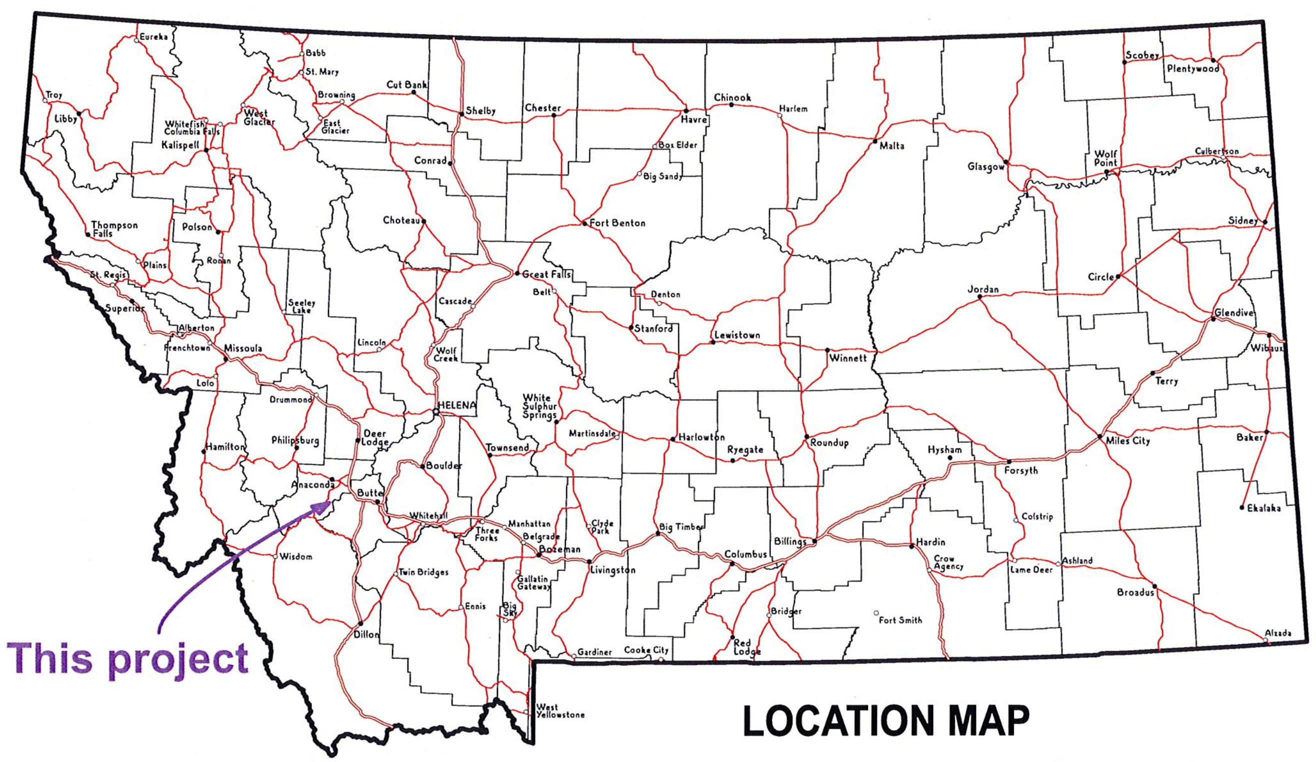
# Mount Haggin WMA

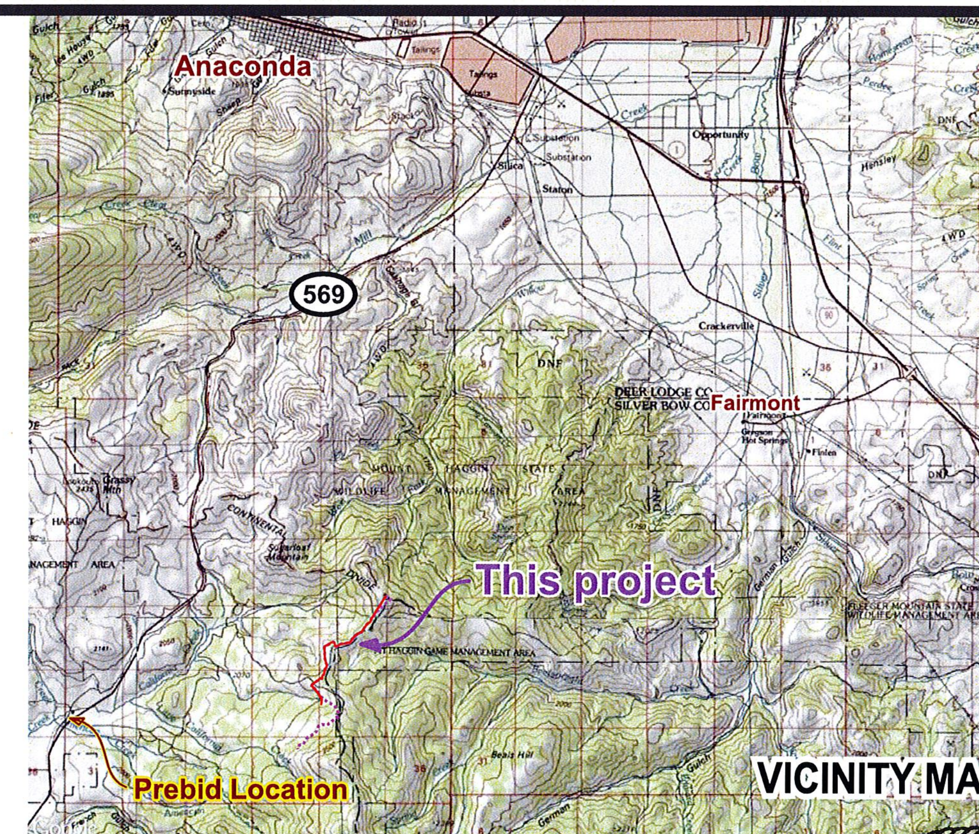
# California Creek / Beefstraight Creek Divide Fence

12 miles south of Anaconda, Montana

FWP Project #7095326




LOCATION MAP




VICINITY MAP


MONTANA FISH, WILDLIFE AND PARKS
DESIGN & CONSTRUCTION

**MAILING ADDRESS:**
PO Box 200701
Helena, MT 59620-0701
(406) 841-4000
(406) 841-4004 FAX
http://fwp.mt.gov/doingBusiness/designAndConstruction/

