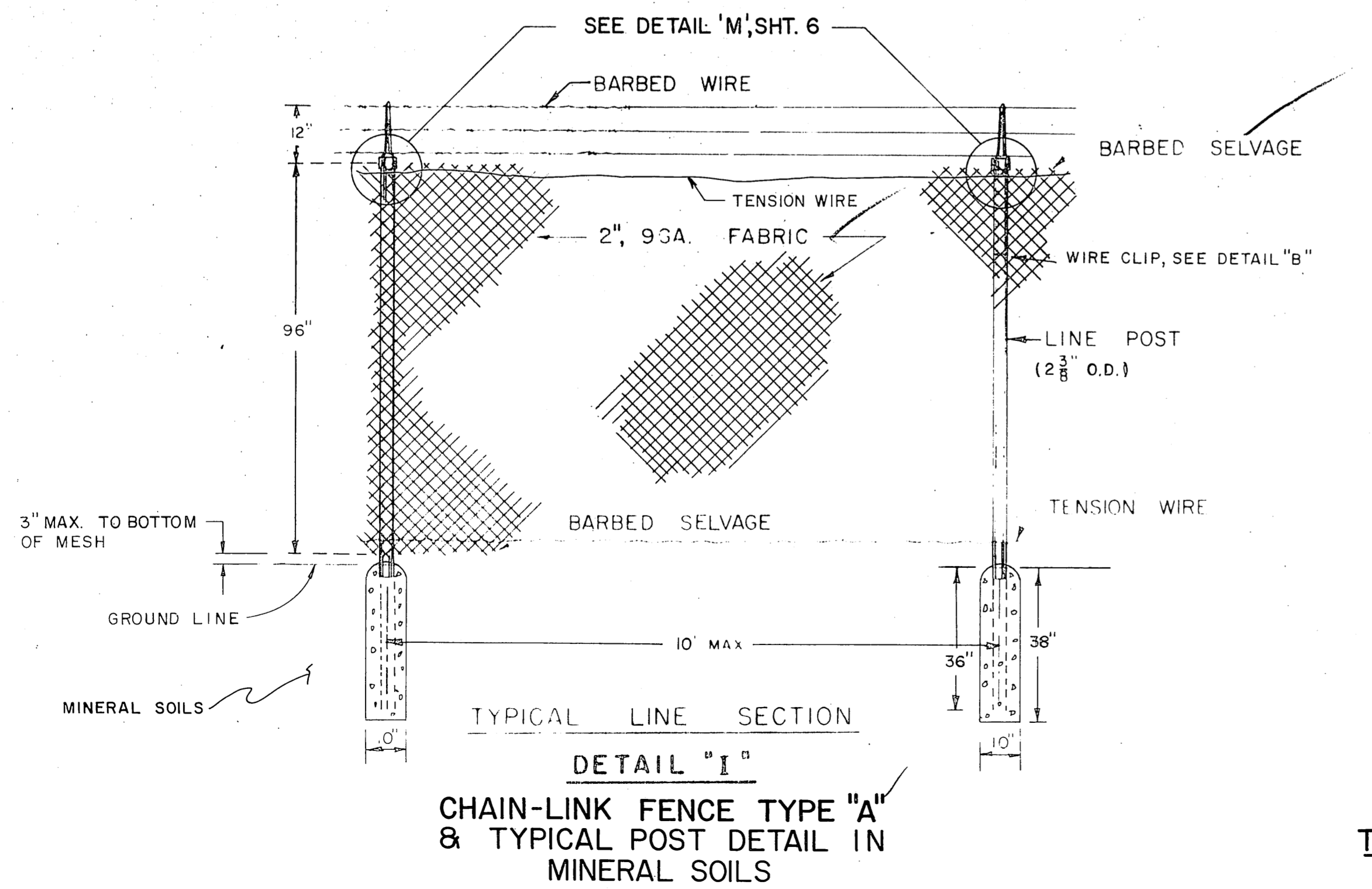
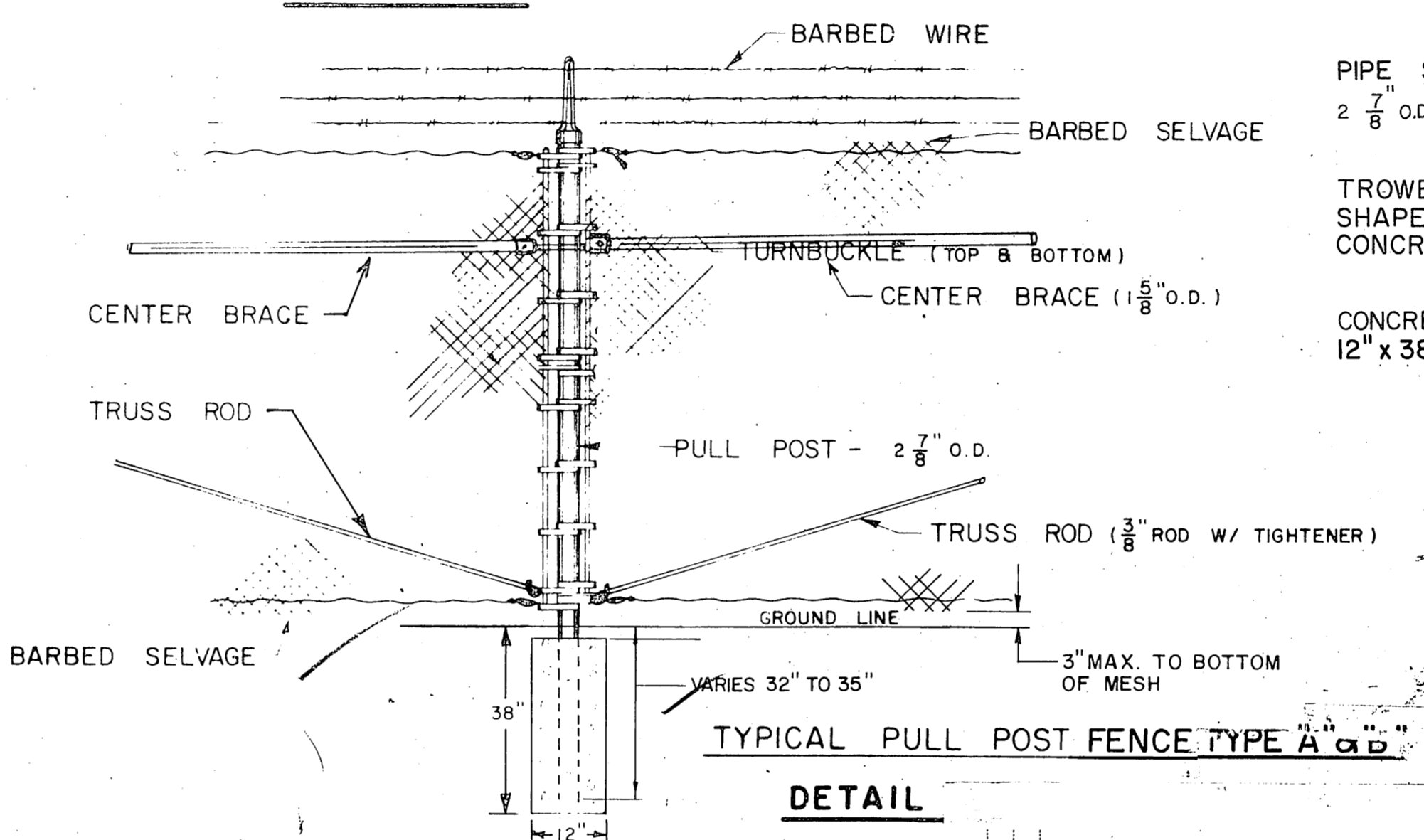
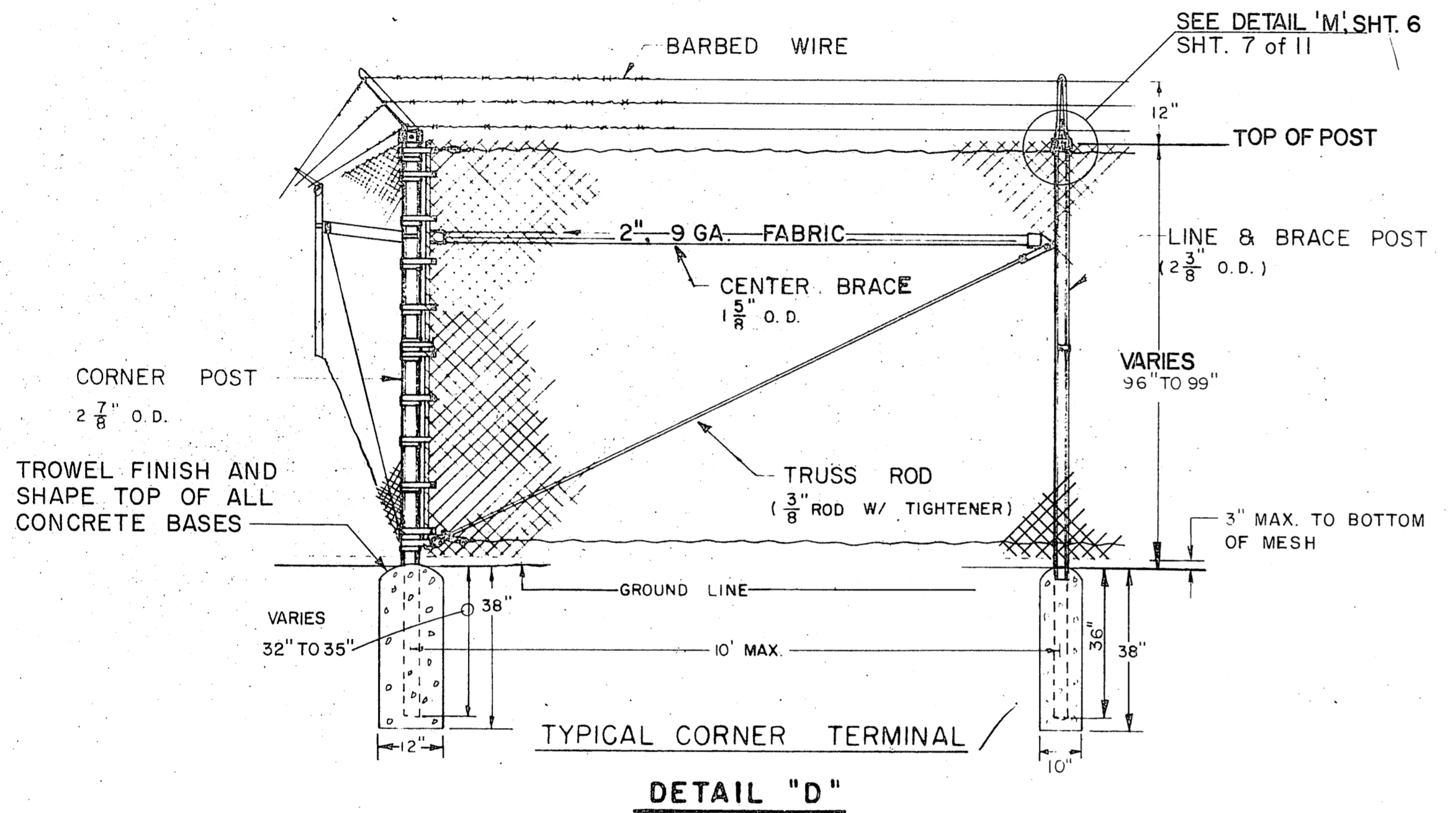
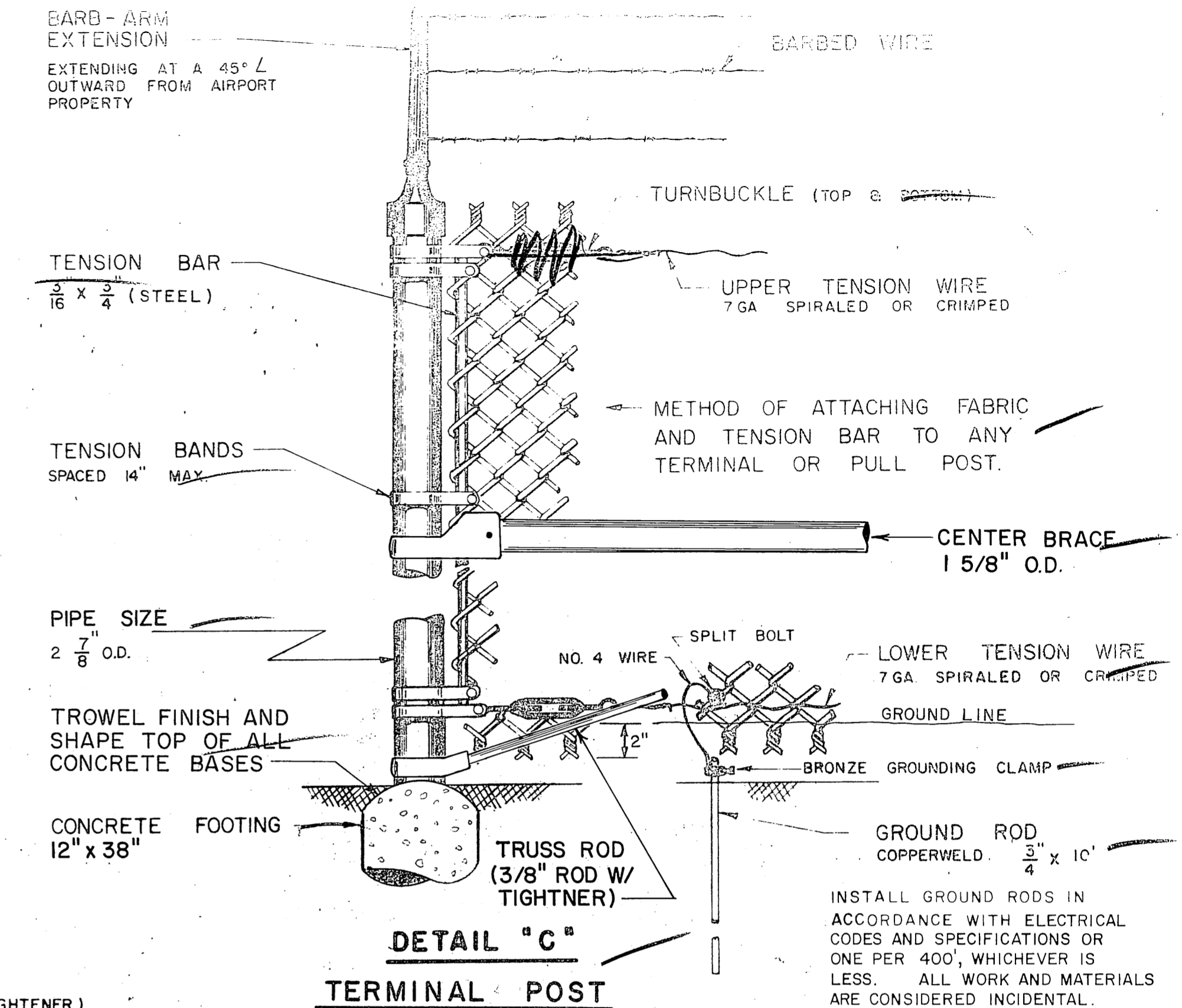
