CNTY	STATION	MILEPO	SPE	T	TRKNAME	DIVISION	RAIL	ST	GXID	INCDTNO
2C007	ROLEEN	545.8	000		WESTWARD MAIN	SACRAMENTO	SP	32		53458
2C007	RONTELLO	662.0	050	E	MAIN TRACK	SACRAMENTO	SP	32		47935
2C007	RONTELLO	661.9	045	E	MAIN	SACRAMENTO	SP	32		51428
2C007	RONTELLO	663/4	040	E	SP MAIN	SACRAMENTO	SP	32		60605
2C007	RONTELLO	658.0	025	E	MAIN TRACK	SACRAMENTO	SP	32		47806
2C007	RONTELLO	661.5	050	E	MAIN TRACK	SACRAMENTO	SP	32		53206
2C007	RONTELLO	60.9	050	E	MAIN TRACK	SACRAMENTO	SP	32		47609
2C007	RONTELLO	660.0	006	E	MAIN	SACRAMENTO	SP	32		61601
2	RONTELLO	657.0	015	E	MAIN TRACK	SACRAMENTO	SP	32		59480
2C007	ROOR	614.0	045	E	MAIN TRACK	SACRAMENTO	SP	32		54446
2C015	ROSEL	491.0	045	E	MAIN TRACK	SACRAMENTO	SP	32		54408
2C015	ROSEL	491.1	050	E	WESTWARD MAIN	SACRAMENTO	SP	32		45658
2C015	ROSEL	490.0	042	E	MAIN	SACRAMENTO	SP	32		53471
2C015	ROTE	466.6	045	E	MAIN TRACK	SACRAMENTO	SP	32		44347
2C001	GCALA	318.6	045	E	MAIN TRACK	SACRAMENTO	SP	32	740765S	56598
2C027	CREANA	361.10	059	E	MAIN TRACK	SACRAMENTO	SP	32		51846
2C027	CREANA	361.0	040	E	MAIN	SACRAMENTO	SP	32		61334
2C027	CREANA	358.0	050	E	MAIN TRACK	SACRAMENTO	SP	32		44838
2C011	PALISADE	536.0	000		QUARRY TRACK	SACRAMENTO	SP	32		69200
2C011	PALISADE	525.0	004	E	4742	SACRAMENTO	SP	32		57871
2C011	PALISADE	524.5	045	E	MAIN TRACK	SACRAMENTO	SP	32		48888
2C007	PARDO WP	673.6	045	E		SACRAMENTO	SP	32		53103
2C031	PATPICK	257.9	050	E	MAIN TRACK	SACRAMENTO	SP	32		47918
2C027	PERTH	340.50	055	E	MAIN	SACRAMENTO	SP	32		44935
2C027	PERTH	340.0	005	E	MAIN TRACK	SACRAMENTO	SP	32		54869
2C031	PHIL	422.0	045	E		SACRAMENTO	SP	32		50207
2C013	PREBLE	440.0	055	E	WESTWARD MAIN	SACRAMENTO	SP	32		45115
2C013	PREBLE	552.5	055	E	MAIN TRACK	SACRAMENTO	SP	32		51746
2C013	RAGLAN	518.5	050	E		SACRAMENTO	SP	32		49079
2C013	RED HOUSE	555.6	000	E		SACRAMENTO	SP	32		52790
2C013	RED HOUSE	562.97	000			SACRAMENTO	SP	32		50503
2C013	REDHOUSE	555.1	050	E		SACRAMENTO	SP	32		50967
32	RENO	243.0	004	E	860 LEAD	SACRAMENTO	SP	32		66640
32	RENO	242.5	005	E	86501 TO 86511	SACRAMENTO	SP	32		72820
2C031	RENO	241.0	028	E	MAIN	SACRAMENTO	SP	32		50004
2C031	REYNARD	416.3	035	E		SACRAMENTO	SP	32		51349
2C013	ROSE CREEK	408.5	055	E	MAIN TRACK	SACRAMENTO	SP	32	740796R	53969
2C031	SAND PASS	385.0	045	E		SACRAMENTO	SP	32		55614
32	SAND PASS	397.6	035	E	WP MAINLINE	SACRAMENTO	SP	32		52160
32	SAND PASS	397.25	035	E		SACRAMENTO	SP	32		63250
2C021	SCHURZ	366	020	E	BRANCH LINE	SACRAMENTO	SP	32		R6039
2C031	SPARKS	246.0	003	E	ENGINE LEAD	SACRAMENTO	SP	32		53196
2C031	SPARKS	247.0	007	E	0 1 MAIN	SACRAMENTO	SP	32		59294
2C031	SPARKS	245.0	020	E	WESTBOUND MAIN	SACRAMENTO	SP	32		50708
32	SPARKS	246.2	004	E	TRACK 4	SACRAMENTO	SP	32		60980
2C031	SPARKS	246.0	007	E	WEST LEAD	SACRAMENTO	SP	32		47548
2C031	SPARKS	247.0	005	E	ENGINE LEAD	SACRAMENTO	SP	32		47437
2C031	SPARKS	245.0	010	E	XOVER	SACRAMENTO	SP	32		51825
2C031	SPARKS	245.8	008	E	WEST XOVER	SACRAMENTO	SP	32		57693
2C031	SPARKS	246.2	005	E	EAST DRILL TRK	SACRAMENTO	SP	32		52288
2C031	SPARKS	245.0	000		TRACK AC 1	SACRAMENTO	SP	32		50708
2C031	SPARKS	247.5	010	E	EST MAIN	SACRAMENTO	SP	32		5406
2C031	SPARKS	245.0	003	E	104-102	SACRAMENTO	SP	32		53807
2C031	SPARKS	247.5	000		WEST MAIN	SACRAMENTO	SP	32		54068
2C031	SPARKS	246.2	003	E	PVT CAR SPUR	SACRAMENTO	SP	32		52732
2C031	SPARKS	245.0	000		WESTBOUND MAIN	SACRAMENTO	SP	32		50708

