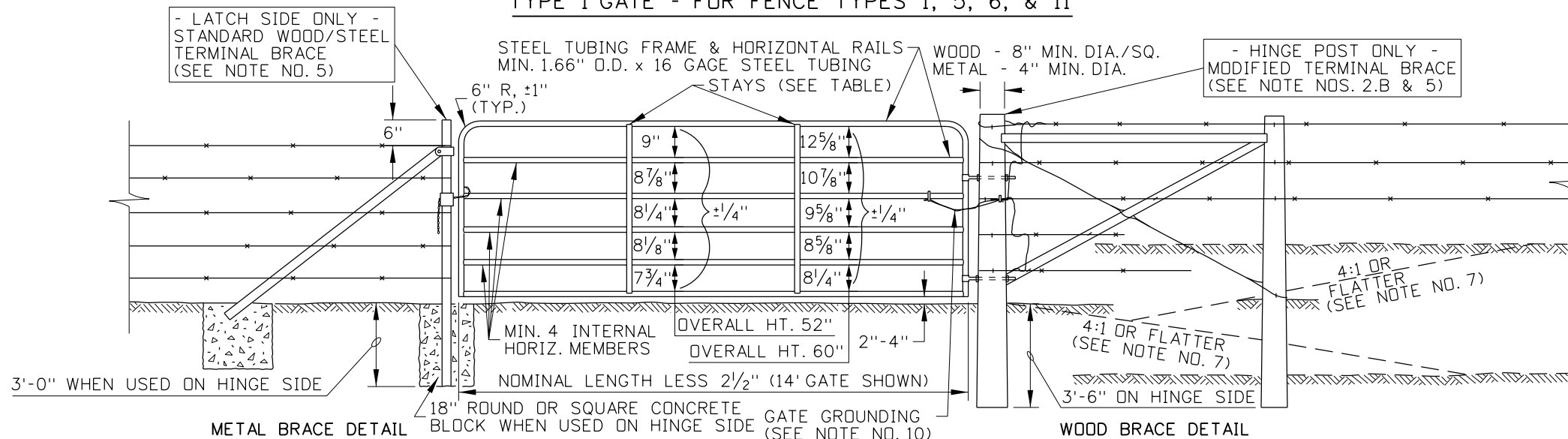


METAL BRACE DETAIL

WOOD BRACE DETAIL

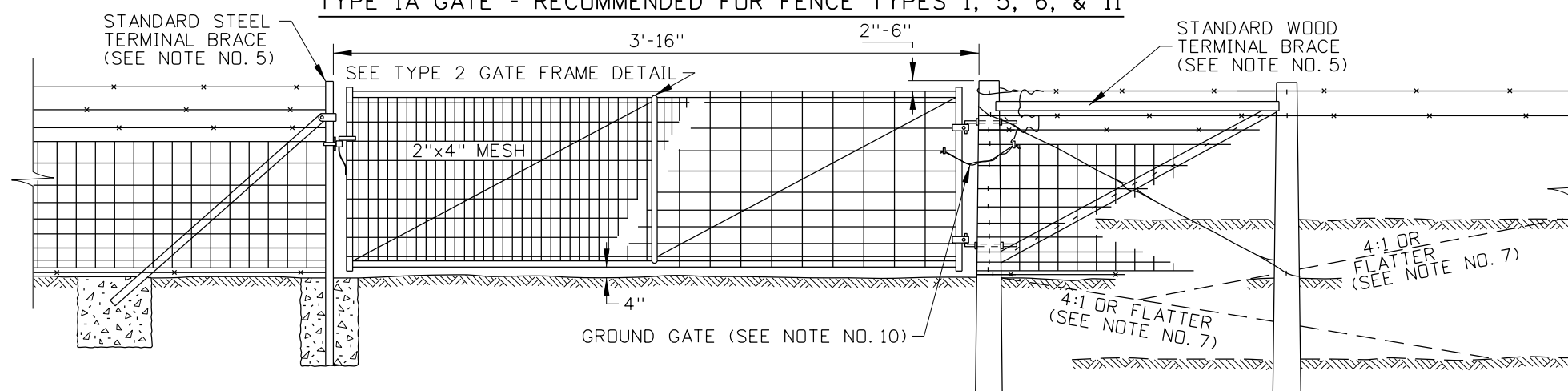
TYPE 1 GATE - FOR FENCE TYPES 1, 5, 6, & 11