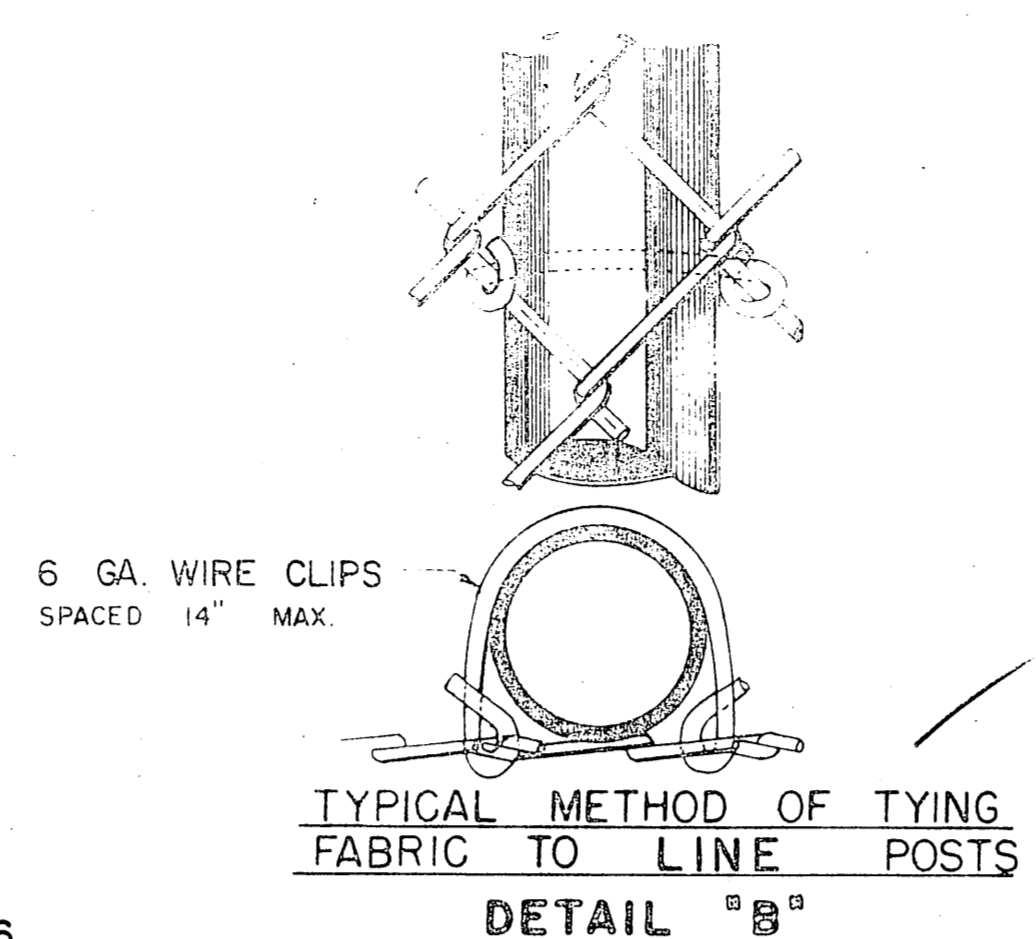
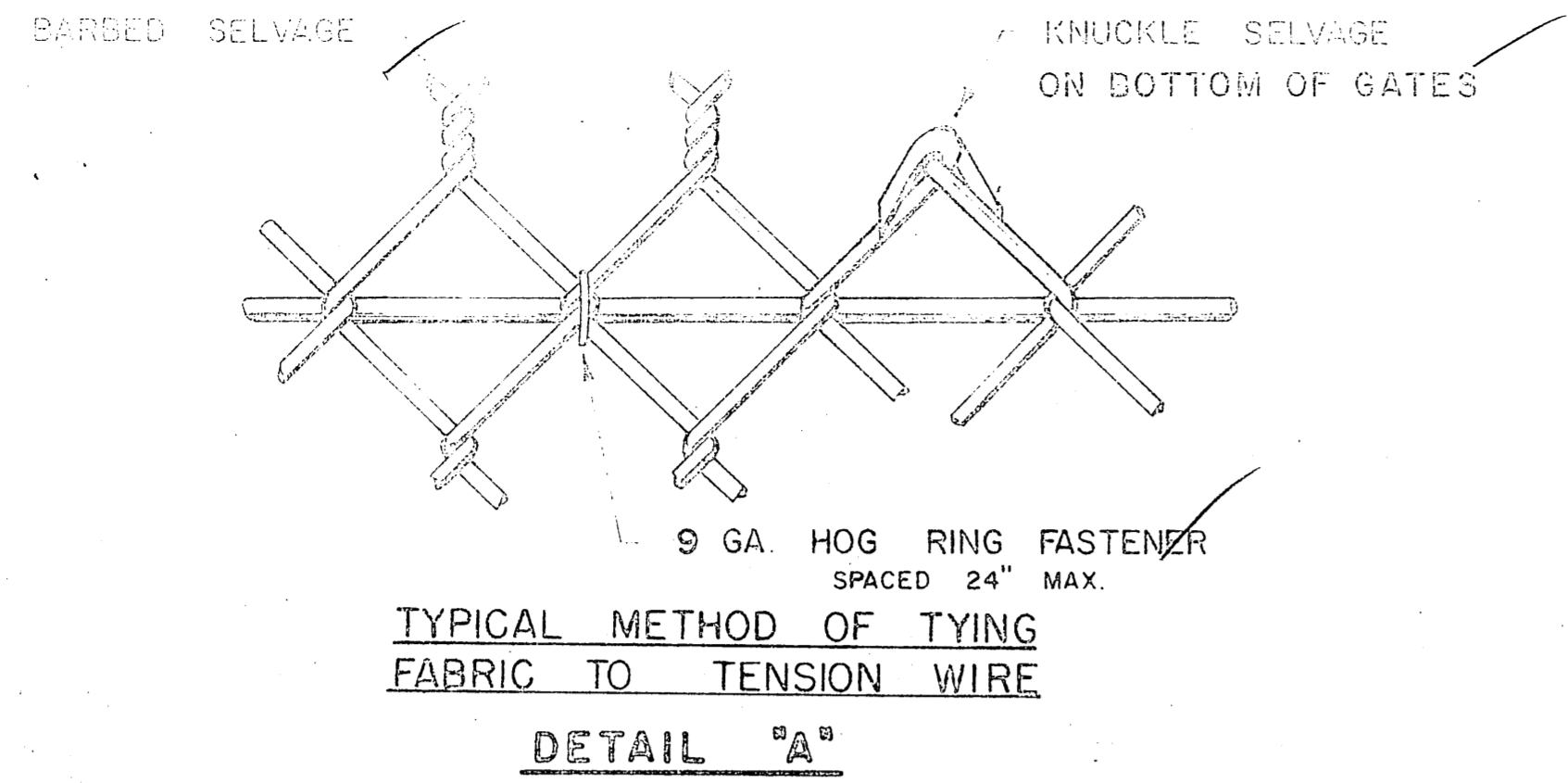
Connect New Fence to existing fence. Connection shall be as shown in Detail "D," Sheet 4.