TCNTY	STATION	MILEPO	SPE	T	TRKNAME	DIVISION	RAIL	ST	GXID	INCDTNO
2C031	SPARKS	246.2	015	E	FOUR TRK	SACRAMENTO	SP	32		S7112
2C031	SPARKS	245.0	004	E	MAIN	SACRAMENTO	SP	32		S6546
2C031	SPARKS	246.0	005	E	TRACK 21	SACRAMENTO	SP	32		R8969
2C031	SPARKS	247.0	006	E	17 LEAD	SACRAMENTO	SP	32		45088
2C031	SPARKS	247.0	005	E	TRACK 4	SACRAMENTO	SP	32		S3968
2C031	SPARKS	246.7	005	E	WESTMAIN	SACRAMENTO	SP	32		S6381
2C031	SPARKS	246.0	004	E	WEST MAIN TRACK	SACRAMENTO	SP	32		R2949
2C031	SPARKS	246.0	011	E	EASTBOUND MAIN	SACRAMENTO	SP	32		49977
2C031	SPARKS	247.5	000		EAST MAIN	SACRAMENTO	SP	32		S4068
2C031	SPARKS	245.5	010	E	WEST LEAD	SACRAMENTO	SP	32		S6742
2C031	SPARKS	245.3	005	E	MAIN	SACRAMENTO	SP	32		S2484
2C031	SPARKS	245.5	000	E	TRACK TWO	SACRAMENTO	SP	32		S6742
2C031	SPARKS	246.0	005	E	WESTEND LEAD	SACRAMENTO	SP	32		S5101
2C007	TECOMA	668.9	000	E	MAIN	SACRAMENTO	SP	32		S5765
2C007	TECOMA	669.3	070	E	MAIN	SACRAMENTO	SP	32		S1038
2C007	TECOMA	668.9	023	E	MAIN	SACRAMENTO	SP	32		S5785
2	THISBE	272.10	045	E	MAIN	SACRAMENTO	SP	32		S8539
32C031	THISBE	267.0	010	E	MAIN TRACK	SACRAMENTO	SP	32		S1388
32C021	THORNE	391.0	025	E	MAIN LINE	SACRAMENTO	SP	32		R6919
32C021	THORNE	382.2	020	E	BRANCH LINE	SACRAMENTO	SP	32		47517
32C027	TREGO	454.0	050	E	MAIN TRACK	SACRAMENTO	SP	32		44157
32C027	TREGO	451.01	045	E	MAIN LINE	SACRAMENTO	SP	32		S3547
32C007	TULASCO	597.1	000		MAIN TRACK	SACRAMENTO	SP	32		60221
32C007	TULASCO	709.0	045	E		SACRAMENTO	SP	32		72860
32C001	UPSAL	303.2	040	E	MAIN LINE	SACRAMENTO	SP	32		62111
32C001	UPSAL	303.2	000	E	MAIN	SACRAMENTO	SP	32		62111
32C007	VALLEY PASS	639.0	015	E	MAIN TRACK	SACRAMENTO	SP	32		47975
32C015	VALMY	456.0	060	E	MAIN	SACRAMENTO	SP	32		S1033
32C013	VALMY	456.0	000		MAIN	SACRAMENTO	SP	32		60210
32C031	VERDI	234.0	045	E	MAIN TRK NO 2	SACRAMENTO	SP	32		48535
32C031	VERDI	MP233	045	E	EAST MAIN	SACRAMENTO	WP	32		233881
32C031	VERDI	233.5	000	E	EAST MAIN	SACRAMENTO	SP	32		S2981
32C031	VERDI	230.0	040	E	NO 2	SACRAMENTO	SP	32		59377
32C031	VISTA	249.0	045	E	WESTWARD MAIN	SACRAMENTO	SP	32	740744Y	49899
32C007	WELLS	607.5	030	E	MAIN	SACRAMENTO	SP	32		S4473
32	WESO	421.8	040	E	MAIN LINE	SACRAMENTO	SP	32		S6680
32C013	WESO	420.9	045	E	MAIN TRACK	SACRAMENTO	SP	32		S5096
32C013	WINNEMUCCA	531.50	006	E		SACRAMENTO	SP	32		S9872
32C013	WINNEMUCCA	417.0	008	E	SIDING	SACRAMENTO	SP	32		S3485
32C031	SPARKS	246.0	004	E	WEST MAIN	SACRAMETNO	SP	32		63131
32C007	CARLIN	536.0	000		MAIN	SACRENENTO	SP	32		60723
32C021	LUNING	407.5	008	E	BRANCH LINE	SACRENENTO	SP	32		48756
32	THISBE	269.5	040	E	MAIN TRACK	SACRENENTO	SP	32		63820
32C027	TOY	328.5	040	E	MAIN LINE	SPARKS	SP	32		B2500
32C017	ACOMA	484.4	000		SINGLE MAIN TRACK	UTAH	UP	32		0575UT201
32C017	ACOMA	484.2	001	E	SETOUT TRACK ACOMA	UTAH	UP	32		0279UT204
32C017	ACOMA	484.2	000	E	SIDING ACOMA	UTAH	UP	32		0279UT204
32C017	ACOMA	480.7	022	R	SINGLE MAIN	UTAH	UP	32		0379UT207
32C017	ACOMA	480.7	026	R	SINGLE MAIN	UTAH	UP	32		0878UT203
32C003	APEX	352.3	060	E	MAIN	UTAH	UP	32	5040153	0889UT212
32C003	ARROLINE		001	E	ARROLINE NO 4	UTAH	UP	32		0779UT205
32C003	ARROLINE		000	E	ARROLINE 83	UTAH	UP	32		0779UT205
32C003	ARROLINE	353.0	055	R	SINGLE MAIN	UTAH	UP	32		1278UT204
32C001	ARROWLINE	353.8	000		LEAD TRAIN	UTAH	UP	32		0976UT201
32C001	ARROWLINE	353.8	005	E	YARD NO 1	UTAH	UP	32		0976UT201
32C011	EARTH	521.0	013	R	SP MAIN	UTAH	UP	32		0484UT205

