

CERTIFICATE OF SURVEY

RETRACING CERTAIN SECTION LINES AND HIGHWAY RIGHT OF WAY IN SECTIONS 35, 26, 27, 23, 22, 15, 16, 9, & 4 IN TOWNSHIP 1 SOUTH, RANGE 10 EAST, AND SECTION 32 IN TOWNSHIP 1 NORTH, RANGE 10 EAST, P.M.M.; PARK COUNTY, MONTANA

SURVEYOR'S NOTES

PURPOSE OF SURVEY
The purpose of this survey is to retrace certain section lines and highway right of way. No new parcels have been created; therefore, this survey is exempt from review as a subdivision. This survey was completed in July, 2005.

MOT Project No. F 59-1(7)1 is controlled by ties to HARN marks D123RESET, E128RESEY, N490, and X558. These marks were held in the final least squares adjustment based on the NAD83(92) datum. Fast static observations were made with survey grade, dual-frequency GPS receivers. All monuments on this survey were located with GPS RTK and/or fast static observations based on the following control points:

NAD 83(92) STATE PLANE FEET COORDINATES - MONTANA 2500

MARK	NORTH	EAST	MARK	NORTH	EAST
1. 1A	534677.449	1723152.175	4. 0A	548287.953	1715335.221
1. 1B	536632.408	1721543.836	4. 9C	552044.126	1714174.595
2. 2A	540364.624	1719749.083	5. 1Y	553494.985	1713597.523
3. 2A	544780.602	1715754.276	5E	557419.327	1712564.576
3. 5Y	546079.761	1716623.519	7. 0A	563627.065	1710966.304

Distances shown on this plat are International ground feet; they have been converted from Montana State Plane grid distances by using the following combination scale factors:

South of Railroad Centerline PT 196+3.44 0.99943244
North of Railroad Centerline PT 196+3.44 0.99941123

The convergence angle at Point No. 161, the east 1/4 corner of Section 16 is -0°43'25".

The found right of way reference monuments, various diameter steeplins, were used to calculate the centerline of the highway on both sides from the overpass to the point where the highway right of way intersects the railroad right of way in Section 26; from that point north these reference points were used to determine the easterly highway right of way line. The record distance from the reference monuments to the right of way line is two feet. The westerly highway right of way is determined by the railroad centerline.

REFERENCES
(R1) CLO, 1873, W.H. Baker & J.H. Thomas

(R2) CLO, 1886, J. Johnson

(R3) Northern Pacific Railway Shields River Branch Index Map

(R3A) Northern Pacific Railway Shields River Branch Track Profile, Mission to Gallatin

(R4) MOT Right of Way Plans, FAP 60A, 1939

(R5) MOT Right of Way Plan, FAP 60C, 1939

(R6) MOT Right of Way Plan, FG 60(1)1, F 60(1)1, 1952

(R7) Deed Exhibit, Book 86, Pages 515-517, January 20, 1953; Northern Pacific Railway to MOT

(R8) Deed Exhibit, Book 68, Pages 504-505, May 2, 1940; Northern Pacific Railway to MOT

(R9) MOT Right of Way Plans, F59-1(2)1, 1979

(R10) Plat No. 564, 1971, 287ES

(R11) Plat No. 562, 1971, 287ES

(R12) Plat No. 563, 1971, 287ES

(R13) COS No. 67, 1975, 287ES

(R14) COS No. 76, 1975, 317ELS

(R15) COS No. 472, 1980, 287ES

(R16) COS No. 503A, 1980, 4223ES

(R17) COS No. 582, 1981, 495SLS

(R18) COS No. 844, 1986, 7686LS

(R19) COS No. 988, 1989, 8374LS

(R20) COS No. 1017, 1993, 8375LS

(R21) COS No. 1320, 1994, 2923LS

(R22) COS No. 1432, 1995, 7686LS

(R23) COS No. 1518, 1999, 10010LS

(R24) COS No. 1796, 2003, 6305LS

(R25) RW Deed, Book 86, Pages 469-70

RAILROAD

The Shields River Valley Railway Company purchased right of way from landowners in 1909. It conveyed its interests to Northern Pacific Railway Company by deed dated June 23, 1914, and filed for record on January 26, 1916 (Book 46, Page 29). The track map and track profile were prepared by Northern Pacific Railway. In 1985 the railroad was apparently abandoned (Federal Surface Transportation Board Docket No. AB-6, Sub No. 262). In 1987, Burlington Northern Railroad Company sold its interest in the Shields River Branch to Montana RailLink (Roll 64, Pages 149-153).

The deed from the State of Montana to the Shields River Valley Railway Company (Book 39, Page 117) for right of way in the NE 1/4 and the E 1/2 SE 1/4 Sec. 16, contains this reversionary clause: "It is further provided that whenever said lands herein granted as a right of way shall cease to be used for such purpose, the same shall revert to the state upon notice to that effect being given to the said Shields River Valley company, the grantee named herein." At this time Montana RailLink maintains that this railroad is "in service." The status of the easement from the State of Montana to the railroad is yet to be determined.

The Northern Pacific Railway track profile map was used in this survey for stationing. There were some discrepancies between the track profile map and the track map, the tangent bearings on the track map do not produce the curves as shown. Changes in the railroad right of way widths were proportioned from the track profile map using these features:

RR STA.	FEATURE
44+02	36" Cast Iron Pipe
51+92.1	SE End Yellowstone River Bridge
55+08.3	NW End Yellowstone River Bridge
10+93.5	SE End RR Bridge No. 2
14+168.3	PC RR Curve
488+93	8" Concrete Arch Culvert
532+07.2	3'x 2' Reinforced Concrete Box Syphon

HIGHWAY RIGHT OF WAY

A portion of Federal Route 11 intersects the current right of way near Sta. 83+00 at Old Clyde Park Road. Apparently the permit from the railroad still constitutes part or the highway right of way. This project was constructed in 1922 as FAP 60A. No deeds, right of way plans or construction plans for this project were found in MOT archives. It is possible the highway was built on county road easements.

There are some discrepancies between MOT's right of way plans and the deeds from the Northern Pacific Railway. The information on the deeds was used in these instances.