**STREET ADDRESS:**
1522 Ninth Avenue
Helena, MT 59601


## DRAWING INDEX


1 Cover Sheet
2 Project Location and Access
3 Site Map with Project Extents
4 Fence Location Over Site Aerial - North End of Project
5 Fencel Location Over Site Aerial - Central Section of Project
6 Fence Location Over Site Aerial - South End of Project
7 Four Wire Fence Details - Corners
8 Four-Wire Fence Details - Gates
9 Lay-Down Fence Details
10 Four Wire Fence - Miscellaneous Details


MONTANA ★ MARK C. McNEARNEY 14866PE ★ LICENSED PROFESSIONAL ENGINEER

9-8-15

| | | |
|---|---|---|
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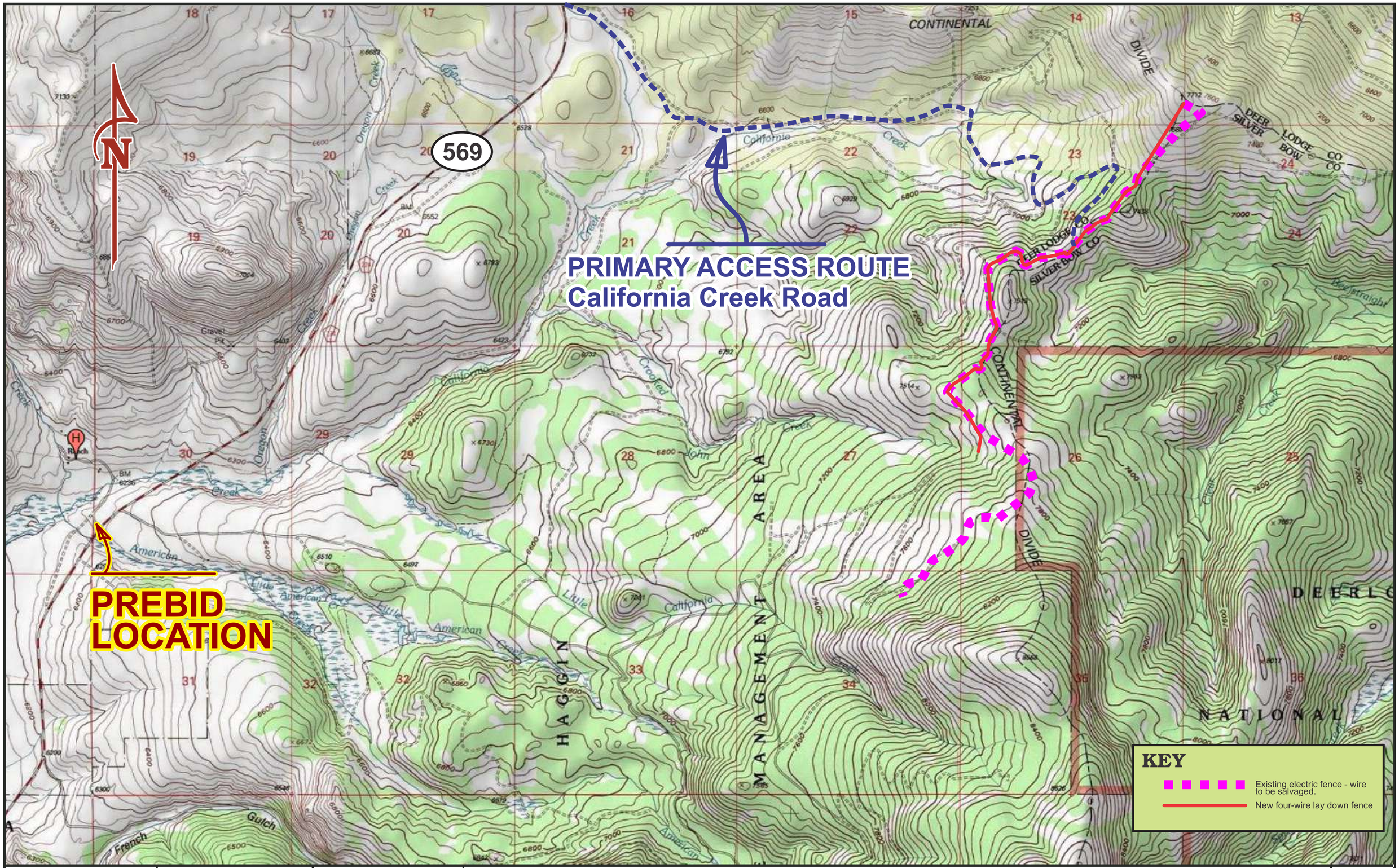
**California/Beefstraight Divide Fence**
**Mount Haggin WMA** **FWP#7095326**