TCNTY	STATION	MILEPO	SPE	T	TRKNAME	DIVISION	RAIL	ST	GXIO	INCDTNO
2	BOYD	443.4	030	E	SINGLE MAIN	UTAH	UP	32		6980UT201
2C017	BOYD	442.0	012	R	SINGLE MAIN	UTAH	UP	32		1177UT201
2C017	BOYD	442.5	020	E	SINGLE MAIN	UTAH	UP	32		0381UT204
2C017	BOYD	443.2	030	R	SINGLE MAIN	UTAH	UP	32		0479UT207
2C017	CALIENTE	458.5	020	E	SIDING	UTAH	UP	32		0582UT205
2C017	CALIENTE	459.9	005	E	WEST LEG WYE	UTAH	UP	32		0681UT207
2C017	CALIENTE	459.5	000	E	SIDING	UTAH	UP	32		0675UT204
2C017	CRESTLINE	495.0	050	E	SINGLE MAIN	UTAH	UP	32		0581UT205
2C007	DEETH	699.1	040	E	MAIN LINE	UTAH	UP	32	833513A	0184UT201
2C003	DIKE	3.4	060	E	MAIN	UTAH	UP	32	804011K	0290UT006
2C003	DRY LAKE	365.0	040	E	SINGLE MAIN	UTAH	UP	32		0979UT202
2C003	DRY LAKE	361.9	005	E	SIDING TRACK	UTAH	UP	32		0581UT203
2C011	DUNPHY	610.9	000		DOUBLE MAIN LINE	UTAH	UP	32		0584UT205
2C017	ECCLES	463.3	030	E	MAIN LINE	UTAH	UP	32		0790UT205
2C017	ELGIN	438.0	025	R	SINGLE MAIN	UTAH	UP	32		0679UT202
2C013	ELLISON	574.0	060	E	MAIN	UTAH	UP	32		0385UT203
2	ETNA	454.2	030	R	SINGLE MAIN	UTAH	UP	32		0979UT207
2C017	GALT	408.8	030	E	3RD SUBDIVN MI TRK	UTAH	UP	32		0181UT204
2C003	HENDERSON	9.5	000		TRK 710	UTAH	UP	32		0789UT202
2C003	HENDERSON	9.5	030	E	TRACK 710	UTAH	UP	32		0789UT202
2	HOYA	402.8	050	E	SINGLE MAIN	UTAH	UP	32		0878UT202
2	HOYA	402.5	000		SETOUT TRACK HOYA	UTAH	UP	32		1278UT003
2	HOYA	402.5	020	R	SETOUT TRACK HOYA	UTAH	UP	32		1278UT003
2C017	ISLEN	478.0	030	E	SINGLE MAIN	UTAH	UP	32		0780UT206
2C017	ISLEN	477.5	020	E	SINGLE MAIN	UTAH	UP	32		0880UT203
2C017	ISLEN	484.8	020	E	SINGLE MAIN	UTAH	UP	32		1082UT205
2C017	ISLEN	475.6	020	E	SINGLE MAIN	UTAH	UP	32		0381UT028