METAL BRACE DETAIL

WOOD BRACE DETAIL

TYPE 1A GATE - RECOMMENDED FOR FENCE TYPES 1, 5, 6, & 11



METAL BRACE DETAIL

WOOD BRACE DETAIL

TYPE 2 GATE - FOR FENCE TYPES 2, 3, 7, 8, & 33

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: RYAN D. LANCASTER DATE ORIGINAL SIGNED: JANUARY 31, 2013

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	9-76		6	10-04	MSM		
2	5-95	MSM	7	12-12	RDL		
3	8-97	MSM					
4	6-02	MSM					
5	6-03	MSM					

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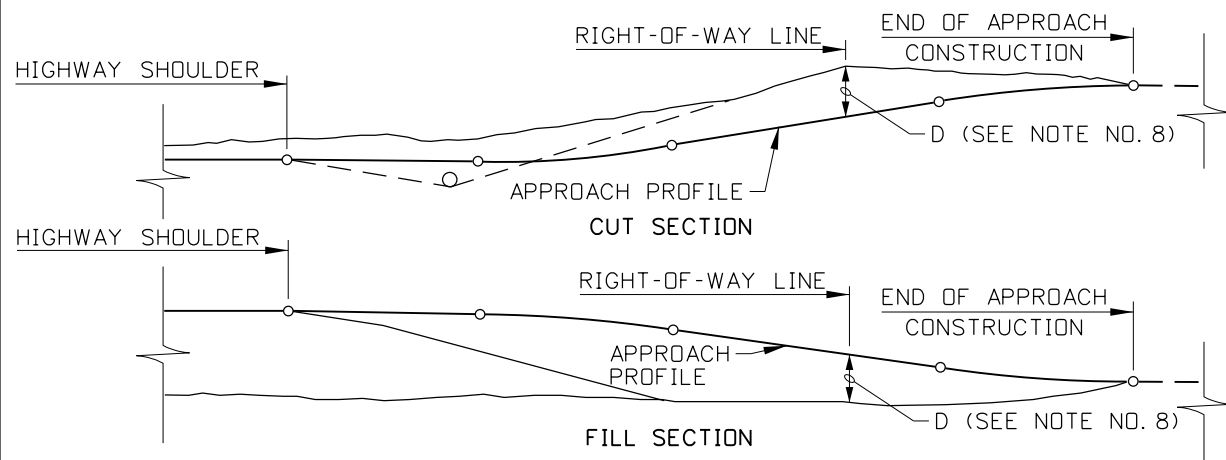
ORIGINAL SIGNED BY: LOREN THOMAS
 HIGHWAYS PROGRAM OVERSIGHT ENGINEER
 ORIGINAL SIGNED BY: TOM COLE
 CHIEF ENGINEER

STANDARD DRAWING
GATE TYPES 1, 1A, & 2
 REQUIRES SHEET 2 OF 2 & STD. DWG. F-2-A

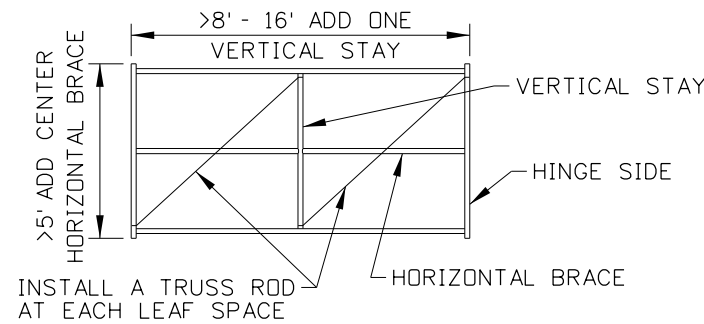
English
 STANDARD DRAWING NO.
F-2-C
 SHEET 1 OF 2