- Plans F 60(10) show a 90-foot wide easement for the overpass; the deed exhibit (Volume 86, Pages 547-549) shows a 100-foot wide easement.
- Plans F 60B show a 15-foot easement from stations 102+00 to 106+00; the deed exhibit (Volume 68, Pages 504-505) does not show this easement.
- Plans F 60C show 10-foot easements between stations 303+00 to 308+00 and 314+34 to 320+00; the deed exhibit (Volume 68, Pages 504-505) does not show these easements.
- Found monuments 313 and 314 were probably set to mark the right of way break 70' right at record station 92+00. Their position does not agree with the right of way deed (Book 46, Page 400), which calls for a point 333.7' south along the centerline from the section line and 70' right. Monuments 313 and 314 are about 282' south of the section line along the highway centerline and about 70' right. The highway right of way plans do not indicate that the north line of Section 27 was located by survey; no survey notes for this section were found.
- Found monuments 323, 324 and 424 were probably meant to be on the section line common to Sections 15 and 16. The highway right of way plans do not indicate that this section line was located by survey nor were any survey notes found. The monuments may have been set on a projected line.

MOT plans F 60C show an additional 170-foot width of right of way delimited by an oxbow of the Shields River in Section 4, T1S R10E. MOT obtained an easement from Clara Pauline Erwin (Book 68, Page 519, May 9, 1940).

This 170-foot strip is not shown as right of way on this certificate of survey because Mrs. Erwin had no interest in this land.

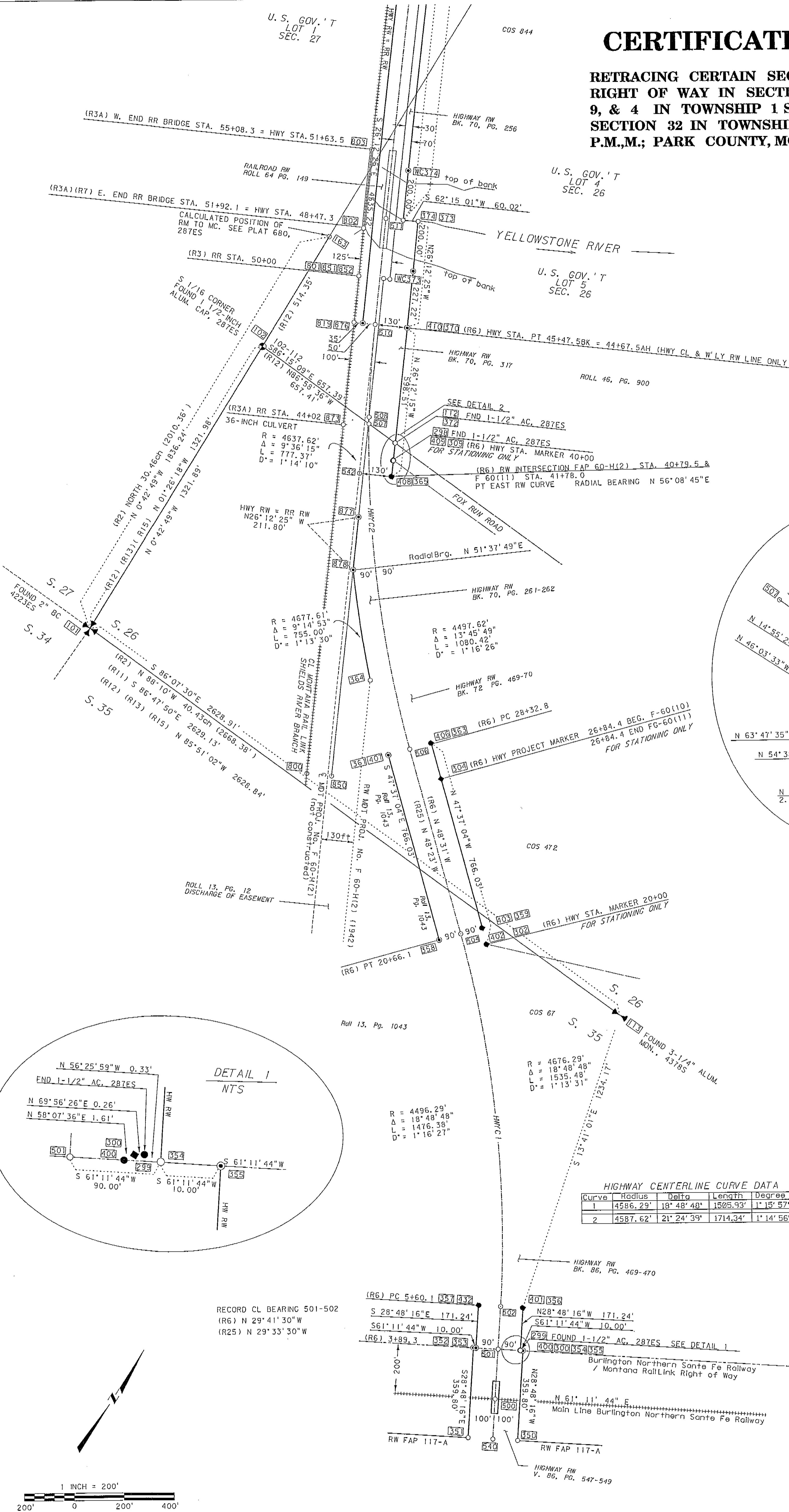
- The legal description for the parcel (Nobla Q. Erwin to Clara Pauline Erwin, Volume 66, Page 181, November 28, 1936) places Mrs. Erwin's land several hundred feet east of the highway centerline; the centerline of the main channel of the Shields River is the west boundary of the parcel and it is today several hundred feet east of the highway.
- The oxbow shown on the highway plans and railroad plans is not the main channel of the Shields River; it is an overflow channel.