2C017	ISLEN	475.6	000	E	PASSING TRACK	UTAH	UP	32		0381UT028
2C017	ISLEN	473.9	020	E	SINGLE MAIN	UTAH	UP	32		0481UT206
2C017	KYLE	434.5	005	E	KYLE SIDING	UTAH	UP	32		0681UT202
2C017	KYLE	432.78	035	E	SINGLE MAIN	UTAH	UP	32		0981UT206
2	KYLE	434.0	020	E	SINGLE MAIN	UTAH	UP	32		1180UT204
2C017	KYLE	433.4	030	E	SINGLE MAIN	UTAH	UP	32		0281UT202
2C017	KYLE	434.5	010	E	SIDING KYLE	UTAH	UP	32		1079UT202
2C003	LAS VEGAS	335.0	003	E	EAST DRILL & MAIN	UTAH	UP	32		0689UT208
32	LEITH	428.5	015	R	SINGLE MAIN	UTAH	UP	32		0378UT203
32	LEITH	428.5	030	R	SINGLE MAIN	UTAH	UP	32		0778UT201
32	LEITH	430.6	032	R	SINGLE MAIN	UTAH	UP	32		0878UT201
32	LEITH	429.4	030	E	SINGLE MAIN	UTAH	UP	32		0879UT204
32	LITTLE SPRINGS	472.91	023	R	SINGLE MAIN	UTAH	UP	32		0478UT202
32	LITTLE SPRINGS	472.8	020	E	SINGLE MAIN	UTAH	UP	32		1279UT201
32C017	LITTLE SPRINGS	472.7	020	E	SINGLE MAIN	UTAH	UP	32		1081UT203
32C003	MCAPA	383.3	060	R	SINGLE MAIN	UTAH	UP	32		0879UT203
32C003	MCAPA		007	E	NEVADA POWER PLANT	UTAH	UP	32		0578UT208
32C017	RICHMOND	4.7	022	E	MAIN LINE	UTAH	UP	32		0488UT213
32C017	RICHMOND	4.7	000	E	MAIN LINE	UTAH	UP	32		0488UT213
32	STINE	448.0	030	R	SINGLE MAIN	UTAH	UP	32		0380UT204
32C003	UTE	376.5	060	E	SINGLE MAIN	UTAH	UP	32		0580UT202
32C003	UTE	373.7	003	E	UTE YD #1 & #2	UTAH	UP	32		0290UT214
32	UVADA	496.7	037	R	SINGLE MAIN	UTAH	UP	32		0579UT203
32C017	UVADA	504.8	055	E	SINGLE MAIN	UTAH	UP	32		0581UT206
32	VIEO	412.0	020	E	MAIN SIDE.E	UTAH	UP	32		1080UT204
32C017	VIEO	4.1	022	R	MAIN LINE	UTAH	UP	32		0688UT203
32	VIEO	411.89	020	R	SINGLE MAIN	UTAH	UP	32		0478UT207
32C017	VIEO	412.2	030	E	SINGLE MAIN	UTAH	UP	32		0881UT205
32	VIEO	408.0	035	E	MAIN SIDE.E	UTAH	UP	32		1080UT206