SHEET: 1 of 10

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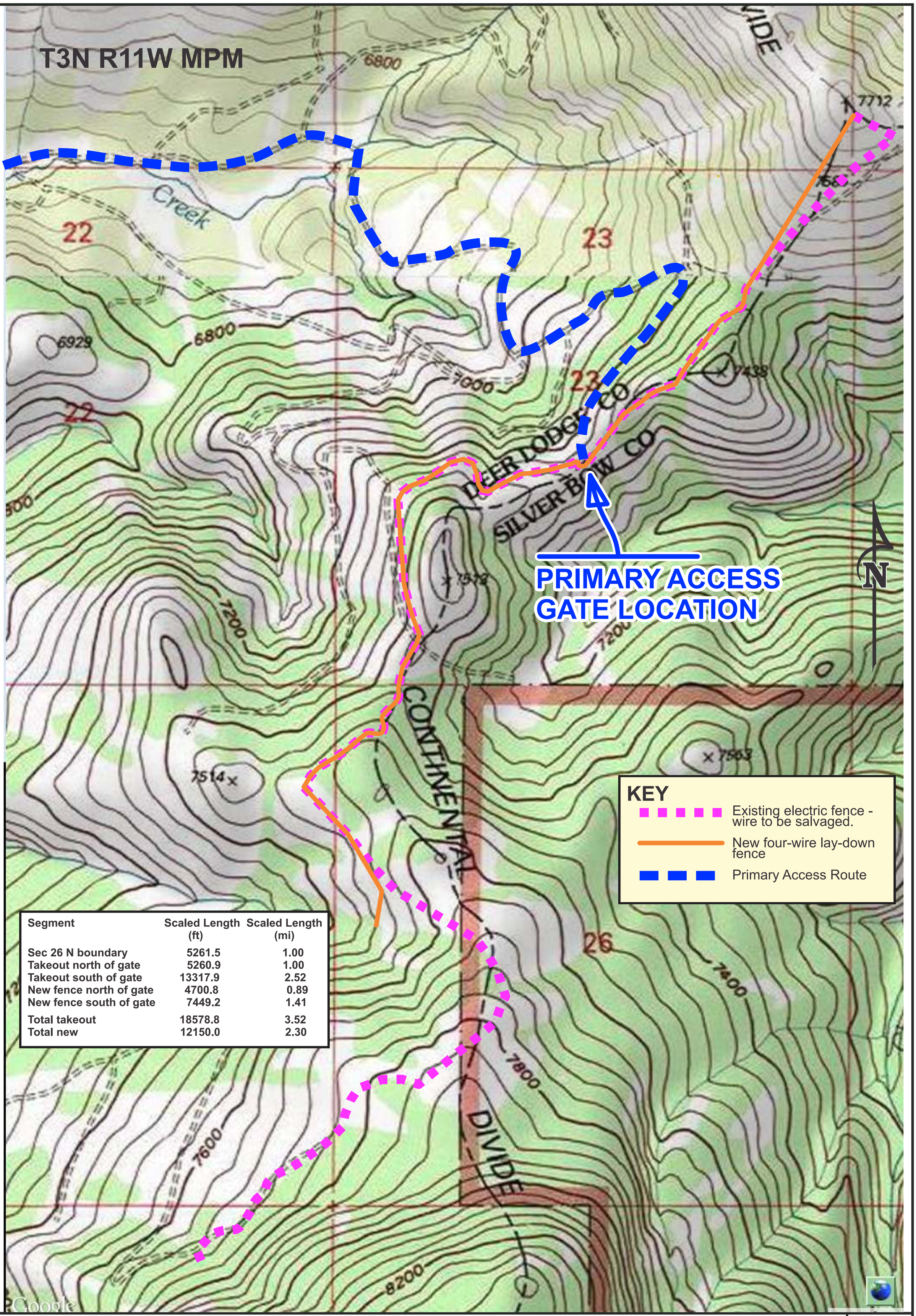
# Project Location and Access

## Mount Haggin WMA

## FWP#7095326

SHEET: 2 of 10




| Segment | Scaled Length (ft) | Scaled Length (mi) |
|---|---|---|
| Sec 26 N boundary | 5261.5 | 1.00 |
| Takeout north of gate | 5260.9 | 1.00 |
| Takeout south of gate | 13317.9 | 2.52 |
| New fence north of gate | 4700.8 | 0.89 |
| New fence south of gate | 7449.2 | 1.41 |
| Total takeout | 18578.8 | 3.52 |
| Total new | 12150.0 | 2.30 |

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# Site Map with Project Extents

## Mount Haggin WMA

## FWP#7095326

SHEET: 3 of 10

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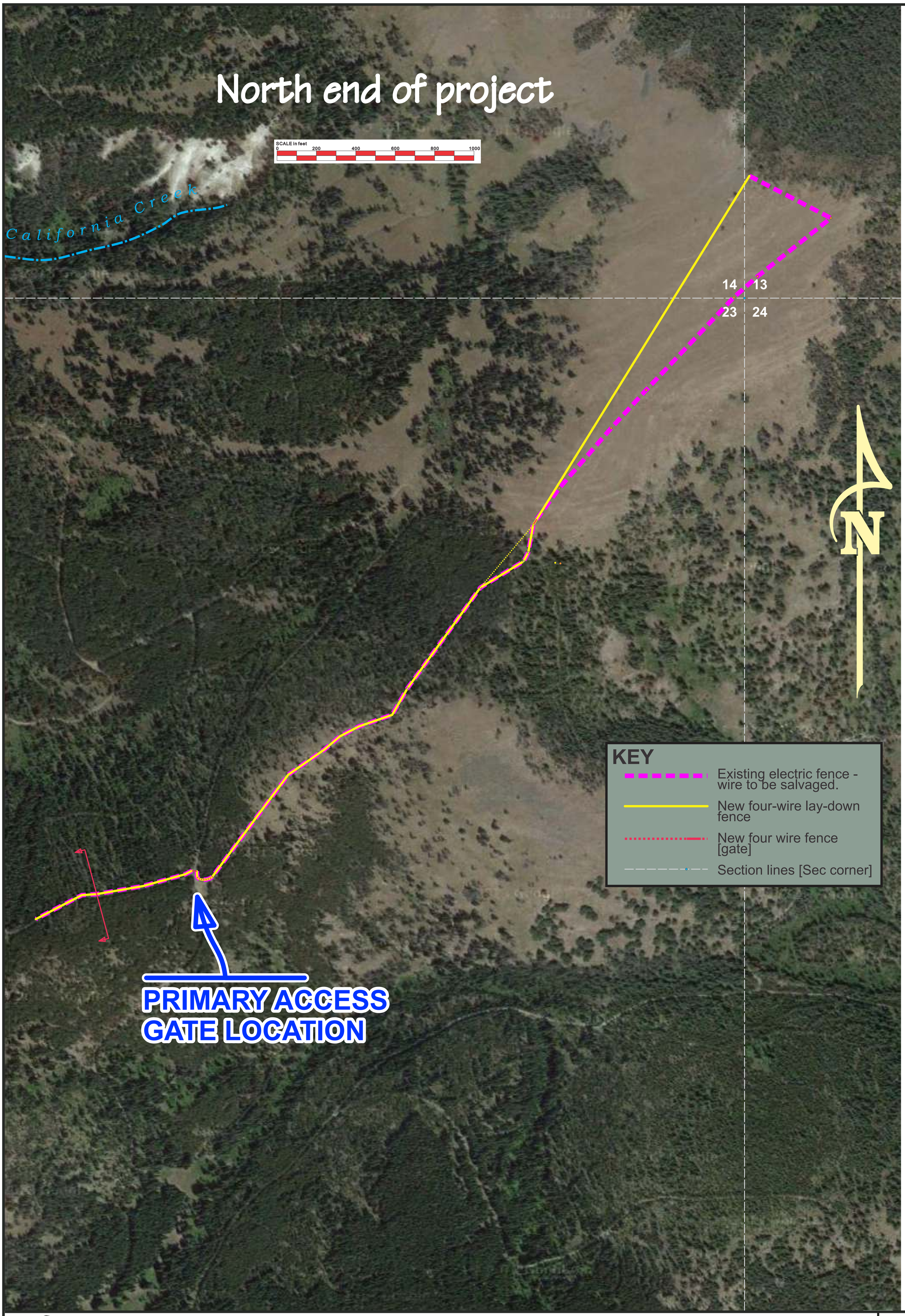


