

| WIRE SPACING TABLE | | | | | | | |
|---|---|---|--|--|--|---|---|
| COMBINATION WOVEN WIRE & BARBED WIRE FENCE | | | | BARBED WIRE FENCE | | | |
| 48" [1200] FENCE HEIGHT | | 51" [1280] FENCE HEIGHT | | 48" [1.2 m] FENCE HEIGHT | | | |
| 32" [813] WW-2 BW * | 32" [813] WW-3 BW * | 39" [990] WW-2 BW * | | 3 BW | 4 BW | 5 BW | 6 BW |
| TYPE F2-32WW [813WW] | TYPE F3-32WW [813WW] | TYPE F2-39WW [990WW] | | TYPE F3 | TYPE F4 | TYPE F5 | TYPE F6 |
| <ul style="list-style-type: none"> 9" [225] 5" [125] 6" [150] 5 1/2" [140] 5" [125] 4 1/2" [115] 4" [100] 3 1/2" [90] 3" [80] 2" [50] | <ul style="list-style-type: none"> 6" [150] 4" [100] 4" [100] 6" [150] 5 1/2" [140] 5" [125] 4 1/2" [115] 4" [100] 3 1/2" [90] 3" [80] 2" [50] | <ul style="list-style-type: none"> 6" [150] 4" [100] 7" [180] 6" [150] 5 1/2" [140] 5" [125] 4 1/2" [115] 4" [100] 3 1/2" [90] 3" [80] 2" [50] | | <ul style="list-style-type: none"> 16" [400] 16" [400] 16" [400] | <ul style="list-style-type: none"> 12" [300] 12" [300] 12" [300] 12" [300] | <ul style="list-style-type: none"> 12" [300] 12" [300] 10" [250] 8" [200] 6" [150] | <ul style="list-style-type: none"> 12" [300] 8" [200] 8" [200] 8" [200] 6" [150] 6" [150] |
| APPROXIMATE WEIGHT OF 32" [813] WOVEN WIRE FABRIC (832-6-12 1/2) PER 20 ROD [100 m] ROLL IS 150 LB. [68 kg] ±10 LB. [5 kg] (NOTE: 12 1/2 GAGE) | | | | APPROXIMATE WEIGHT OF 39" [990] WOVEN WIRE FABRIC (939-6-12 1/2) PER 20 ROD [100 m] ROLL IS 170 LB. [77 kg] ±10 LB. [5 kg] (NOTE: 12 1/2 GAGE) | | | |
| ○ DENOTES STAPLE LOCATIONS | | | | | | | |

* OTHER WOVEN WIRE HEIGHTS AND NUMBER OF BARBED WIRE COMBINATIONS ARE AVAILABLE.

STAYS

- USE WIRE STAYS ON ALL FENCES UNLESS WOOD STAYS ARE SPECIFIED.
- LOCATE STAYS HALFWAY BETWEEN LINE POSTS.
- WIRE STAYS FOR BARBED WIRE FENCING ARE 2" [50] LONGER THAN THE DISTANCE BETWEEN THE TOP AND BOTTOM WIRES.
- FOR WOVEN WIRE FENCING WITH BARBED WIRE ON TOP, EXTEND WIRE STAYS 6" [150] MINIMUM BELOW THE TOP OF THE WOVEN WIRE.
- WHEN WOOD STAYS ARE SPECIFIED, USE EITHER 2" [50] ROUND, A ROUGH DIMENSION 2" x 2" [50 x 50], OR A 1 1/2" x 3 1/2" [37.5 x 87.5] (NOMINAL 2" x 4" [50 x 100]). THE STAY MUST BE OF SUFFICIENT LENGTH TO BE PLACED ON THE GROUND WITH THE TOP OF THE STAY EXTENDING 2" [50] ABOVE THE TOP WIRE. ATTACH EACH WIRE TO THE WOOD STAYS USING 1 3/4" [44] x 9 GAGE STAPLES. WOOD STAYS DO NOT NEED TO BE TREATED.

NOTES:

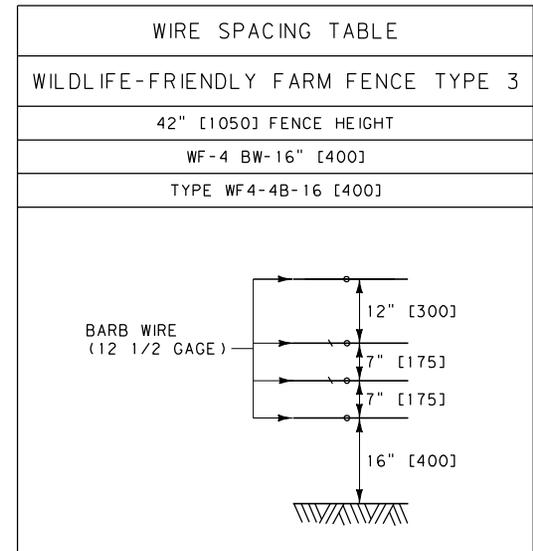
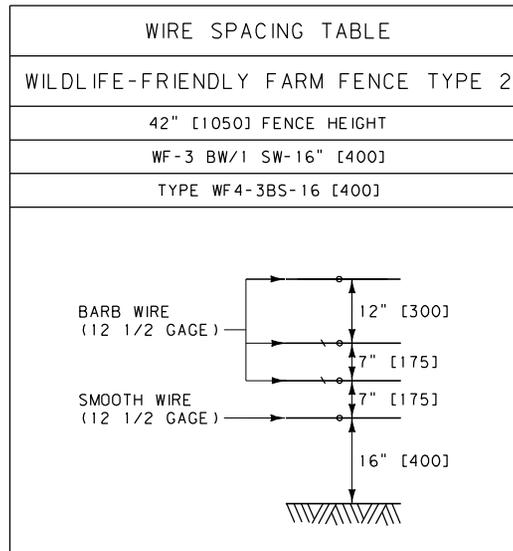
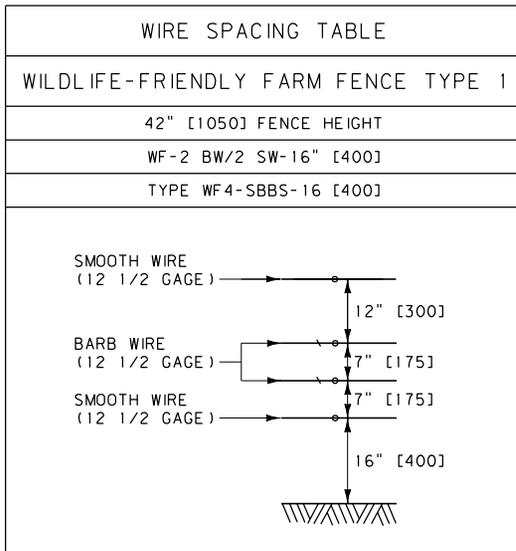
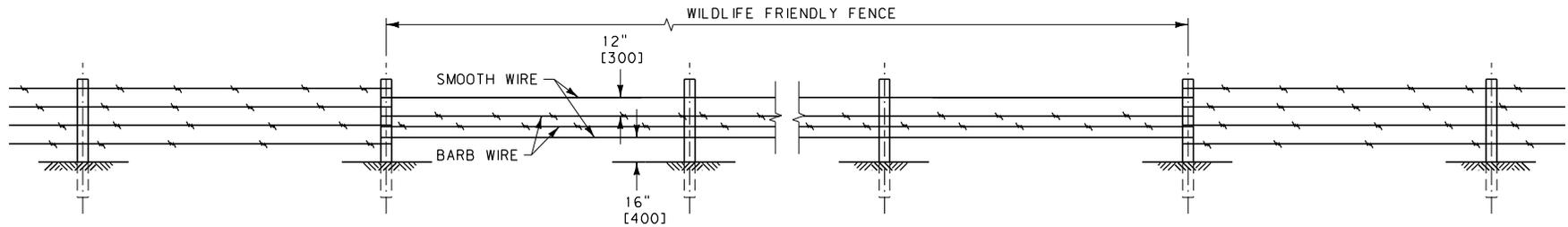
- "M" DENOTES METAL POSTS, IE. TYPE F3M.
"W" DENOTES WOOD POSTS, IE. TYPE F4W.
- SEE DTL. DWG. NO. 607-05 FOR SINGLE AND DOUBLE PANEL DETAILS.
SEE DTL. DWG. NO. 607-10 AND 607-15 FOR ADDITIONAL FENCING DETAILS.

UNITS SHOWN IN BRACKETS [] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

| DETAILED DRAWING | |
|--------------------------------------|-----------------|
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-00 |

FARM FENCE

| | |
|-------------|--------------------------|
| --REVISED-- | EFFECTIVE: FEBRUARY 2005 |
| MAY 2011 | |
| | |



STAYS

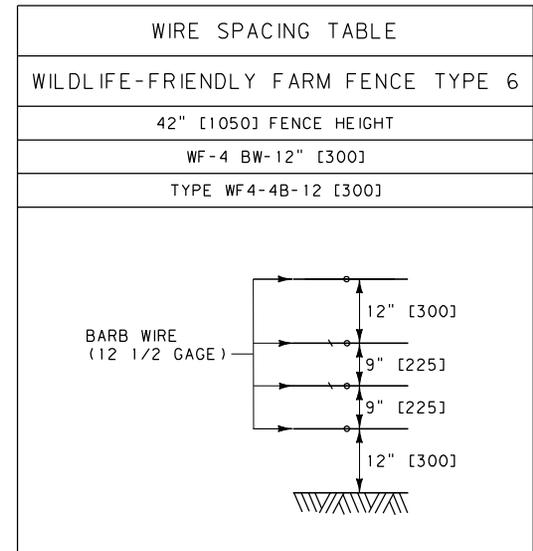
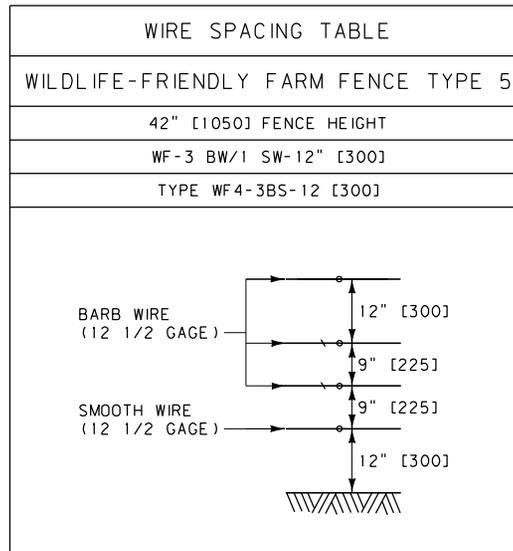
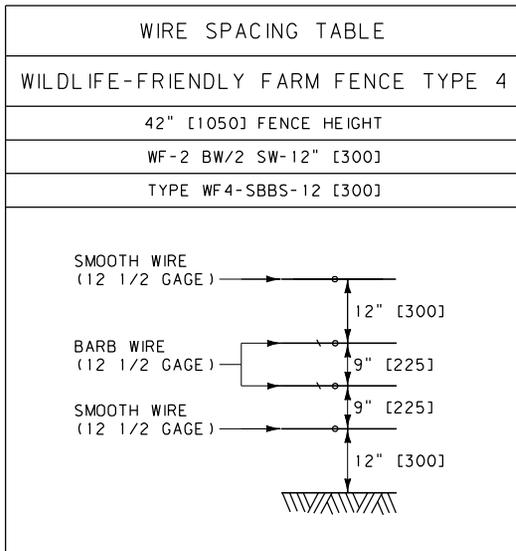
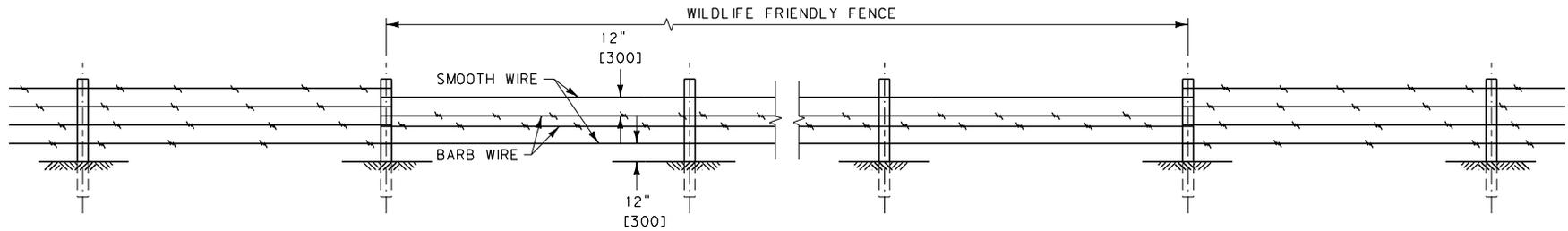
- ① USE WIRE STAYS ON ALL FENCES UNLESS WOOD STAYS ARE SPECIFIED.
- ② LOCATE STAYS HALFWAY BETWEEN LINE POSTS.
- ③ WIRE STAYS ARE 2" [50] LONGER THAN THE DISTANCE BETWEEN THE TOP AND BOTTOM WIRES.