STCNTY	STATION	MILEPO	SPE	T	TRKNAME	DIVISION	RAIL	ST	GXID	INCDTNO
32	VIGO	410.7	030	E	SINGLE MAIN	UTAH	UP	32		0280UT204
32	WEST ELGIN	438.0	025	E	SIDING	UTAH	UP	32		1180UT010
32	WEST ELGIN	438.0	005	E	SINGLE MAIN	UTAH	UP	32		1180UT010
32C015	BATTLE MOUNTAIN	478.2	079	R	MAIN	WESTERN	ATK	32		051685A
32C013	ELLISON	576.9	000		SINGLE MAIN TRACK	WESTERN	WP	32		223378
32C031	FLANIGAN	387.2	000		SINGLE MAIN TRACK	WESTERN	UP	32		0684WP212
32C031	FLANIGAN	MP384	040		SINGLE MAIN TRACK	WESTERN	WP	32		283578
32C007	HALLECK	584	010	E	SINGLE MAIN TRACK	WESTERN	WP	32		221878
32C017	KYLE	430.5	022	R	PASSING SIDING	WESTERN	ATK	32		064681B
32C003	LAS VEGAS	347.5	075	E	MAIN	WESTERN	ATK	32		053088A
32C031	MARTIN	15	025	E	BRANCH TRACK	WESTERN	WP	32		2121178
32C031	MARTIN	21.3	000		RUNAROUND TRACK	WESTERN	WP	32		221477
32C031	NORTH RENO	28	005	E	NORTH TRACK PIGGYBAC	WESTERN	WP	32		241677
32	PEAVINE	MP 12	025		BRANCH TRACK	WESTERN	WP	32		2103778
32C021	PHIL	425.2	040	E	SINGLE MAIN TRACK	WESTERN	UP	32		0184WP218
32C013	RED HOUSE	562.0	070	E	MAIN	WESTERN	ATK	32		013083A
32C031	REYNARD	MP416	055	E	SINGLE MAIN TRACK	WESTERN	WP	32		211379
32C031	SAND PASS	MP394	030	E	SINGLE MAIN TRACK	WESTERN	WP	32		283678
32C031	SIERRA PACIFIC	MP30.6	000		SINGLE MAIN TRACK	WESTERN	WP	32		272082
32C031	SPARKS	246.2	003	E	PRIVATE CAR SPUR	WESTERN	ATK	32		0324828