MONTANA COORDINATE SYSTEM NAD 83(99) ZONE 2500

POINT	NORTH	EAST	DESCRIPTION	POINT	NORTH	EAST	DESCRIPTION
101	534687.4310	1721373.9260	FND 2" BC, NW COR S35 T10S R10E, 4223ES	413	540418.4370	1719752.6430	FND 5/8" STEEL PIN, RM TO HWY CL AT STA. MARKER 90+00
102	534806.4230	1721357.4700	FND 1" BC, AC, S1/4 COR S27/26 T15 R10E, 287ES	414	540622.5490	1719642.2670	FND 1" STEEL PIN, SEE SURVEYOR'S NOTE
103	534806.4230	1721351.5710	FND 2" BC, SC COR, S22/15 COR, 4223ES	415	544746.1370	1717622.8800	FND 5/8" STEEL PIN, RM TO HWY CL AT STA. MARKER 90+00
104	540863.3530	1718665.8100	FND 2" BC, N 1/4 COR, S27 T15 R10E, 4223ES	417	544746.1370	1717622.8800	FND 5/8" STEEL PIN, REFERENCE TO HWY CL AT STA. MARKER 90+00
105	546053.5320	1718687.2900	FND 2" BC, N 1/4 COR, S22 T15 R10E, 4223ES	418	545381.5400	1717283.5560	FND 1/2" STEEL PIN, RM TO HWY RW AT PT 145+53.2 RT
106	551553.6480	1713272.0010	FND 3 1/4" MDT ALUM. MON. N 1/4 COR, S16 T15 R10E, 4378S	419	545326.3500	1717174.3920	FND 5/8" STEEL PIN, REFERENCE TO HWY CL AT STA. MARKER 90+00
107	550713.9821	1710529.7161	FND 3 1/4" MDT ALUM. MON. SW COR, S4 T15 R10E, 4378S	421	547807.3620	1715655.5670	FND 1/2" STEEL PIN, RM TTO HWY RW AT PC 174+58.6 RT
108	551618.6720	1710715.7940	FND 1 1/2" AC CLOSING CORNER S4 & S5 T15 R10E, 287ES	422	547751.9950	1715571.2820	FND 1/2" STEEL PIN, BENT, RM TO HWY CL AT PC 174+58.6 RT
109	551619.6720	1716735.6580	FND 1 1/2" AC CLOSING CORNER S3 & S4 T15 R10E, 287ES	424	548822.0110	1716131.4300	FND 1/2" STEEL PIN, RM TO HWY RW AT PT 192+40.3
110	551619.6720	1716735.6580	FND 2" AC MARKED "AC" 1/16 LINE, 287ES	426	549361.5800	1714813.5540	FND 1/2" STEEL PIN, RM TO HWY CL PT 192+40.3
111	551609.2845	1716735.6597	FND 2" AC MARKED "AC" 1/16 LINE, 287ES	428	549362.5300	1710978.0880	FND 1/2" STEEL PIN, RM TO HWY RW TS 346+52.3 RT
112	551609.2845	17220013.0850	FND 1 1/2" AC MARKED "AC" 1/16 LINE, 287ES	432	533225.8360	1724131.2180	FND 3/4" STEEL PIN, RM TO HWY RW AT PC 5+60.1
113	551619.6720	1716620.4200	FND 1 1/2" AC MARKED "AC" 1/16 LINE, 287ES	434	533225.8360	1724131.2180	FND 3/4" STEEL PIN, RM TO HWY RW AT PC 5+60.1
123	551579.0760	1716030.2950	FND 3 1/4" MDT ALUM. MON. S 1/4 COR, S4 T15 R10E, 2923S	500	532943.1267	1724136.9891	CALCULATED HWY CL POINT AT BEGINNING OF PROJECT
150	556862.8290	1713546.7900	FND 3 1/4" MDT ALUM. MON. S 1/4 COR, S4 T15 R10E, 2923S	501	533110.1076	1724290.7749	CALCULATED HWY CL POINT AT POT 3+09.3
152	561720.9150	1713513.5770	FND 3 1/4" MDT ALUM. MON				

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SECTION 32 IN TOWNSHIP 1 NORTH RANGE 10 EAST,
P.M.M.; PARK COUNTY, MONTANA.**



(R6) RECORD HIGHWAY
CENTERLINE CURVE DATA

Curve	Radius	Delta	Length	Degree	Radius	Delta	Length	Degree
1	4586.29'	18° 48' 48"	1505.93'	1° 15' 57"	4584.0'	18°49'30"	1506.0'	1°15'
2	4587.62'	21° 24' 39"	1714.34'	1° 14' 56"	4584.0'	21°26'00"	1714.7'	1°15'