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# Fence Location over Aerial - North End

## Mount Haggin WMA

## FWP#7095326

SHEET: 4 of 10

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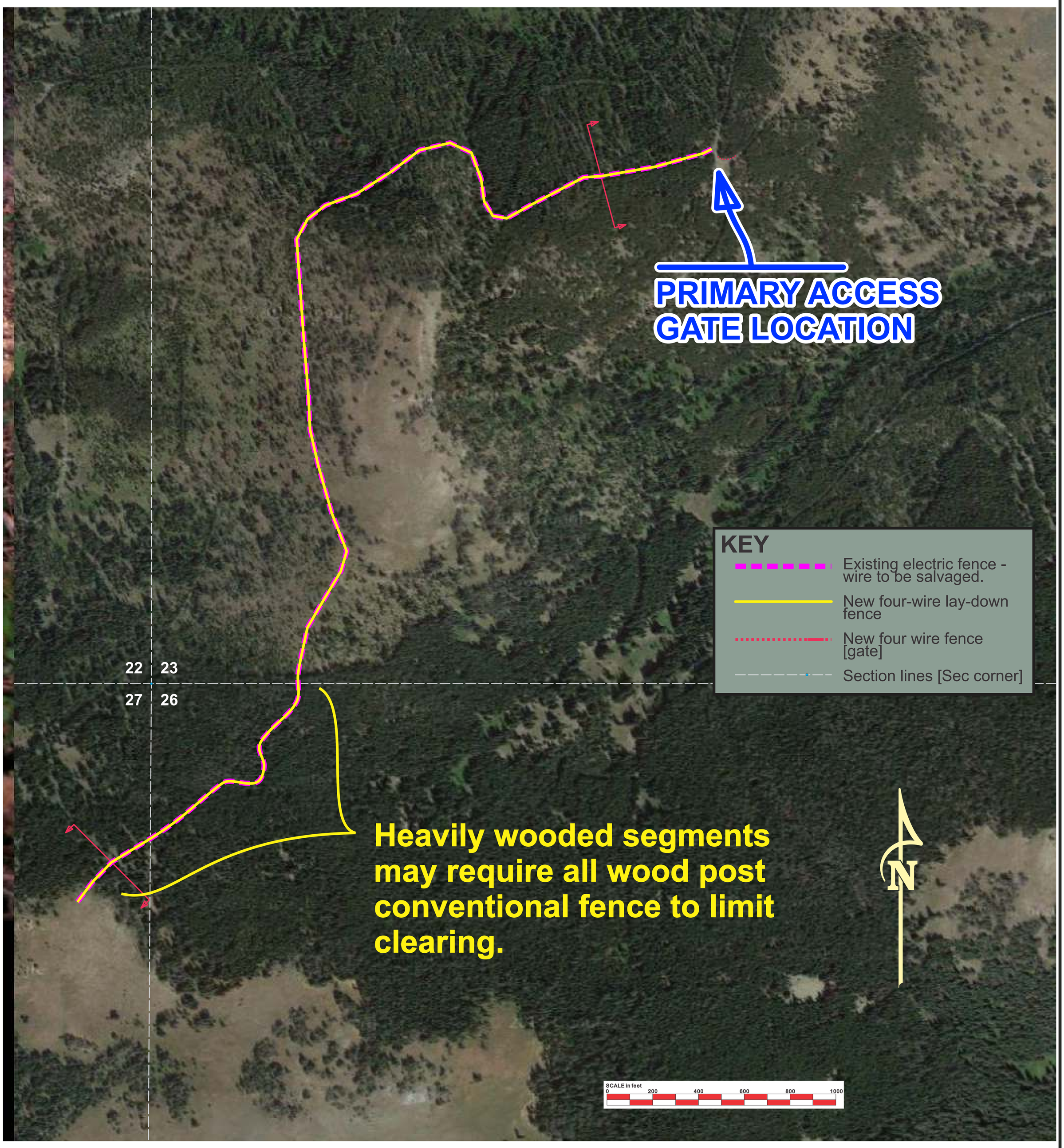
|---|---|---|---|---|---|




Central section of project

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# Fence Location Aerial - Central Section