NOTES

1. TYPE 1 GATES:
 - A. USE FOR FENCE TYPES 1, 5, 6, & 11.
 - B. USE A SECTION OF METAL FENCE POST OR ROUND WOOD POST 2 1/2" TO 3" IN DIAMETER. PLACE LARGER WOODEN STAYS AT THE GATE ENDS.
 - C. ENSURE THAT PRY STICK ARE A 24" LENGTH OF HARDWOOD TOOL HANDLE.
 - D. ATTACH WIRE LOOPS AND PRY STICK WIRE WITH A DOUBLE WOVEN 9 GAGE BARBLESS WIRE OR A SUITABLE CHAIN. ADJUST THE LOOPS AND PRY STICK SO THAT THE GATE IS TAUT WHEN CLOSED. FASTEN THE LOOPS TO THE ADJACENT LATCH/HINGE POST.
 - E. STAPLE THE STAYS AND END POSTS TO THE CONNECTING WIRES.
 - F. ENSURE THAT THE GATE BRACES MATCH THE ADJACENT FENCE TYPE.
2. TYPE 1A GATES:
 - A. USE WITH FENCE TYPES 1, 5, 6, & 11. THE USE OF TYPE 1A GATES IN PLACE OF TYPE 2 GATES REQUIRES THE APPROVAL OF THE ENGINEER AND THE ADJACENT PROPERTY OWNER(S).
 - B. TYPE 1A GATES REQUIRE A MODIFIED METAL OR WOODEN BRACE. USE OF THE METAL BRACE REQUIRES A 4" MINIMUM PIPE (1/4" WALL) ON THE HINGE POST. USE OF THE WOODEN BRACE REQUIRES A MINIMUM 8" SQUARE OR SMALL END DIAMETER FOR THE HINGE POST. DO NOT USE BAR ANGLES ON TUBE GATE TERMINALS. WOOD HINGE POSTS ARE 8' AND METAL HINGE POSTS ARE 7'-6" IN LENGTH. THE METAL HINGE POST REQUIRES AN 18" SQUARE OR ROUND ANCHOR BLOCK.
 - C. ENSURE THAT HINGES FOR TYPE 1A GATES WIDER THAN 10' HAVE LEVELING THREADS ON A MINIMUM 3/4" DIAMETER ROD.
 - D. ENSURE THAT LATCHES FOR TYPE 1A GATES ARE LOCKABLE AND NON-SAGGING ON THE LATCH SIDE WHEN LATCHED.
 - E. ENSURE THAT TYPE 1A GATES SWING 180° UNLESS OTHERWISE SPECIFIED.
3. TYPE 2 GATES:
 - A. USE FOR FENCE TYPES 2, 3, 7, 8, & 33.
 - B. ENSURE THAT GATE FRAMES ARE FABRICATED WITH A 1.05 INCH O.D. COLD ROLLED OR DRAWN GALVANIZED STEEL TUBING WITH A WALL THICKNESS OF 0.095 INCHES OR 1 INCH GALVANIZED PIPE.
 - C. USE 12.5 GAGE (MINIMUM) GALVANIZED WIRE MESH.
 - D. EQUIP GATE WITH AN ADJUSTABLE DIAGONAL TRUSS ROD.
 - E. USE GALVANIZED MALLEABLE STEEL HINGES AND LATCHES.
 - F. CONSTRUCT GATES FOR TYPE 7 FENCING WITH A 2" x 4" MESH.
 - G. ENSURE THAT GATES FOR TYPE 8 FENCING HAVE 3 SETS OF HINGES AND A HORIZONTAL BRACE MEMBER.
 - H. ENSURE THAT TYPE 2 GATE FRAMES ARE SHOP WELDED. PAINT WELDS WITH 702.02 PAINT FORMULA NO.2. THE TRUSS ROD TIGHTENER AND NON-TIGHTENING END OF THE TRUSS ROD MAY BE WELDED TO THE GATE.
 - I. ENSURE THAT TYPE 2 GATE FRAMES HAVE EXTRA VERTICAL STAY(S) AND A CENTERED HORIZONTAL BRACE WELDED IN PLACE IN ACCORDANCE WITH THE TYPE 2 GATE FRAME DETAIL. EVENLY SPACE THE VERTICAL STAY(S) ON THE GATE. ENSURE THAT EACH LEAF SPACE HAS A TRUSS ROD.
4. TYPE 3 GATES:
 - A. TYPE 3 GATES ARE FOR CHAIN LINK FENCES ONLY. SEE STANDARD DRAWING F-2-D.
5. GATES REQUIRE A LIKE PAIR OF METAL OR WOOD TERMINAL BRACES AS DETAILED ON STANDARD DRAWING F-2-A (SHEET 2 OF 3). GATE TYPE 1A REQUIRES A LARGER HINGE POST ON THE TERMINAL BRACE.
6. PROVIDE A DROP ROD, LATCH, CHAIN, OR SNAP, APPROVED BY THE ENGINEER, BETWEEN THE GATES WHEN TWO TYPE 1A OR 2 GATES ARE USED FOR A SINGLE OPENING.
7. PROVIDE 4:1 OR FLATTER SIDE SLOPES ON THE VEHICLE APPROACH TO PROVIDE FOR INSTALLATION OF THE CONNECTING FENCE.
8. D = DEPTH AT RIGHT-OF-WAY LINE. WHEN D IS 5' OR LESS, INSTALL GATES AT THE END OF THE APPROACH CONSTRUCTION OR AS DIRECTED BY THE ENGINEER. ANGLE AND INSTALL RIGHT-OF-WAY FENCE ALONG THE EDGE OF THE APPROACH CUT OR FILL SLOPE. CONSTRUCT APPROACHES IN ACCORDANCE WITH STD. DWG. H-4-A.
9. ALTERNATE DESIGNS OF TYPE 1A AND TYPE 2 GATES MAY BE USED. PRIOR APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER IS REQUIRED BEFORE USING ALTERNATE GATE DESIGNS.
10. GROUND GATES ACCORDING TO THE GATE GROUNDING TABLE AND GATE GROUNDING DETAIL. ENSURE THAT GROUNDED GATES HAVE A FLEXIBLE COPPER CABLE ATTACHING THE GATE AND FENCE WIRING ON THE HINGE SIDE OF THE GATE.
11. NOT TO SCALE.



