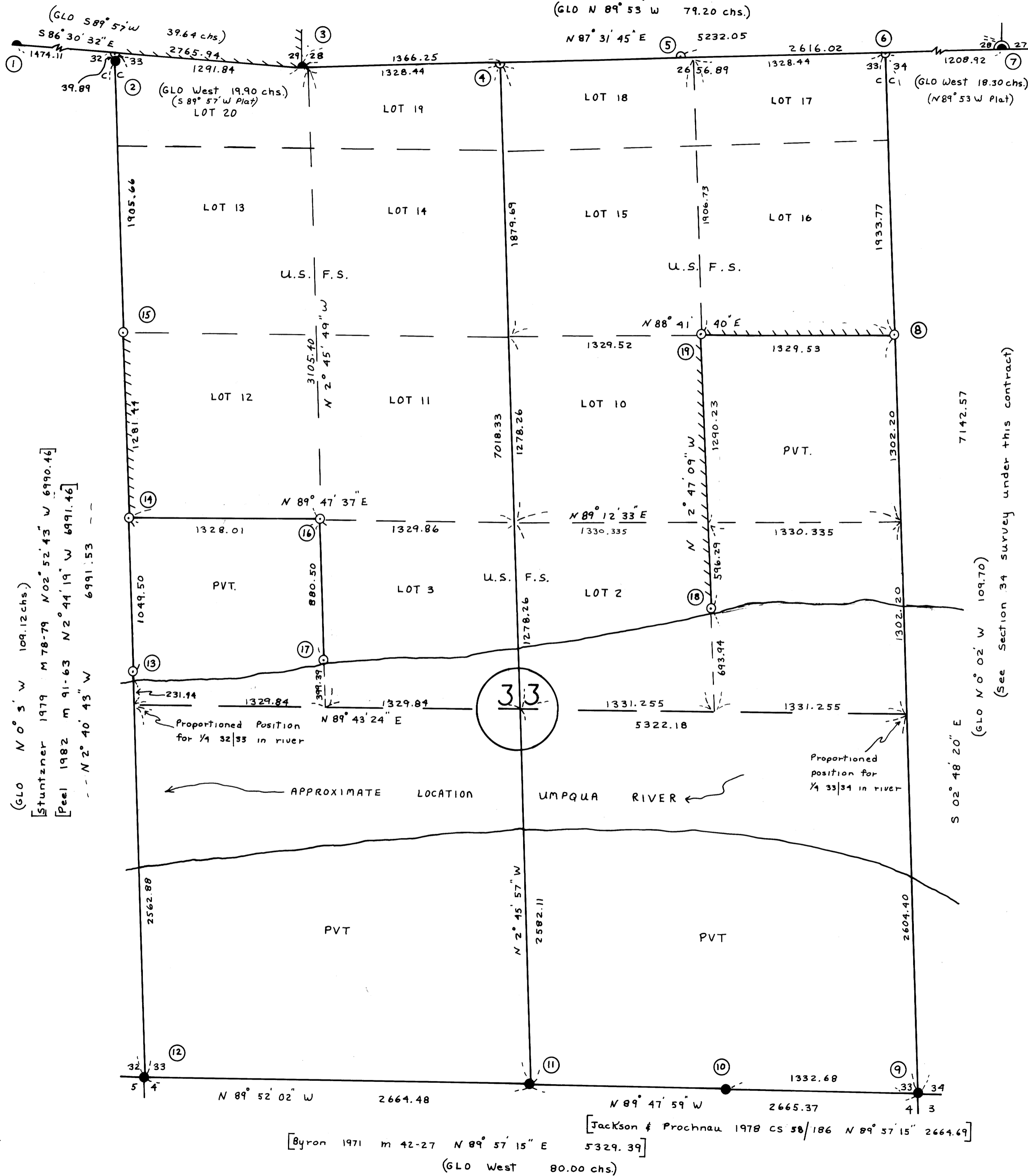
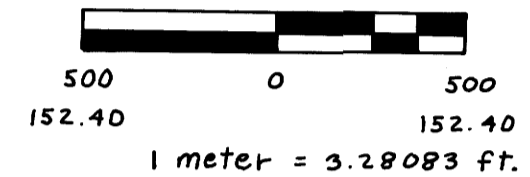


(See Section 28 survey under this contract)



SURVEY FOR  
**U.S. FOREST SERVICE**  
**SMITH-UMP CADASTRAL**  
**CONTRACT NO. 53-04T0-3-0935N**  
**SECTION 33, T21S, R11W, W. M.**  
**DOUGLAS COUNTY, OREGON**

SCALE 1" = 500'



FEBRUARY 24, 1984

LEGEND

- Corner evidence found
- ⊙ Corner evidence found from adjacent survey under this contract.
- Corner set by survey
- ▬ Property line posted with 6' fiberglass posts with F.S. decals 54-2a or 1/2"x5" rebar with F.S. signs 54-2.
- [ ] Bearings and distances of record by other surveys.
- ( ) Bearings and distances of record from original GLO survey.