## Mount Haggin WMA

## FWP#7095326

SHEET: 5 of 10

D. Stinson

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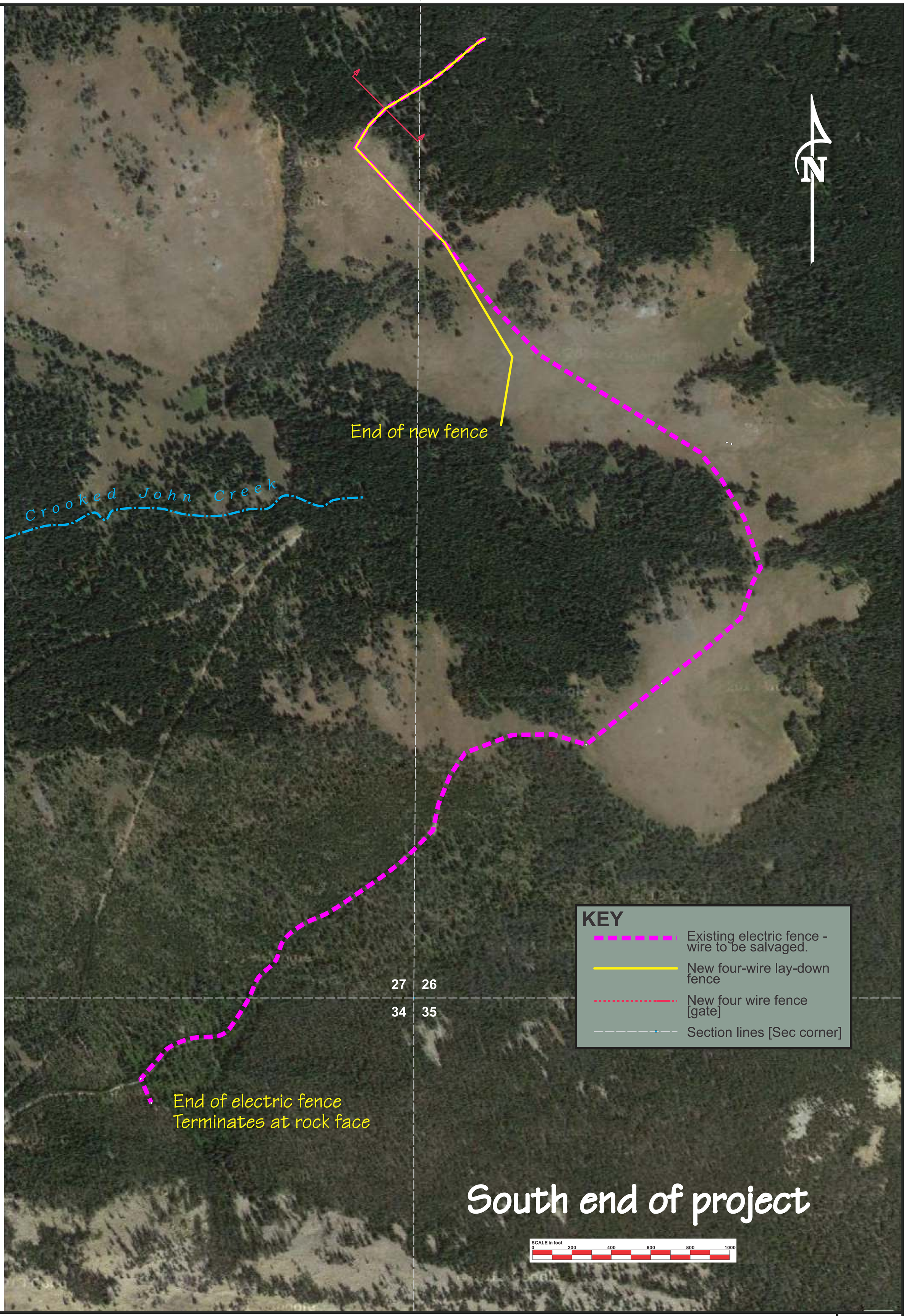
Checked by: Date:

Approved by: Date:

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# Fence Location over Aerial - South End

## Mount Haggin WMA

## FWP#7095326

SHEET: 6 of 10

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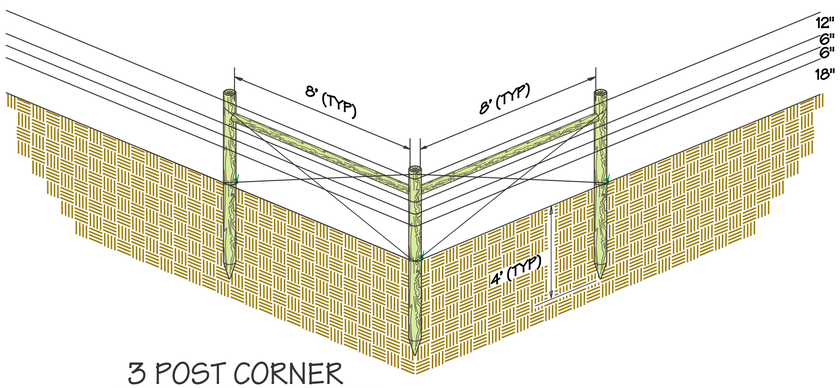
|---|---|---|---|---|---|

# FOUR WIRE FENCE DETAILS

**6" x 8' treated wood Brace Posts (typ.)**
**5" x 7' wood Line Posts (typ.)**

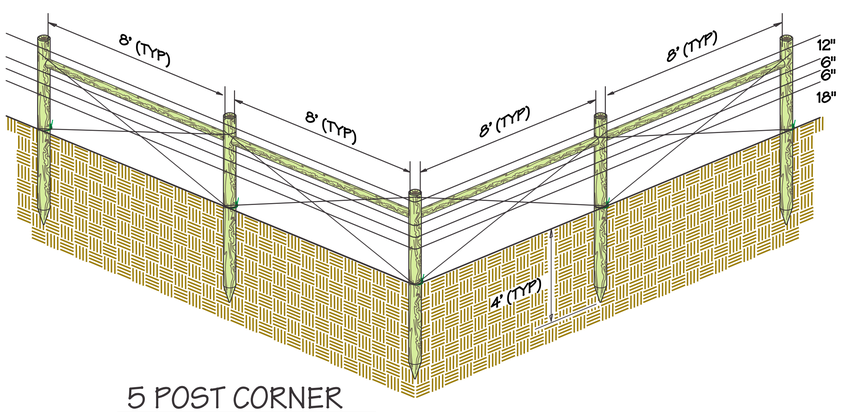
**NOTE: Not all detail drawings may pertain to this job, and some may only be used in the event of change orders.**

Top three wires to be two strand twisted barbed wire.
Bottom wire to be two strand, twisted smooth wire.
Spacing from ground up should be 18"/6"/6"/12"



