

EXAMPLE LETTER TO ADJOINERS

SAMPLE SURVEYS, INC.

REGISTERED LAND SURVEYORS

November 15, 1983

E. F. Black
1407 Hampton Road
Scolfield, CO 80707

Dear Mr. Black:

Our firm has been contracted by the USDA, Forest Service to survey and mark the boundaries adjoining your property. We plan to be in your area during the month of December doing this work.

There are provisions in the contract to mark your side of the line, if you desire. The Forest Service prefers to mark both sides of the boundary line, so Forest users can easily see the limits of National Forest land.

Surveying and marking Forest Service boundaries include the following standards:

- ...clear underbrush ___ feet each side of the line.
- ...painted blazes on trees within 3 feet of the line.
- ...boundary line signs within 2 feet of the line.
- ...set new Forest Service corner monuments and mark new bearing trees, where applicable.

Should the need arise, we ask your permission to cross your land to gain access to the project.

Please fill out the enclosed card concerning project access and boundary line marking, and return the card to our office in the enclosed self-addressed envelop. If you have any information, concerns, or desires you wish to express, please use the Remark's Section of the card or contact this office.

Thank you for your cooperation.

Sincerely,

THOMAS WASHINGTON

Enclosure

Route 28, Box 17, Entiat, Colorado 80224

Phone (303) 547-3333

EXAMPLE REPLY CARD

OWNER: E. F. BLACK

- Do we have your permission to mark your side of the boundary line? Yes No
- Do we have your permission to cross your land for project access? Yes No

Remarks: _____

Signature: _____ Date: _____

FROM

STAMP

SAMPLE SURVEYS, INC.
RTE. 1, BOX 1
ORANGE, VA 24411

EXAMPLE CONFLICT REPORT

SAMPLE SURVEYS, INC. CERTIFIED LAND SURVEYORS

IDENTIFICATION OF POSSIBLE CONFLICT

Contract Number 53-43-ZP-2-19

Date Discovered 12-5-83

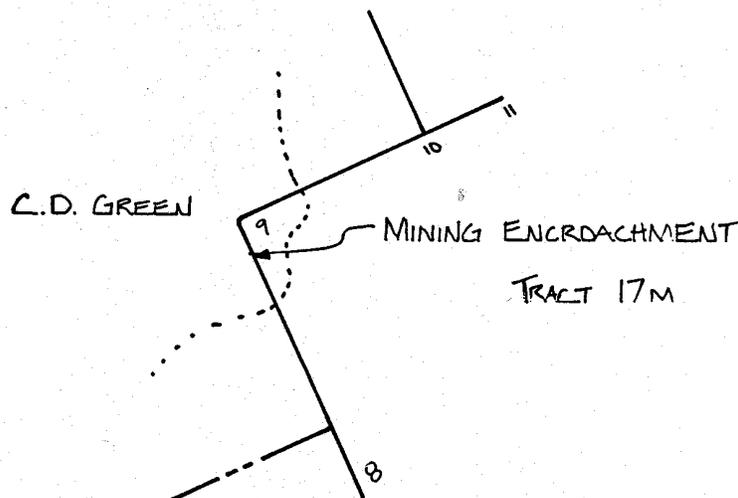
Location Near Corner 9 of USA Tract 17m.

Name of Adjoining Landowner C. D. Green

Nature of Conflict A preliminary survey indicates a mining encroachment near corner 9. The monument at corner 9 is missing, but a bearing tree was left standing. Based on the location of the bearing tree, the encroachment appears to be less than 1/2 acre.

Remarks We have tied the limits of the mining operation to our traverse. When corner 9 has been reestablished, we can compute the area of the encroachment.

Sketch



Submitted by: _____

Date 12-7-83

Received by: _____

Date _____

Route 1, Box 1 Orange, Virginia 24411

Phone 703-555-4444

SURVEY STANDARDS

1. Positional Tolerance of monuments to be set with respect to nearest controlling senior corner.

a. Rectangular Survey System

$$\pm 2.0 \text{ feet or } \pm .0008S$$

S = distance to nearest controlling monument in feet. Use smallest value.

b. Metes and Bounds Surveys

$$\pm 2.0 \text{ feet or } \pm (.16 + .0005S + .012\sqrt{S}) \text{ feet}$$

S = distance to nearest controlling monument in feet. Use smallest value.

2. Astronomic azimuth of bearing base ± 2 minutes

Surveys will be analyzed against the following criteria:

1. The Estimated Uncertainty (E_u) of position shall be computed for the instruments and methods used according to the method shown on page two (2) of this Exhibit. The error of closure shall not exceed the Estimated Uncertainty.

If the closing distance for the traverse exceeds the Estimated Uncertainty (E_u), unresolved systematic error or blunders or both should be suspected.

2. The angular closure should not exceed $3\sigma_a\sqrt{n}$. n = number of stations in traverse. See Table 1 for typical $3\sigma_a$ values.

3. The E_u of any corner set shall be less than its Position Tolerance.

4. In rectangular system surveys, the inverse distances along the subdivision lines between monuments used to establish corner positions will be compared using coordinates computed from both field data and adjusted coordinates. The difference in the distances shall not exceed 1.5 times the positional tolerance of the corner to be set.

5. Control for photogrammetry shall meet National Geodetic Survey 2nd order, Class II standards and be adjusted by least square methods.

6. For photogrammetric and other point positioning systems, the root mean square error of system determined points compared with control points shall not be greater than 1/3 of the smallest positional tolerance of any corner to be set by the system.

If any of the above criteria are not met, additional measurements between monuments will be required to verify that the monuments set are correctly placed.

Number of Direct and Reverse pairs or angles doubled.	TABLE I Least Division of Micrometer, Scale, or Vernier of Theodolite or Transit					
	1"	6"	10"	20"	30"	1'
1	7"	7.4"	7.5"	10.5"	13"	15"
2	5.9"	6.2"	6.3"	8.8"	10.9"	12.6"
3	5.3"	5.6"	5.7"	8.0"	9.9"	11.4"
4	5.0"	5.2"	5.3"	7.4"	9.2"	10.6"
6	4.5"	4.7"	4.8"	6.7"	8.3"	9.6"
8	4.2"	4.4"	4.5"	6.2"	7.7"	8.9"

SURVEY STANDARDS

ESTIMATED UNCERTAINTY

Estimated uncertainty is a method of computing the propagation of random error with some simplifying assumptions. The method assumes that the largest contributing error for each course, either angular or linear will become the radius of the error circle for that course. The total error for several courses is the square root of the sum of the squares of the radii of the error circles.

$$E_u = \sqrt{r_1^2 + r_2^2 + \dots + r_n^2}$$

Typical formulae for computing estimated error of a course:

1. ANGULAR ERROR

S = horizontal distance of traverse leg
 σ_a = standard error of angle measured

$$E_a = S \sin(3\sigma_a)$$

Table 1 shows 3σ values to be used with this formula. The table assumes all angles are measured to stationary targets. Errors associated with the following are considered:

Centering Instrument & Target
 Leveling Instrument & Target
 Sighting Targets
 Reading Scale

2. LINEAR ERROR

a. EDM

5mm = random error associated with internal EDM functions

$$E_d = 3\sqrt{5\text{mm}^2 + 5\text{ppm}^2}$$

OR

$$E_d = 3\sqrt{0.0164^2 + \left(\frac{5S}{10^6}\right)^2}$$

The manufacturer supplies a standard deviation (σ) for the equipment. These figures typically only concern internal and atmospherically caused random error.

5ppm = random error associated with determination of atmospheric effects.

S = Distance in Feet

b. TAPING

N = number of tape lengths

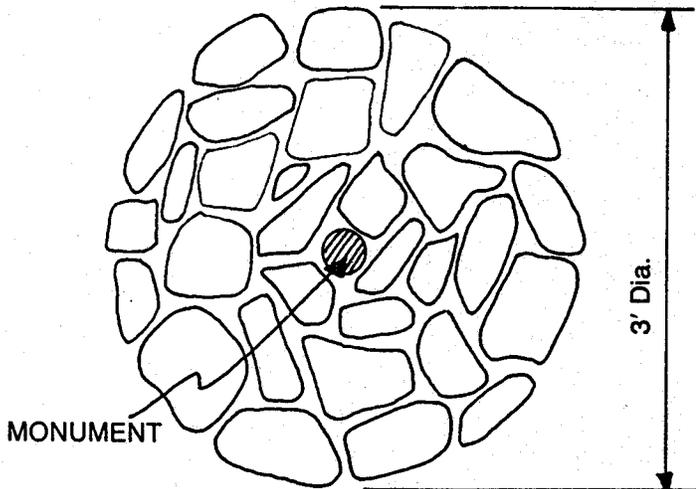
σ_m = standard error of marking the end of the tape with plumb bob

σ_Δ = standard error of tape calibration.