Remove existing fence as directed - Considered incidental to this project.

This portion of the fence to be constructed first.

Chain-Link Fence, Type "B"

Chain-Link Fence, Type "A"

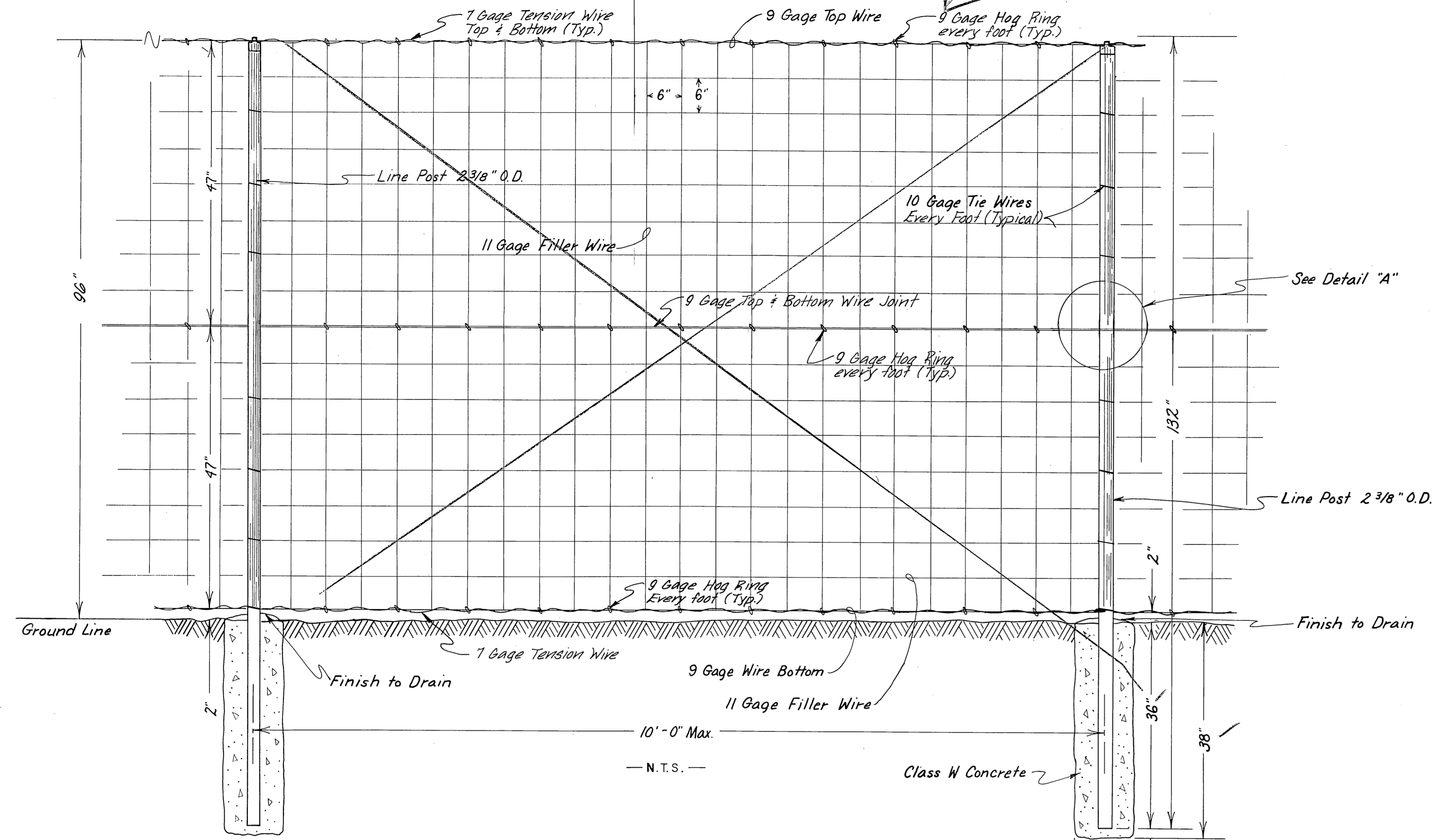


ALL WORK AND MATERIALS TO BE PROVIDED BY THE CONTRACTOR IN THE PRICE OF SEPARATE PAYMENT FOR CORNER POSTS IN PEAT AREAS PROVIDED BY THE CONTRACTOR AS APPROVED BY THE ENGINEER.

APPROVED BY: <i>William A. Locher</i> WILLIAM A. LOCHER, P.E. S.E. AVIATION DESIGN ENGINEER		APPROVED BY: <i>William L. Baumgartner</i> WILLIAM L. BAUMGARTNER, P.E. S.E. REGION DESIGN ENGINEER	
BY	DATE	DESIGNED	DRAWN
REVISIONS		CHECKED	DATE

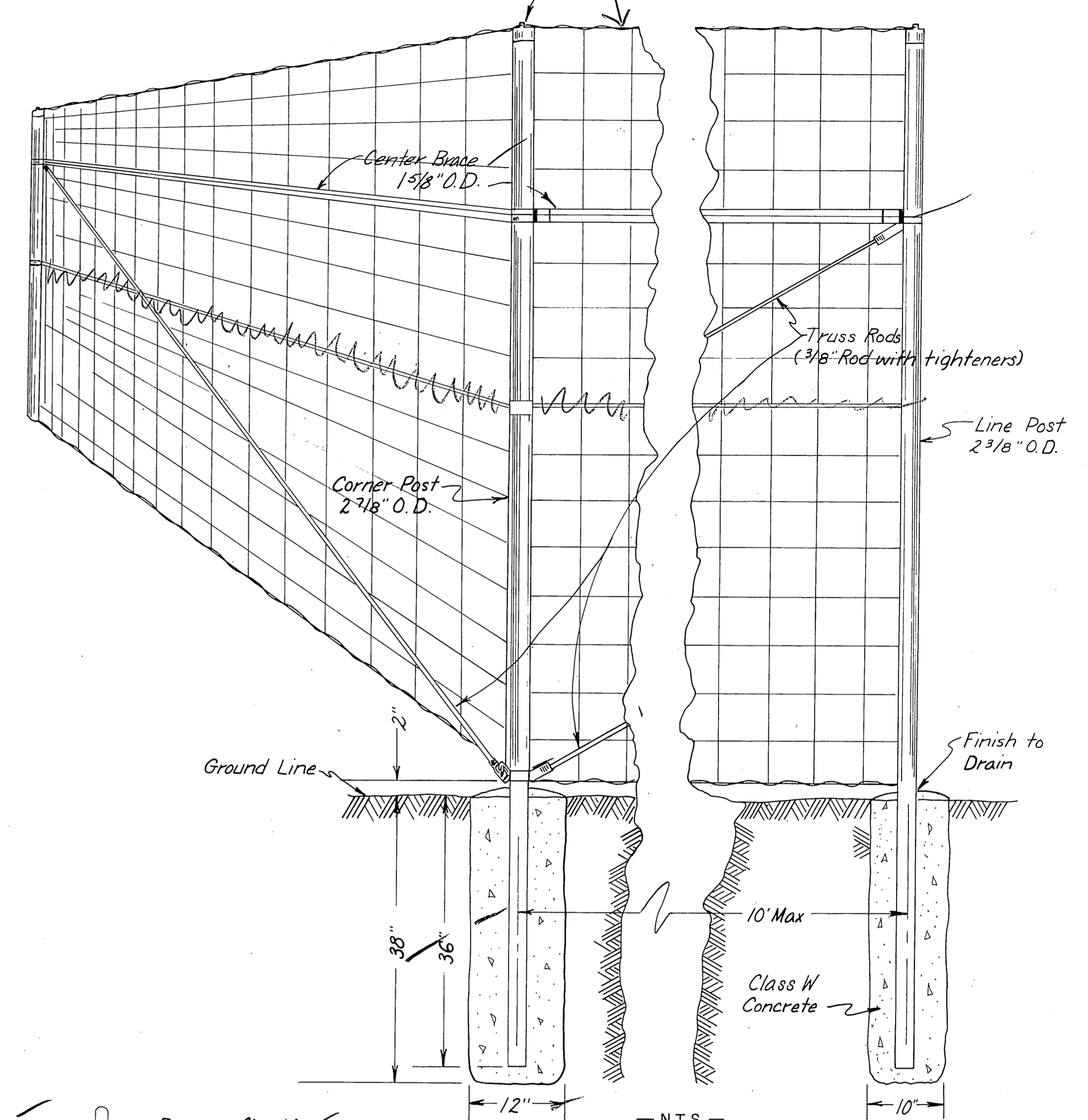
CHAIN-LINK FENCE TYPE "B"

TYPICAL LINE SECTION

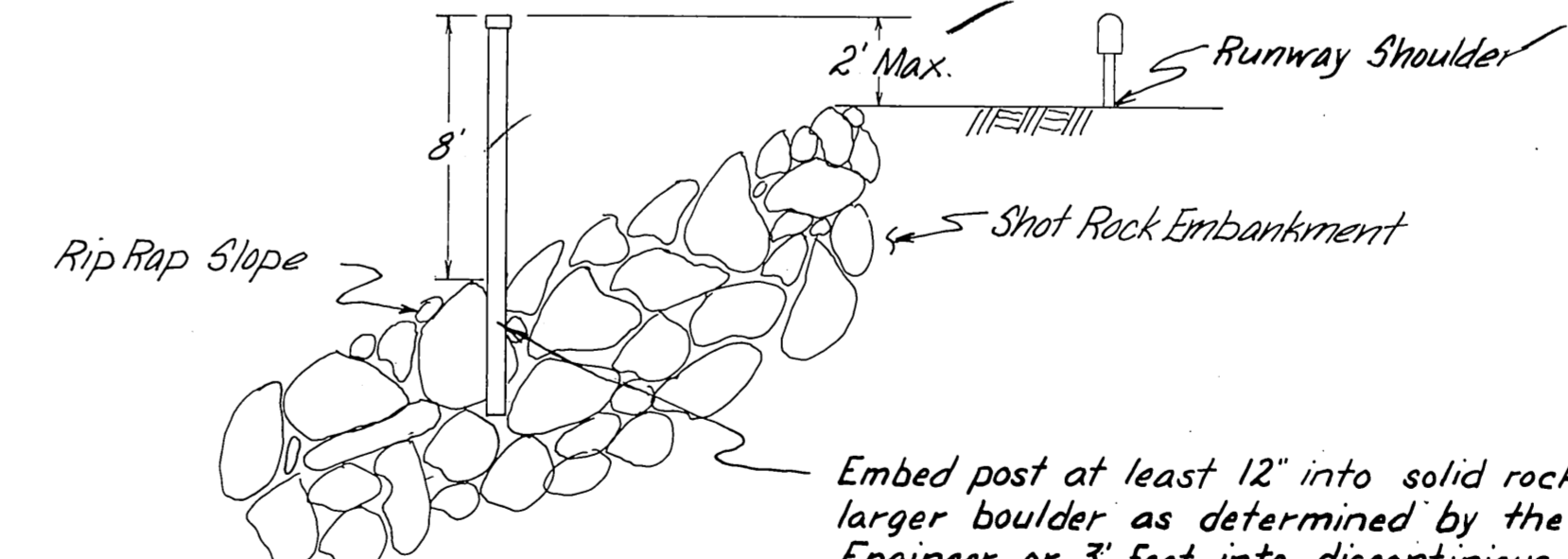
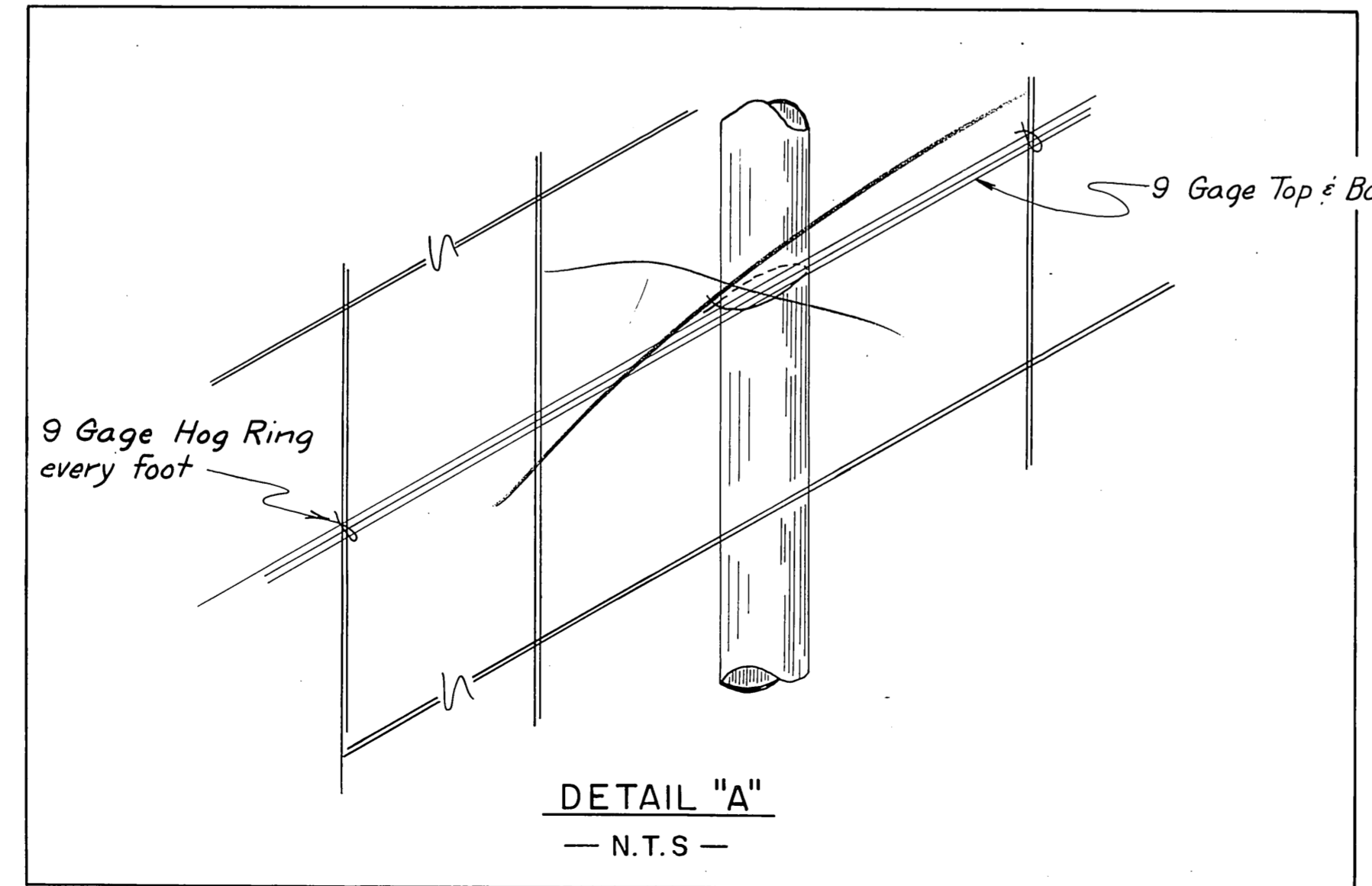