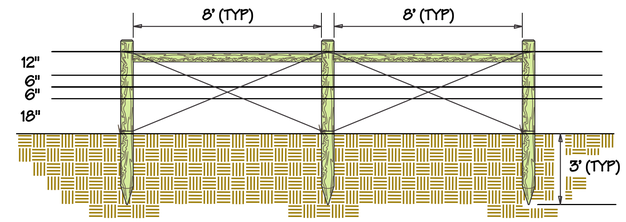

## 3 POST CORNER

6" x 8' Wood Posts (typ.) - 8' Top Rails

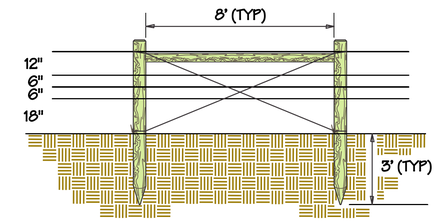



## 5 POST CORNER

6" x 8' Wood Posts (typ.) - 8' Top Rails

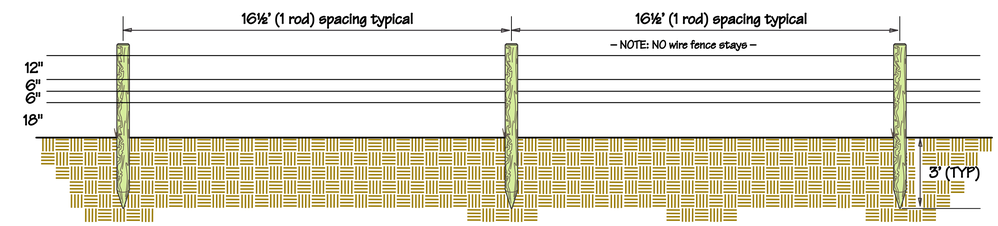



## DOUBLE BRACE PANEL



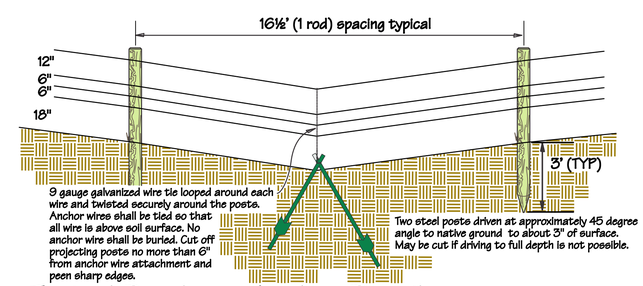

## SINGLE BRACE PANEL

NOTE ON POST SIZES - Posts shown in the drawings above represent braces placed at vertical grade changes where the fence wire does **not** terminate. In such cases, 5" x 7' posts are acceptable. In cases where the brace also acts as a wire termination point, posts for the braces should be 6" x 8' with a typical 4' bury depth.




## Four Wire Spacing with Wood Line Posts

7' Wood Line Posts (typ.)




## Typical Deadman Anchor Detail

5½' Steel Posts (typ.)
5" x 7' wood Line Posts shown

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**Fence Details - Corners**
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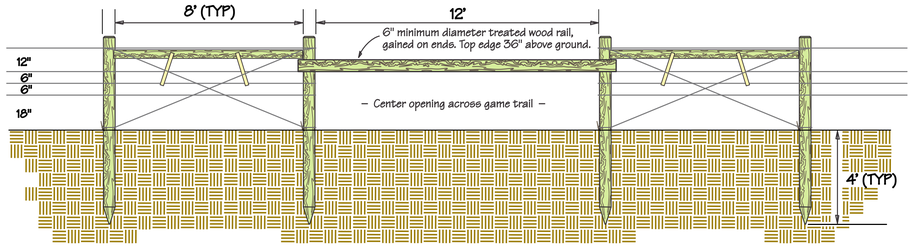
SHEET: 7 of 10

# FOUR WIRE FENCE - Typical Gates & Details

**6" x 8' Wood Brace Posts (typ.)**

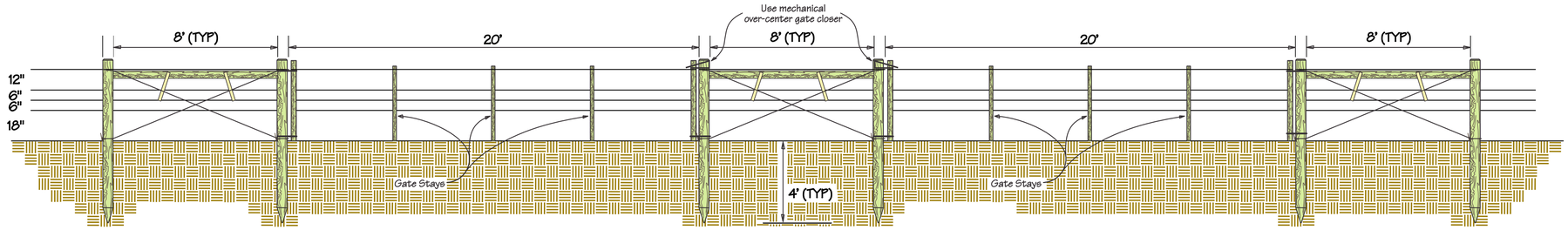
**NOTE: Not all detail drawings may pertain to this job, and some may only be used in the event of change orders.**

Top three wires to be two strand twisted barbed wire.
Bottom wire to be two strand, twisted smooth wire.
Spacing from ground up should be 18"/6"/6"/12"




12 Ft GAME TRAIL CROSSING (30" clear)

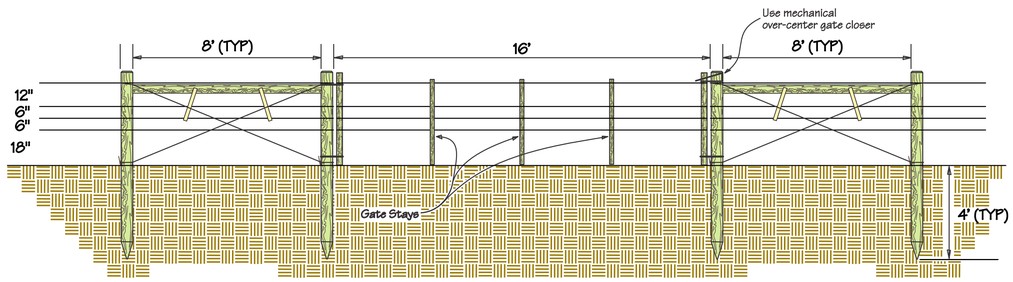
6" x 8' Wood Posts (typ.)




DOUBLE 20 Ft FOUR-WIRE WILDLIFE GATE

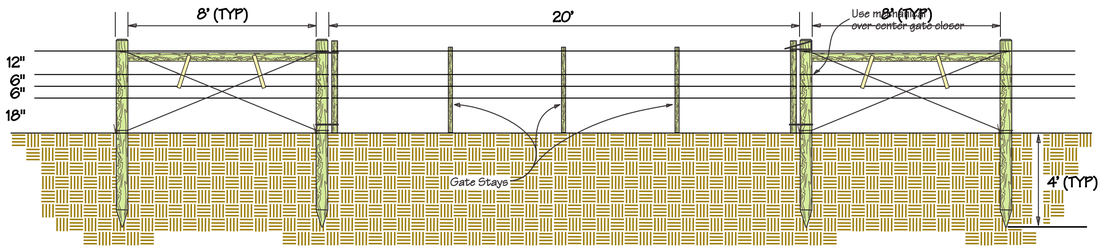
6" x 8' Wood Posts (typ.)

= ALL GATES TO BE FIELD LOCATED =
unless specifically noted in plans.