Narrative: This survey is a closed traverse by T-16 theodolite with DI-4 EDM and T-1 theodolite with Citation 460 EDM, made by Jackson & Prochnau, Inc., P.O. Box 177, Albany, Oregon 97321. The South boundary of the township, the meanders of the Umpqua River and subdivision of portions of the township along the river was originally done by W.H. Gyars in 1879. William Thiel subdivided portions of the township North of the river in 1891. The Southwest corner of Section 28, corner No. 3, as monumented by Stuntzner M 78-79, was accepted by our survey as the original section corner established in 1891. Acceptance is based on the 36" Cedar bearing tree and supporting topographic calls to the West. The Cedar is the correct age and size (12" per GLO notes) and was opened up in the 1950's. No scribing can be found due to heart rot. The position for the corner, as determined from the Cedar, falls 63 ft. East of a creek bearing Southwesterly, which fits with the original call of 1.00 chains. The calls further West fit very good. The position for the corner was accepted by Hintz M 70-10, and Hootman M 15-23. The closing corner 32|33 was monumented on line between corner 1 and corner 3. Corner Nos. 4, 5, 6 and 13 were set by single proportion measure following a thorough search of the respective areas. In order to subdivide the section, proportioned positions for the East and West 1/4 corners were computed. Both corners fall in the river and were not originally set. The N 1/16 32|33, No. 14 and 1/16 80 32|33, 15, were previously monumented by Stuntzner, M 78-79, in 1979. Stuntzner's positions per his survey, for the N 1/16 32|33 bears S 3° 05' 39" W 0.56 ft, and for the 1/16 80 32|33 brs N 73° 37' 06" 4.15 ft, from the proportioned positions monumented by our survey. Stuntzner removed his monuments during the course of our survey.

REGISTERED  
 PROFESSIONAL  
 LAND SURVEYOR

JAMES W. PROCHNAU  
 OREGON  
 SEPTEMBER 21, 1977  
 JAMES W. PROCHNAU  
 1305

I, James W. Prochnau, a registered Land Surveyor in the State of Oregon, hereby certify that this plat and the notes hereon, or attached, are a correct representation of a survey I performed during October 1983 through February 1984 for the U.S. Forest Service in accordance with the statutes of the State of Oregon and with the articles of my contract.

James W. Prochnau  
 PLS 1305 Oregon

[Byron 1971 m 42-27 N 89° 57' 15" E 5329.39]  
 (GLO West 80.00 chs.)  
 [Jackson & Prochnau 1978 CS 58/186 N 89° 57' 15" 2664.69]

(GLO N 0° 5' W 109.12 chs.)  
 [Stuntzner 1979 M 78-79 N 02° 52' 43" W 6990.46]  
 [Peel 1982 m 91-63 N 2° 44' 19" W 6991.46]  
 N 2° 40' 43" W 6991.53

(See Section 34 survey under this contract)

5/8/294  
 M 96-64 A

SMITH - UMP CADASTRAL

Note: All new BT's are faced with a double blaze and marked per the BLM manual and in addition have a brass washer marked LS 1305 nailed flush in lower blaze. New BT's are tagged with USFS signs 54-4 and 54-3, and painted with a 6" red band. All corner monuments set are stamped per the BLM manual, plus township, range, 1984 and PLS 1305. Reference monuments at property corners were set within one minute of true bearing. 6 ft. fiberglass posts with decals LSM-130 or 1/2" x 5' rebar with signs 54-4 were set 3 to 5 ft. from all corners set as per contract. Field notes are in books 3, 5, 8, 11, 14, 15 and 19. Contract No. 53-0470-3-0935 N