Note: substitute the chain link fence TYPE "B" shown in plans to a 8 Feet high sold Fabric Fencing which was approved By Designer under addendum No#2

Eye Top Post Cap 2 7/8 O.D. Typ.



Note: Fence consists of two 47" high Woven Wire sections stacked one on the other and tied in the middle as shown in Detail "A".



TYPICAL POST DETAIL IN RIP RAP AREAS

Embed post at least 12" into solid rock or larger boulder as determined by the Engineer or 3' feet into discontinuous rock or other soils. Hand place lighter rip rap along bottom of fence to fill voids or use detail "F" as shown on Sheet 4 of the plans, as directed by the Engineer. Set posts with approved grout and/or fill voids with concrete. All work and materials involved with post in rock or rip rap shall be included in the Bid Price and no separate payment will be made therefore.

CHAIN-LINK FENCE TYPE "B"

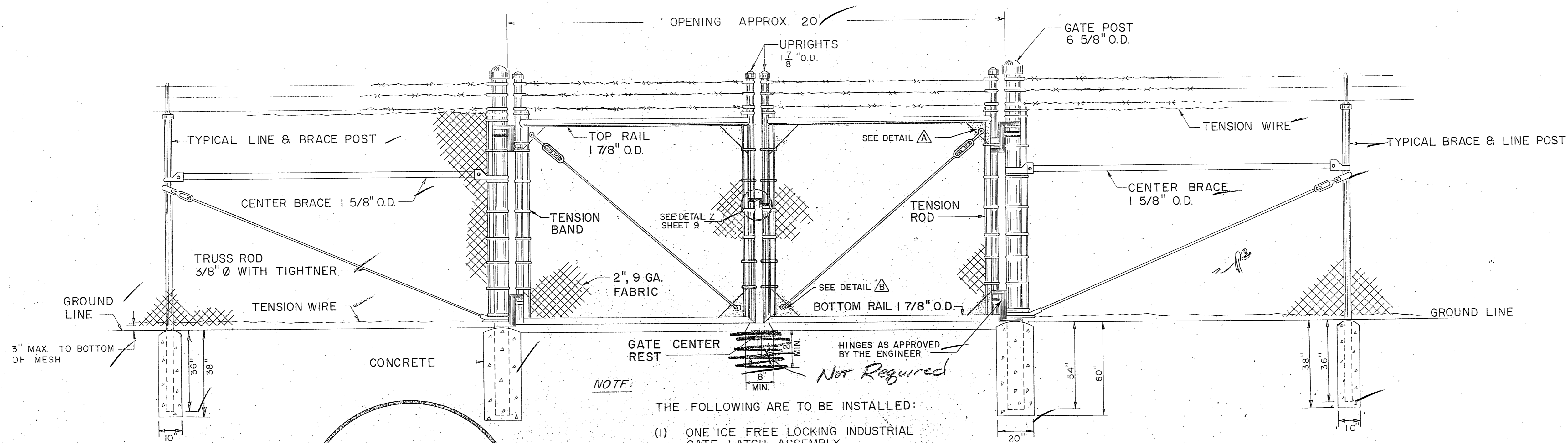
TYPICAL CORNER SECTION



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**TYPICAL SECTIONS & DETAILS
CHAIN-LINK FENCE TYPE "B"**

APPROVED BY:		William A. Locher, P.E.		S.E. AVIATION DESIGN ENGINEER	
APPROVED BY:		W. Baumgartner		S.E. REGION DESIGN ENGINEER	
BY	DATE	CHANGE	SCALE:	DESIGNED:	DRAWN:
REVISIONS			CHECKED:	DATE:	SHEET 5 OF 9



NOTE:
THE FOLLOWING ARE TO BE INSTALLED:
(1) ONE ICE FREE LOCKING INDUSTRIAL GATE LATCH ASSEMBLY.
(2) ONE DOUBLE GATE CENTER REST.

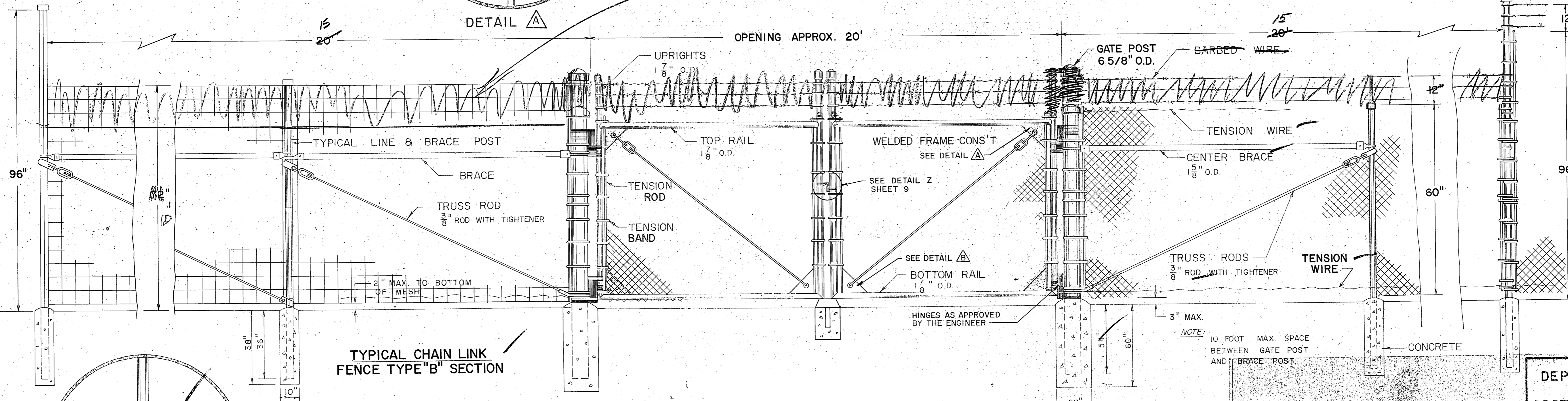
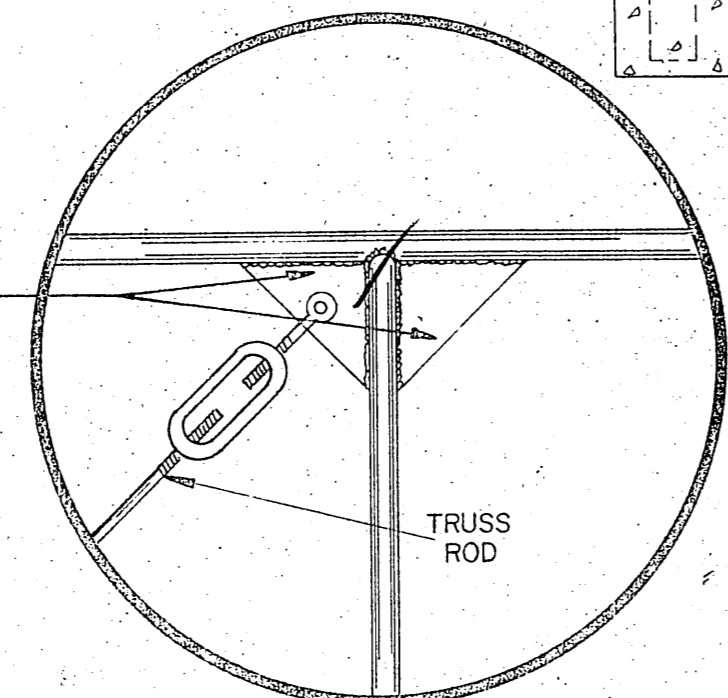
20' DOUBLE SWING GATE DETAIL

DETAIL "L"
NOT TO SCALE

Note the Barbwire was deleted in this Section To provide adequate Aircraft wing Clearance.

TYPICAL EYE-TOP, BARB-ARM EXTENSION
(1) TYPICAL TOP FOR ALL LINE & PULL POSTS FOR TYPE "A" FENCE.
(2) TENSION WIRE TO BE THREADED THROUGH EYE-TOP, AS SHOWN, ON ALL POSTS.