NOTES:

- ① SEE DTL. DWG. NO. 607-05 FOR SINGLE AND DOUBLE PANEL DETAILS.
SEE DTL. DWG. NO. 607-10 AND 607-15 FOR ADDITIONAL FENCING DETAILS.

UNITS SHOWN IN BRACKETS [] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

| DETAILED DRAWING | |
|--|-----------------|
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-01 |
| WILDLIFE FRIENDLY FENCE 16" [400] BOTTOM WIRE HEIGHT | |
| EFFECTIVE: MAY 2011 | |
| MONTANA DEPARTMENT OF TRANSPORTATION | |



STAYS

- ① USE WIRE STAYS ON ALL FENCES UNLESS WOOD STAYS ARE SPECIFIED.
- ② LOCATE STAYS HALFWAY BETWEEN LINE POSTS.
- ③ WIRE STAYS ARE 2" [50] LONGER THAN THE DISTANCE BETWEEN THE TOP AND BOTTOM WIRES.

NOTES:

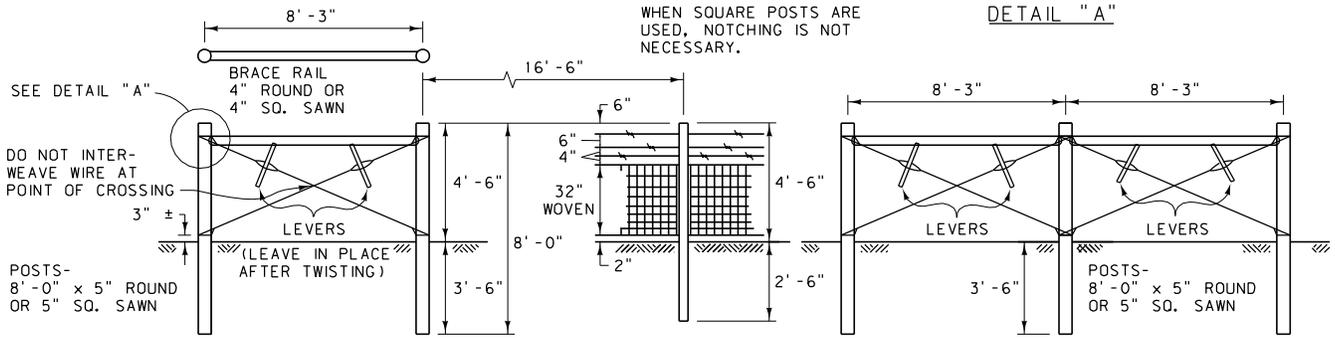
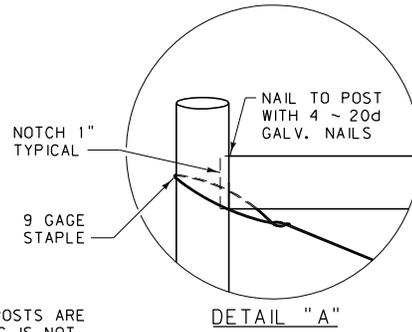
- ① SEE DTL. DWG. NO. 607-05 FOR SINGLE AND DOUBLE PANEL DETAILS.
SEE DTL. DWG. NO. 607-10 AND 607-15 FOR ADDITIONAL FENCING DETAILS.

UNITS SHOWN IN BRACKETS [] ARE
METRIC AND ARE IN MILLIMETERS (mm)
UNLESS OTHER UNITS ARE SHOWN.

| DETAILED DRAWING | |
|---|-----------------|
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-02 |
| WILDLIFE FRIENDLY FENCE 12" [300] BOTTOM WIRE HEIGHT | |
| EFFECTIVE: MAY 2011 | |
| MONTANA DEPARTMENT OF TRANSPORTATION | |

BRACE WIRES - ONE CONTINUOUS 9 OR 12½ GAGE SMOOTH WIRE DOUBLED TO FORM A FOUR WIRE BRACE. TIE THE TWO ENDS NEAR THE TOP OF THE PANEL POSTS.

LEVERS - 1½" x 2" x 12" MINIMUM SIZE.



SINGLE PANEL

FOR PULLING, STRETCHING, CHANGES IN VERTICAL ALIGNMENT OR PANELS ON A RUN OF LESS THAN 330'.

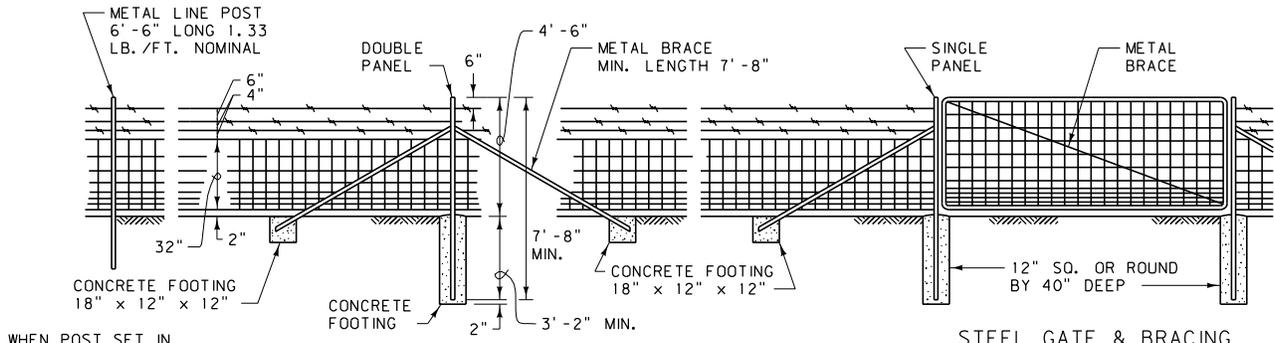
LINE POST

7' - 0" x 4" MIN. ROUND OR 4" x 4" SQ. SAWN

DOUBLE PANEL

FOR CORNERS, PULLING OR STRETCHING, AND CHANGES IN HORIZONTAL ALIGNMENT.

TYPE "CW" - "STRAIGHT RUN" FENCE WITH WOOD POSTS



WHEN POST SET IN SOLID ROCK, PROVIDE 18" MIN. BURIAL.

TYPE "CM" - FENCE WITH STEEL POSTS

NOTES:

SEE THE STANDARD SPECIFICATIONS FOR POST AND GATE REQUIREMENTS.

PLACE ALL FENCE WIRE ON PASTURE SIDE OF POST, EXCEPT ON CURVES. THEN, PLACE THE WIRE ON THE OUTSIDE OF THE CURVE.

IN AREAS SUBJECT TO HIGH VELOCITY WINDS AND MOVING DEBRIS, WIRES MAY BE PLACED ON WINDWARD SIDE OF POSTS, EXCEPT ON CURVES.

ALL CONCRETE IS CLASS "F" OR BETTER.

POST SPACING IS GENERALLY MEASURED PARALLEL TO GROUND.

LINE POST SPACING IS 16'-6" CENTER TO CENTER. LINE POST SPACING FROM BRACE OR PANEL POST IS 16'-6" CENTER TO CENTER.

PLACE 24" WIRE STAY HALFWAY BETWEEN POSTS. DO NOT PLACE STAYS ON PANELS FOR "CM" AND "CW" FENCE.

TYPE "CW" FENCE HAS ONE METAL POST IN PLACE OF A WOODEN LINE POST IN EACH 500' RUN FOR LIGHTNING PROTECTION.

USE TYPE "CW" (WOOD) PANELS ON ALL TYPE "CM" (METAL) FENCES UNLESS OTHERWISE SPECIFIED.

SET STEEL CORNER, END, GATE AND PULL POSTS, AND EACH BRACE IN CONCRETE AS SHOWN.

SEE DTL. DWG. NO. 607-10 FOR ADDITIONAL FENCING DETAILS.

A DEADMAN MAY BE A PRECAST CONCRETE BLOCK, A CAST IN PLACE CONCRETE BLOCK, A ROCK OR OTHER APPROVED OBJECT WEIGHING AT LEAST 150 LB. BURY THE DEADMAN IN THE GROUND WITH AT LEAST 2'-0" OF COVER. ATTACH THE DEADMAN TO THE FENCE WITH 3 STRANDS OF 9 GAGE WIRE OR 6 STRANDS OF 12½ GAGE WIRE. SEE DETAILED DRAWING NO. 607-10 FOR ALTERNATE DEADMAN.

STAPLE THE BOTTOM, TOP, CENTER AND ALTERNATE WIRES OF WOVEN WIRE TO WOOD LINE POSTS.

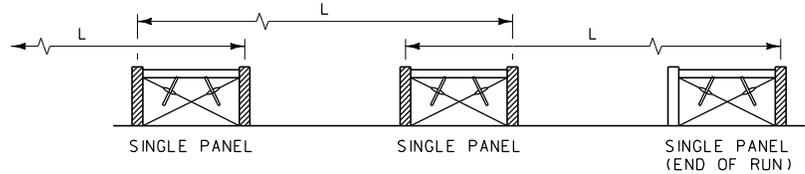
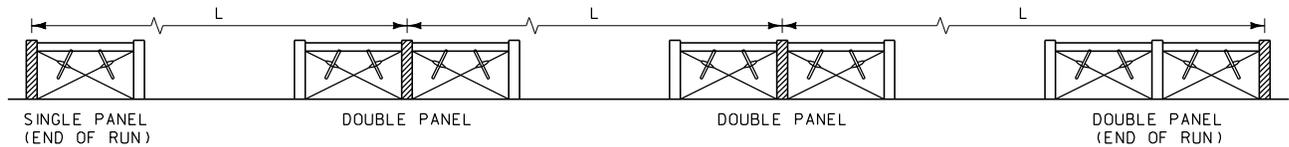
TIE THE BOTTOM, TOP, CENTER AND ALTERNATE WIRES OF WOVEN WIRE TO STEEL LINE POSTS.

STAPLE ALL WIRES OF WOVEN WIRE TO WOOD CORNER POSTS OR POST USED TO TIE-OFF WIRE.

| DETAILED DRAWING | |
|--------------------------------------|-----------------|
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-05 |

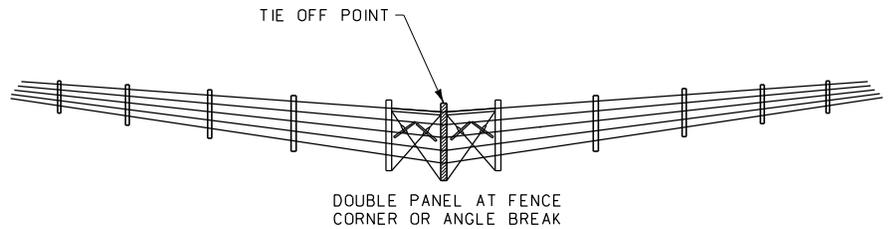
INTERSTATE FENCE

EFFECTIVE: FEBRUARY 2005



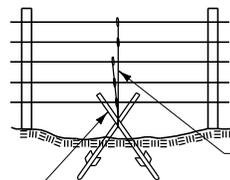
| FENCE TYPE | RUN = L | PANELS REQUIRED |
|--------------------------------|------------------------------|-----------------|
| COMBINATION WOVEN BARBED | LESS THAN 33' | NONE |
| | 33' - 330' | SINGLE |
| | OVER 330' TO 660' MAX. | DOUBLE |
| BARBED | LESS THAN 66' | NONE |
| | 66' - 660' | SINGLE |
| | OVER 660' TO 990' MAX. | DOUBLE |

| FENCE TYPE | RUN = L (m) | PANELS REQUIRED |
|--------------------------------|----------------------------|-----------------|
| COMBINATION WOVEN BARBED | LESS THAN 10 | NONE |
| | 10 - 100 | SINGLE |
| | OVER 100 TO 200 MAX. | DOUBLE |
| BARBED | LESS THAN 20 | NONE |
| | 20 - 200 | SINGLE |
| | OVER 200 TO 300 MAX. | DOUBLE |



FENCE PANEL TYPES

- ① LIMIT RUN LENGTHS IN POOR SOIL CONDITIONS TO REDUCE RESULTING TENSION AT CORNER OR ANGLE BREAK PANELS.
- ② TIE OFF ON ALL CROSS HATCHED OR SHADED POSTS.



ALTERNATE DEADMAN

WHEN APPROVED BY THE PROJECT MANAGER THE ABOVE DEADMAN MAY BE USED IN LIEU OF A ROCK OR PRECAST CONCRETE BLOCK AS SPECIFIED ON DTL. DWG. NO. 607-05.

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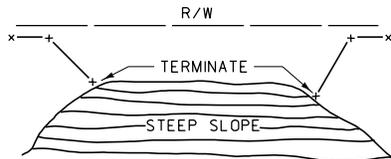
NOTES:

- ① ATTACH BARBED WIRES TO POSTS BY WRAPPING AROUND THE POST AT LEAST TWO TIMES, THEN WRAPPING AROUND ITSELF FIVE TIMES.
- ② TO ATTACH WOVEN WIRE TO AN END POST, REMOVE TWO OR THREE VERTICAL STAY WIRES FROM THE END OF THE FENCE. PLACE THE FIRST COMPLETE VERTICAL STAY WIRE AGAINST THE POST. START AT THE MIDDLE OF THE HORIZONTAL LINE WIRES, WRAPPING AROUND THE END POST AT LEAST TWO TIMES AND THEN WRAPPING AROUND ITSELF FIVE TIMES.