PARK COUNTY, MONTANA

PRINCIPAL MERIDIAN			
	SEC.	T.	R.
	27	1S	10E
	26	1S	10E
	35	1S	10E

MDT PROJECT NO. F 59-1(7)1
SHEET 2 OF 7

CERTIFICATE OF SURVEY NO. 1999

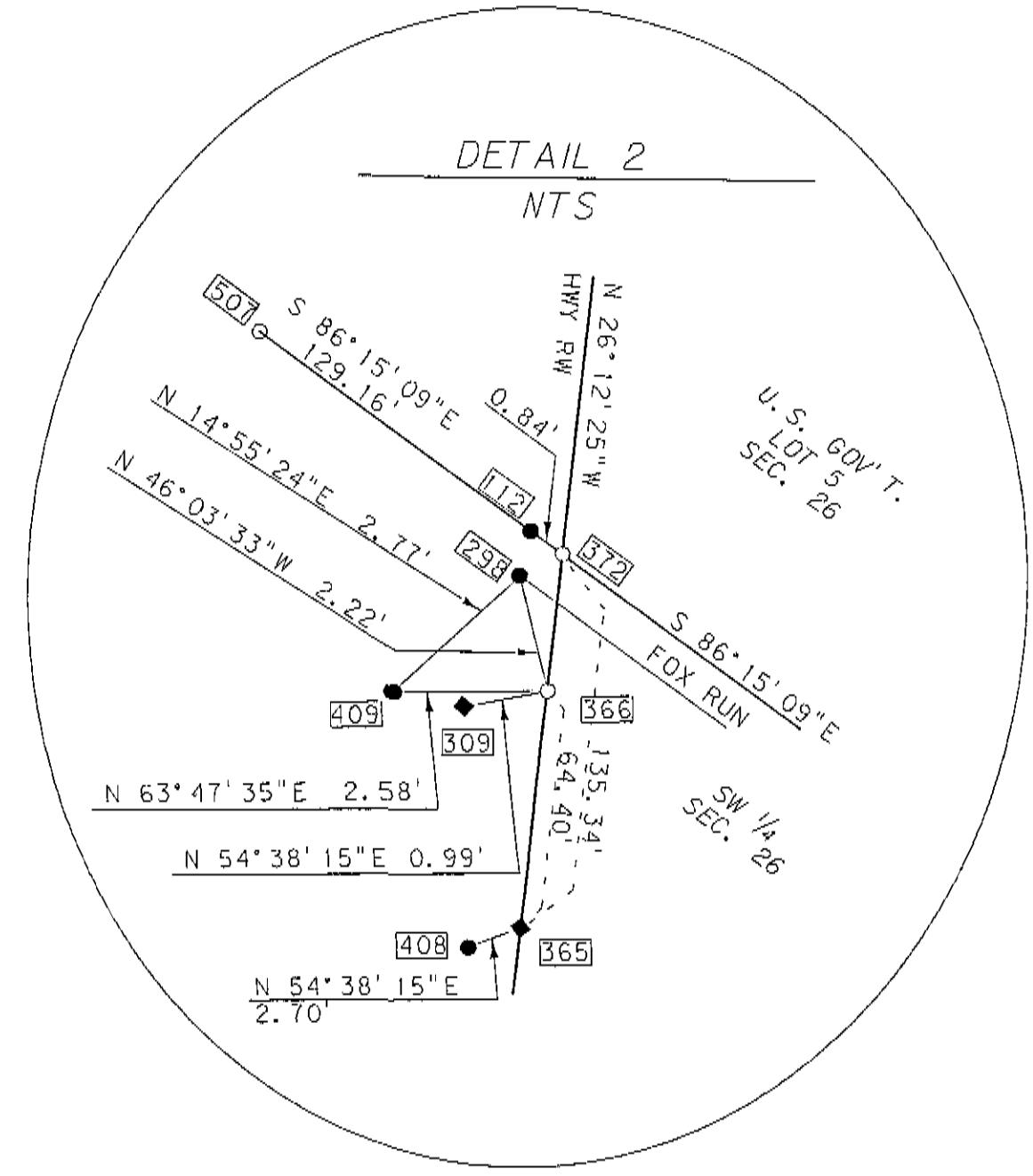
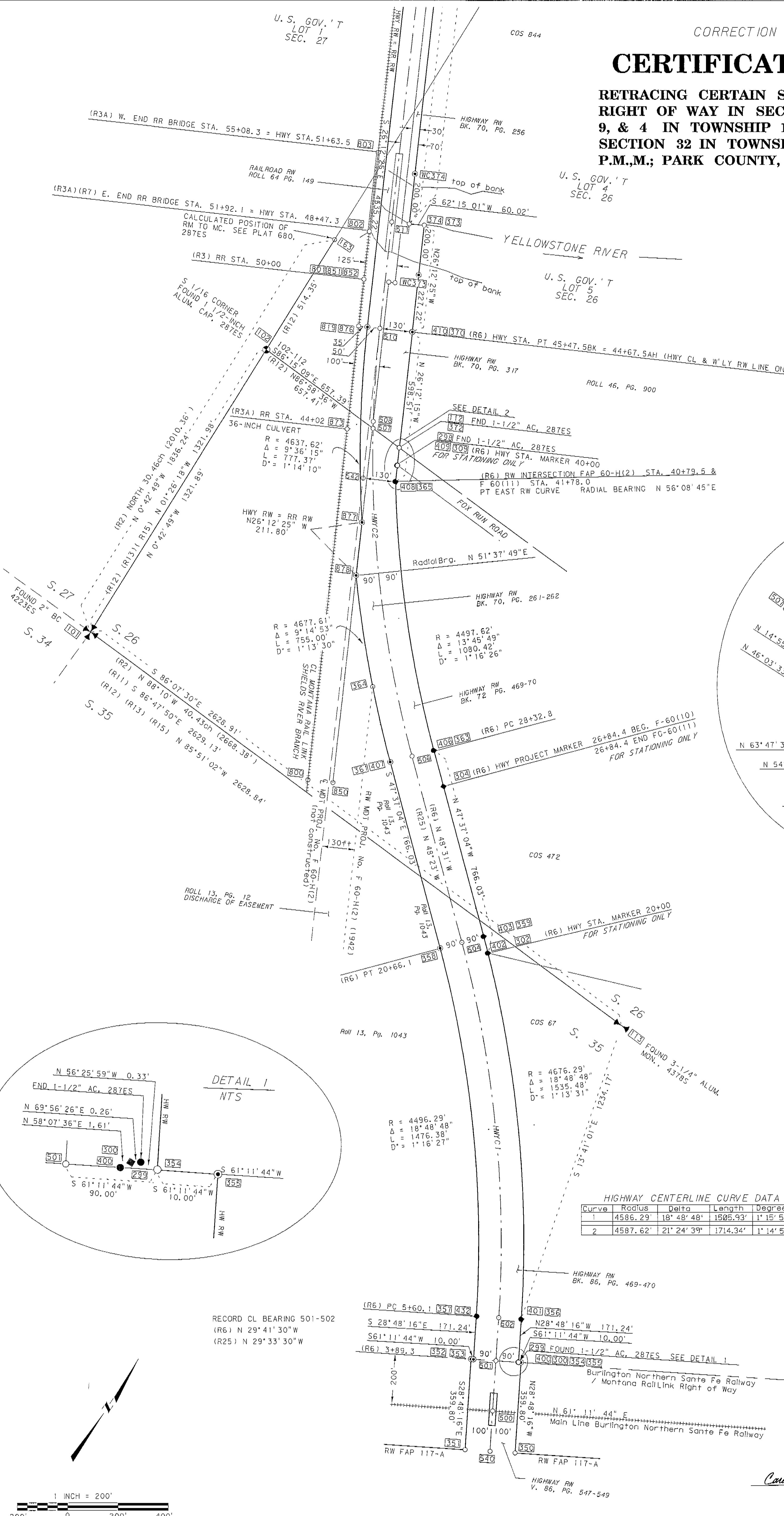
PREPARED BY MONTANA DEPARTMENT OF TRANSPORTATION