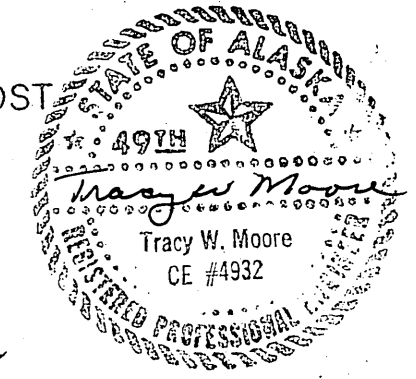
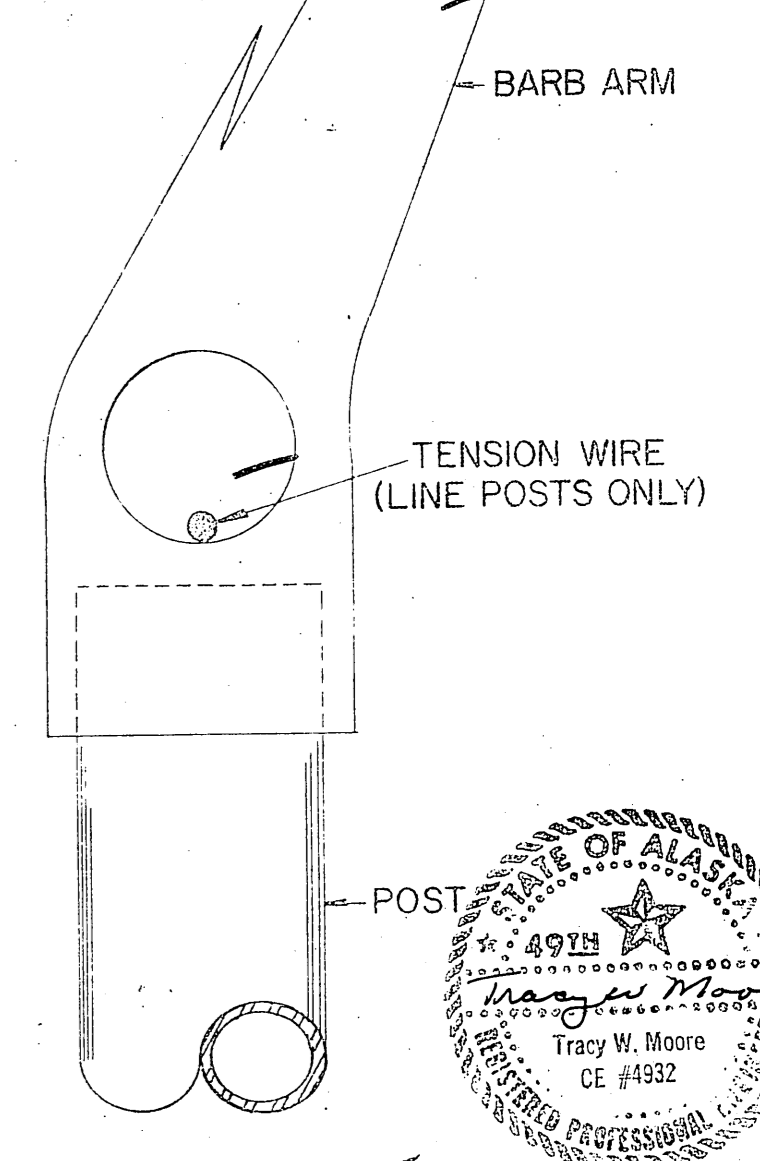
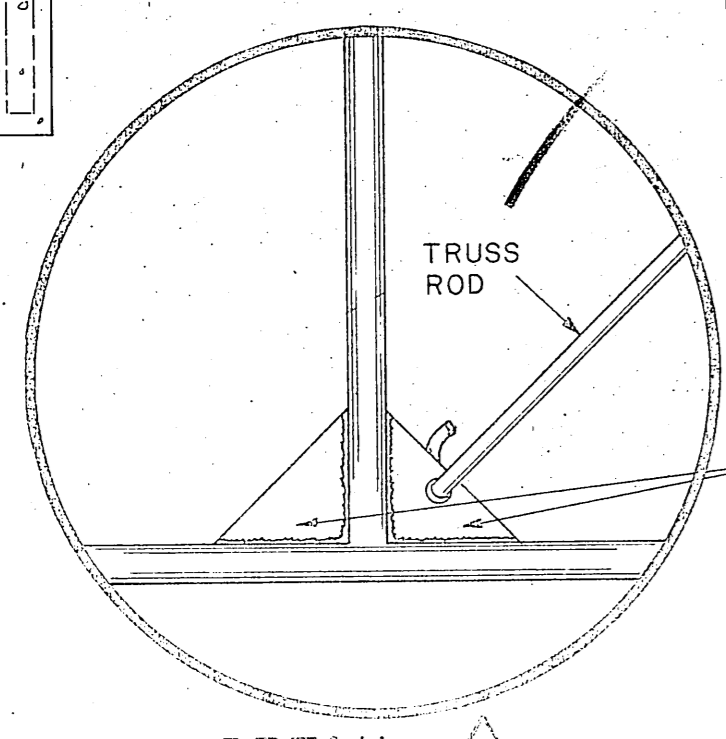
TURN-BUCKLE EYE IS BOLTED TO TRIANGULAR PLATE THAT HAS BEEN DRILLED TO ACCEPT BOLT.



TYPICAL DOUBLE SWING GATE & FENCE FOR SEA PLANE PULLOUT

DETAIL "K"
NOT TO SCALE

TRIANGULAR PLATES WELDED IN AND DRILLED TO ACCEPT NON-THREADED END OF 3/8" TRUSS ROD.

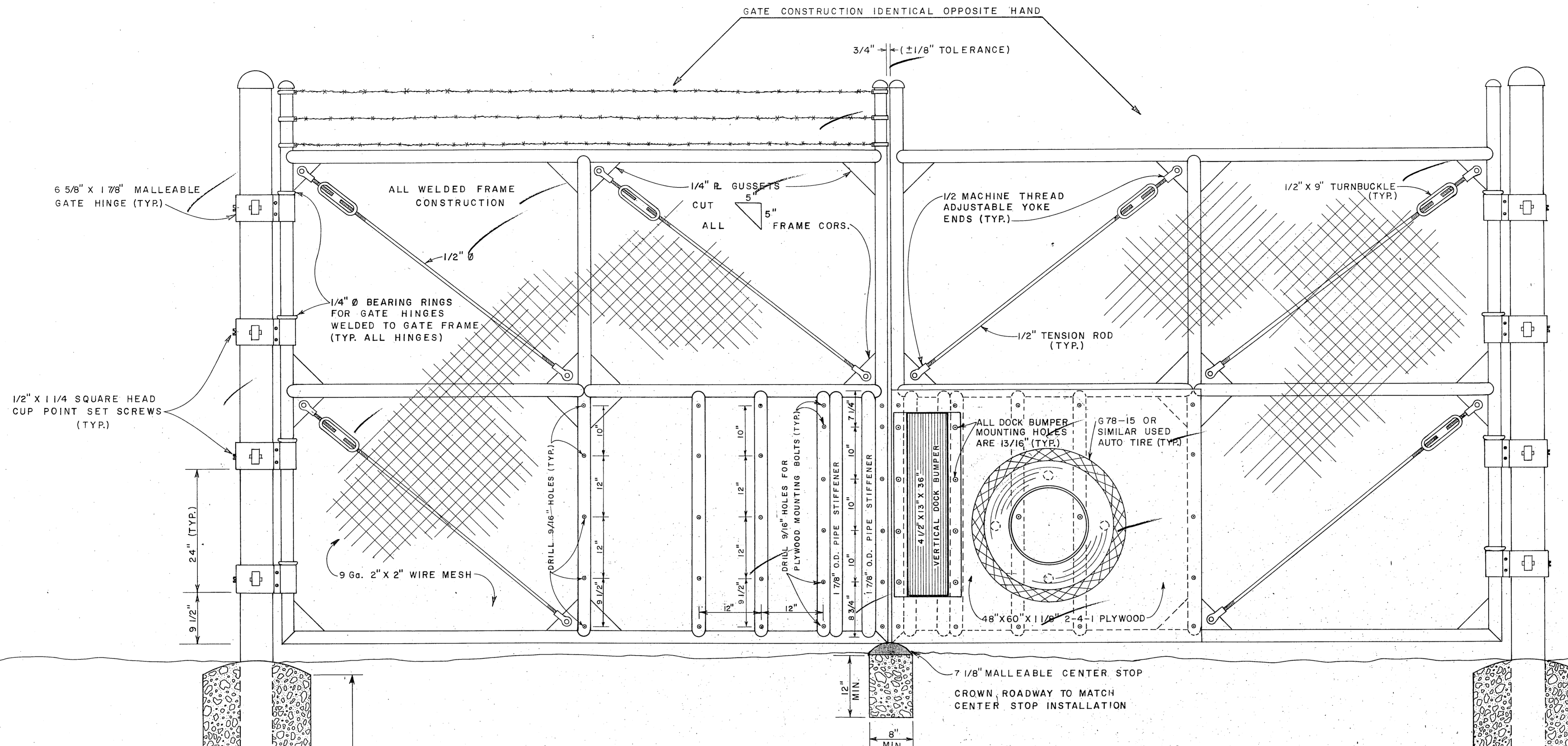


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
S.E. REGION AVIATION-DESIGN AND CONSTRUCTION

DOUBLE SWING GATE DETAILS

APPROVED: *William A. Locher*
WILLIAM A. LOCHER, P.E. S.E. AVIATION DESIGN ENGINEER
APPROVED: *William L. Baumgartner*
WILLIAM L. BAUMGARTNER, P.E. S.E. REGION DESIGN ENGINEER

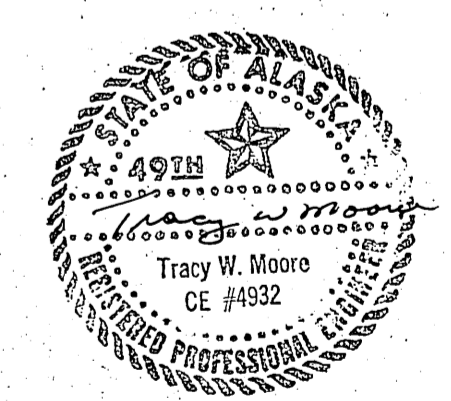
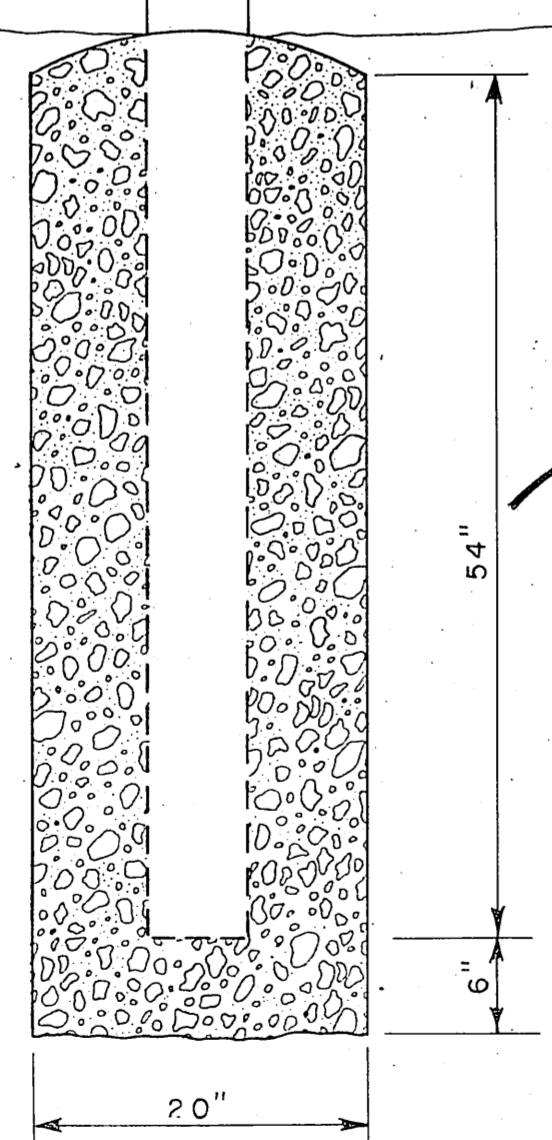
BY	DATE	CHANGE	SCALE	DESIGN	CHECKED	DRAWN	DATE
			AS SHOWN				
REVISIONS							



**EMERGENCY ENTRY GATE
WITH ADJUSTABLE STRENGTH BREAKAWAY LOCK
OUTSIDE FACE VIEW
N.T.S.**

NOTES:

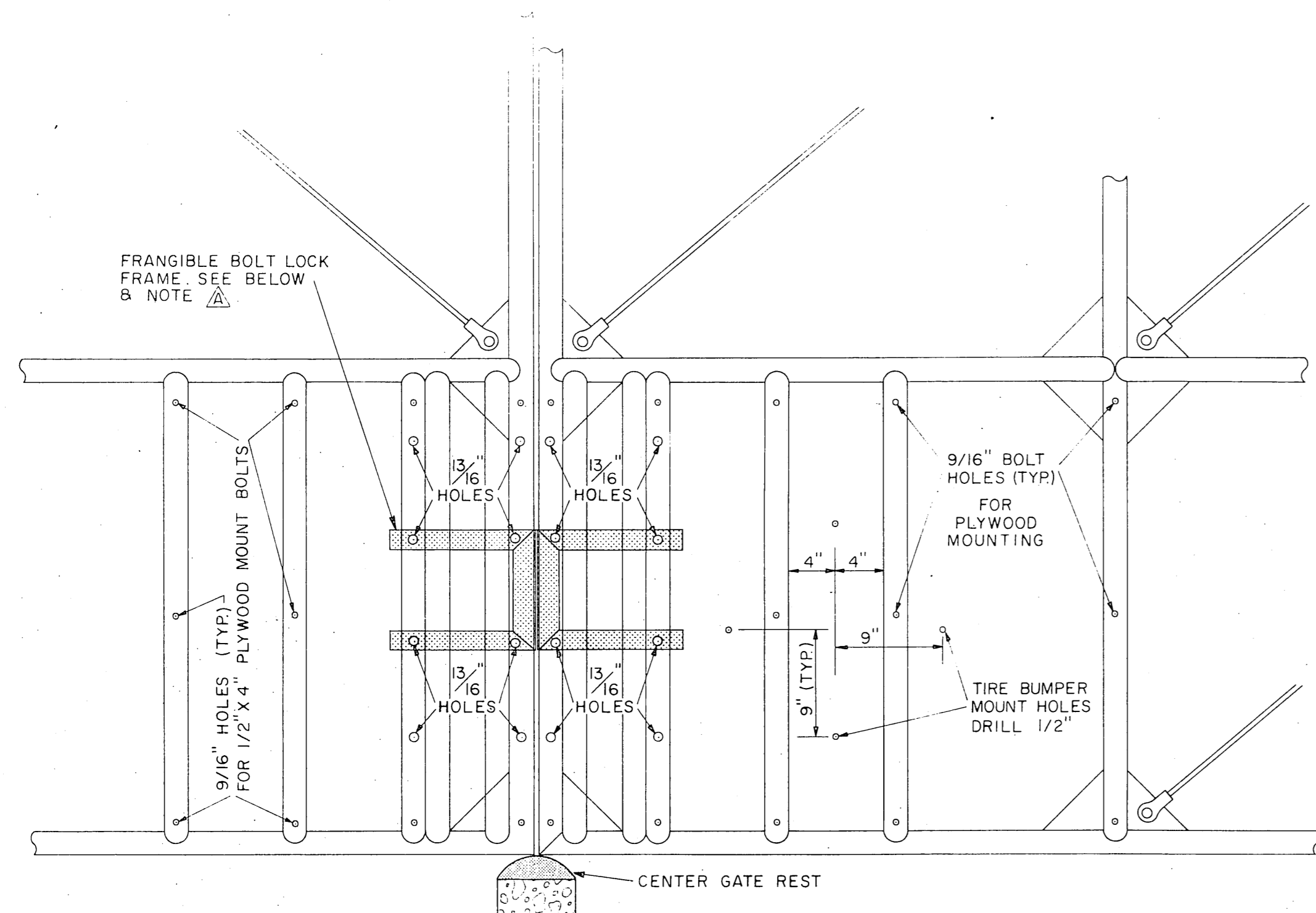
1. ALL DETAILS SHOWN ON EITHER HALF SECTION OF DOUBLE SWING GATE ARE OPPOSITE HAND IDENTICAL ON THE OTHER HALF OF GATE.
2. INSTALL STANDARD 9 GA. 2" MESH CHAIN LINK FENCE FABRIC TO OUTER FACE OF EACH DOUBLE SWING GATE PANEL EXCEPT ON LOWER CENTER 1/4 PANELS, WHICH RECEIVES A 48" X 60" X 1 1/8" 2-4-1 PLYWOOD FACING PANEL BOLTED DIRECTLY TO TUBULAR STEEL FRAME MEMBERS. NORMAL FENCE FITTINGS AND INSTALLATION PROCEDURES TO BE USED IN FABRIC INSTALLATION.
3. FULL GUSSET WELD ALL FRAME UNITS. TRIPLE DIP GALVANIZED COMPLETED FRAME AFTER WELDING.
4. FASTEN 2-4-1 PLYWOOD PANELS WITH 1/2" X 4"-13 THREAD OVAL HEAD ZINC CHROMATE CARRIAGE BOLTS WITH BOLT HEAD AT OUTER FACE OF GATE.
5. FASTEN DOCK BUMPERS WITH 3/4" X 7 1/2" HEX HEAD BOLTS AND NUTS WITH BOLT HEAD AT OUTER FACE OF GATE.
6. ALL TUBULAR GATE FRAME MEMBERS ARE 1 7/8" O.D. GALVANIZED STEEL FULL SCHEDULE 80 PIPE.



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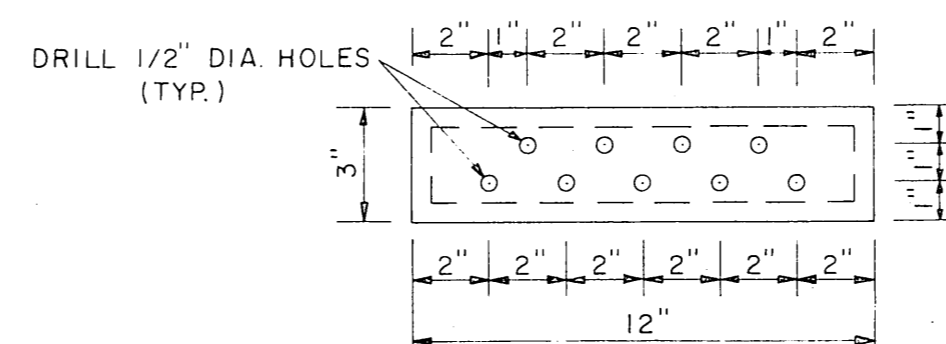
EMERGENCY ENTRY GATE

APPROVED		<i>William A. Fisher</i>		S.E. AVIATION DESIGN ENGINEER	
APPROVED		<i>William L. Baumgartner</i>		S.E. REGION DESIGN ENGINEER	
BY	DATE	CHANGE	DESIGN	DRAWN	SHEET 7 OF 9
			AS SHOWN		
REVISIONS					



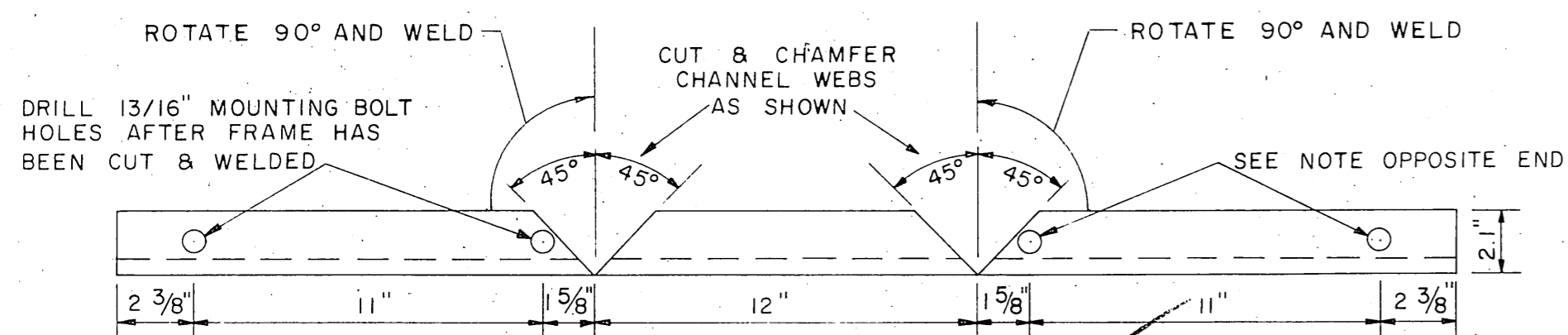
INSIDE VIEW OF LOWER CENTER GATE SECTIONS

BOLT HOLES NOT SHOWN AS 13/16" ARE TO BE 9/16".



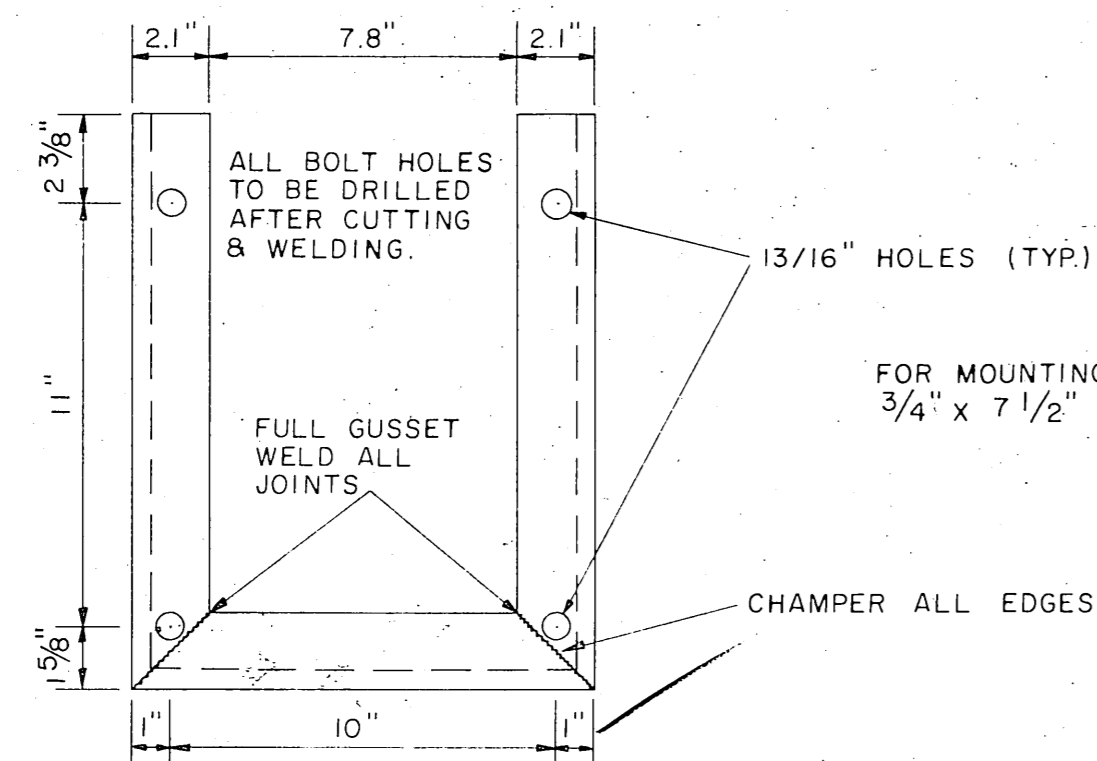
FACE VIEW OF FRANGIBLE BOLT LOCK FRAME (2 REQUIRED)

DRILL FACE OF 1ST FRAME BEFORE INSTALLATION. INSTALL BOTH FRAMES AND ADJUST GATE SECTIONS FOR FINAL ALIGNMENT. USE PREDRILLED 1ST FRAME AS DRILL TEMPLATE FOR DRILLING 2ND FRAME.
USE 3/8" X 2" ALUMINUM ROUND HEAD MACHINE BOLTS WITH NUTS & WASHERS FOR INITIAL TESTING. NOTCH BOLTS AS NECESSARY TO PROVIDE A TOTAL BREAKING STRENGTH OF 500 LBS. FOR THE FRANGIBLE LOCK



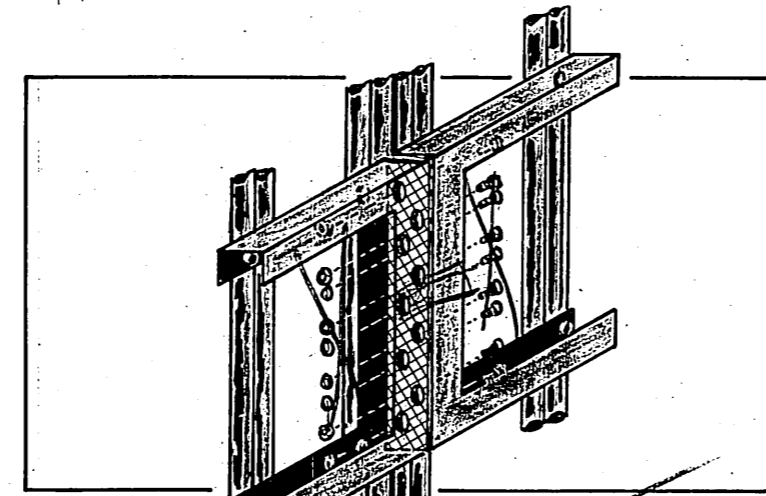
FRANGIBLE BOLT LOCK FRAME (2 REQUIRED)

FABRICATE FROM MC 3"x9" MISC. CHANNEL, 42" LENGTH.