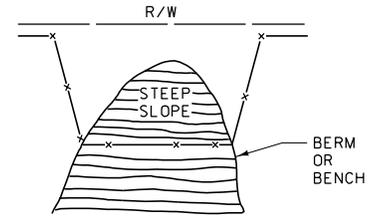
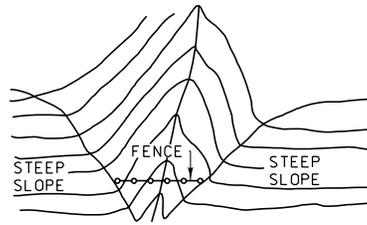
| DETAILED DRAWING | |
|--|--------------------|
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-10 |

FENCING DETAILS

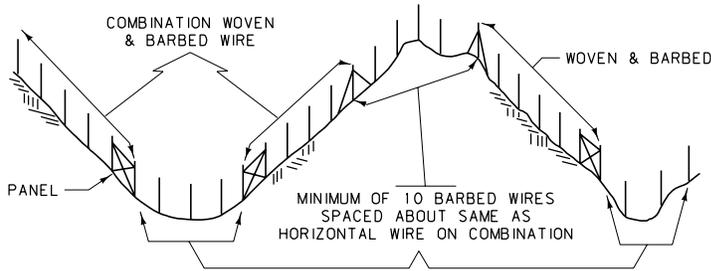
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| --REVISED-- | EFFECTIVE: FEBRUARY 2005 |
| MAY 2011 | |
| MDTA MONTANA DEPARTMENT OF TRANSPORTATION | |



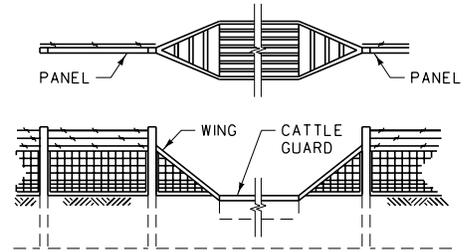
SLOPE MUST BE STEEP ENOUGH TO DETER
PASSAGE OF TRESPASSERS.



FENCE LAYOUT ON STEEP SLOPES



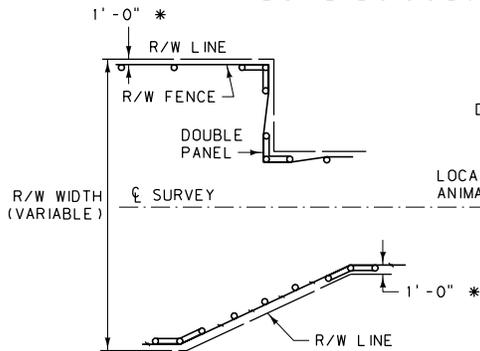
FENCE LAYOUT ON SHARP VERTICAL CURVES
TO AVOID TRYING TO CONFORM WOVEN WIRE TO UNEVEN TERRAIN



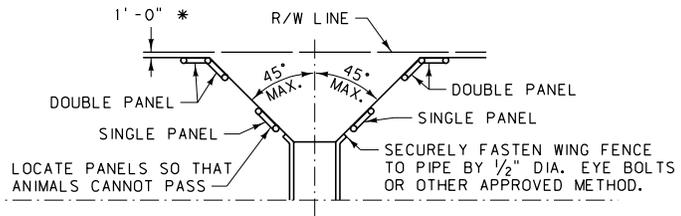
FENCE CONNECTION TO CATTLE GUARD

SECURELY FASTEN FENCE WIRE TO THE WINGS
AND ARRANGE SO THAT ANIMALS CANNOT PASS.

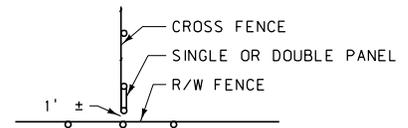
* ONE FOOT OFFSET APPLIES TO
INTERSTATE FENCING ONLY.



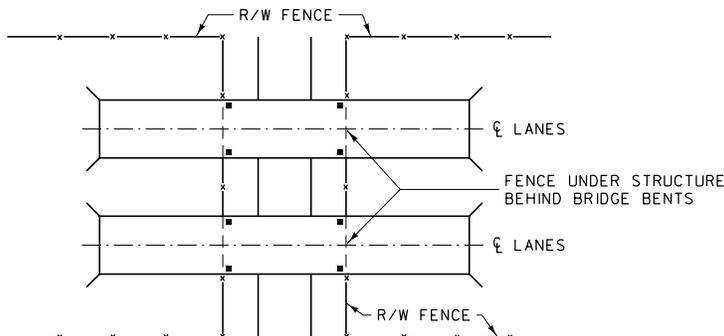
FENCE LAYOUT AT
CHANGE IN R/W WIDTH



FENCE LAYOUT AT STOCKPASS, BRIDGES AND LARGE PIPES



FENCE LAYOUT AT CROSS-FENCE CONNECTION



FENCE LAYOUT AT LOCAL ROAD
UNDER INTERSTATE

NOTES:

INSTALL NON-INTERSTATE FENCE ON THE
RIGHT-OF-WAY LINE.

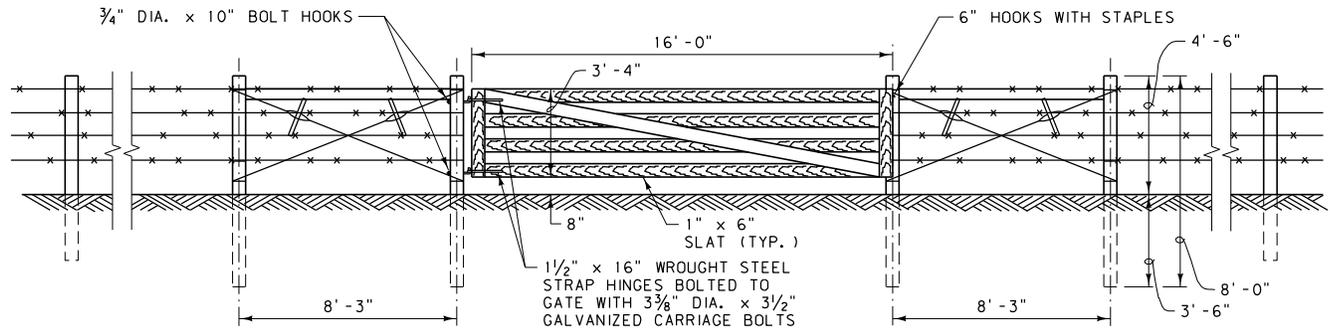
DO NOT DAMAGE SURVEY MONUMENTS.

| | |
|--------------------------------------|-----------------|
| DETAILED DRAWING | |
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-15 |

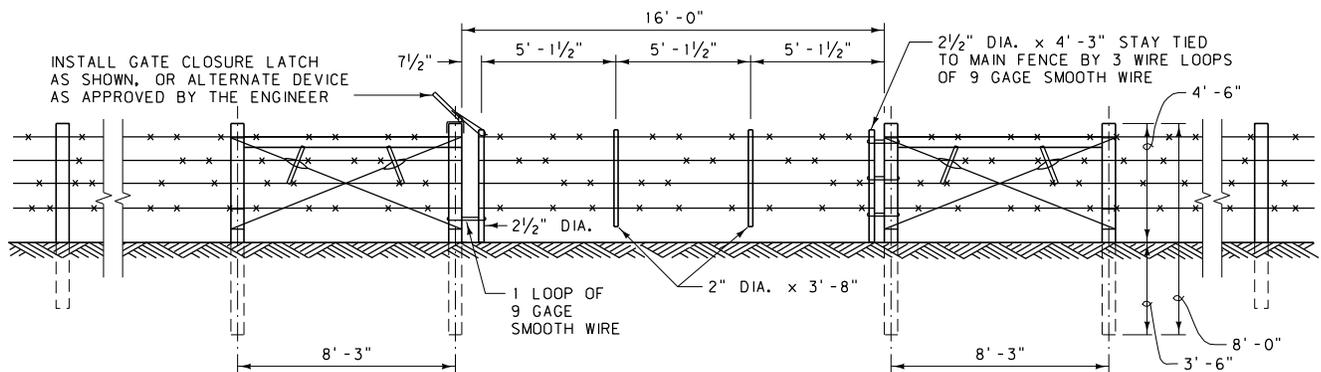
FENCING DETAILS

-- REVISED --
October 2008

EFFECTIVE: FEBRUARY 2005

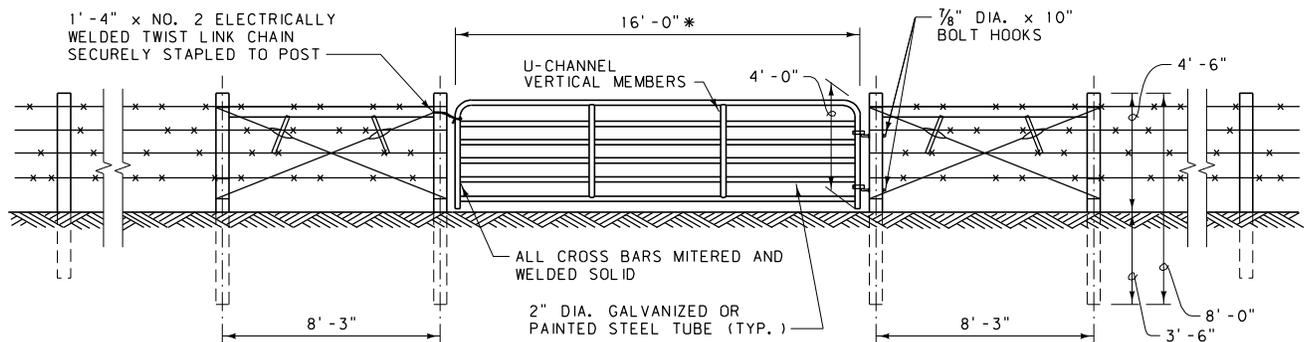


WOOD FARM ENTRANCE GATE (TYPE G-1)
 NOTE: USE 10d NAILS AND CLINCH FOR GATE CONSTRUCTION.



WIRE FARM ENTRANCE GATE (TYPE G-2)

NOTE:
 USE SAME WIRE SCHEME ON GATE
 AS THAT USED ON FENCE, UNLESS
 STATED OTHERWISE IN R/W AGREEMENT.



METAL FARM ENTRANCE GATE (TYPE G-3)

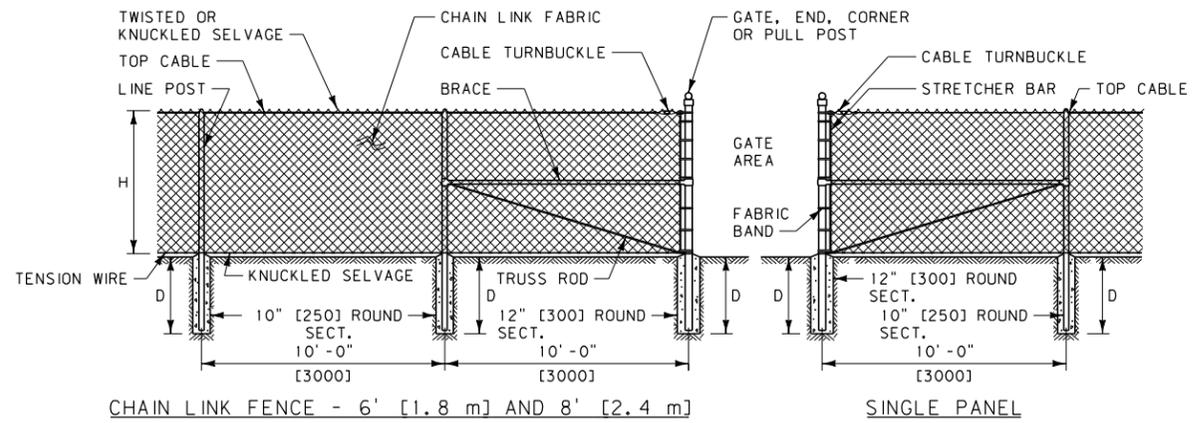
NOTES:

ALL GATES ARE 16'-0" WIDE UNLESS R/W AGREEMENT STATES OTHERWISE.

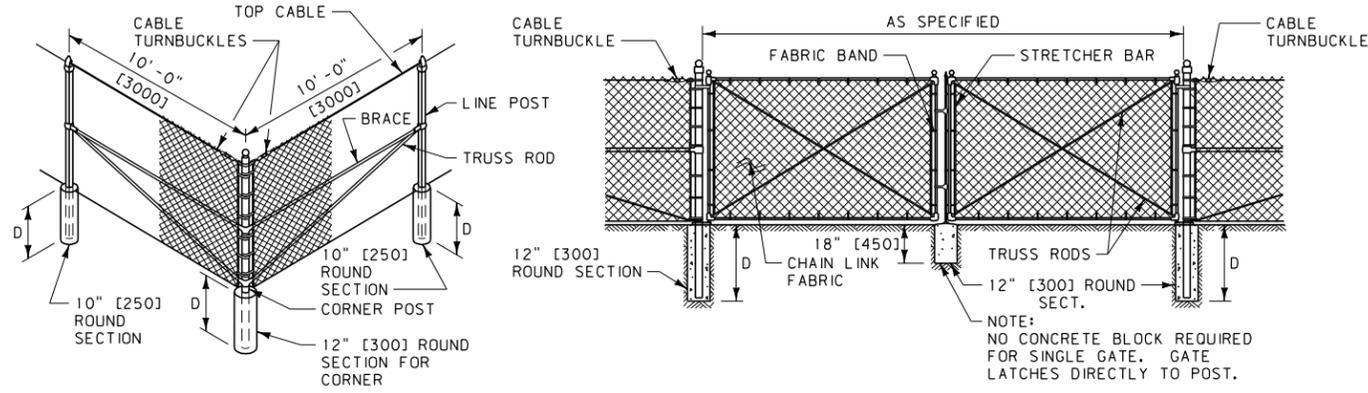
ALL GATES WILL HAVE A SINGLE OR DOUBLE PANEL AT EACH END.