CONTROL No. 1298 DRAWING No. 1298SUCAD001, DGN

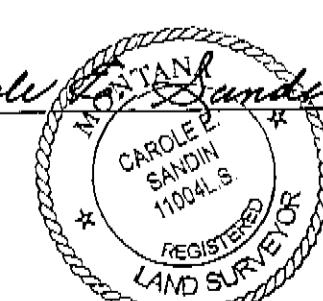
CORRECTION TO SHEET 2, COS 1999

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PARK COUNTY, MONTANA

PRINCIPAL MERIDIAN	SEC.	T.	R.
	27	1S	10E
	26	1S	10E
	35	1S	10E

MDT PROJECT NO. F 59-1(7)1
SHEET 2 OF 7 CORRECTED
CERTIFICATE OF SURVEY NO. 199A

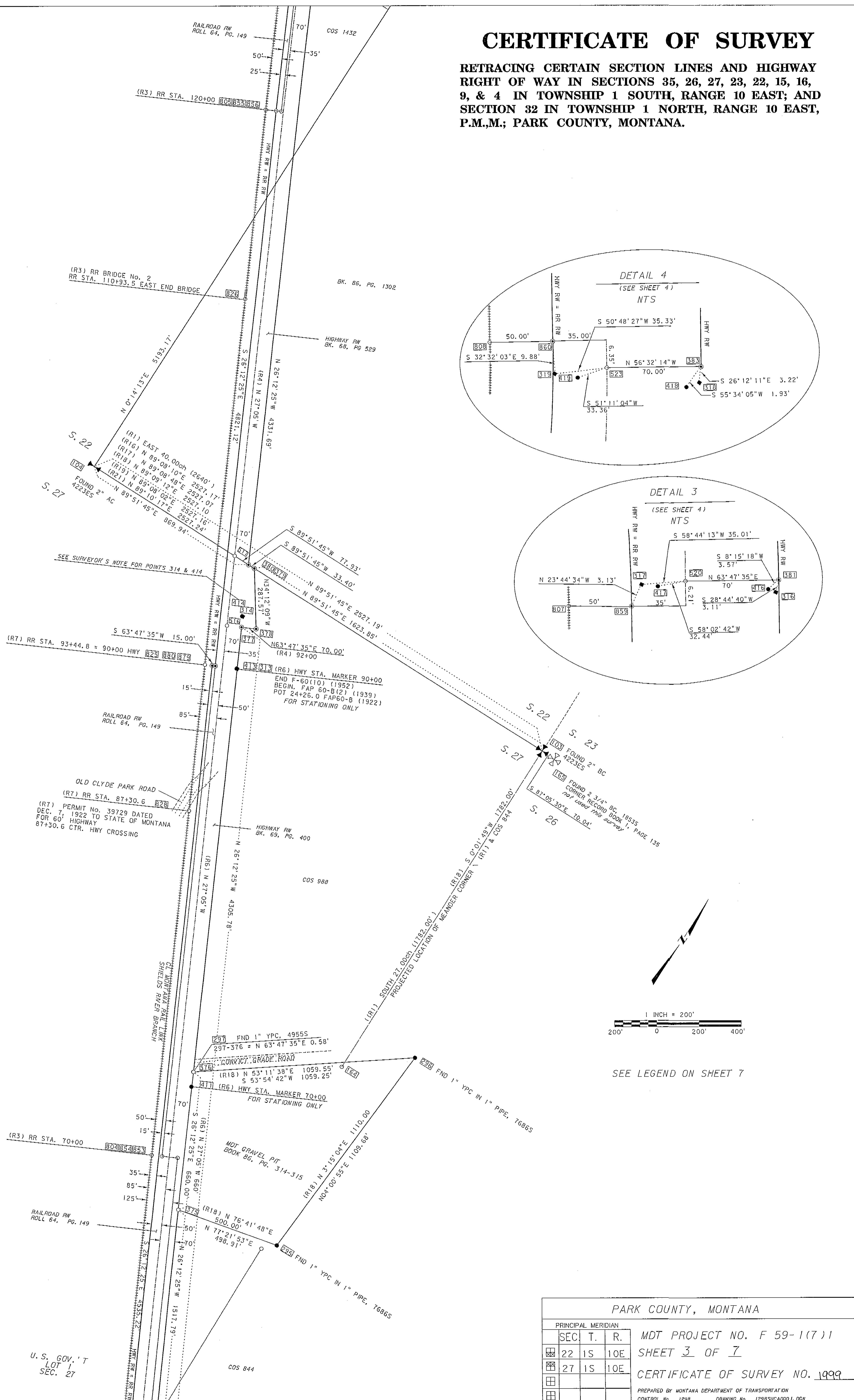
PREPARED BY MONTANA DEPARTMENT OF TRANSPORTATION
CONTROL NO. 1298 DRAWING NO. 1298SUCAD001.DGN

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PARK COUNTY Filed 09/01/2005 At 09:31 AM
Denise Nelson, Clerk & Recorder