CORNER NO.	MONUMENT	ACCESSORIES	CORNER NO.	MONUMENT	ACCESSORIES
1	Fd. 2 1/2" brass cap on 2" G.I. pipe set by Peel.	Fd. orig. BT: 70" D. Fir bears S 14° E 33.0 ft. bark scribed - 3 "x's" on bark 1/4 S29 BT. Fd. Peel BT: 27" D. Fir bears N 27° E 32.2 ft. visible scribe 1/4 S29 BT.	13	"X" chopped in rock face by Stuntzner, LS 1342 brs. S 54° 38' E 0.38 ft. from true position. Set W.C. 3" alum. cap on 2 1/2" x 30" alum. pipe 11.27 ft. North on line from true position.	Fd. Stuntzner BT's: 9" Fir brs. N 44° E 10.8 ft. healed face; 34" Fir brs. East 49.3 ft. healed face. Fd. Stuntzner W.C. 5/8" iron rod 11.05 ft. North from "X". Iron rod 15 0.80 ft. East of true line. New BT's scribed to W.C.: 10" Madrone brs. N 73° W 7.0 ft. scribed x BT; 8" D. Fir brs. S 38° E 11.1 ft. scribed x BT.
2	Fd. 1" brass disk on T-iron. Set 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound. Haines monument for orig. cc. brs. S 2° 40' 45" E 39.89 ft.	Fd. orig. BT: 55" rotten Spruce snag brs. N 26° W 17.8 ft. Fd. Hootman BT's: 31" Spruce brs. N 9° W 34.5 ft. (rec. N 11° W 34.2 ft.) healed face; 38" Alder brs. S 41° W 47.6 ft. (rec. S 24° 30' W 47.1 ft.) vis. scribe. New BT: 32" Spruce brs S 33° W 7.5 ft. scribed T21S R11W CC S32 BT. Set R.M. - 3" alum cap on 2 1/2" x 30" alum. pipe brs. S 57° 41' 14" E 24.87 ft. marked RM CC. S33 1984 PLS 1305.	14	Set 2" alum. cap on 1 1/2" x 1/2" iron rod in sandstone.	New BT: 16" Red Cedar brs. S 37° E 16.2 ft. scribed N 1/16 S 33 BT. Set R.M. - 2" alum. cap on 1/2" x 12" iron rod bears S 40° 43' 35" W 45.50 ft. marked T21S R11W RM N 1/16 S 32 1984 PLS 1305.
3	Fd. 5/8" I.R. by Stuntzner LS 1342 in 1979. Set 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound. Buried iron rod.	Fd. orig. BT: 36" Cedar brs. N 10° E 23.1 ft. Fd. Stuntzner BT: 42" Hemlock brs. N 14° W 55.2 ft. (rec. N 16° W) vis. scribe. New BT: 15" Hemlock brs. N 70° W 63.5 ft. scribed T21S R11W S 29 BT. Set R.M. - 2" alum. cap on 1/2" x 24" iron rod brs. N 17° 12' 51" E 50.17 ft. marked RM SW. S28 1984 PLS 1305.	15	Set 3" alum. cap on 2 1/2" x 30" alum. pipe at true position. Rock mound.	New BT: 36" Red Cedar bears S 2° W 71.1 ft., scribed N 1/16 80 S 32. Set R.M. - 3" alum. cap on 2 1/2" x 30" alum. pipe bears N 59° 47' 09" E 43.20 ft. marked T21S R11W RM N 1/16 80 S 33 1984 PLS 1305.
4	Set 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound.	New BT's: 18" Alder brs. S 63° E 16.2 ft. bark scribed 1/4 S33 BT; 28" D. Fir brs. S 31° W 47.9 ft. scribed 1/4 S33 BT.	16	Set 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound.	New BT's: 26" Red Cedar brs. S 29° W 53.5 ft. scribed NW 1/16 S33 BT; 21" Red Cedar brs S 49° E 48.9 ft. chopped x BT.
5	Set 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound.	New BT's: 34" D. Fir brs. N 2° W 12.1 ft. scribed 1/4 S 28 BT; 21" D. Fir brs. N 60° E 18.6 ft. scribed 1/4 S 28 BT.	17	Set 2" alum. cap on 12" x 1/2" iron rod 9" in sandstone.	New BT's: 13" D. Fir brs. N 16° W 8.8 ft. scribed x BT; 6" R. Cedar brs. N 47° E 21.3 ft. scribed x BT.
6	Fd. 1" I.P. set by Hootman brs. S 3° 05' 28" E 18.82 ft. from true position. Set 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound.	Fd. Hootman BT's from his monument: 36" D. Fir snag brs. S 39° E 58.0 ft. healed face; 24" D. Fir brs. S 65° W 26.0 ft. healed face; 12" D. Fir brs. N 19° E 41 ft. New BT's: 24" D. Fir brs. S 38° W 37.5 ft. scribed T21S R11W CC S33 BT; 34" D. Fir brs. S 58° E 65.0 ft. scribed T21S R11W CC S34 BT.	18	Set 2" alum. cap on 1/2" x 8" rebar in rock.	New BT's: 14" D. Fir brs N 71° E 48.1 ft. chopped, scribed x BT; 12" D. Fir brs. S 63° W 19.8 ft. scribed x BT.
7	Fd. 3" alum. cap on 2 1/2" x 30" alum. pipe set by Jackson & Prochnau. Rock mound.	Fd. Jackson & Prochnau BT's: 7" D. Fir brs. N 67° W 6.9 ft. scribed T21S R11W S 28 BT; 7" D. Fir brs. N 21° E 26.9 ft. scribed T21S R11W S 27 BT.	19	Set 2" alum. cap on 1/2" x 8" rebar in rock.	New BT: 22" D. Fir brs. N 13° W 7.9 ft. scribed E 1/16 80 S33 BT. Set R.M. - 3" alum. cap on 2 1/2" x 30" alum. pipe brs. S 11° 28' 35" E 44.20 ft. marked RM E 1/16 80 S33 1984 PLS 1305.
8	Set 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound.	New BT: 6" D. Fir brs. N 86° E 21.0 ft. scribed 1/16 80 S34 BT. Set R.M. - 2" alum. cap on 1/2" x 18" iron rod brs. N 84° 44' 41" W 58.0 ft. marked RM S33 1/16 80 1984 PLS 1305.			
9	Fd. 2 1/4" brass cap on 1 1/4" iron pipe.	Fd. orig. BT: 42" D. Fir brs. N 21° W 20.5 ft. cut open face. Fd. County BT: 7" D. Fir brs. S 46° E 25.2 ft. vis. scribe. Fd. Hootman BT's: 36" D. Fir brs. N 39° E 14.3 ft. (rec. N 42° 15' E 15.0 ft.) healed face; 44" D. Fir brs. S 82° W 57.7 ft. (rec. S 8.5 ft.) healed face.			
10	Fd. 1/2" I.R. set by Jackson & Prochnau LS 1305 in 1978. Replaced I.R. with 3" alum. cap on 2 1/2" x 30" alum. pipe. Rock mound Buried iron rod.	Fd. Jackson & Prochnau BT's: 28" maple brs. S 46° E 23.2 ft. (rec. S 43° E 24.1 ft.) vis. scribe; 31" Fir brs. N 33° E 28.2 ft. (rec. N 38° E 26.0 ft.) healed face			
11	Fd. 2 1/2" brass cap on 1 1/4" iron pipe set by Douglas County.	Fd. Douglas County BT's: 5/8" rebar brs. N 89° W 42.7 ft., 5/8" rebar brs. S 89° E 9.3 ft.			
12	Fd. 2 1/2" brass cap on 2" iron pipe.	Fd. Douglas Co. BT: 46" Spruce brs. S 5° W 356.5 ft. (rec. S 4° W) healed face.			