* TYPE G-3 GATES ARE AVAILABLE IN WIDTHS FROM 4' TO 20' IN 2' INCREMENTS.

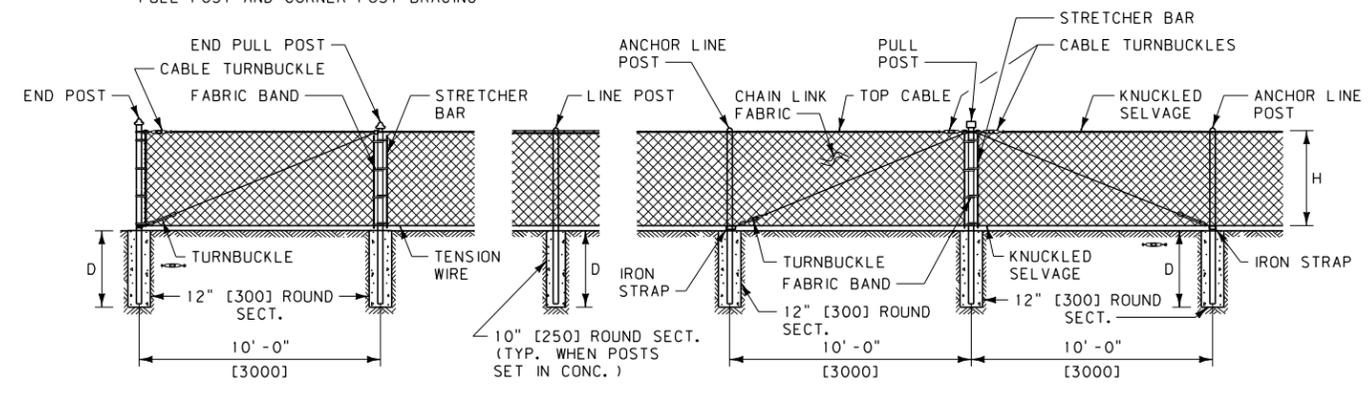
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| DETAILED DRAWING | |
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-20 |
| FARM ENTRANCE GATES | |
| EFFECTIVE: FEBRUARY 2005 | |
|  MONTANA DEPARTMENT OF TRANSPORTATION <i>servicing you with pride</i> | |



CHAIN LINK FENCE - 6' [1.8 m] AND 8' [2.4 m] SINGLE PANEL



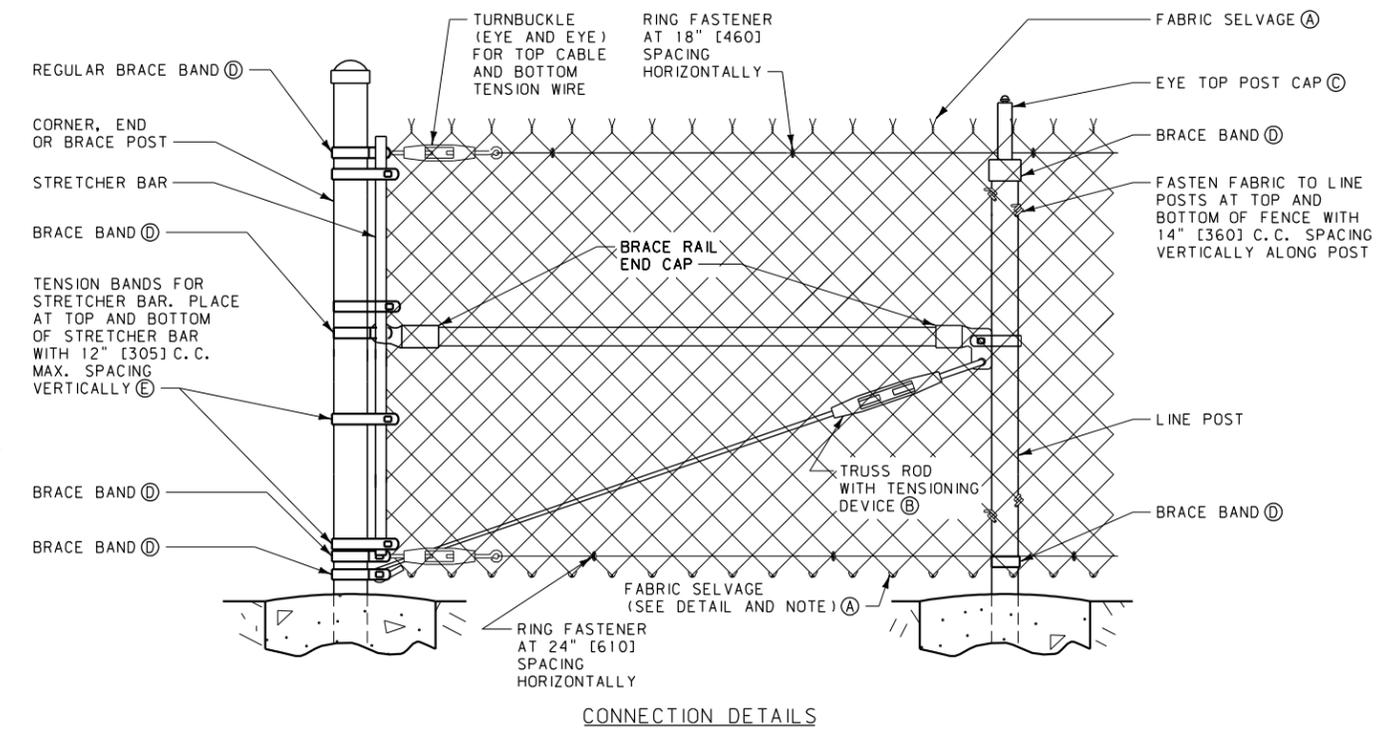
DOUBLE PANEL PULL POST AND CORNER POST BRACING GATES



CHAIN LINK FENCE - 3' [0.9 m], 4' [1.2 m] AND 5' [1.5 m]

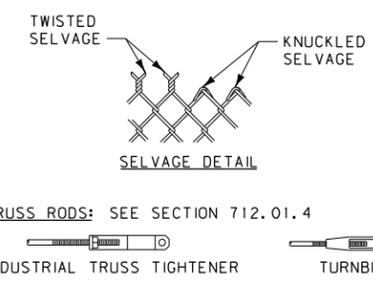
- NOTES:
- DO NOT INSTALL DOUBLE PANELS MORE THAN 300' [90 m] APART ON TANGENTS OR MORE THAN 250' [75 m] APART ON ANY CURVE. FOR CURVES WITH RADIUS SHARPER THAN 1150' [350 m], INSTALL A DOUBLE PANEL ON EACH CURVE END, PLUS ONE ADDITIONAL PANEL FOR EACH 10° OF DEFLECTION, EVENLY SPACED, BETWEEN THE CURVE ENDS.
 - PULL POST BRACING ON 6' [1.8 m] AND 8' [2.4 m] FENCE IS THE SAME AS CORNER BRACING.
 - A DROP BAR LOCKING DEVICE IS REQUIRED FOR ALL DOUBLE GATE INSTALLATIONS. THE DROP BAR MUST BE ABLE TO BE INSERTED INTO THE CONCRETE BLOCK AT LEAST SIX INCHES [150].
 - ALL CONCRETE IS CLASS "F" OR BETTER.
 - INSTALL A 3/8" [10] DIAMETER GALVANIZED STEEL TOP CABLE ALONG ALL FENCE. TERMINATE TOP CABLE WITH GALVANIZED CABLE TURNBUCKLES FASTENED VIA THE FABRIC BAND AT THE POST.

| HEIGHT OF FABRIC, H | WIRE FABRIC ABOVE GROUND | DEPTH OF CONCRETE, D | DEPTH OF POST IN CONC. (MIN.) |
|---------------------|--------------------------|----------------------|-------------------------------|
| 8' [2440] | 1"-2" [25-50] | 42" [1050] | 38" [950] |
| 6' [1830] | 1"-2" [25-50] | 36" [900] | 32" [800] |
| 5' [1525] | 1"-2" [25-50] | 36" [900] | 32" [800] |
| 4' [1220] | 1"-2" [25-50] | 30" [750] | 26" [650] |
| 3' [915] | 1"-2" [25-50] | 30" [750] | 26" [650] |



CONNECTION DETAILS

- GENERAL NOTES
- PROVIDE CHAIN LINK FENCE MATERIALS PER SECTION 712.
- ① FABRIC SELVAGE: FENCE HEIGHT UNDER 6' [1.8 m]: TOP AND BOTTOM KNUCKLED SELVAGE. FENCE HEIGHT 6' [1.8 m] AND OVER: TOP - TWIST SELVAGE BOTTOM - KNUCKLED SELVAGE
- ② BRACE BANDS: SEE SECTION 712.01.5.
- ③ POST CAPS: PROVIDE EYE-TOP CAPS FOR ALL POSTS CARRYING A TOP CABLE THROUGH THE POST. PROVIDE ROUNDED TOPS FOR ALL OTHER ROUND POSTS. FIT POST CAPS TIGHTLY TO PREVENT REMOVAL.
- ④ TENSION BANDS: SEE SECTION 712.01.5.
- ⑤ TRUSS RODS: SEE SECTION 712.01.4.



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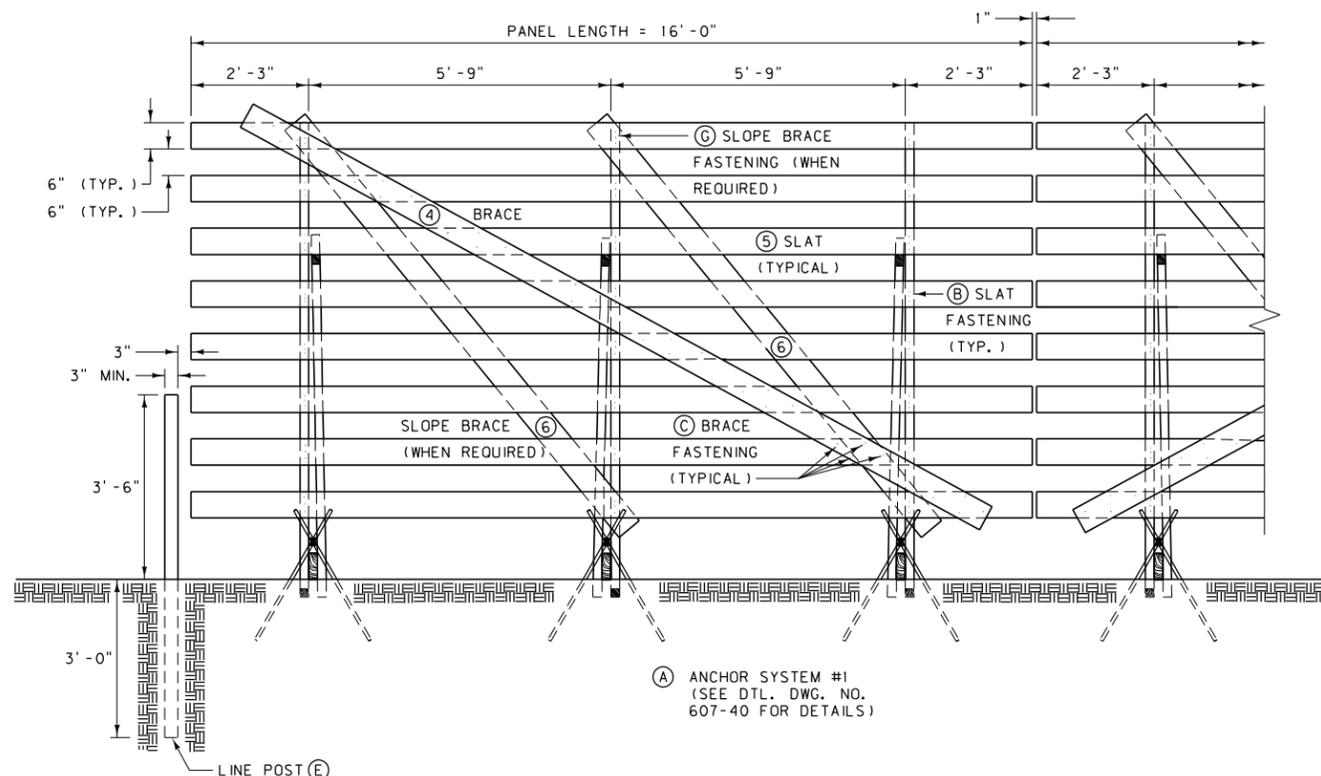
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| DETAILED DRAWING | |
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-25 |