1/5 1999

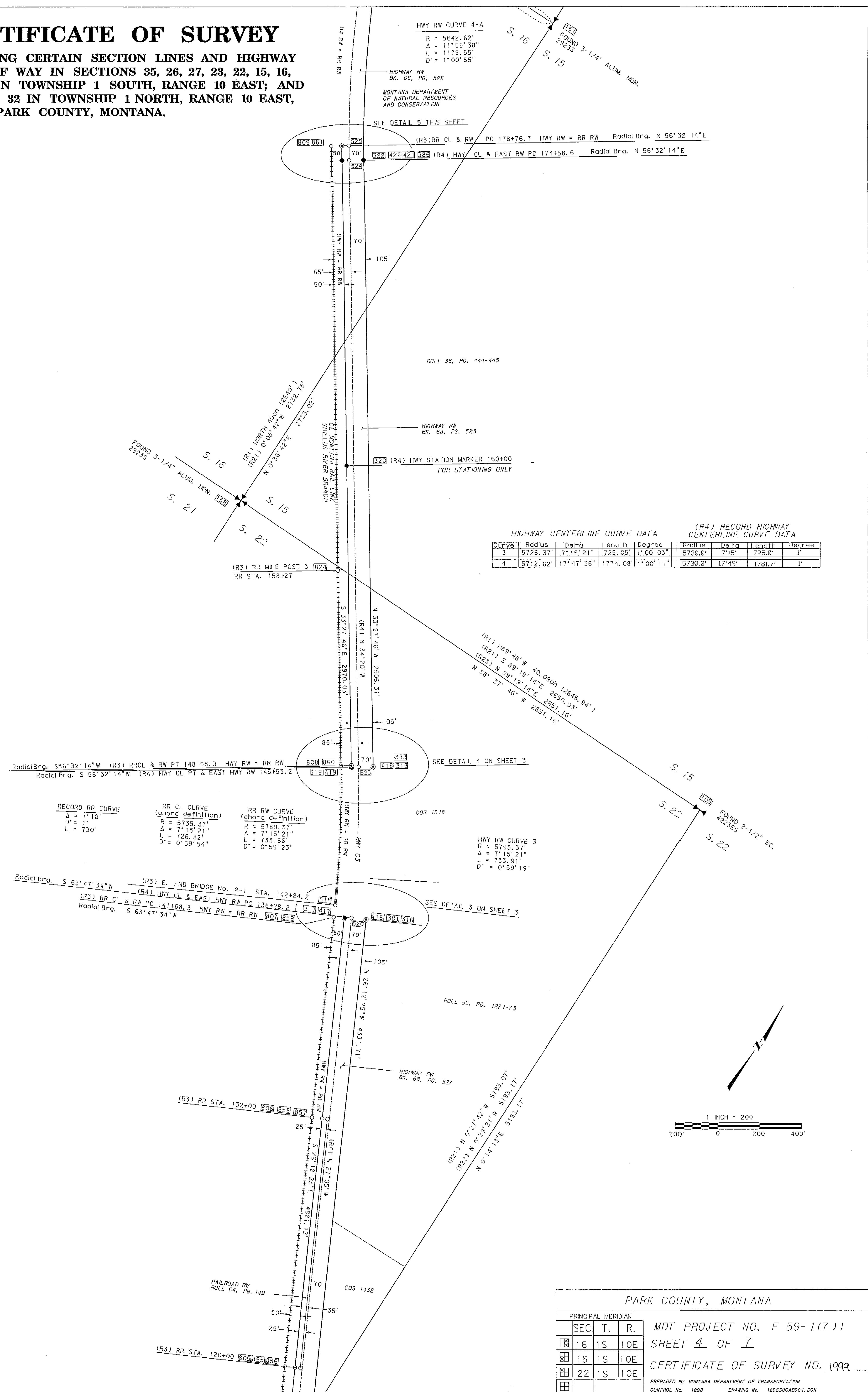
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CORRECTION TO SHEET 4, COS 1999

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P.M., M.; PARK COUNTY, MONTANA.

HWY RW CURVE 4-A

R = 5642.62
 Δ = 11° 58' 38"
 L = 1179.55'
 D^* = 1° 00' 55"

MONTANA DEPARTMENT
OF NATURAL RESOURCES
AND CONSERVATION

SEE DETAIL 5 THIS SHEET

S. 16
 S. 15
 FOUND 3-1/4" ALUM MON
 2923S

(R3) RR CL & RW PC 178+76.7 HWY RW = RR RW Radial Brdg. N 56° 32' 14"E

(R4) HWY CL & EAST RW PC 174+58.6 Radial Brdg. N 56° 32' 14"E

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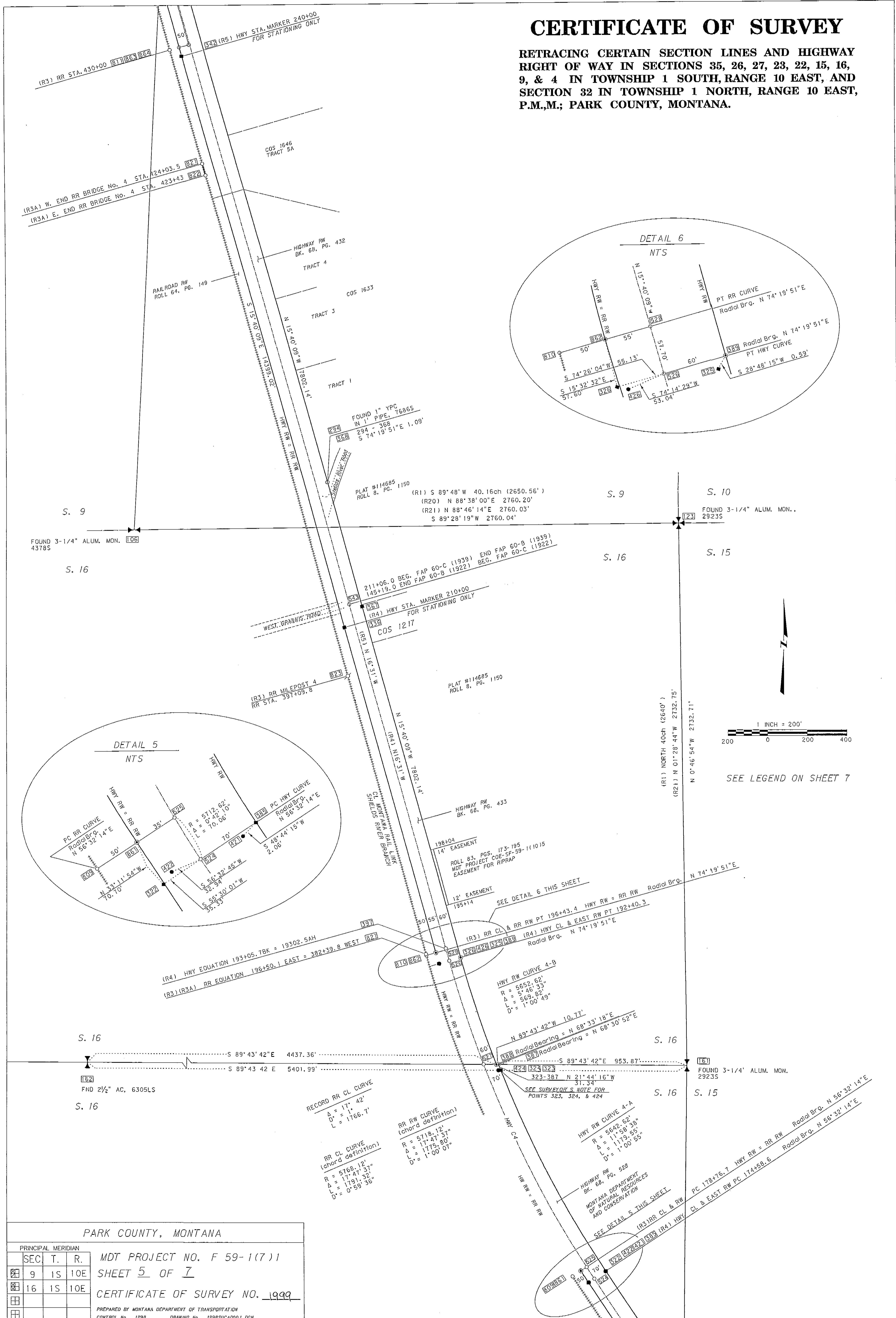
70'