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR  
James W. Prochnau  
OREGON  
SEPTEMBER 21, 1877  
JAMES W. PROCHNAU  
1305

50/294  
M 96-64-B

M 96-64-B  
50/294



*M 96-61 A&B, M 96-62, M 96-63 A&B,  
M 96-64 A&B, M 96-65 A&B*

IN REPLY REFER TO

United States Department of the Interior 9641 (942)

BUREAU OF LAND MANAGEMENT

OREGON STATE OFFICE  
P.O. Box 2965 (825 N.E. Multnomah Street)  
Portland, Oregon 97208

January 26 **FILED**

**RECEIVED** *RS*

MAY 16 1984

COUNTY SURVEYOR  
DOUGLAS COUNTY, ORE.

Mr. James W. Prochnau  
Jackson and Prochnau, Inc.  
P. O. Box 177  
Albany, Oregon 97321

Dear Mr. Prochnau:

This is in response to your request for our opinion concerning survey procedure in T. 21 S., R. 11 W., Willamette Meridian, Oregon, as discussed in your meeting with Dan Berry on January 24, 1984.

As you point out in your letter accompanying the material presented in the meeting, this situation was previously addressed in a letter from this office to the Douglas County Surveyor, dated January 25, 1974. The procedures for reestablishing lost corners outlined in that letter were those which would normally be used when considering the methods originally used to establish the section corners involved.

Based on the ground conditions you have developed, your submitted material contains several proposed methods, including the 1974 BLM recommendation, all of which indicate some distortion in bearings and/or distances from the original record. The 1974 BLM recommendation (your method No. 1) creates what we consider to be minor distortion in bearing but produces distances that in most cases are closer to matching the record than the alternatives; i.e., some bearing distortion gives way to generally good distance relationships.