CHAIN LINK FENCE

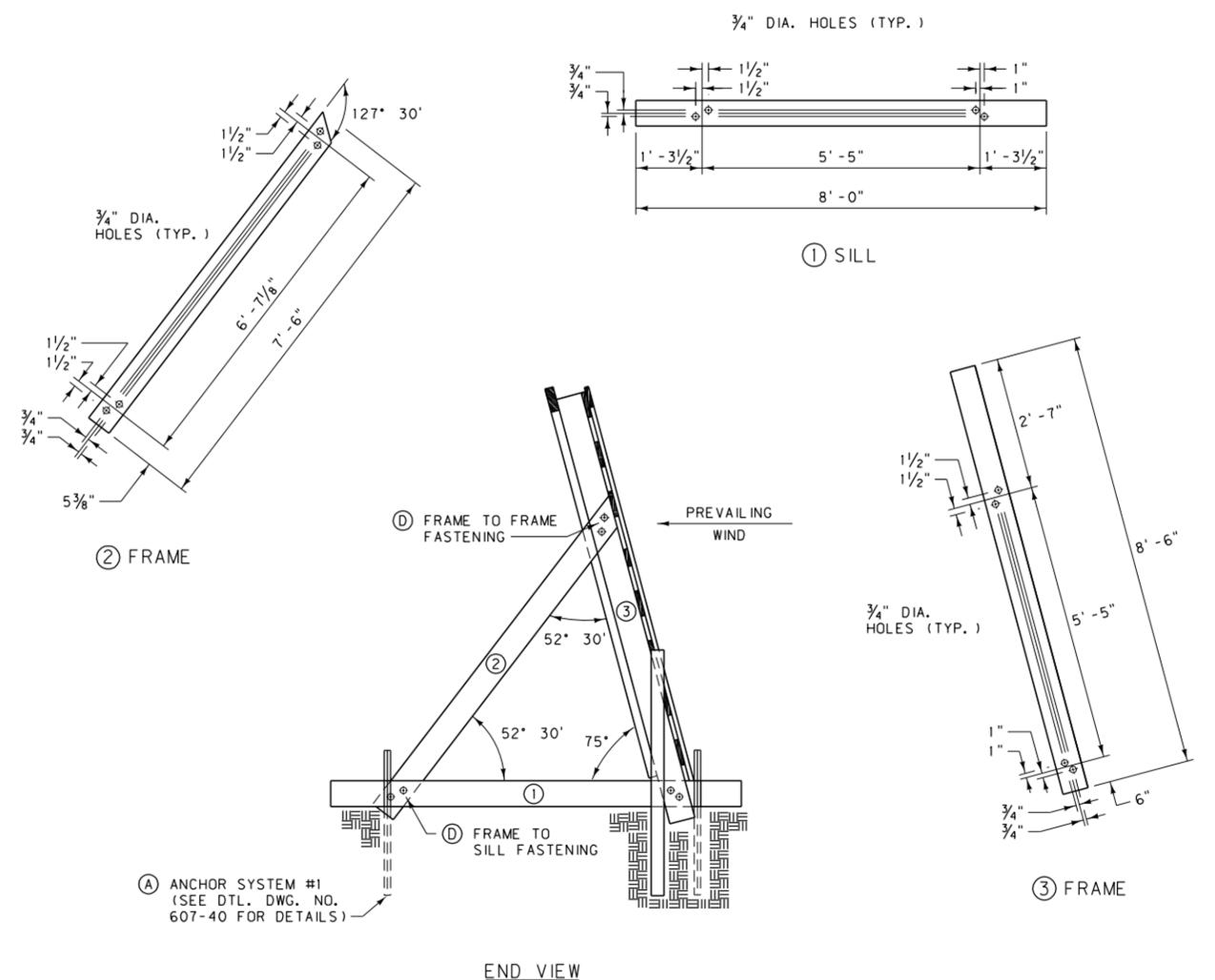
--REVISED--
MAY 2009
MAY 2011

EFFECTIVE: APRIL 2006

MDT MONTANA DEPARTMENT OF TRANSPORTATION



FRONT VIEW



END VIEW

GENERAL NOTES

- (A) ANCHOR SYSTEM DETAIL
USE ANCHOR SYSTEM #1 UNLESS SOIL AND MOISTURE CONDITIONS NECESSITATE THE USE OF AN ALTERNATE SYSTEM, OR AS DIRECTED BY THE ENGINEER. CONSULT DETAILED DRAWING NUMBERS 607-40 AND 607-45 FOR ANCHOR SYSTEMS #3 (ROCKY CONDITIONS) AND #2 (SWAMPY CONDITIONS).
- (B) SLAT FASTENING
FASTEN SLATS TO THE FRAME WITH 3 ~ 12d COMMON BARBED SHANK NAILS AT EACH LOCATION.
- (C) BRACE FASTENING
FASTEN BRACES TO THE FRAME WITH 4 ~ 8d COMMON NAILS AT EACH LOCATION AND CLINCH.
- (D) FRAME TO SILL AND FRAME TO FRAME FASTENING
FASTEN THE SILL AND FRAME MEMBERS TO THE FRAME AT EACH LOCATION WITH 2 ~ 5/8" DIA. x 5" STANDARD MACHINE BOLTS, EACH WITH HEX NUT AND TWO FLAT WASHERS. SEE NOTE (X) AT RIGHT.
- (E) LINE POSTS
PLACE LINE POSTS AT EACH END OF EACH LINE OF SNOW FENCE AS SHOWN. POSTS ARE 6'-6" LONG WITH A MINIMUM DIAMETER OF 3" AND A MAXIMUM DIAMETER OF 6". BUTT TREAT 3" MINIMUM.
- (F) WIRE TIE
USE 12 GAGE OR HEAVIER GALVANIZED WIRE TO FORM THE WIRE TIES.
- (G) SLOPE BRACE FASTENING
FASTEN SLOPE BRACES WITH 3 ~ 16d COMMON BARBED SHANK NAILS AT EACH LOCATION.

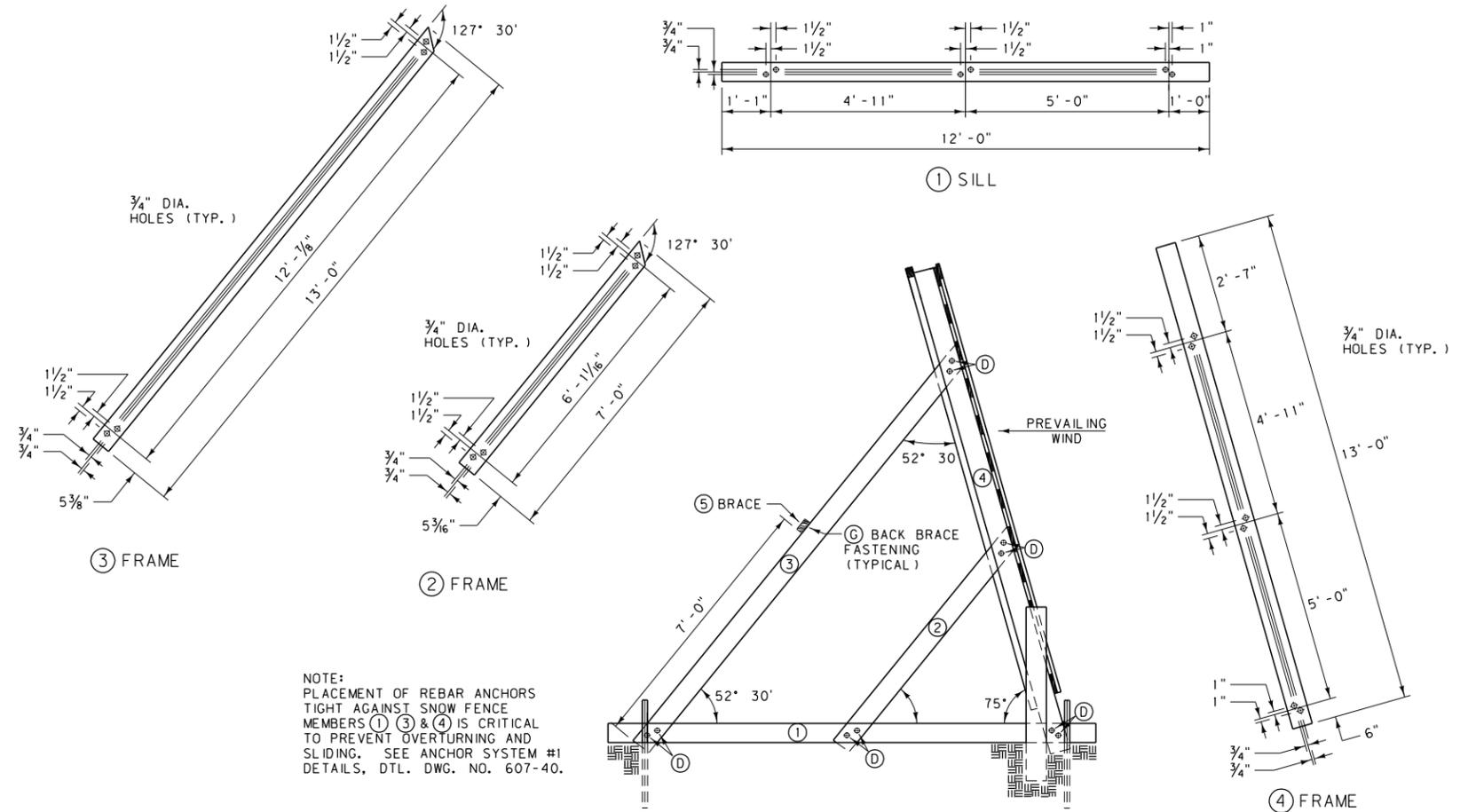
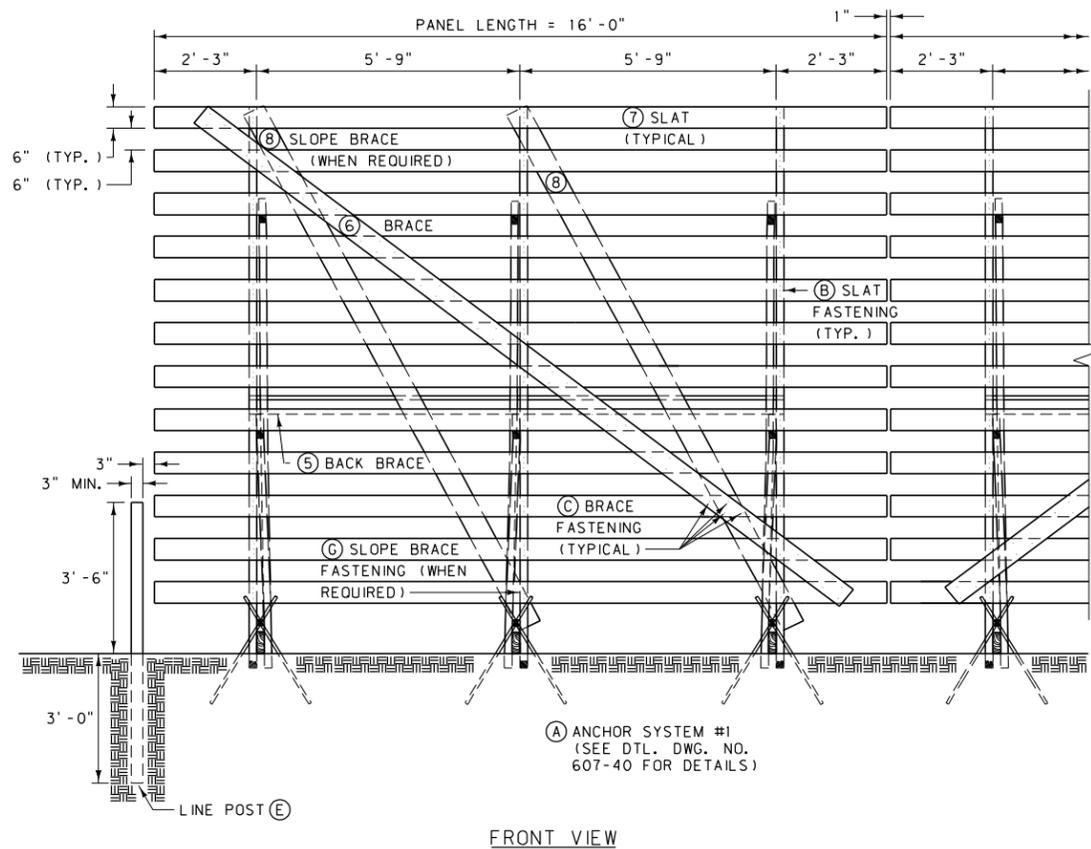
| LUMBER - 8' SNOW FENCE W/ ANCHOR SYSTEM #1 | | | |
|---|---------------|------------------|--------------|
| BILL OF MATERIALS FOR ONE PANEL | | | |
| ITEM NO. | NO. OF PIECES | LUMBER SIZE | DESCRIPTION |
| ①* | 3 | 2" x 6" x 8'-0" | FRAME (SILL) |
| ②* | 3 | 2" x 6" x 7'-6" | FRAME |
| ③* | 3 | 2" x 6" x 8'-6" | FRAME |
| * NOTE: PRESSURE TREAT ALL 2" x 6" MEMBERS (ENTIRE FRAME) | | | |
| ④ | 1 | 1" x 6" x 16'-0" | BRACE |
| ⑤ | 8 | 1" x 6" x 16'-0" | SLAT |
| ⑥** | 2 | 2" x 6" x 10'-0" | SLOPE BRACE |
| ** NOTE: USE ONLY WHEN SLOPE IS 5:1 OR GREATER | | | |

| HARDWARE - 8' SNOW FENCE W/ ANCHOR SYSTEM #1 | | |
|--|-------------|--|
| BILL OF MATERIALS FOR ONE PANEL | | |
| QUANTITY | DESCRIPTION | |
| ① | 18 | 5/8" DIA. x 5" HEX BOLT (THREADED FULL LENGTH) AND NUT |
| ② | 36 | FLAT WASHER FOR 5/8" DIA. BOLT |
| ③ | 1 LB. | 12d COMMON BARBED SHANK NAIL |
| ④ | 12 | #6 REBAR x 5'-0" (3/4" DIA.) |
| ⑤ | 6 PIECES | 12 GAGE TIE WIRE x 5'-0" ± |
| ⑥ | 1/3 LB. | 8d COMMON NAILS |
| ⑦ | 1/4 LB. | 16d COMMON BARBED SHANK NAILS |

ALL NAILS MAY BE EITHER HAND DRIVEN OR DRIVEN WITH A PNEUMATIC NAILER.