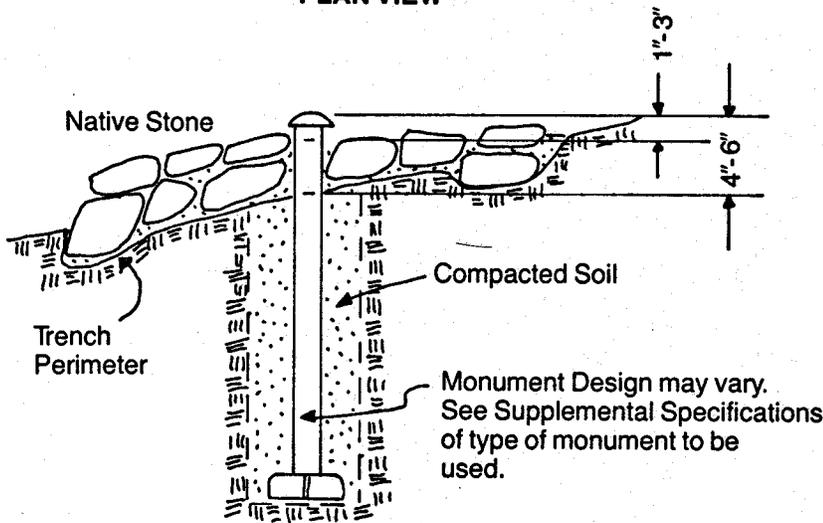
$$E_d = 3\sqrt{2N\sigma_m^2 + N^2\sigma_\Delta^2}$$

This formula only takes two sources of error into consideration. Actual field measurements may require additional factors such as temperature tension, sag, etc.

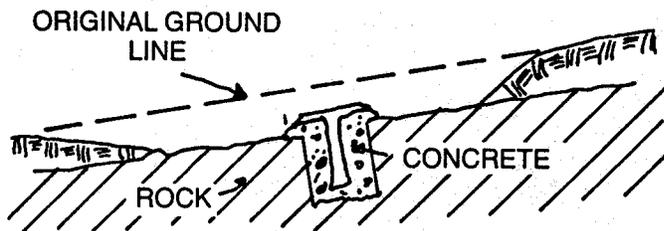
PLACEMENT OF CORNER MONUMENTS



MONUMENT w/MOUND of STONES - TYPICAL PLAN VIEW



TYPICAL SECTION VIEW



TYPICAL ROCK TABLET INSTALLATION

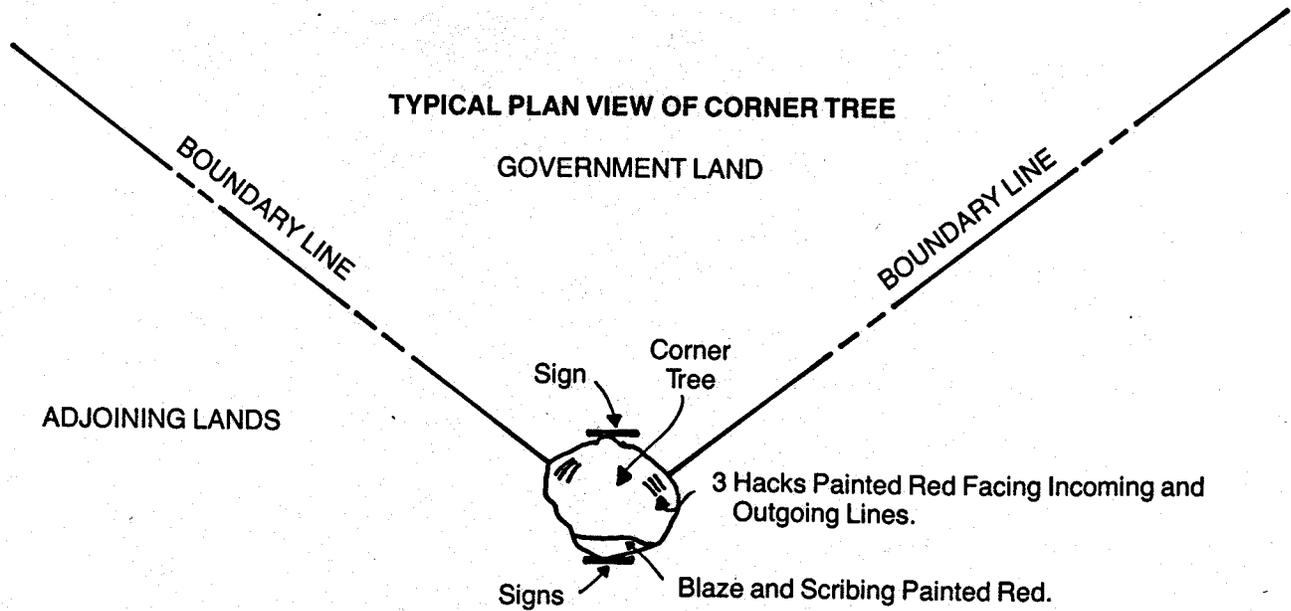
NOTES:

1. Native stones within 100' of the corner shall be used to construct a mound around the monument. Where the number of available stones is insufficient to construct a 3' diameter mound, the contractor shall construct a mound as large as the available stones will permit.
2. Monuments shall be set plumb with the backfill soil compacted to 4" to 6" layers.
3. Only those monuments designed to be driven shall be driven.

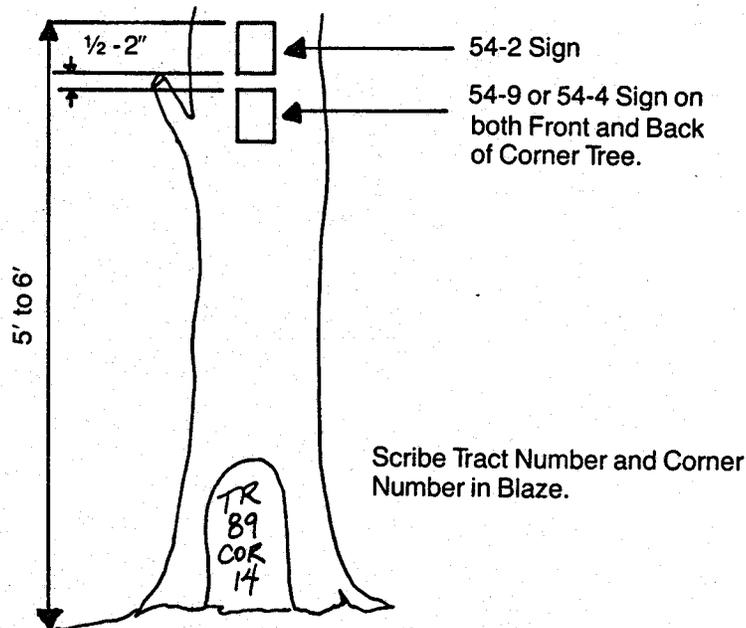
NOTES:

1. Rock Tablets shall be used in solid rock or in large planted stones impractical to remove.
2. The Contractor shall clean the rock surface and provide for drainage.
3. Rock tablets shall be flush to surface.