85'

50'

CERTIFICATE OF SURVEY

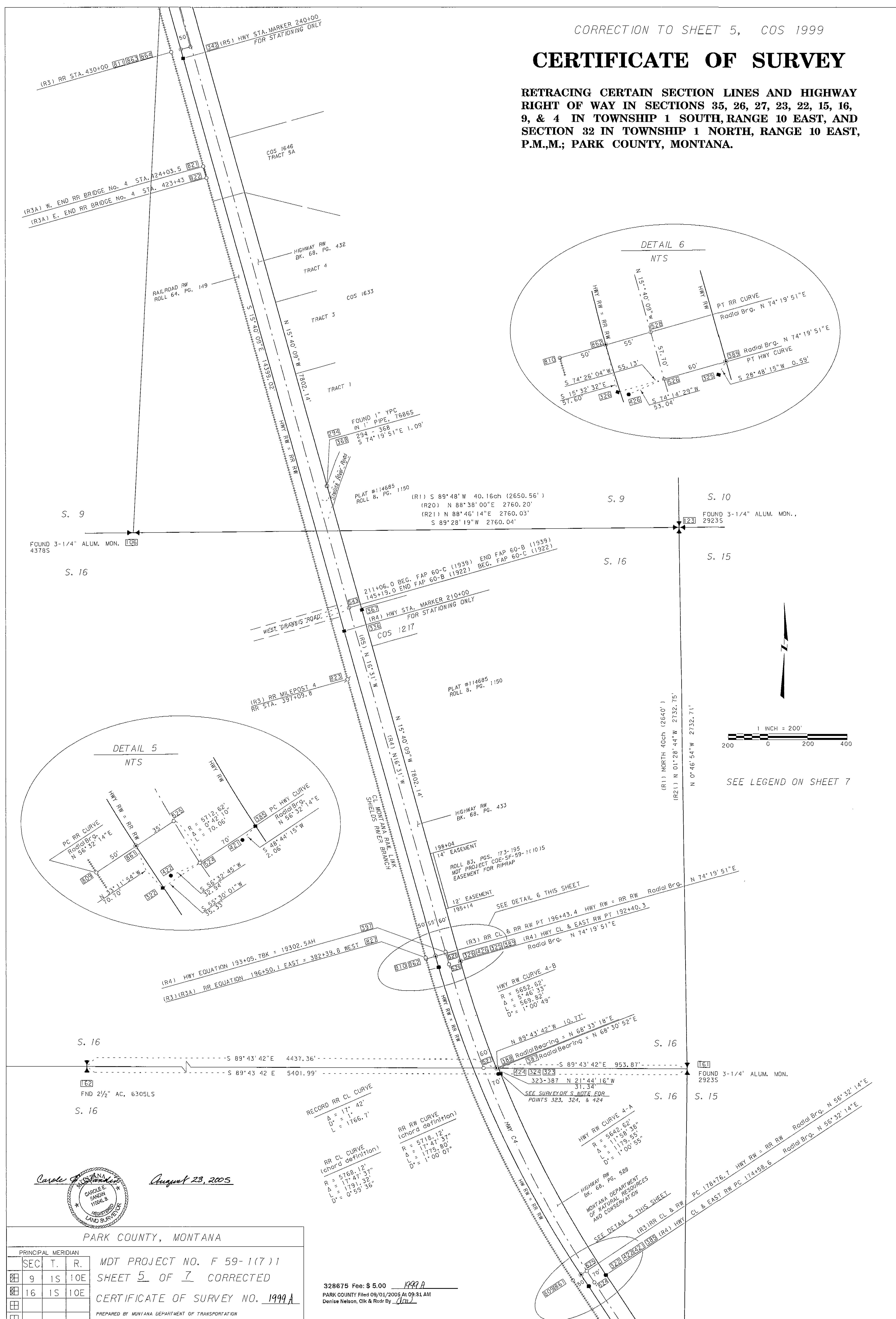
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CORRECTION TO SHEET 5, COS 1999