TOTALS: SPEED 10,314

Printed 467 of the 467 records.

PRIMARY SORT FIELD: SORT_SEQ

SELECTION CRITERIA:
All records

APPENDIX D

Highway Accident Data

I-80: CA/NV border eastward to Wadsworth, NV
U.S. 395: Bower's Mansion Road north to N. McCarran Blvd

Data Source:
State of Nevada, Department of Transportation
ATTN: Robert Hilderbrand

MACKAY SCHOOL OF MINES

UNIVERSITY OF NEVADA RENO

Department of Geological Sciences
Reno, Nevada
Ph
FAX

February 22, 1996

Robert Hilderbrand
State of Nevada, Dept. of Transportation
1263 S. Steward St.
Carson City, NV 89710

Dear Sir:

I am a faculty member at the University of Nevada, Reno and am working on a project funded by Sierra Pacific Power Company entitled, "Development of an Integrated Computer Platform for the Evaluation of Contaminant Mitigation Scenarios along the Truckee River." My effort on this project involves calculating the risk of contaminating the Truckee River by an accident, or accidents involving hazardous substances. To enable me to develop realistic calculations of risk, I am in need of accident statistics on two major highways in the time period, 1992-1994 (or, if data this recent are not available, then for the three most recent years of available data):

1. Interstate 80 (I-80), from the CA-NV state line east to Wadsworth, NV; and
2. US 395, from the north end of Washoe Valley north to the N. McCarran exit.

I would like to have these data by April 1, 1996, if possible. I hope my request is clear. If not, please call me at 784-4244 for clarification. Moreover, thank you for your time and attention to this matter.

Sincerely,

James R. Carr
Professor, Geological Sciences

P.S. These requested data will not be sold for profit; they will be included in my final report to Sierra Pacific Power Company to document the risk to the Truckee River of contamination by hazardous substances.

DEPARTMENT OF TRANSPORTATION
1263 S. Stewart Street
Carson City, Nevada 89712

March 13, 1996

BOB MILLER, Governor

TOM STEPHENS, P.E., Director

In Reply Refer to:

University of Nevada, Reno
Department of Geological Sciences/172
Reno, NV 89557-0138

Attn: James Carr

Dear Mr. Carr:

In response to your letter dated February 22, 1996, we have research our database for all the reported accidents on the following segments of I-80 and US 395 for the 3 year time period of January 1992 through December 1994:

I-80 from CA-NV State line to West Wadsworth Interchange
US 395 from Bowers Mansion Road to N. McCarran Blvd.

Enclosed you will find tables indicating type of accident and contributing factors by severity for these two segments of roadway.

A charge of $105.00 will be assessed your school for computer and research time.

If you have any questions regarding this matter, please contact either Eileen Letizia or Theresa Pacheco at (702) 888-7469.

Sincerely,

Robert E. Hilderbrand
Chief Safety Engineer

REH:TCP:dmg
Encl.

Policy on billing - if you're using data for profit

I-80 From the CA/NV State Line to the West Wadsworth Interchange
January 1992 through December 1994