CORNER TREES



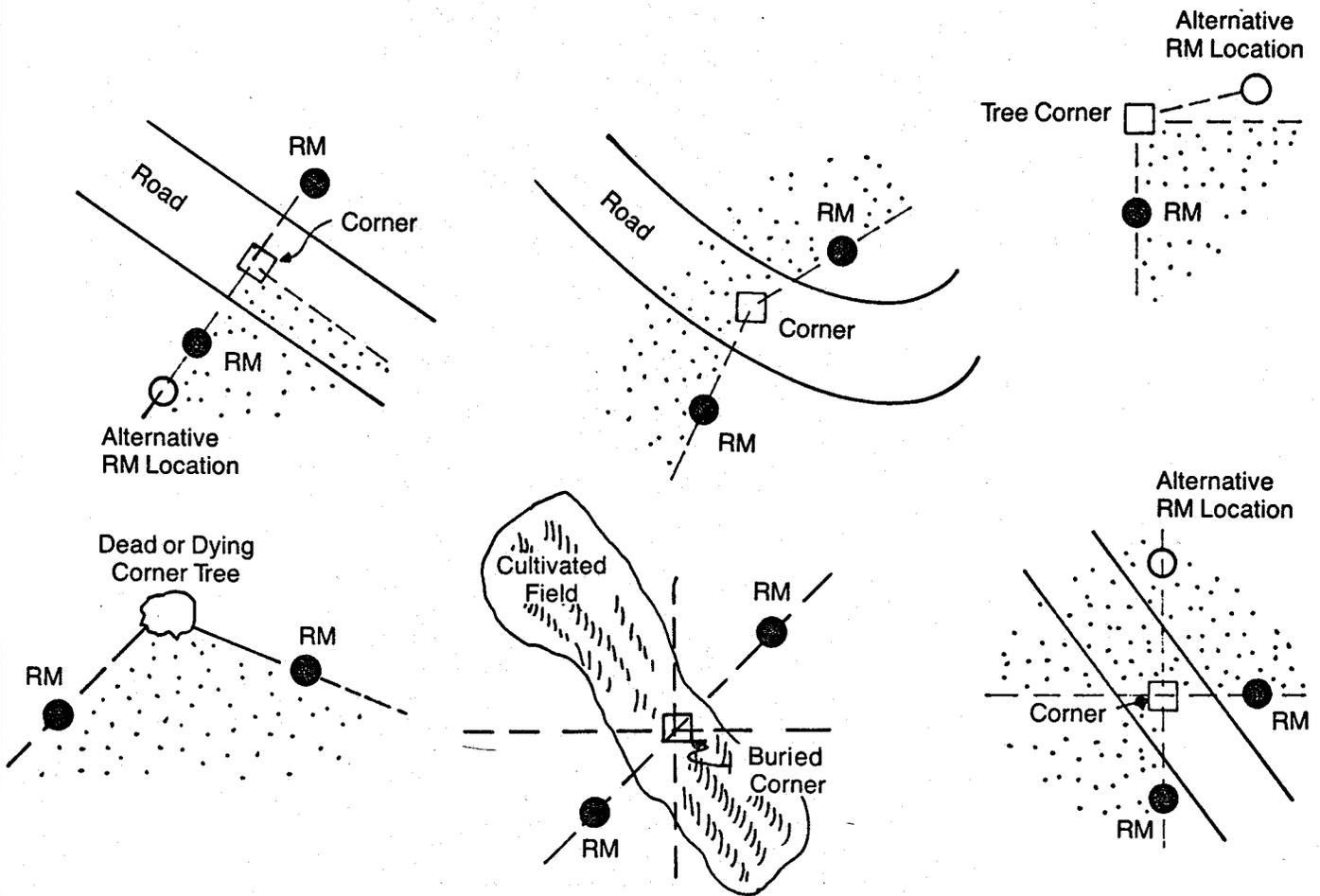
TYPICAL FRONT VIEW OF CORNER TREE



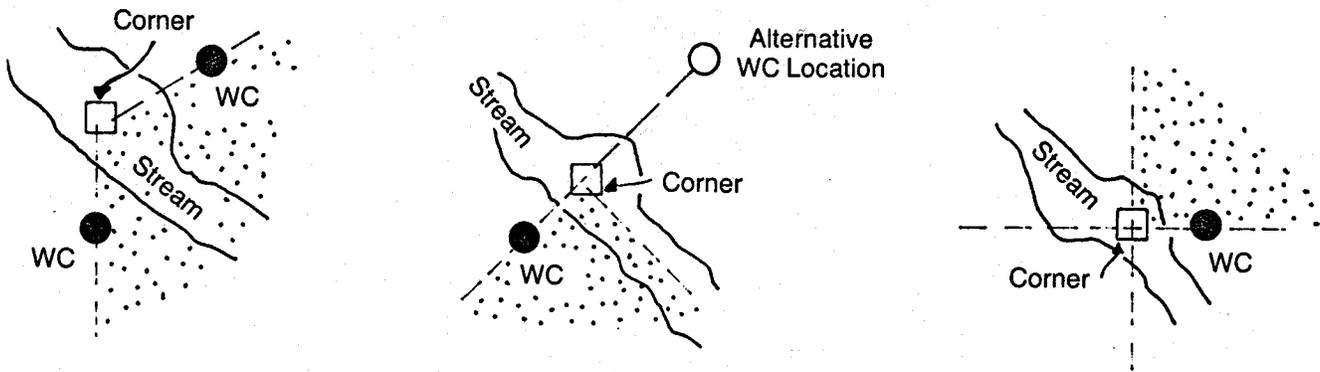
NOTES:

1. Bisect Boundary Line Angle to Determine the Front of the Tree.
2. The 3 hacks on the incoming and outgoing lines shall be 3" to 4" apart, and 3' to 4' above the ground.
3. Smooth bark maple, beech and holly shall not be blazed, but shall be scribed and painted as if blazed.
4. Paint shall be neatly applied.
5. Original corner trees shall not be rescribed.
6. Signs shall be attached to corner trees with 2 aluminum nails. The nail shall be left protruding at least 1" on trees to allow for growth.

TYPICAL PLACEMENT OF REFERENCE MONUMENTS



TYPICAL PLACEMENT OF WITNESS CORNERS



NOTES:

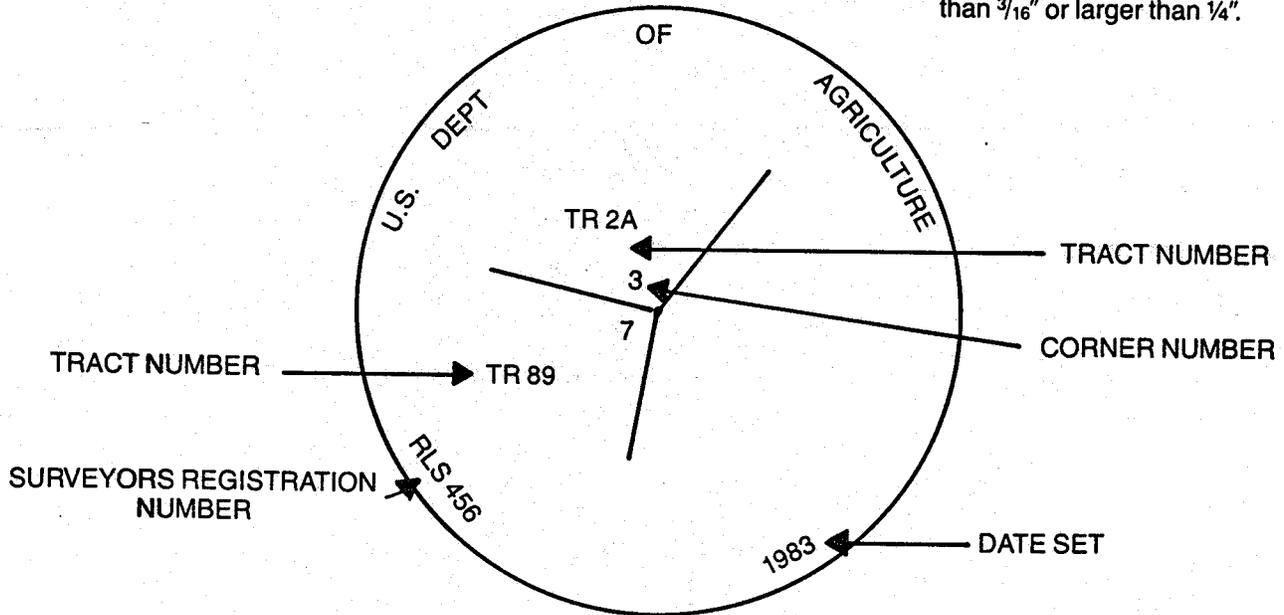
1. In sectionalized land the Manual shall be used.
2. Witness corners and reference monuments shall be placed on the Forest Service property line; however, if impractical, off line WC's and RM's may be used.

 National Forest Land

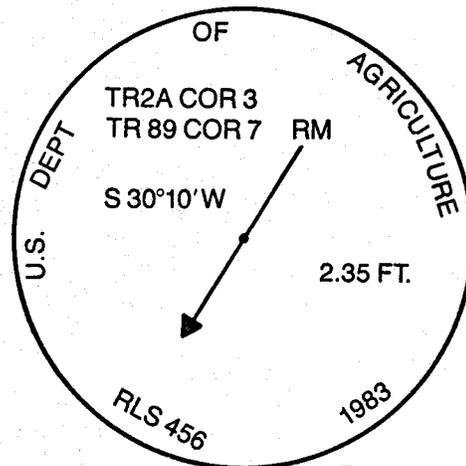
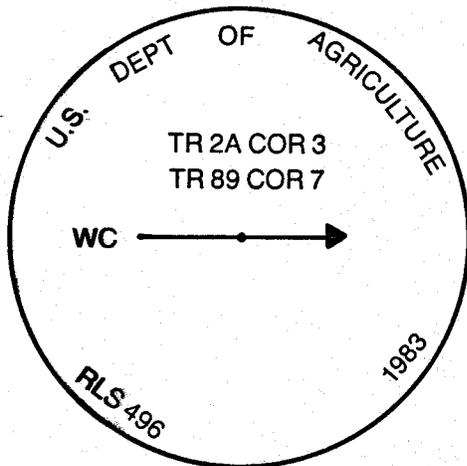
TYPICAL STAMPING OF MONUMENTS METES AND BOUNDS

CORNER MONUMENT

Note: Lettering size shall be no smaller than 3/16" or larger than 1/4".