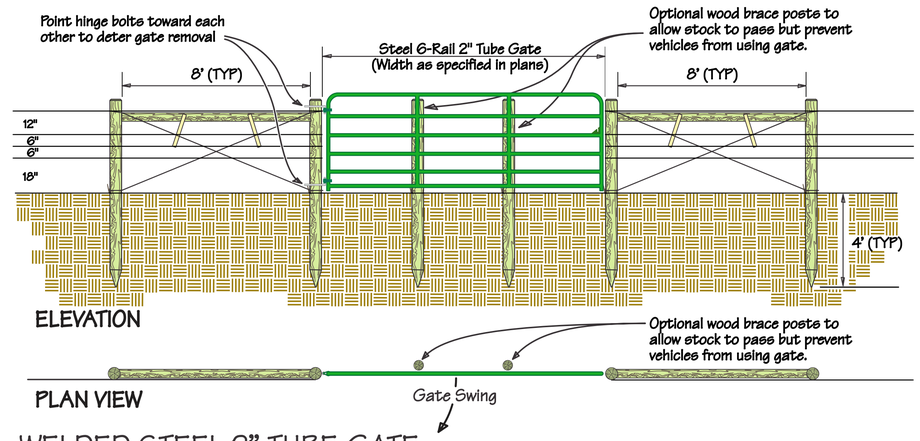

16 Ft FOUR-WIRE GATE

6" x 8' Wood Posts (typ.)




20 Ft FOUR-WIRE GATE

6" x 8' Wood Posts (typ.)




WELDED STEEL 2" TUBE GATE

6" x 8' Wood Posts (typ.)

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**Four Wire Fence Details - Gates**

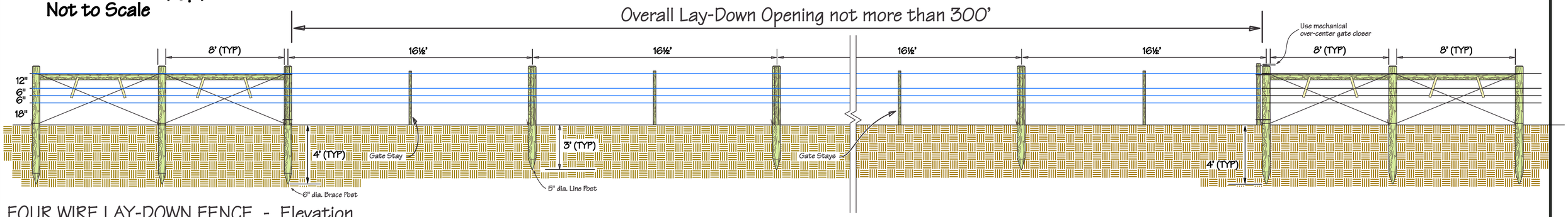
**Mount Haggin WMA** **FWP#7095326**

SHEET: 8 of 10

# Four Wire Lay-Down Fence - Typical Segment

= Hinge end on uphill end where possible =

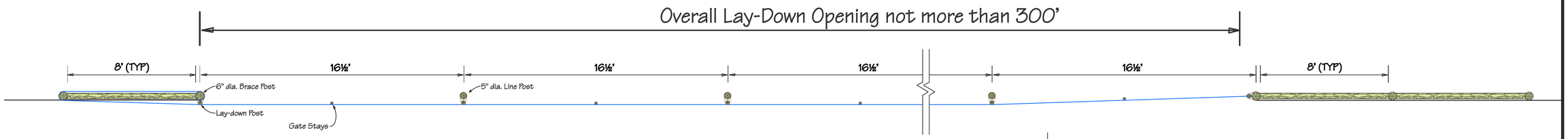
**8' Brace Posts = all wood materials, including stays, must be full length pressure treated =**
**7' Wood Posts (typ.)**
**Not to Scale**




## FOUR WIRE LAY-DOWN FENCE - Elevation

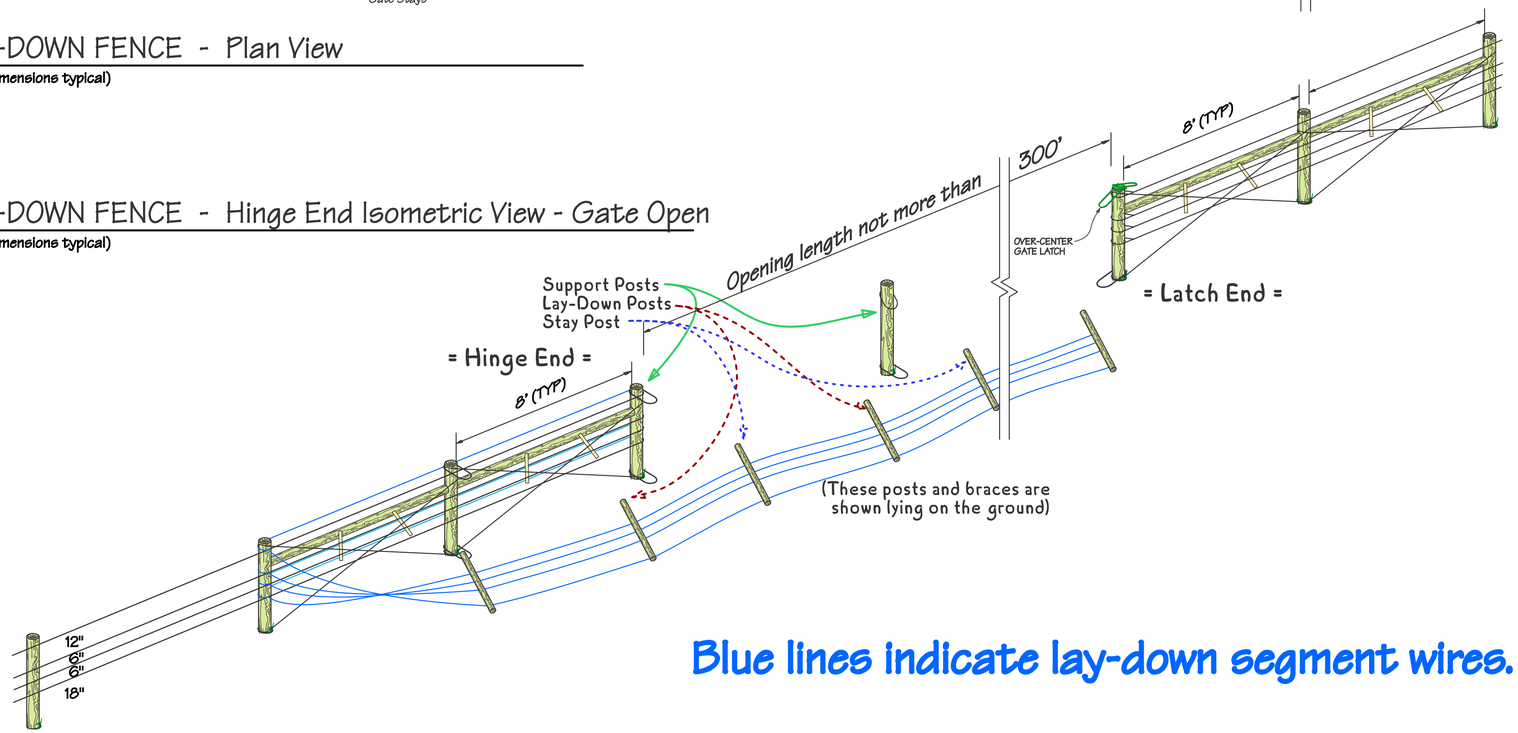
6" x 8' Wood Brace Posts (all dimensions typical)
5" x 7' Wood Support Posts