(X) NOTE:
AFTER 5/8" DIA. BOLTS HAVE BEEN TIGHTENED, BURR THE THREAD DIRECTLY BEHIND THE NUT TO PREVENT EVENTUAL LOOSENING OF THE NUTS.

| DETAILED DRAWING | |
|--|-----------------|
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-30 |
| 8' WOOD SNOW FENCE W/ ANCHOR SYSTEM #1 | |
| EFFECTIVE: FEBRUARY 2005 | |
| MONTANA DEPARTMENT OF TRANSPORTATION <small>servicing you with pride</small> | |



DIG OUT AS REQUIRED FOR ENDS OF MEMBERS ② ③ & ④ AND THE ENTIRE LENGTH OF SILL ① TO ASSURE FULL BEARING OF SILL AGAINST TERRAIN.

END VIEW

GENERAL NOTES

- (A) ANCHOR SYSTEM DETAIL
USE ANCHOR SYSTEM #1 UNLESS SOIL AND MOISTURE CONDITIONS NECESSITATE THE USE OF AN ALTERNATE SYSTEM, OR AS DIRECTED BY THE ENGINEER. CONSULT DETAILED DRAWING NUMBERS 607-40 AND 607-45 FOR ANCHOR SYSTEMS #3 (ROCKY CONDITIONS) AND #2 (SWAMPY CONDITIONS).
- (B) SLAT FASTENING
FASTEN SLATS TO THE FRAME WITH 3 ~ 12d COMMON BARBED SHANK NAILS AT EACH LOCATION.
- (C) BRACE FASTENING
FASTEN BRACES TO THE FRAME WITH 4 ~ 8d COMMON NAILS AT EACH LOCATION AND CLINCH.
- (D) FRAME TO SILL AND FRAME TO FRAME FASTENING
FASTEN THE SILL AND FRAME MEMBERS TO THE FRAME AT EACH LOCATION WITH 2 ~ 5/8" DIA. x 5" STANDARD MACHINE BOLTS, EACH WITH HEX NUT AND TWO FLAT WASHERS. SEE NOTE (X) AT RIGHT.
- (E) LINE POSTS
PLACE LINE POSTS AT EACH END OF EACH LINE OF SNOW FENCE AS SHOWN. POSTS ARE 6'-6" LONG WITH A MINIMUM DIAMETER OF 3" AND A MAXIMUM DIAMETER OF 6". BUTT TREAT 3" MINIMUM.
- (F) WIRE TIE
USE 12 GAGE OR HEAVIER GALVANIZED WIRE TO FORM THE WIRE TIES.
- (G) BACK & SLOPE BRACE FASTENING
FASTEN BACK BRACES TO THE FRAME WITH 2 ~ 16d NAILS, AND FASTEN THE SLOPE BRACES WITH 3 ~ 16d BARBED SHANK NAILS AT EACH LOCATION.

| LUMBER - 12' SNOW FENCE W/ ANCHOR SYSTEM #1 | | | |
|---|---------------|------------------|-------------|
| BILL OF MATERIALS FOR ONE PANEL | | | |
| ITEM NO. | NO. OF PIECES | LUMBER SIZE | DESCRIPTION |
| ①* | 3 | 2" x 6" x 12'-0" | SILL |
| ②* | 3 | 2" x 6" x 7'-0" | FRAME |
| ③* | 3 | 2" x 6" x 13'-0" | FRAME |
| ④* | 3 | 2" x 6" x 13'-0" | FRAME |
| * NOTE: PRESSURE TREAT ALL 2" x 6" MEMBERS (ENTIRE FRAME) | | | |
| ⑤ | 1 | 2" x 4" x 12'-0" | BACK BRACE |
| ⑥ | 1 | 1" x 6" x 18'-0" | BRACE |
| ⑦ | 12 | 1" x 6" x 16'-0" | SLAT |
| ⑧** | 2 | 2" x 6" x 13'-0" | SLOPE BRACE |
| ** NOTE: USE ONLY WHEN SLOPE IS 5:1 OR GREATER | | | |

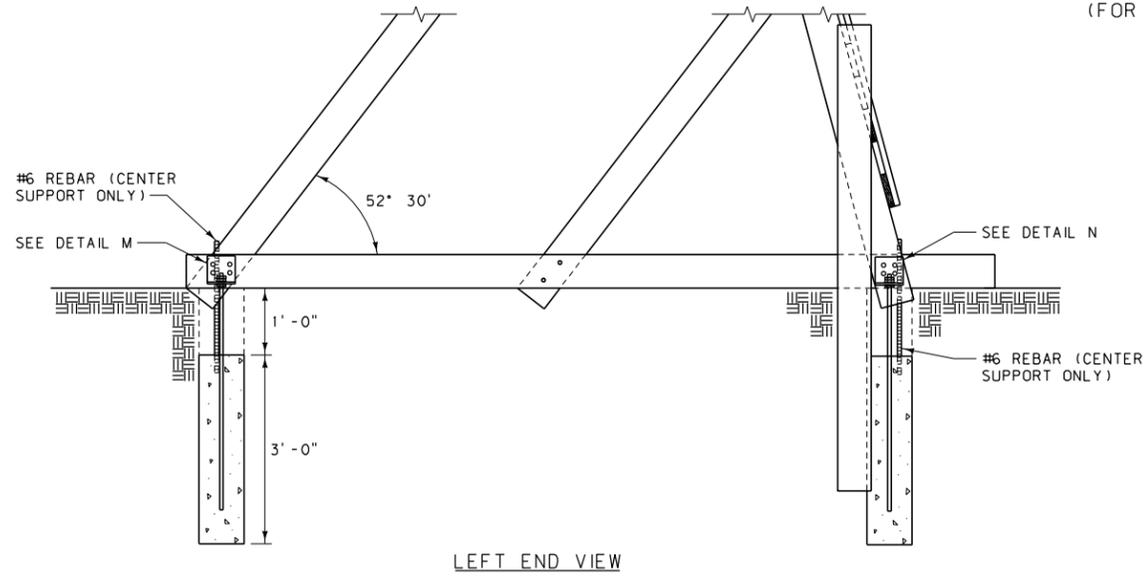
| HARDWARE - 12' SNOW FENCE W/ ANCHOR SYSTEM #1 | |
|---|---|
| BILL OF MATERIALS FOR ONE PANEL | |
| QUANTITY | DESCRIPTION |
| ① | 30 5/8" DIA. x 5" HEX BOLT (THREADED FULL LENGTH) AND NUT |
| ② | 60 FLAT WASHER FOR 5/8" DIA. BOLT |
| ③ | 1/2 LB. 8d COMMON NAILS |
| ④ | 1 2/3 LB. 12d COMMON BARBED SHANK NAILS |
| ⑤ | 1/2 LB. 16d COMMON BARBED SHANK NAILS |
| ⑥ | 12 #6 REBAR x 5'-0" (3/4" DIA.) |
| ⑦ | 6 PIECES 12 GAGE TIE WIRE x 5'-0" ± |

ALL NAILS MAY BE EITHER HAND DRIVEN OR DRIVEN WITH A PNEUMATIC NAILER.

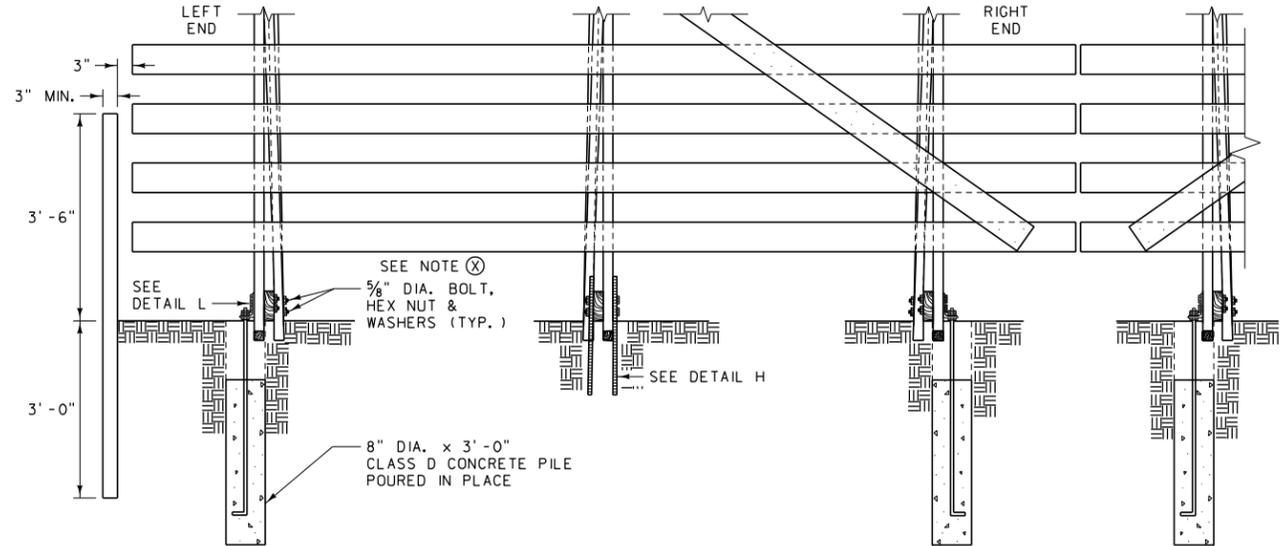
(X) NOTE:
AFTER 5/8" DIA. BOLTS HAVE BEEN TIGHTENED, BURR THE THREAD DIRECTLY BEHIND THE NUT TO PREVENT EVENTUAL LOOSENING OF THE NUTS.

DETAILED DRAWING
 REFERENCE DWG. NO. 607-35
 STANDARD SPEC. 607
 SECTION 607
 12' WOOD SNOW FENCE W/ ANCHOR SYSTEM #1
 EFFECTIVE: FEBRUARY 2005
 MONTANA DEPARTMENT OF TRANSPORTATION
 serving you with pride

ANCHOR SYSTEM #3
(FOR ROCKY CONDITIONS)

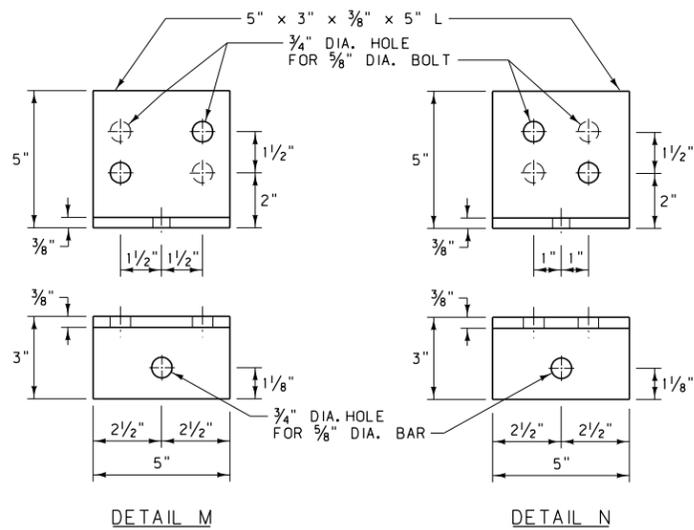


LEFT END VIEW



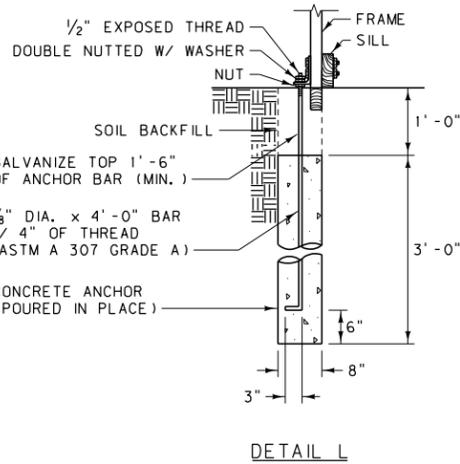
FRONT VIEW

NOTE:
HOLES SHOWN IN DETAILS BELOW ARE FOR LEFT END OF FENCE.
HOLES SHOWN HIDDEN ARE FOR RIGHT END OF FENCE.