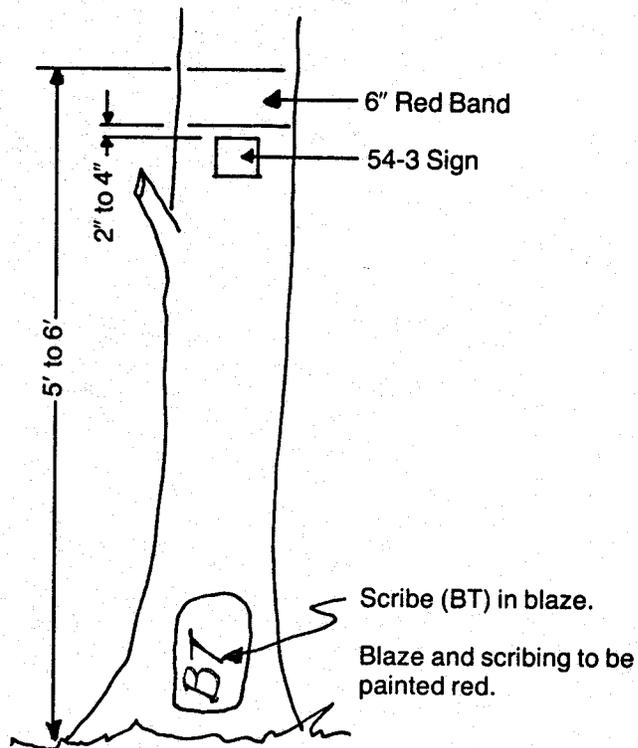
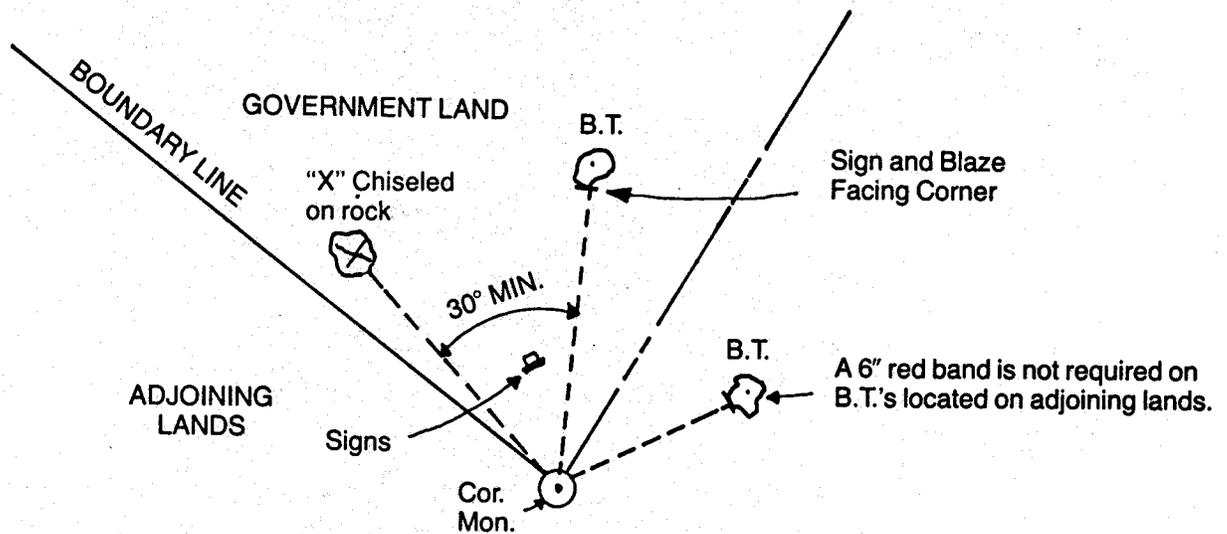
WITNESS AND REFERENCE MONUMENT



Bearing and distance from reference monument to corner.

BEARING TREES

TYPICAL PLAN VIEW OF B.T. LAYOUT



TYPICAL BEARING TREE ON GOVERNMENT LAND

NOTES:

1. B.T.'s shall be base blazed, scribed "BT" and painted red, with 54-3 signs attached.
2. Smooth bark maple, alder, aspen etc., shall not be blazed, but shall be scribed and painted as if blazed.
3. Scribing on existing bearing trees shall not be disturbed.
4. B.T.'s on Government land shall have 6" band painted red around the tree. Bark shall be smoothed prior to painting.
5. Paint shall be neatly applied.
6. The contractor shall stamp or etch the required information on the 54-3 signs.
7. Signs shall be attached to bearing trees with 2 aluminum nails. The nail shall be left protruding at least 1" on trees to allow for growth.

EXAMPLE CORNER CARD (FORM-7100-52)

FRONT

USDA-FOREST SERVICE		CORNER RECORD (SEARCH)		Tract or	Cor. 1/4
Index	T-13	(Ref. FSM 7151.4)		Survey No.	No.
File No.		R.D.	Hebo	County	Tillamook
T 5 S	R. 9 W	N.F.	Siuslaw	State	Oregon
Merid.	WM				
CORNER DIAGRAM		DESCRIBE CORNER MONUMENT FOUND			
		Found a 4"x4"x30" old cedar post, a 3/4" iron pipe and fir post in a mound of earth. Aluminum post with a location poster and boundary sign is 2' east.			
PHOTO IDENTIFICATION DATA Photo No. 126-22 Field At. Hebo RD Object Ident. Precise Ident. By _____ Signature _____		DESCRIBE BEARING TREES OR OTHER OFFICIAL ACCESSORIES FOUND			
PLANE COORDINATE POSITION DATA State _____ Zone _____ X _____ Y _____ Estab. By _____ Agency _____		A green fir, 30" diam., bears N61°E., 29 lks. Face healed and did not open. A fir snag, 36" diam., bears N10°W. (Record: N16°W), 10 lks., open blaze scribed 1/4 S BT.			
		DESCRIBE CORNER LOCATION RELATIVE TO NEAR-BY FEATURES, ALSO HOW TO REACH CORNER			
		Go west up old Nestua Toll Road 1/4 mile from Highway 22 to edge of timber. Location poster on 10" cedar on right side of road. Go south 3.5 chs. to corner.			
Signature Johnny Broadleaf		Title Forester	Division	Headquarters Hebo RD	Date 8/22/82
				Date	FS-7100-52 (3/68)

INSTRUCTIONS - Numbers refer to those indicated on the card

- 1 - Self-explanatory. R.D. denotes Ranger District and N.F. denotes National Forest.
- 2 - Describe the monument found.
- 3 - Describe the accessories found.
- 4 - Describe general location, how to reach, local witnesses and general information.
- 5 - The person or contractor, and date of recovery.
- 6 - Sketch showing major topographic features and B.T.'s in approximate relationship to corner.
- 7 - Identify aerial photograph and tie to picture point. NOT REQUIRED UNLESS SHOWN IN SUPPLEMENTAL SPECIFICATIONS.
- 8 - Self-explanatory. NOT REQUIRED UNLESS SHOWN IN SUPPLEMENTAL SPECIFICATIONS.

EXAMPLE CORNER CARD (FORM-7100-52)

INSTRUCTIONS - Numbers refer to those indicated on the card

- 9 - Describe work done in remonumenting, refurbishing, or remarking the corner. Fully describe any new monument set.
- 10 - Describe work done to preserve old bearing trees, and fully describe all new bearing trees and objects set.
- 11 - The registered surveyor who accomplished the work, or who supervised it.
- 12 - May be used for information from front of card or other comments.
- 13 - Self-explanatory.

Note: Cards shall be typed or completed neatly in ink.

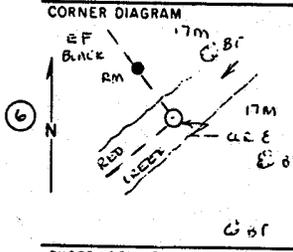
BACK

CORNER RECORD (PERPETUATION)						
MONUMENT	DESCRIBE NEW MONUMENT SET, OR WORK DONE TO PRESERVE EXISTING MONUMENT					
<p>Set a 2" x 30" aluminum pipe with cap marked:</p> <p>Pipe is set 24" in the ground with a collar of stone.</p> <p>Buried iron pipe alongside</p>	<p>T5S R9W 1/4 S28 S27 RLS 000 1983</p> <p style="text-align: right;">④</p>					
ACCESSORIES	DESCRIBE NEW BT'S WITNESS OBJECTS ETC. ESTABLISHED, OR WORK DONE TO PRESERVE EXISTING EVIDENCE					
<p>A cedar, 27" diam., bears S45° E, 24 lks., blazed and scribed 1/4 S27 BT.</p> <p>Painted a red band around all bearing trees and attached 54-3 "Bearing Tree" signs.</p> <p>Set a steel fence post 3' north of monument with 54-2 and 54-9 signs.</p>	<p style="text-align: right;">⑩</p>					
10						
<p>Work Done By <u>John B Theo</u> Title <u>Land Surveyor</u> Date <u>5/10/83</u> State Registration No. <u>RLS 000</u></p>	⑪					
<p>Certified Cor Record Prepared? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Filed At <u>Tillamook County</u> Date <u>7/5/83</u></p>	⑫					
REMARKS						
Index File No	T.	R.	M.	Tract or Surv No	Cor	12
						⑬

RETRACEMENT SURVEYS

EXAMPLE CORNER CARD (FORM-7100-52)