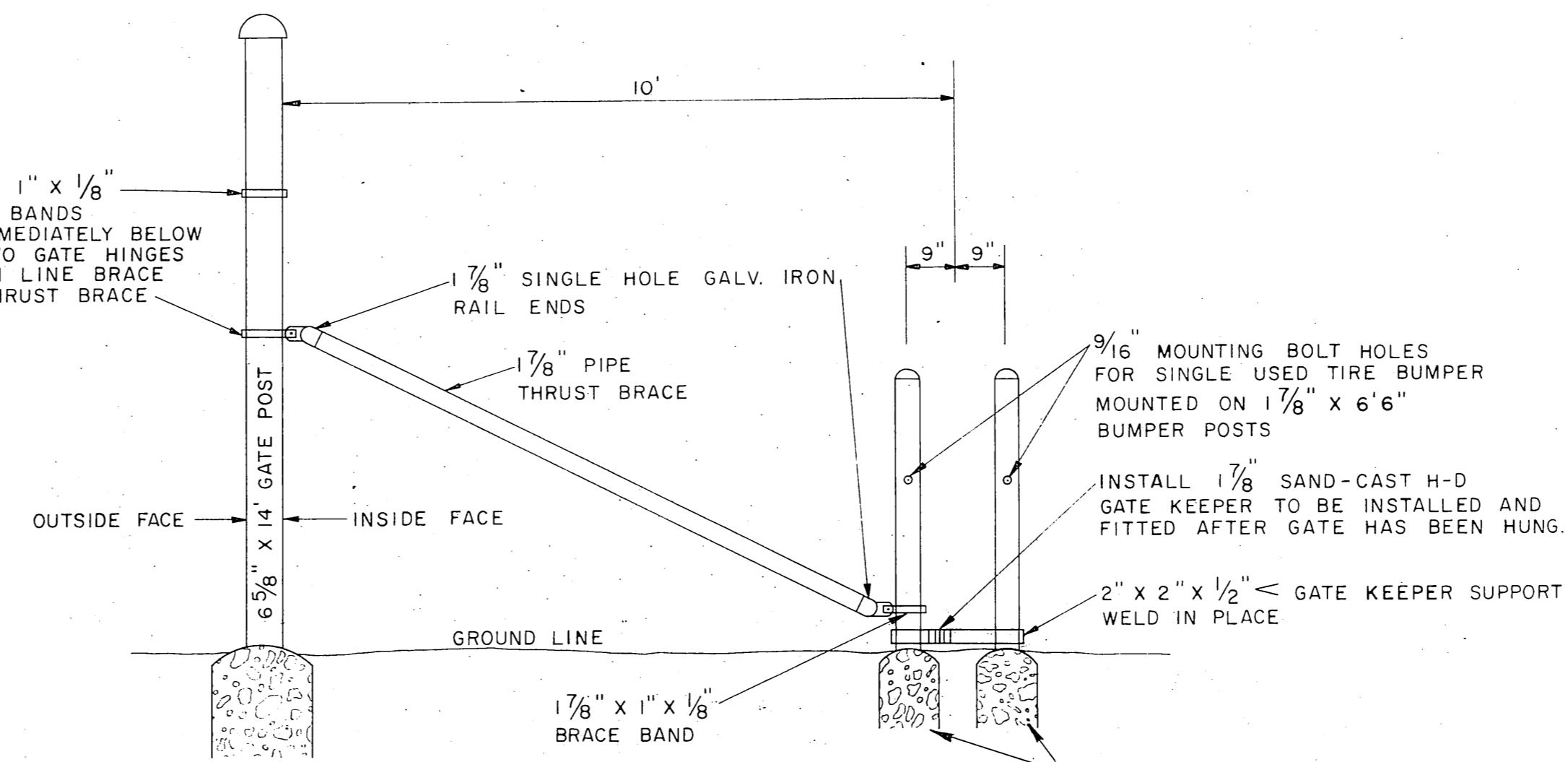


FRANGIBLE BOLT LOCK DETAIL

FOR MOUNTING USE HEX HEAD BRIGHT FINISH STEEL 3/4" X 7 1/2" BOLTS WITH MATCHING WASHERS & NUTS.



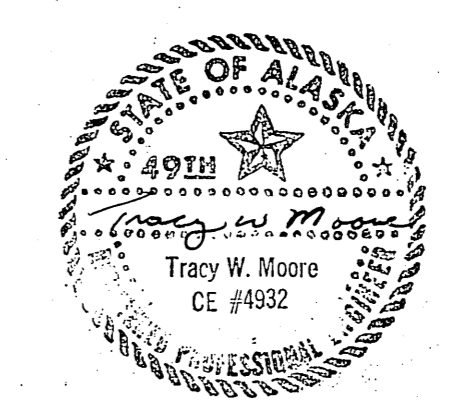
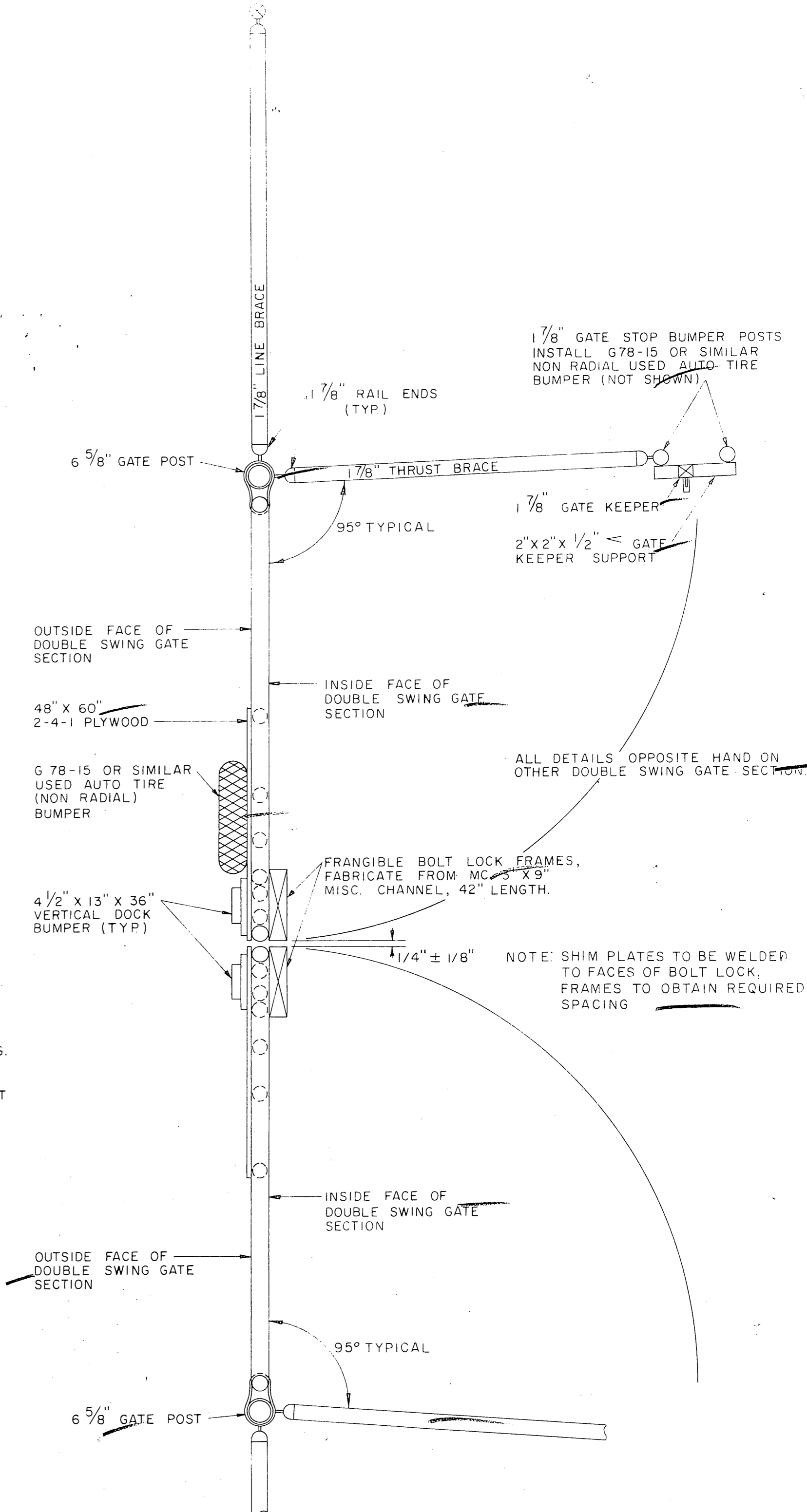
call PS



ON LINE VIEW OF GATE POST BRACING & GATE STOP BUMPER

ALL GATE DETAILS OPPOSITE HAND IDENTICAL ON DOUBLE SWING GATE INSTALLATION.