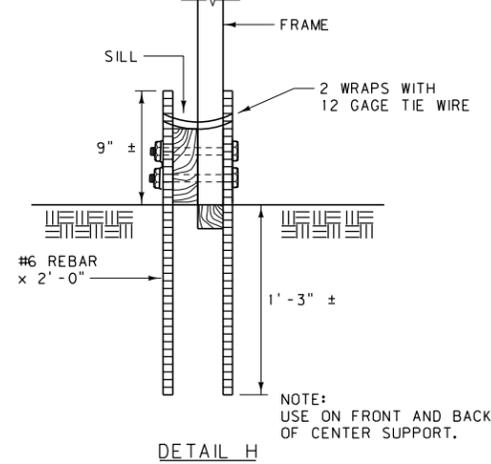


DETAIL M

DETAIL N



DETAIL L



DETAIL H

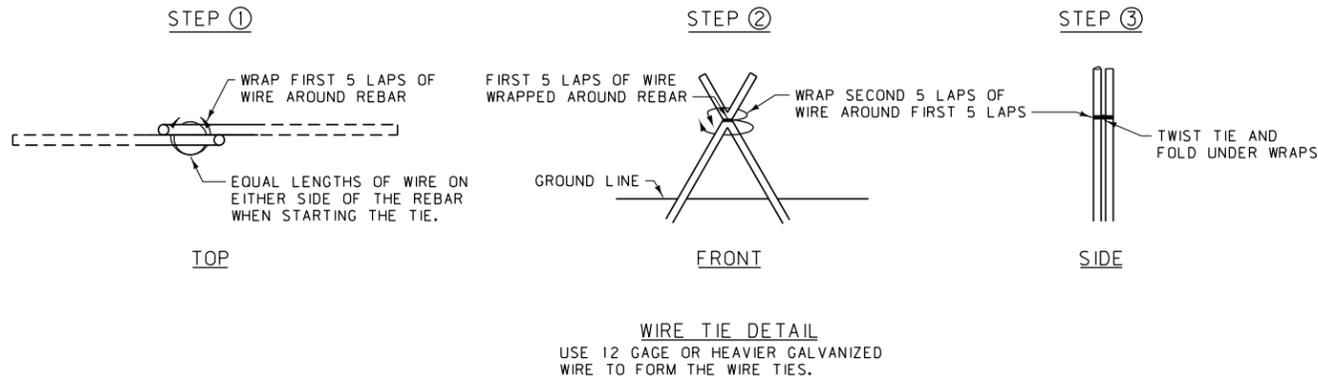
| | |
|--|--|
| LUMBER - SNOW FENCE W/ ANCHOR SYSTEM #3 | |
| BILL OF MATERIALS FOR ONE PANEL | |
| SAME AS FOR SNOW FENCE W/ ANCHOR SYSTEM #1 | |

| HARDWARE - SNOW FENCE W/ ANCHOR SYSTEM #3 | |
|---|--|
| BILL OF MATERIALS FOR ONE PANEL | |
| QUANTITY | DESCRIPTION |
| 4 | 5" x 3" x 3/8" x 5" L |
| 4 | 5/8" DIA. x 4'-0" BAR W/ 3 HEX NUTS |
| 4 | FLAT WASHERS FOR 5/8" DIA. BAR |
| 0.16 C.Y. | CLASS D CONCRETE |
| 4 | #6 REBAR x 2'-0" (3/4" DIA.) |
| 4 PIECES | 12 GAGE TIE WIRE x 2'-0" ± |
| 30 | 5/8" DIA. x 5" HEX BOLT (THREADED FULL LENGTH) AND NUT |
| 60 | FLAT WASHERS FOR 5/8" DIA. BOLT |
| NOTE: NAILS REQUIRED ARE SAME AS SHOWN ON HARDWARE SUMMARY FOR SNOW FENCE W/ ANCHOR SYSTEM #1 | |

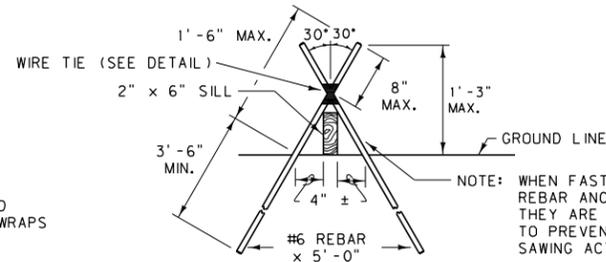
SEE NOTE (X) BELOW

(X) NOTE:
AFTER 5/8" DIA. BOLTS HAVE BEEN TIGHTENED,
BURR THE THREAD DIRECTLY BEHIND THE NUT
TO PREVENT EVENTUAL LOOSENING OF THE NUTS.

ANCHOR SYSTEM #1
(STANDARD)



WIRE TIE DETAIL
USE 12 GAGE OR HEAVIER GALVANIZED WIRE TO FORM THE WIRE TIES.

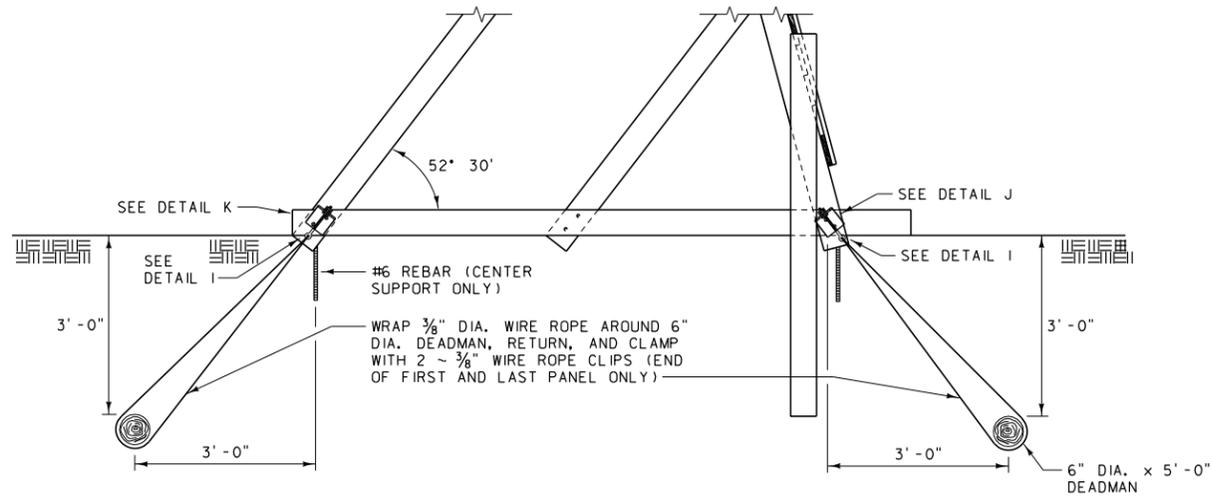


STANDARD ANCHOR DETAIL

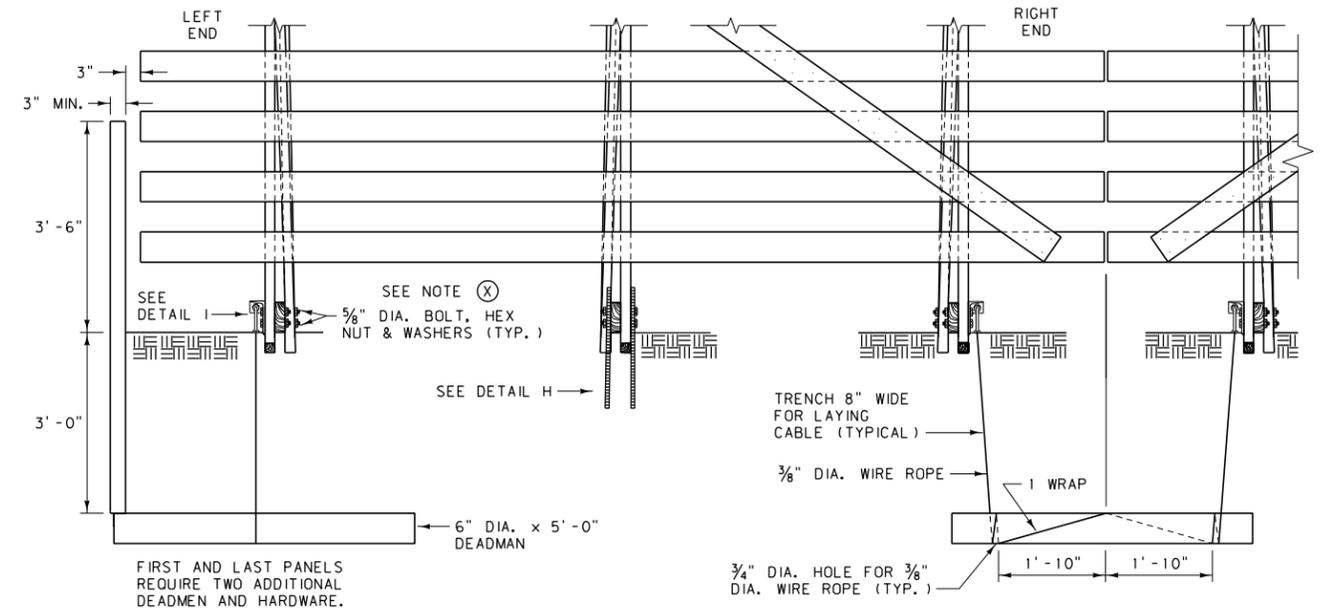
USE TWO #6 REINFORCING BARS FOR EACH END OF EACH SILL MEMBER. DRIVE THE BARS UP TIGHT TO THE FRAME TO PREVENT SLIDING. TIE THE REINFORCING BARS AS SHOWN IN THE WIRE TIE DETAIL. THE PLACEMENT OF THE ANCHORS IS CRITICAL IN PREVENTING OVERTURNING AND SLIDING OF THE FENCE.

| | |
|---|-----------------|
| DETAILED DRAWING | |
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-40 |
| WOOD SNOW FENCE ANCHOR SYSTEM #3 AND #1 DETAILS | |
| EFFECTIVE: FEBRUARY 2005 | |
|  MONTANA DEPARTMENT OF TRANSPORTATION <i>-serving you with pride-</i> | |

ANCHOR SYSTEM #2
(FOR SWAMPY CONDITIONS)

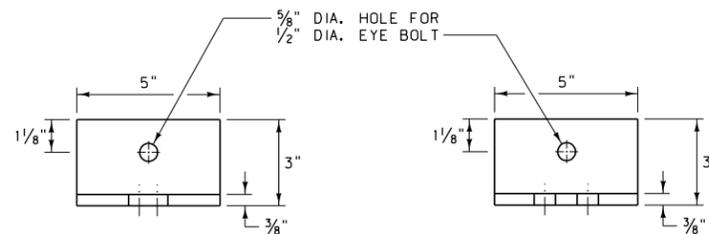


LEFT END VIEW



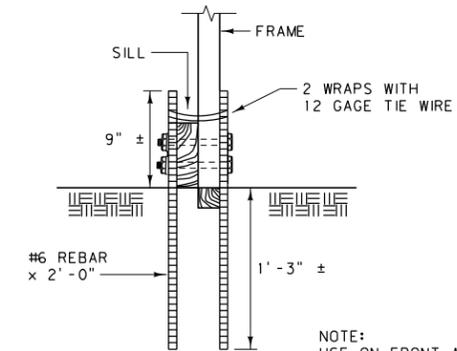
FRONT VIEW

NOTE:
HOLES SHOWN IN DETAILS BELOW ARE FOR LEFT END OF FENCE.
HOLES SHOWN HIDDEN ARE FOR RIGHT END OF FENCE.