FRONT

USDA-FOREST SERVICE Index File No. _____ T _____ R. _____ R.D. <u>Washington</u> County <u>Orange</u> Tract or Survey No. <u>17m</u> Cor. No. <u>8</u> ① Merid. _____ N.F. <u>Jefferson</u> State <u>Virginia</u> Page <u>6</u>	
CORNER DIAGRAM 	DESCRIBE CORNER MONUMENT FOUND 1936 USA description called for point in G Red Creek, with set stone Witness Corner bearing 421°49'W, 0.303 chains Found a planted stone with "X" mark on NW bank of Red Creek. Trace of red paint on one side. ②
PHOTO IDENTIFICATION DATA Photo No. _____ Filed At _____ Object Ident. _____ Ident. By _____ Signature _____ ⑦	DESCRIBE BEARING TREES OR OTHER OFFICIAL ACCESSORIES FOUND 1936 USA Description called for: 1 - 18" hemlock, S70°E, 0.26 ch. 2 - 16" red oak S10°E, 0.40 ch. Found: 1 - 24" hemlock bearing S70°16'E, 17.19' ③ 2 - Dead and down 17" cak near bearing and distance called for. ③
PLANE COORDINATE POSITION DATA State _____ Zone _____ X _____ Y _____ Estab. By _____ Signature _____ Agency _____ ⑧	DESCRIBE CORNER LOCATION RELATIVE TO NEAR-BY FEATURES, ALSO HOW TO REACH CORNER ④ From St. Rte. 999, go approximately 1 mile south on private gravel road to E.F. Black's house. Corner is located about 900' east of house. ④
Signature <u>Thomas Washington</u> Title <u>Land Surveyor</u> Division _____ Headquarters _____ Date <u>12/15/82</u> FS-7100-52 (3/68) ⑤	

INSTRUCTIONS - Numbers refer to those indicated on the card

- 1 - Self-explanatory. R.D. denotes Ranger District and N.F. denotes National Forest.
- 2 - Divide this section into two parts. In the left section describe the corner monument called for in the Government description or Government Corner Card. In the right section describe the monument found.
- 3 - Divide this section into two parts. In the left section describe the accessories called for in the Government description or Government Corner Card. In the right section describe the accessories found.
- 4 - Describe general location, how to reach, local witnesses and general information.
- 5 - The person or contractor, and date of recovery.
- 6 - Sketch showing major topographic features and B.T.'s in approximate relationship to corner.
- 7 - Identify aerial photograph and tie to picture point. NOT REQUIRED UNLESS SHOWN IN SUPPLEMENTAL SPECIFICATIONS.
- 8 - Self-explanatory. NOT REQUIRED UNLESS SHOWN IN SUPPLEMENTAL SPECIFICATIONS.

EXAMPLE CORNER CARD (FORM-7100-52)

INSTRUCTIONS - Numbers refer to those indicated on the card

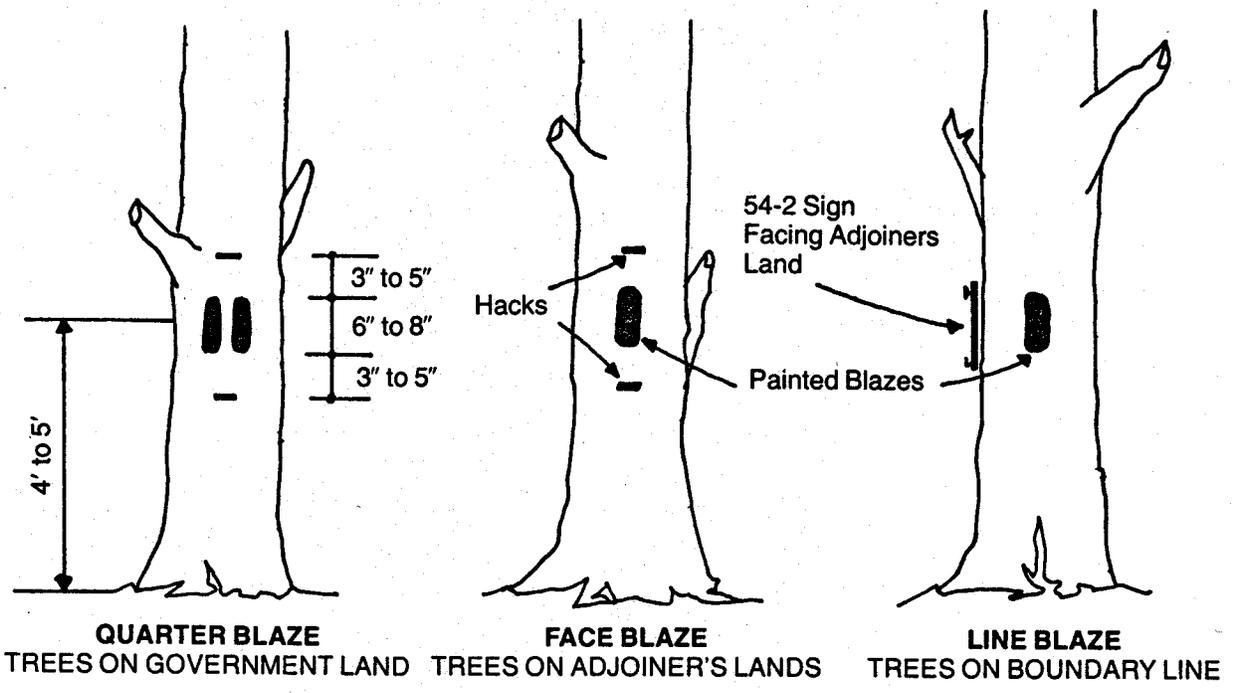
- 9 - Describe work done in remonumenting, refurbishing, or remarking the corner. Fully describe any new monument set.
- 10 - Describe work done to preserve old bearing trees, and fully describe all new bearing trees and objects set.
- 11 - The registered surveyor who accomplished the work, or who supervised it.
- 12 - May be used for information from front of card or other comments.
- 13 - Complete Tract No. and Corner No. only.

Note: Cards shall be typed or completed neatly in ink.

BACK

CORNER RECORD (PERPETUATION)	
<p>MONUMENT DESCRIBE NEW MONUMENT SET, OR WORK DONE TO PRESERVE EXISTING MONUMENT</p> <p>Replaced planted stone witness corner with a 2"x30" aluminum pipe with aluminum cap stamped as shown. Constructed mound of stones around monument and painted red. Old witness corner is in mound of stones. Set 54-2 and 54-9 signs.</p>	
<p>ACCESSORIES DESCRIBE NEW B.T.'s WITNESS OBJECTS ETC. ESTABLISHED, OR WORK DONE TO PRESERVE EXISTING EVIDENCE</p> <p>1 - 24" hemlock bears S70°16'E, 17.19' - old B.T. 2 - 6" white oak bears N26°18'E, 19.43' - new B.T. 3 - 9½" hemlock bears S38°26'E, 49.74 - new B.T.</p> <p>New B.T.'s are base blazed, and scribed "BT" with blaze painted red. All B.T.'s have 6" band painted red 6' above ground with 54-3 sign attached.</p>	<p>10</p>
<p>Work Done By <u>Thomas Washington</u> Title <u>Land Surveyor</u> Date <u>10/15/82</u> State Registration No <u>CLS 0000</u></p> <p>Certified Cor Record Prepared? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Filed At _____ Date _____</p>	<p>11</p>
REMARKS	
<p>Index File No. _____ T. _____ R. _____ M. _____</p>	<p>Tract XXXXXX No <u>17M</u> Cor <u>8</u></p>
GPO: 1982 O-382-659	
<p>12</p> <p>13</p>	

BLAZES, HACKS AND MARKING, BOUNDARY LINE

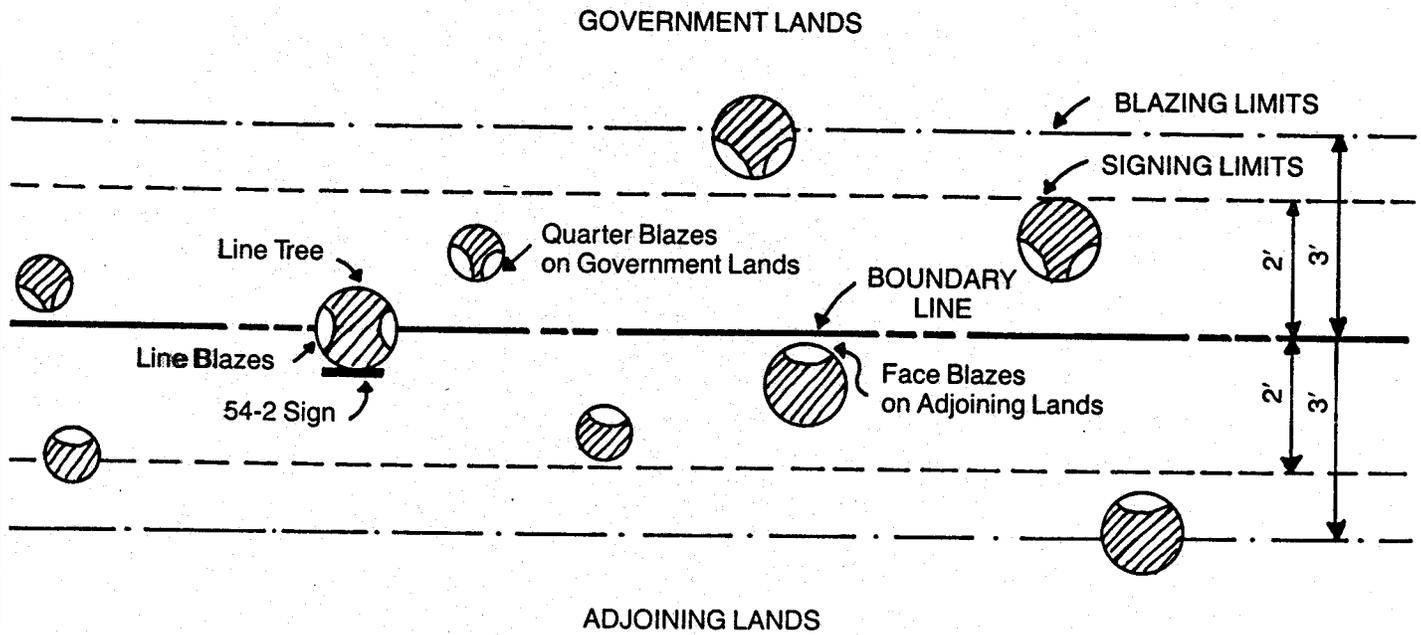


Permission shall be obtained from adjoining landowners before their side of the boundary line is cleared, marked, painted or signed. Refer to Section 142.