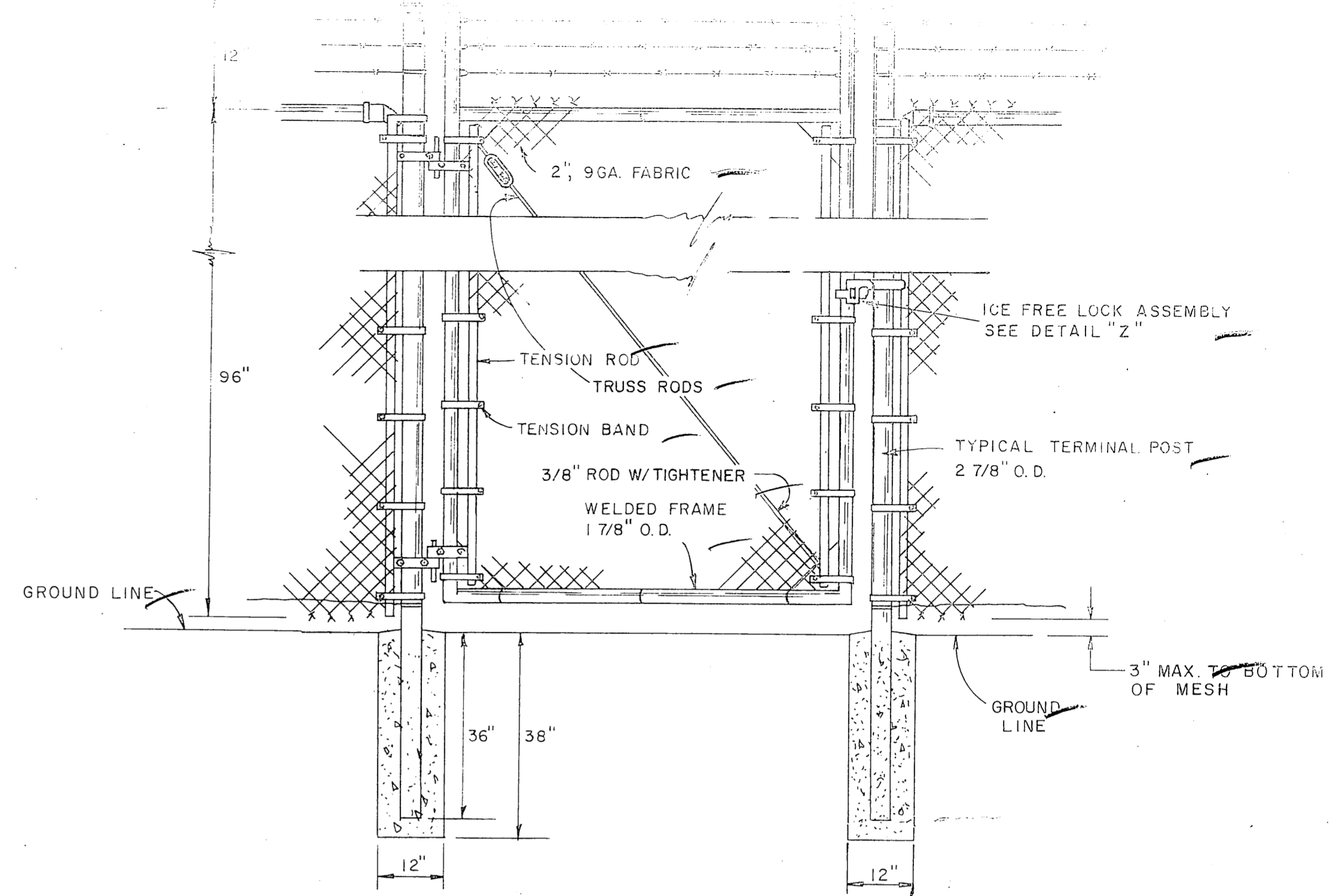
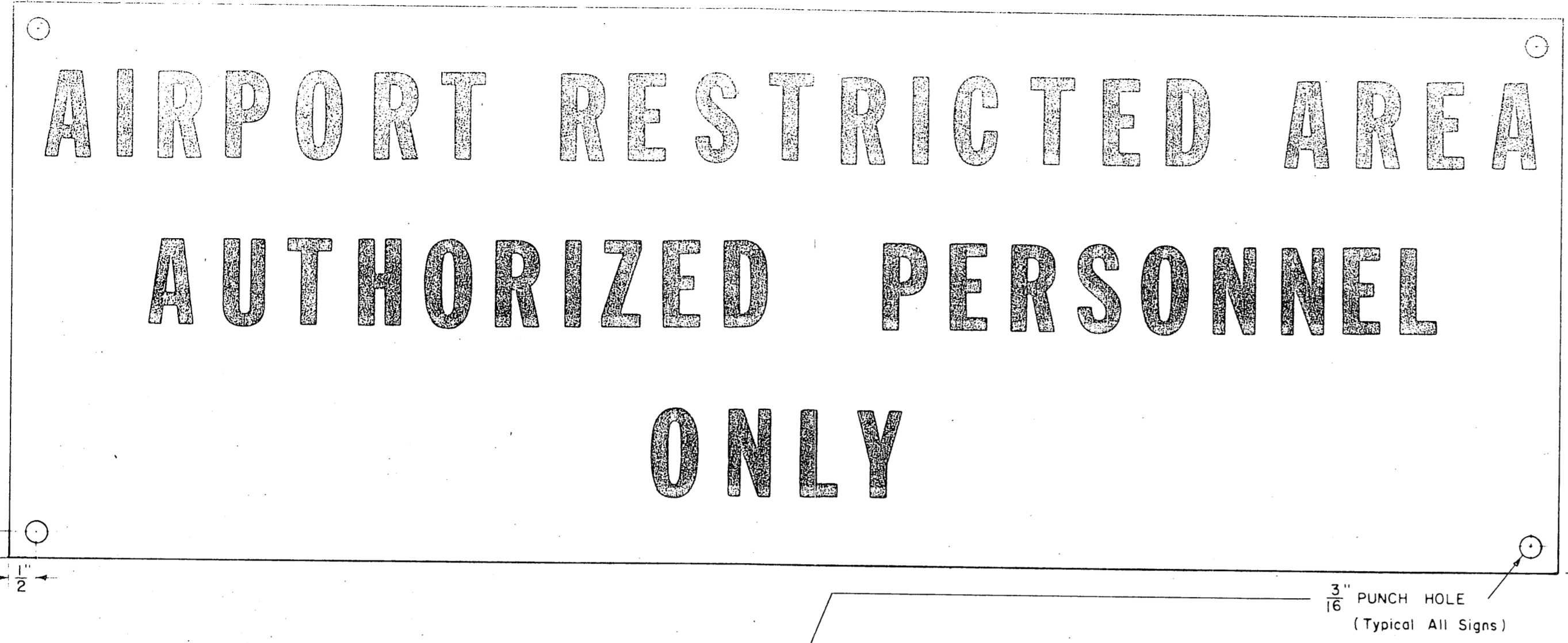
NOTE:
FRAMES FOR FRANGIBLE BOLT LOCK ARE SHOWN INSTALLED AT MIDDLE HEIGHT. FRAMES MAY BE INSTALLED 10" HIGHER OR LOWER AS REQUIRED TO PLACE MIDDLE OF THE FRAMES AT A HEIGHT MOST NEARLY CORRESPONDING TO THE BUMPER HEIGHT OF EMERGENCY VEHICLES USING THIS ENTRANCE.



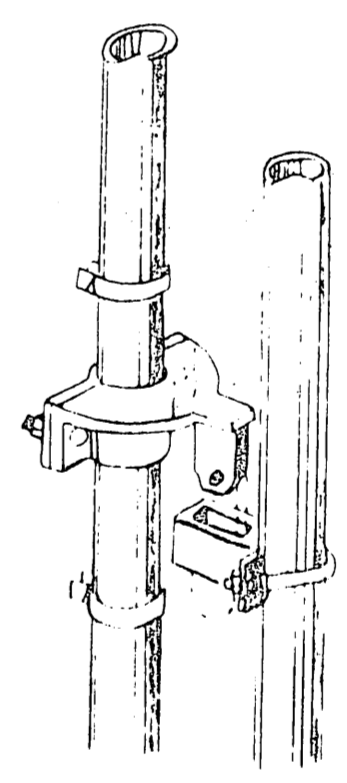
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
S.E. REGION AVIATION-DESIGN AND CONSTRUCTION

EMERGENCY ENTRY GATE
DETAILS

APPROVED		William A. Locher		WILLIAM A. LOCHER, P.E.		S.E. AVIATION DESIGN ENGINEER	
APPROVED		William L. Baumgartner		WILLIAM L. BAUMGARTNER, P.E.		S.E. REGION DESIGN ENGINEER	
BY	DATE	CHANGE	DESIGN	DRAWN	CHECKED	DATE	SHEET 8 OF 9
REVISIONS		N.T.S.					



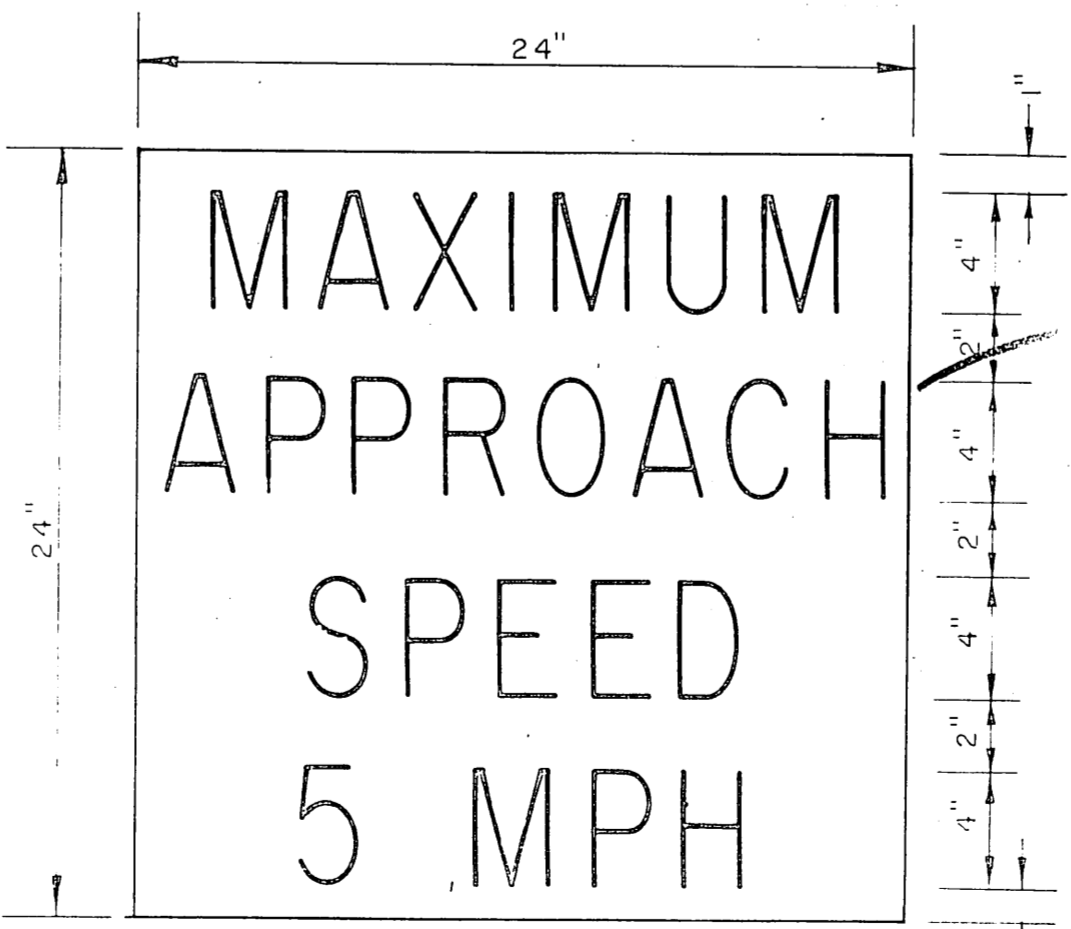
TYPICAL WALK IN GATE
DETAIL "N"
NO SCALE



ICE FREE LOCKING ASSEMBLY
NO SCALE
DETAIL "Z"



NOT TO SCALE



APPROACH WARNING SIGN
FRANGIBLE LOCK GATE
TWO REQUIRED

NOTES

- (1) ALL SIGNS SHALL HAVE WHITE REFLECTIVE SHEETING BACKGROUND WITH RED LETTERING
- (2) THE LOWER EDGE OF ALL SIGN PLATES INSTALLED ON THE 8 FOOT CHAIN-LINK FENCE SHALL BE 5 FEET ABOVE THE GROUND.
- (3) THE "AIRPORT RESTRICTED AREA" SIGN PLATES SHALL BE PLACED ON ALL GATES
- (4) THE "NOTICE" SIGN PLATES SHALL BE PLACED EVERY 300 FEET ALONG THE 8 FOOT CHAIN-LINK FENCE
- (5) ALL SIGNS SHALL BE ATTACHED TO FABRIC WITH 9 GAGE WIRE.
- (6) ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING WARNING SIGNS SHALL BE INCIDENTAL TO THIS CONTRACT.

STATE OF ALASKA
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SIGNS & ICE FREE LOCK DETA

APPROVED		<i>William A. Locher</i>		S.E. AVIATION DES	
APPROVED		<i>William L. Baumgartner</i>		S.E. REGION DEF	
BY	DATE	CHANGE	SCALE	DESIGN	DRAWN
			AS SHOWN	CHECKED	DATE
REVISIONS					