Type of Accident by Severity

Type of Accident	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Rear-End Collision	384	216	1	601	342	1
Sideswipe-Same Dir.	195	39	2	236	55	4
Ran off Rdwy-Fixed Obj.	162	69	0	231	81	0
Obj. Thrown from Veh.	88	3	0	91	5	0
Out of Control Vehicle	59	20	0	79	43	0
Angle Collision	45	24	0	69	29	0
Ran off Rdwy	45	14	0	59	22	0
Ran off Rdwy Overturned	24	26	1	51	41	1
Object in Roadway	43	5	0	48	5	0
Ran off Rdwy-Median Fixed Object	31	13	2	46	14	3
Parked Vehicle	32	13	0	45	22	0
Animal	34	1	0	35	1	0
Left Turn Collision	18	10	0	28	14	0
Ran off Rdwy-Median Overturned	9	14	3	26	29	3
Chain Reaction Collision	8	16	0	24	45	0
Ran off Rdwy-Median Fixed Object	14	3	0	17	3	0
Overturned in Rd.	6	8	0	14	9	0
Ran off Rdwy-Other Comb.	4	6	3	13	13	3
Pedestrian	0	9	2	11	9	2
Overturned Down Cliff	4	4	2	10	6	2
Other Non-motor Vehicle	10	0	0	10	0	0
Ran off Rdwy-Embank.	4	5	0	9	9	0
Other Non-Collision	8	0	0	8	0	0
Sideswipe-Opposite Dir.	3	3	1	7	4	1
Jackknife in Rd.	6	1	0	7	1	0

Type of Accident by Severity

Type of Accident	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Pedalcycle	0	6	0	6	6	0
Right Turn Collision	4	0	0	4	0	0
Protruding Part of Veh.	1	0	0	1	0	0
Trailing Unit Disconnects	1	1	0	2	1	0
Head-On Collision	0	1	1	2	7	1
Unknown Non-Collision	2	0	0	2	0	0
Ran off Rdwy-Culv. Or Abut.	0	1	0	1	1	0
Unknown Collision	1	0	0	1	0	0
Other Type Collision	1	0	0	1	0	0
Totals	1246	531	18	1795	817	21

I-80 From the CA/NV State Line to the West Wadsworth Interchange
January 1992 through December 1994

Contributing Factor by Severity

Contributing Factor	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Failure to Reduce Speed	147	106	0	253	186	0
Inattentive Driving	171	77	3	251	120	4
Speed Too Fast for Cond.	172	51	3	226	85	3
Following Too Close	108	54	0	162	71	0
Improper Lane Change	125	33	2	160	38	4
D.U.I. - Alcohol	41	59	7	107	88	7
Failure to Yield	66	36	0	102	46	0
Non-Contact Vehicle	41	19	0	60	23	0
Other Factor	52	4	0	56	6	0
Objects in Roadway	46	3	0	49	3	0
Unsafe Load	38	1	0	39	1	0
Fatigued Driver	21	16	0	37	27	0
Deer in Rdwy	26	0	0	26	0	0
Improper Turn	23	3	0	26	3	0
Improper Passing	21	4	0	25	6	0
Excessive Speed	12	10	0	22	13	0
Defective Roadway	12	6	0	18	24	0
Defective Tires	14	2	1	17	3	1
Defective Vehicle	13	3	0	16	5	0
Bad Weather	15	1	0	16	1	0
Driving in Improp. Manner	6	9	0	15	22	0
Prior Accident	9	3	0	12	5	0
Animal in Rdwy	8	4	0	12	4	0
Nondesignated Travel Ln.	5	6	0	11	8	0
Defective Trailing Unit	6	2	0	8	2	0
Improper Backing	8	0	0	8	0	0
Wrong Way on One Way	4	1	1	6	2	1

Contributing Factor by Severity

Contributing Factor	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Improp. Start from Parking	5	1	0	6	2	0
Driver Phycial Defect	2	3	0	5	4	0
Defective Brakes	5	0	0	5	0	0
Improp. Pedalcycle Action	0	4	0	4	4	0
Pedestrian in Roadway	0	3	1	4	3	1
Loose Material on Surface	3	1	0	4	2	0
Vehicle Stalled in Lane	1	2	0	3	5	0
Fail to Yield to Temp. Traffic Cont.	2	1	0	3	2	0
D.U.I. - Drugs	2	1	0	3	1	0
Cow in Roadway	3	0	0	3	0	0
Improp. Use of Turn Ln.	3	0	0	3	0	0
Rocks in Roadway	1	1	0	2	1	0
Failure to Signal	1	1	0	2	1	0
Opening Dr. into Traffic	2	0	0	2	0	0
Hit and Run	2	0	0	2	0	0
Vehicle Too High	1	0	0	1	0	0
Unknown Factor	1	0	0	1	0	0
Improper Parking	1	0	0	1	0	0
Unoccupied Moving Veh.	1	0	0	1	0	0
Totals	1246	531	18	1795	817	21