NOTES:

1. The three types of markings used on trees along Forest Service boundary lines are referred to as Quarter Blazes, Face Blazes, and Line Blazes. The markings are used at the locations shown on page 2 of this exhibit.
2. A blaze is made by cutting off a vertical strip of bark and a very thin layer of the underlying wood tissue. The strip shall be about 6 to 8 inches long, 2 to 4 inches wide, and the top and bottom ends shall be smoothed out.
3. A hack is a single cut made with an ax or similar cutting tool about 4 inches above and below the blaze. The cut shall go through the bark and penetrate well into the wood.

BLAZES, HACKS AND MARKING, BOUNDARY LINE



NOTES:

1. Permission shall be obtained from adjoining landowners before their side of the boundary line is cleared, marked, painted or signed.
2. Trees less than 3" in diameter shall not be blazed, but shall be painted as if blazed.
3. Trees on Government Land, and within 3' of the boundary line shall be quarter blazed and hacked, as shown in these exhibits.
4. Trees on Adjoining Land, and within 3' of the boundary line shall be face blazed and hacked as shown in these exhibits.
5. Trees on the Boundary Line, shall be line blazed on both sides of the tree along the direction of the line, as shown in these exhibits.
6. Painting. Painting shall be neatly applied. Only blazes shall be painted.

SIGNS



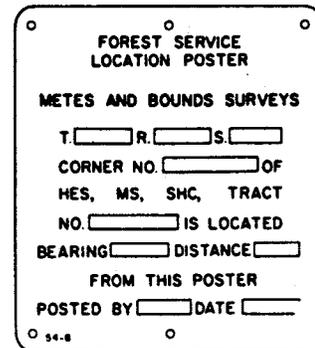
54-2



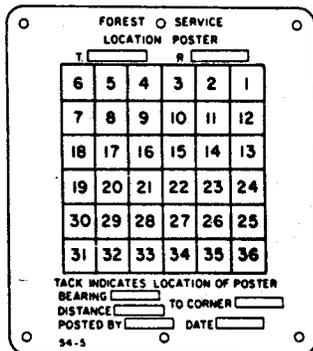
54-2
(Decal)



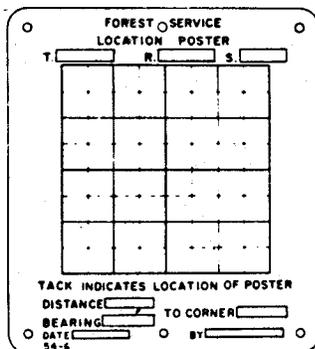
54-3



54-8



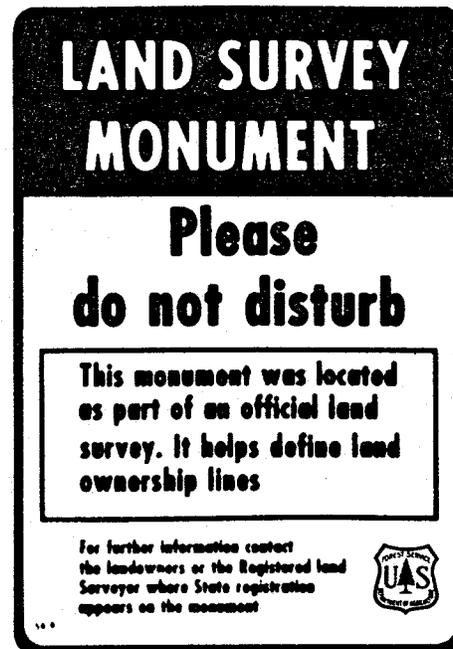
54-5



54-6



54-9
(Decal)

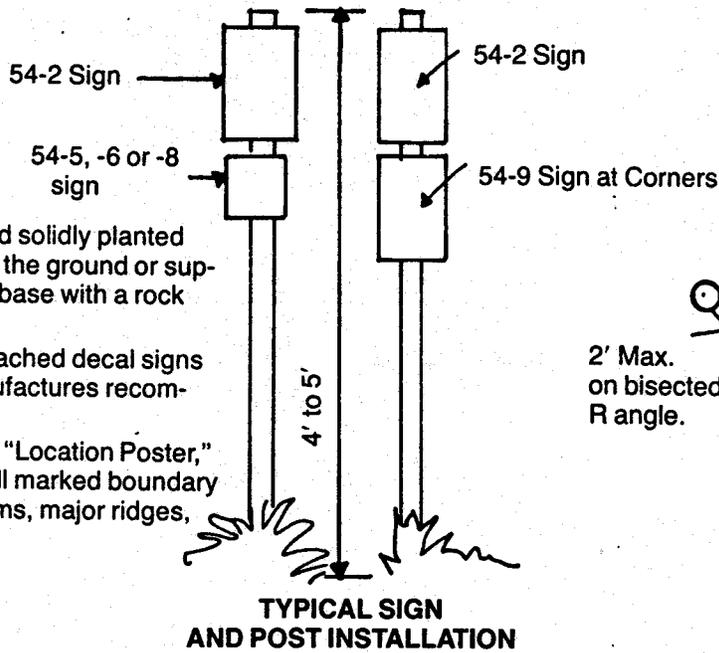


54-9

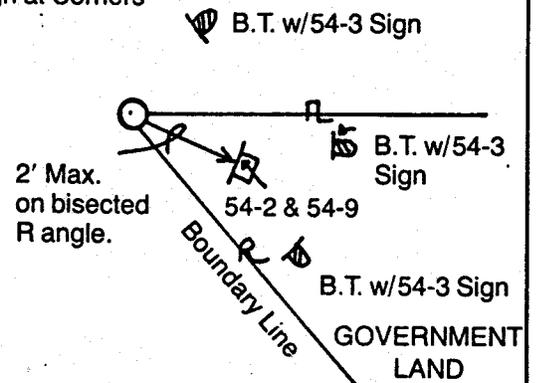
SIGN PLACEMENT

NOTES:

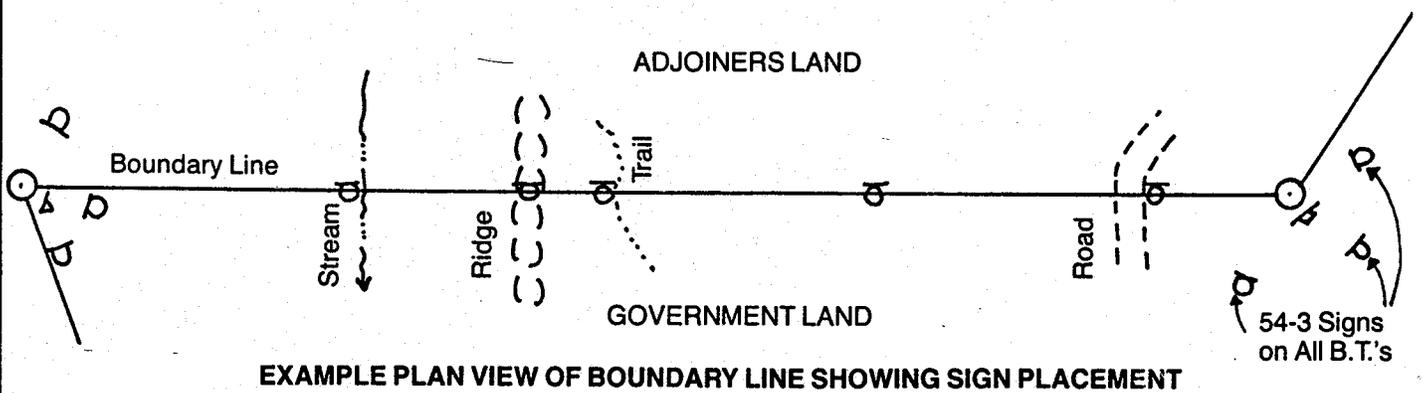
1. Posts shall be plumb and solidly planted with a minimum of 12" in the ground or supported to 24" above the base with a rock mound.
2. Glass fiber post with attached decal signs shall be set as per manufactures recommendations.
3. Sign 54-5, 54-6, or 54-8, "Location Poster," shall be placed where all marked boundary lines cross roads, streams, major ridges, and trails.