After examining all possible methods that you have proposed, it appears that no one method can be adopted that will not create some distortion. Considering this, we feel the factor that should determine the method used is that which would normally be called for in such instances, according to the BLM Manual and common practice. Therefore, it is our opinion that the procedures outlined to Mr. Ingram in 1974, and reiterated in your letter, are still valid and would probably be used by this office if we were conducting the survey.

*Def 4*

C.S. File No. 58/294-1A

With regard to the monument at the  $\frac{1}{4}$  section corner of sections 21 and 28 which the BLM reestablished in 1960, and you found to be approximately 25 feet from its proper position, we feel it should remain as is. This decision is based on (1) its length of existence, (2) the fact that its position was used by a 1977 private survey, and (3) its position does not constitute what we consider to be gross error.

Sincerely,

*Bill*

William W. Glenn  
Chief, Branch of Cadastral Survey

FILED  
RECEIVED

MAY 16 1984

COUNTY SURVEYOR  
DOUGLAS COUNTY, ORE.

304



## United States Department of the Interior 9641.5 (942)

## BUREAU OF LAND MANAGEMENT

OREGON STATE OFFICE  
P.O. Box 2965 (825 N.E. Multnomah Street)  
Portland, Oregon 97208

February 9, 1984

FILED  
RECEIVED *BJ*

MAY 16 1984

COUNTY SURVEYOR  
DOUGLAS COUNTY, ORE.

Mr. James W. Prochnau  
Jackson & Prochnau Inc.  
P. O. Box 177  
Albany, Oregon 97321

Dear Mr. Prochnau:

This is in response to your letter dated January 30, 1984, concerning survey procedure in T. 21 S., R. 11 W., Willamette Meridian, Oregon.

The problem you have posed is not to calculate the position for the southeast corner of section 34, but rather to restore the meander corner of sections 34 and 35. The point for the section corner mentioned in Byars' record falls in a meandered river and hence does not exist either in theory or practice.

The Manual (Section 5-40) prescribes that meander corners on lines projected across meandered bodies of water will usually be reestablished by single proportionate measurement (occasionally, by single point control), or in extreme cases, by adjustment of the record meanders. It also allows for special cases (Section 5-46) where the surveyor's experience and judgment may properly override or modify these principles.

In our opinion, the meander corner of sections 34 and 35 should, in this case, be reestablished at record bearing, South, from the original  $\frac{1}{4}$  section corner of sections 34 and 35, and at record distance, 17.89 chains, from the  $\frac{1}{4}$  section corner if this distance places the meander corner on or very near the present meander line. If the record distance falls close, but not on the meander line, the present shoreline may be treated "as an identified natural feature" (Section 5-40) and the meander corner reestablished on it.

There are many potential pitfalls in using control south of the river to restore the meander corner in question. You refer to some of these in your letter. Whenever possible, survey errors or discrepancies should be isolated where they "properly belong" (Section 5-23) and should not effect proportioning of lost corners beyond their immediate area. In line with this principle, projecting Byars' survey across the river through his 23.22 chain triangulation would probably introduce more error than using his 17.89 chain tie to the  $\frac{1}{4}$  section corner.

*(3) of 4*

In addition, it makes little sense to extend possible distortion from questionable corners, which are 74 to 96 chains away, across a river, and in another township, when the original  $\frac{1}{4}$  section corner of sections 34 and 35 is much closer, probably more reliable, and in the same township. While certain aspects of Haines' work are debatable, it is not necessary to pass judgment on his survey one way or another, as the method we suggest for restoring the meander corner ignores his survey and conforms to the Manual.

A second best solution might be to reestablish the meander corner by single proportionate measurement between the corner of sections 3 and 10, T. 22 S., R. 11 W., and the  $\frac{1}{4}$  section corner of sections 34 and 35, since these two seem generally accepted as original corners. From your data, it appears that such a restoration would place the meander corner about 8 links south and 30 links west of a point at record bearing and distance from the  $\frac{1}{4}$  section corner of sections 34 and 35. The two locations are favorably related and tend to confirm one another, but all things considered, a single point control restoration is preferable.

We hope that this information is helpful to you.

Sincerely,

*Bill*

William W. Glenn  
Chief, Branch of Cadastral Survey

cc: Dennis Moonier  
Larry Hunnemuller

FILED  
RECEIVED *BS*  
MAY 16 1984  
COUNTY SURVEYOR  
DOUGLAS COUNTY, ORE.

*4 of 4*