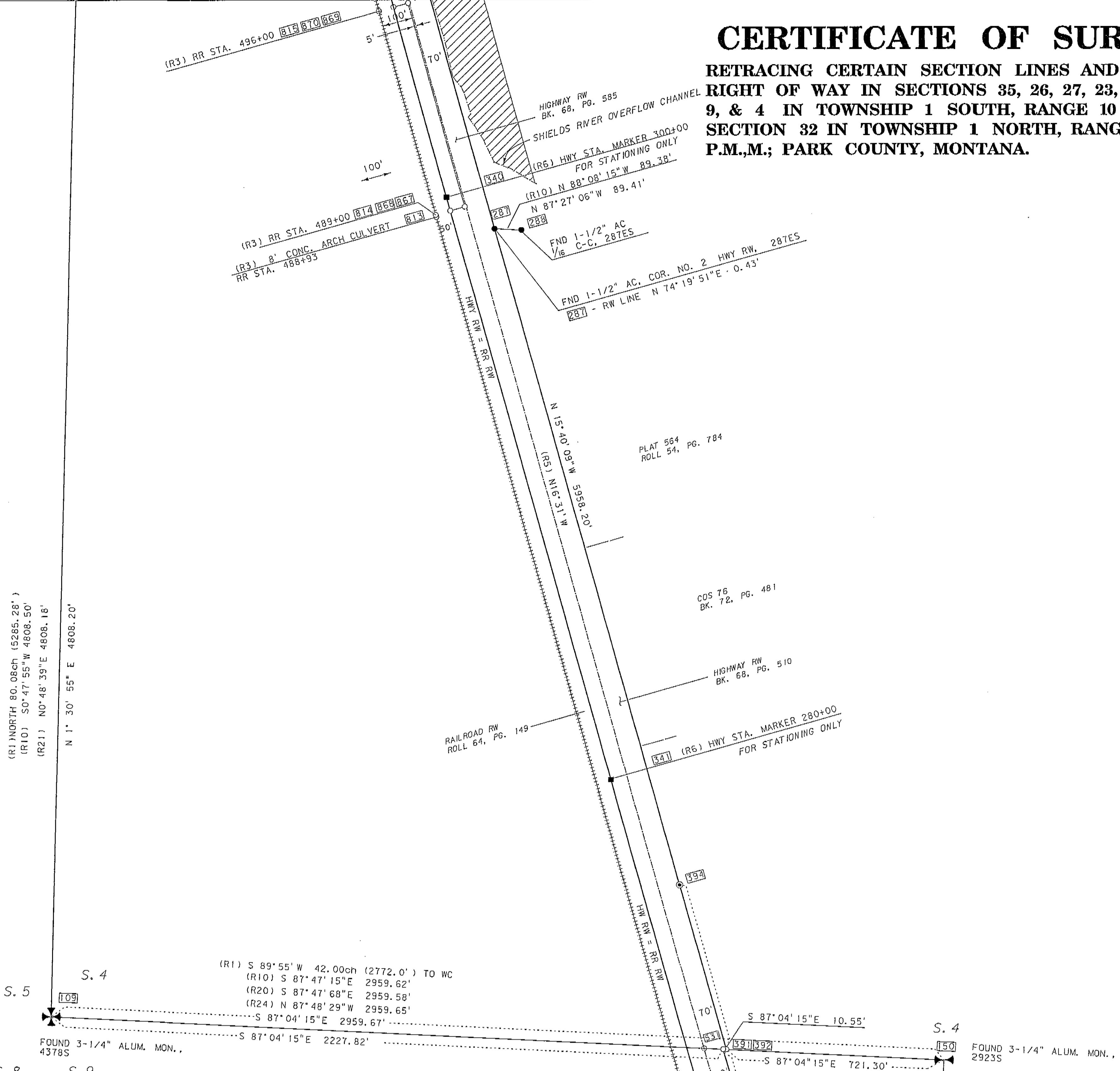
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1 INCH = 200'

SEE LEGEND ON SHEET 7

PARK COUNTY, MONTANA

MDT PROJECT NO. F 59-1(7)

SHEET 6 OF 7

CERTIFICATE OF SURVEY NO. 1999

PREPARED BY MONTANA DEPARTMENT OF TRANSPORTATION
CONTROL No. 1290 DRAWING No. 1298UCAD001.DGN

PRINCIPAL MERIDIAN		
SEC.	T.	R.
4	IS	10E
9	IS	10E

(R3) RR STA. 496+00 B1 870 863
 (R3) RR STA. 489+00 B1 874 868 862
 (R3) 8' CONC. ARCH CULVERT 813
 RR STA. 488+95
 (R3) RR STA. 450+00 B1 869 859
 (R3) RR STA. 430+00 B1 863 854
 (R5) HWY STA. MARKER 240+00
 FOR STATIONING ONLY

CERTIFICATE OF SURVEY

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 IN TOWNSHIP 1 NORTH, RANGE 10 EAST, P.M.M., PARK COUNTY, MONTANA.

LEGEND

■ SECTION CORNERS FOUND	LS LAND SURVEYOR	[101] POINT No.
■ QUARTER CORNERS FOUND	RW RIGHT OF WAY	[101] BK. BOOK
■ CLOSING CORNERS FOUND	FND FOUND	[101] PG. PAGE
■ FOUND 4X4 CONCRETE MONUMET, SET $\frac{5}{8}$ " REBAR W/ 2" ALUM. CAP STAMPED "11004LS 2005"	MON. MONUMENT	AC ALUMINUM CAP
● FOUND MONUMENT AS DESCRIBED	CONC. CONCRETE	RR RAILROAD
○ COMPUTED POINT, NOTHING FOUND OR SET	ALUM. ALUMINUM	Hwy HIGHWAY
COS CERTIFICATE OF SURVEY	CL CENTERLINE	NTS NOT TO SCALE
MDT MONTANA DEPARTMENT OF TRANSPORTATION	STA. STATION	
(R) RECORD INFORMATION	" INCH	
	' FEET	
	SEC. / S. SECTION	
	ch. CHAINS	
	PT POINT OF TANGENCY	
	PC POINT OF CURVATURE	

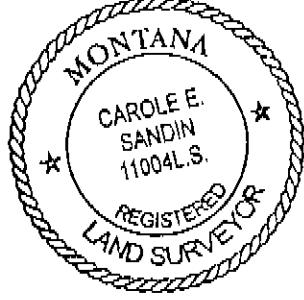
RAILROAD CENTERLINE
 RAILROAD RIGHT OF WAY LINE
 HIGHWAY CENTERLINE
 HIGHWAY RIGHT OF WAY LINE
 APPROXIMATE BOUNDARY LINE

CERTIFICATE OF SURVEYOR

Carole E. Sandin Aug. 5, 2005
 Carole E. Sandin, 11004LS

CERTIFICATE OF EXAMINING LAND SURVEYOR

Montana Registration No. _____
 Date _____



CERTIFICATE OF FILING

FILED ON THE 14th DAY OF August, 2004, A.D.
 AT 3:00 O'CLOCK P.M.

BY Alma Johnson Deputy Clerk
 COUNTY CLERK & RECORDER

DOCUMENT NO. 38818