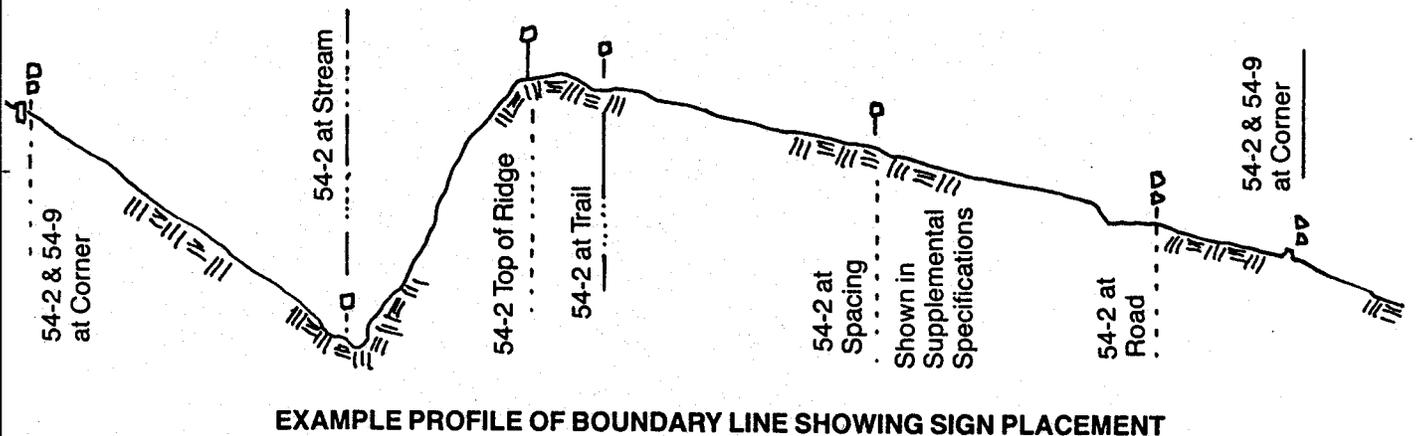
SIGNS AT CORNERS



TYPICAL SIGN AND POST INSTALLATION

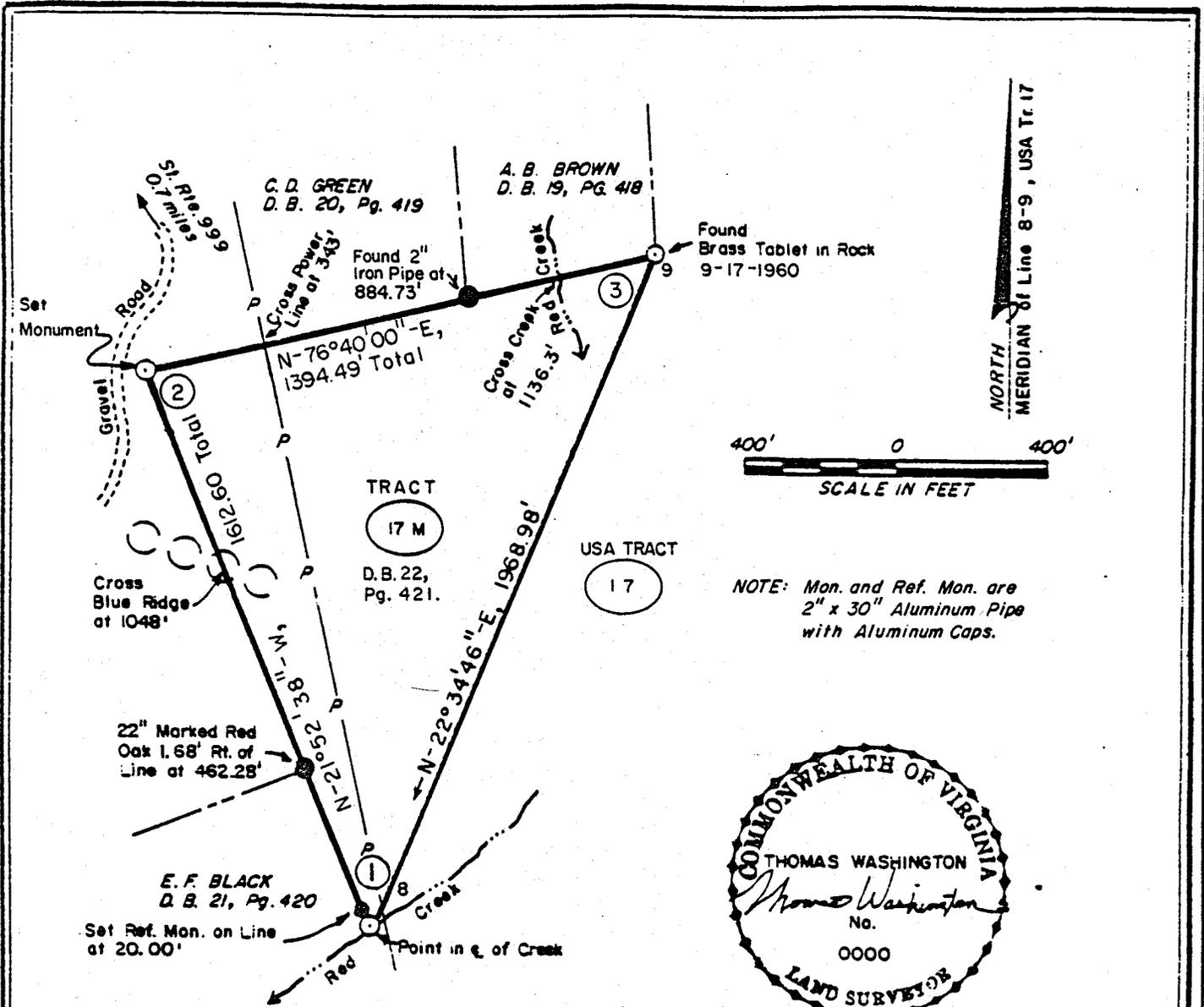


EXAMPLE PLAN VIEW OF BOUNDARY LINE SHOWING SIGN PLACEMENT

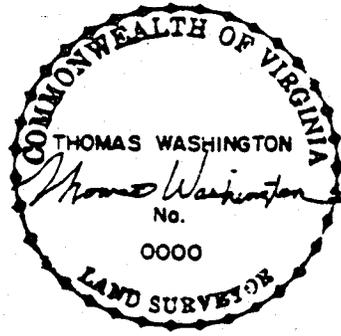


EXAMPLE PROFILE OF BOUNDARY LINE SHOWING SIGN PLACEMENT

EXAMPLE PLAT



NOTE: Mon. and Ref. Mon. are 2" x 30" Aluminum Pipe with Aluminum Caps.



I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, IS CORRECT AND COMPLIES WITH THE MINIMUM PROCEDURES AND STANDARDS ESTABLISHED BY THE VIRGINIA STATE BOARD OF ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND CERTIFIED LANDSCAPE ARCHITECTS.