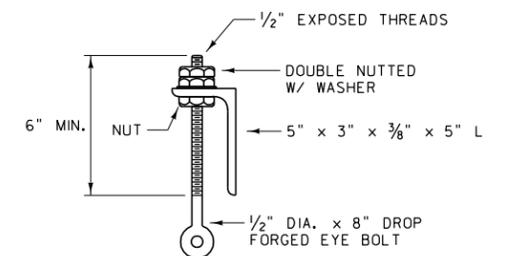


DETAIL J

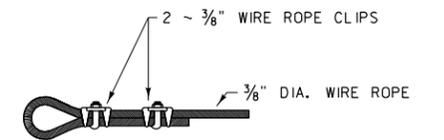
DETAIL K



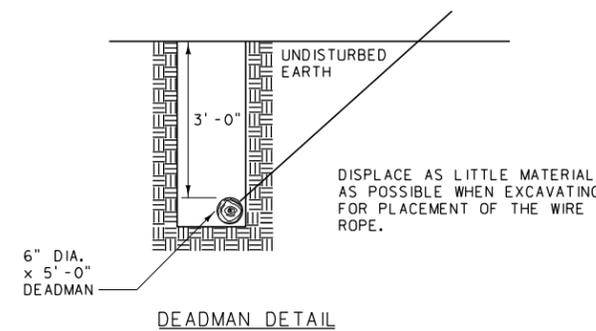
DETAIL H



DETAIL I



WIRE ROPE CONNECTION



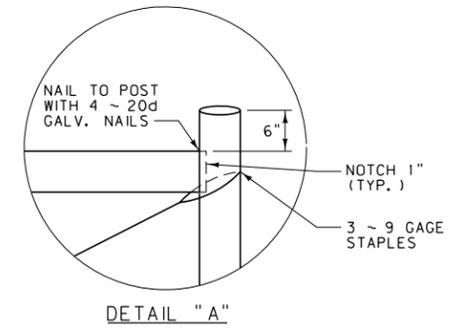
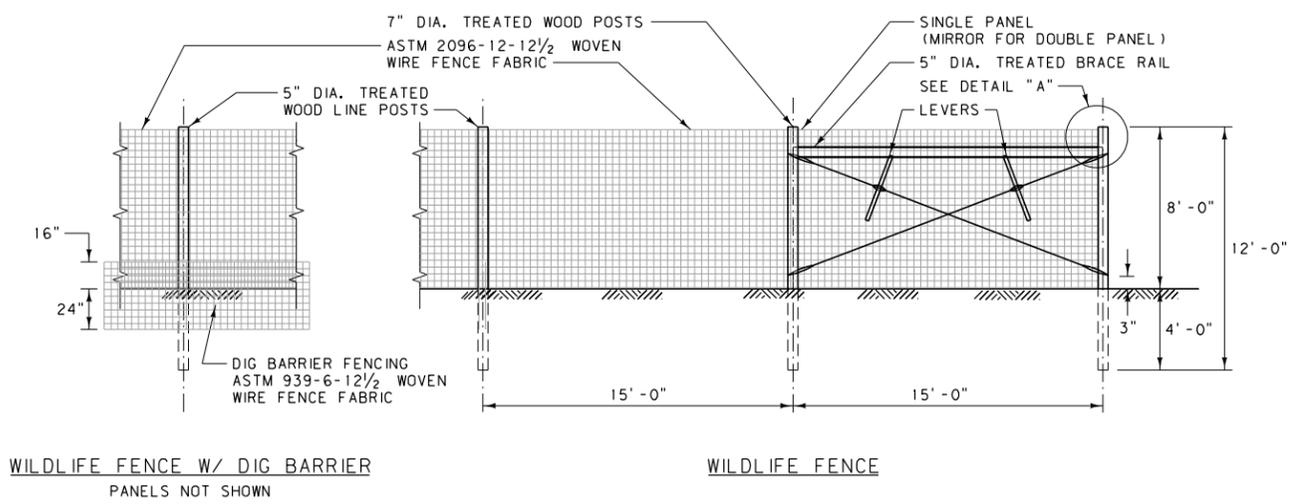
DEADMAN DETAIL

| LUMBER - SNOW FENCE W/ ANCHOR SYSTEM #2 | |
|--|--|
| BILL OF MATERIALS FOR ONE PANEL | |
| SAME AS FOR SNOW FENCE W/ ANCHOR SYSTEM #1 | |

| HARDWARE - SNOW FENCE W/ ANCHOR SYSTEM #2 | |
|---|--|
| BILL OF MATERIALS FOR ONE PANEL | |
| QUANTITY | DESCRIPTION |
| 4 | 5" x 3" x 3/8" x 5" L |
| 8 | 3/8" WIRE CLAMPS |
| 4 | 1/2" DIA. DROP FORGED EYEBOLTS W/ 3 HEX NUTS |
| 4 | FLAT WASHERS FOR 1/2" DIA. EYEBOLTS |
| 4 | #6 REBAR x 2'-0" (3/4" DIA.) |
| 4 PIECES | 12 GAGE TIE WIRE x 2'-0" ± |
| 29 FT. | 3/8" DIA. WIRE ROPE |
| 2 | 6" DIA. x 5'-0" POST DEADMEN |
| 30 | 5/8" DIA. x 5" HEX BOLT (THREADED FULL LENGTH) AND NUT |
| 60 | FLAT WASHERS FOR 5/8" BOLT |
| NOTE: NAILS REQUIRED ARE SAME AS SHOWN ON HARDWARE SUMMARY FOR SNOW FENCE W/ ANCHOR SYSTEM #1 | |

⊗ NOTE:
AFTER 5/8" DIA. BOLTS HAVE BEEN TIGHTENED, BURR THE THREAD DIRECTLY BEHIND THE NUT TO PREVENT EVENTUAL LOOSENING OF THE NUTS.

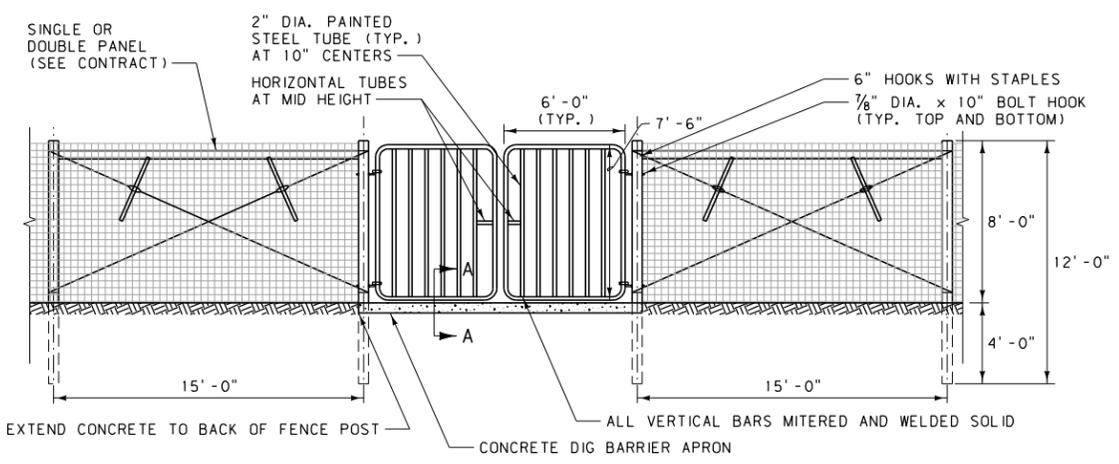
| DETAILED DRAWING | |
|---|-----------------|
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-45 |
| WOOD SNOW FENCE ANCHOR SYSTEM #2 DETAILS | |
| EFFECTIVE: FEBRUARY 2005 | |
|  MONTANA DEPARTMENT OF TRANSPORTATION <i>-serving you with pride-</i> | |



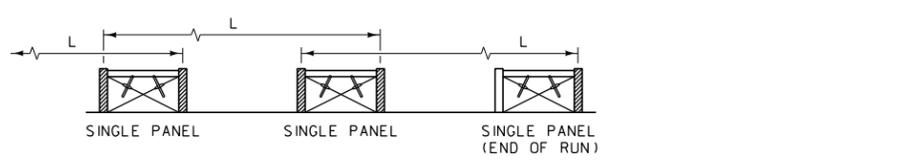
BRACE WIRES - ONE CONTINUOUS 9 OR 12 1/2 GAGE SMOOTH WIRE DOUBLED TO FORM A FOUR WIRE BRACE. TIE THE TWO ENDS NEAR THE TOP OF THE PANEL POSTS.
 LEVERS - 1 1/2" x 2" x 12" MINIMUM SIZE.

WILDLIFE FENCE W/ DIG BARRIER
 PANELS NOT SHOWN

WILDLIFE FENCE

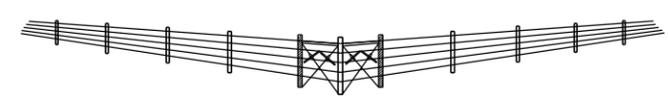
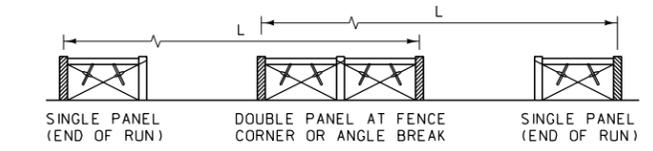


METAL MAINTENANCE ACCESS GATE
 CHAIN AND LOCK TO BE SUPPLIED BY MDT FORCES



| FENCE TYPE | RUN = L | PANELS REQUIRED |
|------------|---------------|-----------------|
| WILDLIFE | LESS THAN 30' | NONE |
| | 30' - 330' | SINGLE |

NOTE:
 TIE OFF ON ALL CROSS HATCHED OR SHADED POSTS.



FENCE PANEL TYPES

NOTES:
 PLACE ALL FENCE WIRE ON PASTURE SIDE OF POST, EXCEPT ON CURVES. THEN, PLACE THE WIRE ON THE OUTSIDE OF THE CURVE.

POST SPACING IS GENERALLY MEASURED PARALLEL TO GROUND.

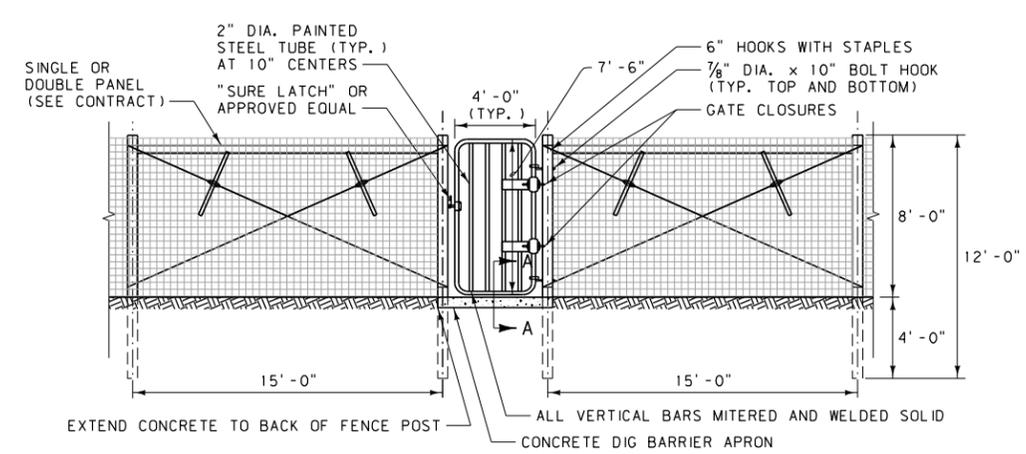
LINE POST SPACING IS 15'-0" CENTER TO CENTER. LINE POST SPACING FROM BRACE OR PANEL POST IS 15'-0" CENTER TO CENTER.

TO ATTACH WOVEN WIRE TO AN END POST, REMOVE TWO OR THREE VERTICAL STAY WIRES FROM THE END OF THE FENCE. PLACE THE FIRST COMPLETE VERTICAL STAY WIRE AGAINST THE POST. START AT THE MIDDLE OF THE HORIZONTAL LINE WIRES, WRAPPING AROUND THE END POST AT LEAST TWO TIMES AND THEN WRAPPING AROUND ITSELF FIVE TIMES.

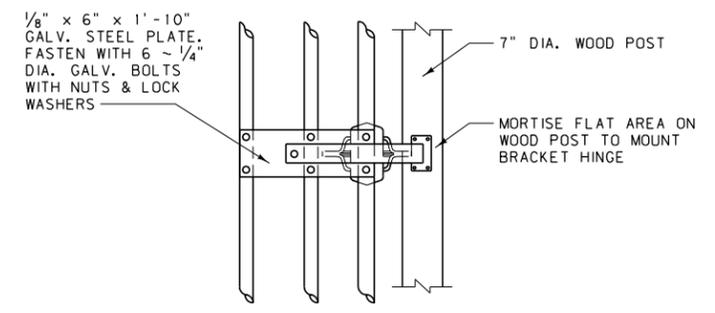
A DEADMAN MAY BE A PRECAST CONCRETE BLOCK, A CAST IN PLACE CONCRETE BLOCK, A ROCK OR OTHER APPROVED OBJECT WEIGHING AT LEAST 260 LB. BURY THE DEADMAN IN THE GROUND WITH AT LEAST 2'-0" OF COVER. ATTACH THE DEADMAN TO THE FENCE WITH 3 STRANDS OF 9 GAGE WIRE OR 6 STRANDS OF 12 1/2 GAGE WIRE. SEE DTL. DWG. NO. 607-10 FOR ALTERNATE DEADMAN.

STAPLE THE BOTTOM, TOP, CENTER AND ALTERNATE WIRES OF WOVEN WIRE TO WOOD LINE POSTS.

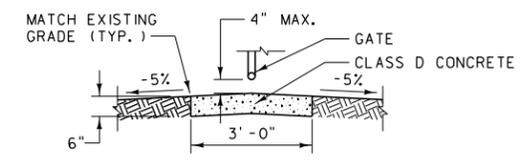
STAPLE ALL WIRES OF WOVEN WIRE TO WOOD CORNER POSTS OR POST USED TO TIE-OFF WIRE.



METAL EQUINE GATE



TIE BAR MOUNTING DETAIL FOR GATE CLOSERS



SECTION A-A
 CENTER CONCRETE DIG BARRIER APRON UNDER CLOSED GATE

| | |
|--|-----------------------|
| DETAILED DRAWING | |
| REFERENCE STANDARD SPEC. SECTION 607 | DWG. NO. 607-50 |
| WILDLIFE FENCE | |
| -- REVISED -- January 2008 | EFFECTIVE: APRIL 2006 |
| MONTANA DEPARTMENT OF TRANSPORTATION <i>-serving you with pride-</i> | |