**Blue lines indicate lay-down segment wires.**




## FOUR WIRE LAY-DOWN FENCE - Plan View

6" x 8' Wood Brace Posts (all dimensions typical)
5" x 7' Wood Support Posts




## FOUR WIRE LAY-DOWN FENCE - Hinge End Isometric View - Gate Open

6" x 8' Wood Brace Posts (all dimensions typical)
5" x 7' Wood Support Posts

**Blue lines indicate lay-down segment wires.**

| | | | |
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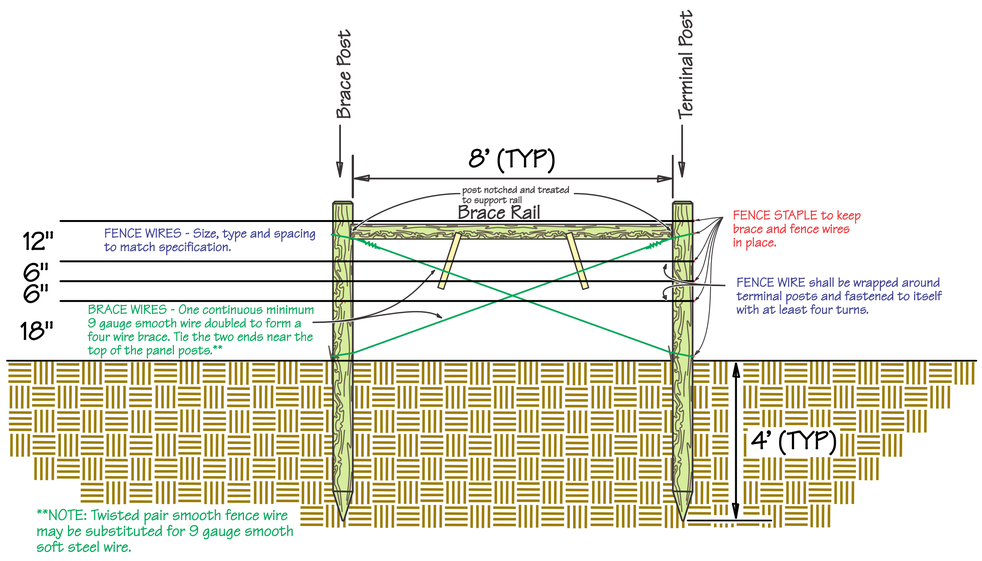
# Lay-down Fence Details
## Mount Haggin WMA
## FWP#7095326

# FOUR WIRE FENCE MISCELLANEOUS DETAILS

**6" x 8' treated wood Brace Posts (typ.)**
**5" x 7' treated wood Line Posts and 5½' steel posts (typ.)**

**NOTE: Not all detail drawings may pertain to this job, and some may only be used in the event of change orders.**

Top three wires to be two strand twisted barbed wire.
Bottom wire to be two strand, twisted smooth wire.
Spacing from ground up should be 18"/6"/6"/12"

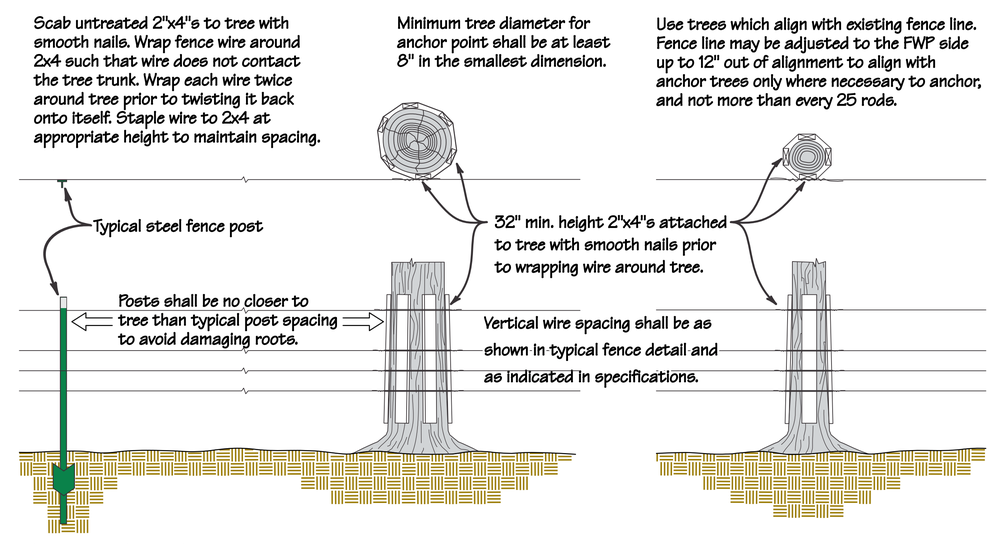



## TYPICAL BRACE PANEL

showing fence wires from one direction for clarity

**6" x 8' Wood Posts (typ.) - (Not to Scale)**

- Double Braces (three posts) have two adjacent Brace Posts and the Terminal Post on the end.
- Corner Braces typically share a common Terminal Brace.
- Intermediate Braces (two posts) in line, but not at either end of wire, may be 5" x 7' wood posts with typical 3' bury.




Typical Tree Anchor Detail

(Not To Scale)

| | | |
|---|---|---|
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**Four Wire Fence - Miscellaneous Details**
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SHEET: 10 of 10