G. H. WHITE
 TRACT 17m
 ORANGE MAGISTERIAL DISTRICT
 Orange County, Virginia
 CONTAINING 25.53 ACRES

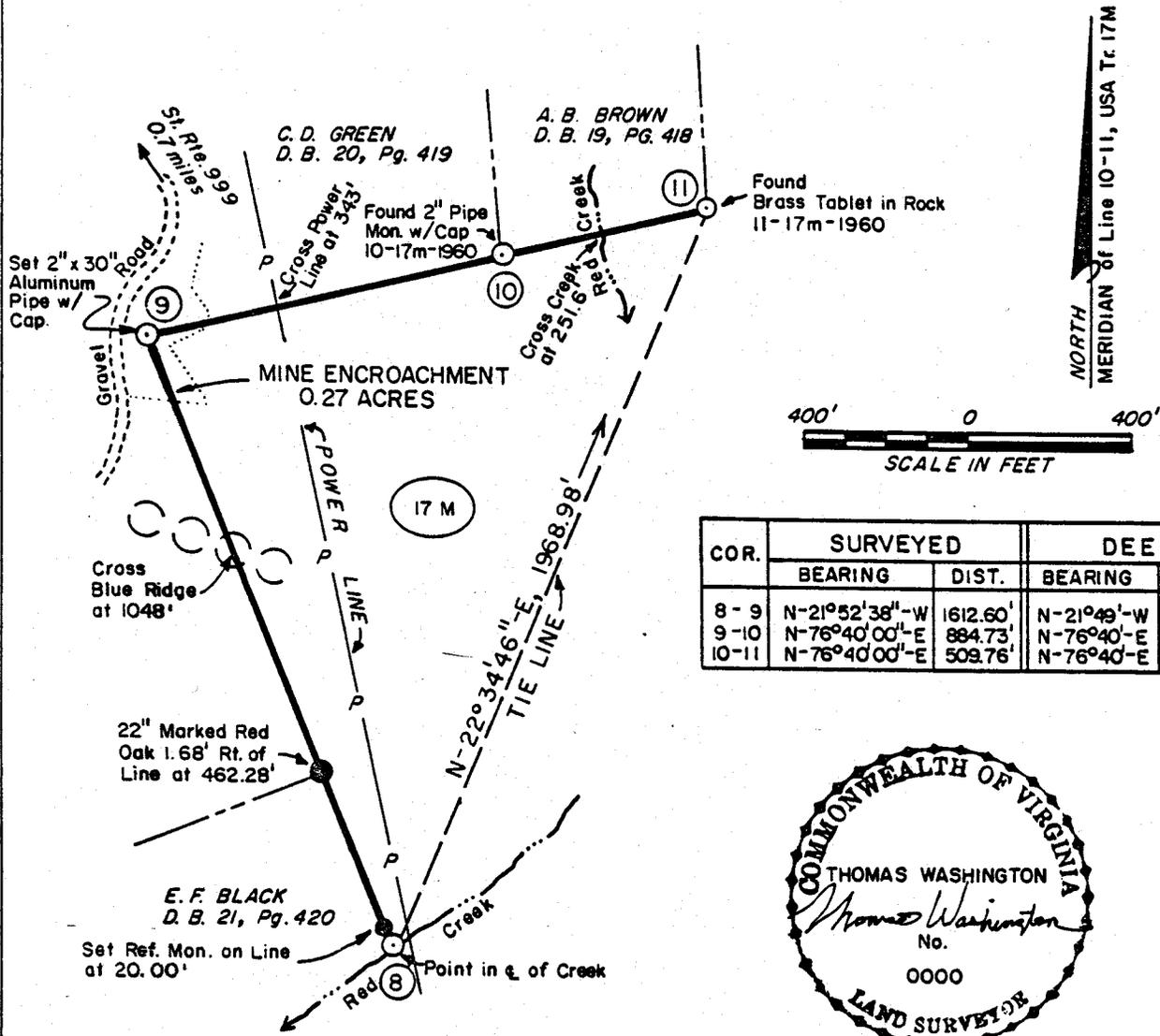
Thomas Washington 12-22-82
 THOMAS WASHINGTON C.L.S. 0000 DATE

5420- PURCHASE
 JEFFERSON- Washington R.D.
 Contract No. 53-432P-2-19
 Date: Dec. 1- Dec. 21, 1982

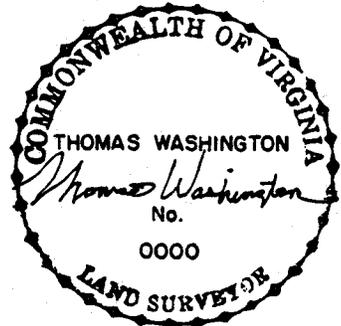
Atlas Sheet: 3-85
 Fieldbook: R-C19
 Party Chief: L. White
 Plat by: *DLANOR N. UNDERWOOD*
 Approved by: *Thomas Washington*
 Land Surveyor C.L.S. No. 0000

SAMPLE SURVEYS, INC.
 LAND SURVEYORS.
 ROUTE 1, BOX 1
 ORANGE, VIRGINIA 24411
 PHONE (703) 555-4444

EXAMPLE PLAT



COR.	SURVEYED		DEED	
	BEARING	DIST.	BEARING	DIST.
8-9	N-21°52'38"-W	1612.60'	N-21°49'-W	1613.70'
9-10	N-76°40'00"-E	884.73'	N-76°40'-E	884.40'
10-11	N-76°40'00"-E	509.76'	N-76°40'-E	510.84'



I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, IS CORRECT AND COMPLIES WITH THE MINIMUM PROCEDURES AND STANDARDS ESTABLISHED BY THE VIRGINIA STATE BOARD OF ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND CERTIFIED LANDSCAPE ARCHITECTS.

Thomas Washington 12-22-82
 THOMAS WASHINGTON C.L.S. 0000 DATE

BOUNDARY LINE RETRACEMENT
 A PORTION of USA TRACT 17-M
 ORANGE COUNTY, VIRGINIA
 0.570 Miles of Line, 2 Corners Monumented, and 2 Corners Refurbished to Forest Service Standards

RETRACEMENT
 JEFFERSON- Washington R.D.
 Contract No. 53-432P-2-19
 Date: Dec. 1- Dec. 21, 1982

Atlas Sheet: 3-85
 Fieldbook: R-C19
 Party Chief: L. White
 Plat by: *DLANOR N. UNDERWOOD*
 Approved by: *Thomas Washington*
 Land Surveyor CLS No. 0000

SAMPLE SURVEYS, INC.
 LAND SURVEYORS
 ROUTE 1, BOX 1
 ORANGE, VIRGINIA 24411
 PHONE (703) 555-4444

EXAMPLE SURVEY DESCRIPTION

DESCRIPTION

G. H. WHITE

TRACT 17m

Orange Magisterial District

Orange County, Virginia

Containing 25.53 Acres

to be conveyed to

UNITED STATES OF AMERICA

JEFFERSON NATIONAL FOREST

5420-PURCHASE
JEFFERSON-Washington R.D.
White, G. H.

Atlas Sheet: 3-85
Fieldbook: R-CL9
December 22, 1982

EXAMPLE SURVEY DESCRIPTION

DESCRIPTION
G. H. WHITE
TRACT 17m

Being that tract of land located in the Orange Magisterial District, Orange County, Virginia, south of State Route 999, on the Waters of Red Creek, and being that same land conveyed to G. H. White from I. J. Green by deed dated August 14, 1964, and recorded in Deed Book 22, at page 421, in the Orange County Circuit Court Clerk's Office, and more particularly described as follows:

BEGINNING AT CORNER 1, which is corner 8 of USA Tract 17, and a corner common to E. F. Black, a point in the center of Red Creek. Found a planted stone marked with an "X" $N21^{\circ}52'38''W$, 20.00 feet from the corner. Replaced said stone with a 2"x30" aluminum pipe with aluminum cap, and marked the following bearing trees: a 24" hemlock, an old bearing tree, bears $S70^{\circ}16'E$, 17.19 feet; a 6" white oak bears $N26^{\circ}18'E$, 19.43 feet; and a $9\frac{1}{2}$ " hemlock bears $S38^{\circ}26'E$, 49.74 feet.

Thence which said Black, $N21^{\circ}52'38''W$, passing a 22" marked red oak 1.68 feet right of line at 462.28 feet, common to Black and C. D. Green. Thence continuing on the same line with Green, crossing Blue Ridge at 1048 feet, in all 1612.60 feet to CORNER 2, where an iron pin was called for but not found. Set a 2"x30" aluminum pipe with aluminum cap, and marked the following bearing trees: a 6" hemlock bears $N81^{\circ}27'E$, 19.74'; and a 24" white oak bears $S28^{\circ}15'E$, 36.30 feet.

Thence $N76^{\circ}40'00''E$, crossing a power line at 343 feet, a 2" iron pipe, corner to Green and A. B. Brown at 884.73 feet, Red creek at 1136.3 feet, and in all 1394.49 feet to CORNER 3, which is corner 9 of said USA Tract 17. Found a brass tablet in a rock outcrop stamped 9-17-1960, with the following marked bearing trees: a 12" ample bears $N15^{\circ}18'E$, 9.4 feet; and a 16" red oak bears $S59^{\circ}11'E$, 19.4 feet.

Thence $S22^{\circ}34'46''W$, 1968.98 feet to CORNER 1, THE POINT OF BEGINNING, containing 25.53 acres, as shown on a plat attached hereto and made a part of this description.

EXAMPLE SURVEYOR'S REPORT

SURVEYOR'S REPORT
RETRACEMENT SURVEY
A PORTION OF USA TRACT 17m
JEFFERSON NATIONAL FOREST

Deed description of all adjoining lands were obtained and compared to the Government description. Only minor differences were noted in the bearings and distances.

All adjoining land owners were contacted and informed of Forest Service plans to survey the boundary lines. Permission was granted by all adjoining owners to mark their side of the line. C.D. Green asked to be present when his lines were marked.

The survey began near corner 8, and continued in a clockwise direction to corner 11. A tie line was then run to the point of beginning. The error of closure of the traverse was 1/12400. All corner monuments were found except corner 9. A 24" white oak bearing tree was found near that corner.

The bearing from corner 10, and the distance (36.30') from the bearing tree were intersected to locate corner 9.

A 0.27 acre coal strip mine encroachment is shown on the plat. C.D. Green said the encroachment occurred prior to his acquiring the land. He bought the land from E.F. Black 4 years ago. According to Green, Black sold the coal to S&J Mining Company in 1975.

A 22' red oak, corner to Green and Black, was found to be 1.68' on Government land. Mr. Green said the red oak was corner he and Black had agreed to when he bought his land from Black. He said he knew the tree was near the old marked line, but not sure whether or not it was exactly in line.

Marking the lines and corners to standard was completed December 20, 1982.



Thomas Washington
THOMAS WASHINGTON, CLS 0000

Contract No. 53-43ZP-2-19, completed by:

SAMPLE SURVEYS, INC.
Rte 1, Box 1
Orange, Virginia 24444