VEHICLE APPROACH GATE INSTALLATION DETAIL

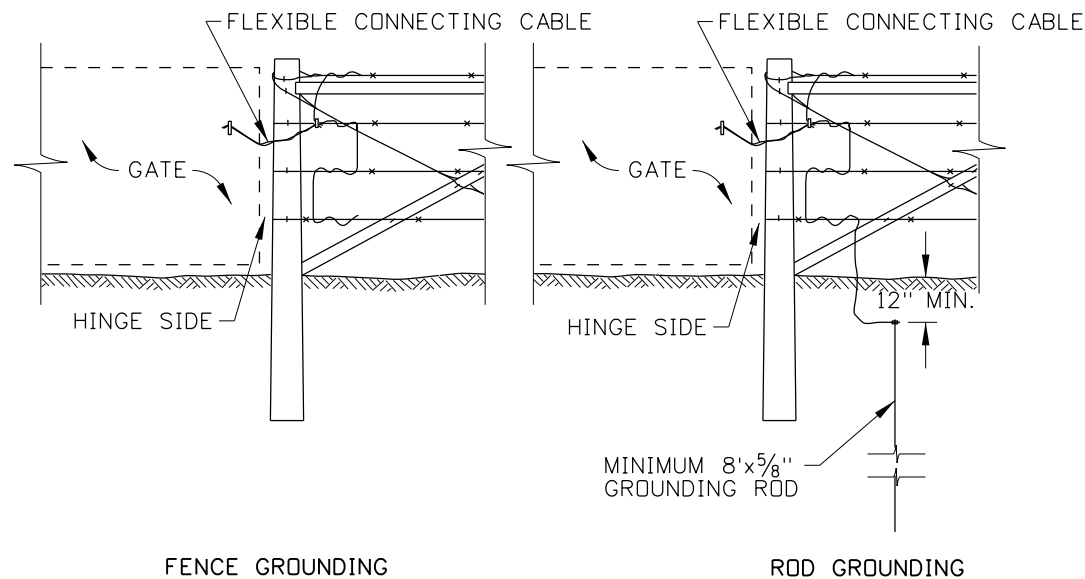


TYPE 2 GATE FRAME DETAIL
(SEE NOTE NO. 3.1)

GATE GROUNDING TABLE			
kV	GATE DISTANCE FROM TRANSMISSION £	GATE TYPE	* GROUNDING TYPE
500	<100'	1, 1A, 2	ROD
500	100' - 200'	1, 1A, 2	FENCE
345	<100'	1A, 2	ROD
345	100' - 150'	1A, 2	FENCE
>230	50' - 100'	1A, 2	FENCE
100-230	WITHIN R/W	NONE	NONE
<100	WITHIN R/W	NONE	NONE

* SEE GATE GROUNDING DETAIL

GATE STAY & WEIGHT TABLE			
GATE TYPE	WIDTH	NO. STAYS	GATE WT. (MIN. LBS.)
TYPE 1	4'-6'	0	N/A
	8'-12'	1	N/A
	14'-16'	2	N/A
TYPE 1A	4'	0	37
	6'	0	50
	8'	1	68
	10'	1	81
	12'	1	95
TYPE 2	14'	2	113
	16'	2	126
	SEE TYPE 2 GATE FRAME DETAIL		



GATE GROUNDING DETAIL

REVISIONS							
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ORIGINAL SIGNED BY: LOREN THOMAS
HIGHWAYS PROGRAM OVERSIGHT ENGINEER

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CHIEF ENGINEER

STANDARD DRAWING

GATE TYPES 1, 1A, & 2

REQUIRES SHEET 1 OF 2 & STD. DWG. F-2-A

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

STANDARD DRAWING NO. **F-2-C**

SHEET 2 OF 2

ORIGINAL SIGNED BY: RYAN D. LANCASTER
DATE ORIGINAL SIGNED: JANUARY 31, 2013