US 395 from Bowers Mansion Road to N. McCarran Blvd. Interchange
January 1992 through December 1994

Type of Accident by Severity

Type of Accident	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Rear-End Collision	164	85	2	251	130	2
Sideswipe-Same Dir.	71	13	0	84	19	0
Ran off Rdwy-Fixed Obj.	39	22	0	61	26	0
Angle Collision	35	21	0	56	40	0
Left Turn Collision	14	11	0	25	20	0
Animal	24	0	0	24	0	0
Out of Control Vehicle	18	3	1	22	8	2
Ran off Rdwy-Median Fixed Object	12	9	0	21	10	0
Obj. Thrown from Vehicle	20	0	0	20	0	0
Chain Reaction Collision	5	10	1	16	30	1
Object in Roadway	10	1	0	11	1	0
Parked Vehicle	6	4	0	10	4	0
Ran off Rdwy-Overturned	4	3	0	7	6	0
Ran off Rdwy	7	0	0	7	0	0
Sideswipe-Opposite Dir.	1	5	0	6	12	0
Other Non-Motor Vehicle	6	0	0	6	0	0
Pedestrian	0	3	2	5	4	2
Head-On Collision	3	1	1	5	4	1
Ran off Rdwy-Other Comb.	2	2	1	5	2	1
Overturned Down Cliff	3	2	0	5	2	0
Ran off Rdwy-Median	4	1	0	5	1	0
Overturned in Rd.	0	4	0	4	5	0
Pedalcycle	0	4	0	4	4	0
Other Type	3	0	0	3	0	0
Right Turn Collision	2	0	0	2	0	0

Type of Accident by Severity

Type of Accident	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Ran off Rdwy-Median Overturned	0	1	0	1	3	0
Jackknife in Rd.	1	0	0	1	0	0
Hit Parked Vehicle Off Rdwy	1	0	0	1	0	0
Totals	455	205	8	668	331	9

US 395 from Bowers Mansion Road to N. McCarran Interchange
January 1992 through December 1994

Contributing Factor by Severity

Contributing Factor	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Failure to Reduce Speed	77	42	0	119	60	0
Inattentive Driving	58	32	1	91	47	1
Failure to Yield	44	32	0	76	61	0
Speed Too Fast for Cond.	37	16	0	53	30	0
Improper Lane Change	43	9	0	52	16	0
Following Too Close	30	12	1	43	19	1
D.U.I. - Alcohol	17	17	3	37	30	4
Fatigued Driver	9	10	0	19	12	0
Other	18	0	0	18	0	0
Weather	13	4	0	17	5	0
Non-Contact Vehicle	11	2	0	13	7	0
Improper Turn	9	3	0	12	8	0
Improper Passing	10	2	0	12	2	0
Animal in Roadway-Deer	12	0	0	12	0	0
Unsafe Load	8	0	0	8	0	0
Object in Roadway	6	1	0	7	1	0
Careless Driving	2	4	0	6	7	0
Improper Use of Turn Ln.	5	1	0	6	1	0
Defective Brakes	3	2	0	5	3	0
Animal in Roadway	5	0	0	5	0	0
Defective Vehicle	5	0	0	5	0	0
Pedestrian in Roadway	0	2	2	4	3	2
Excessive Speed	2	2	0	4	2	0
Nondesignated Travel Ln.	2	2	0	4	2	0
Unoccupied Moving Veh.	3	1	0	4	1	0

Contributing Factor	Property Dam.Acc.	Injury Acc.	Fatal Acc.	Total Acc.	No. of Inj.	No. of Fat.
Defective Tires	3	1	0	4	1	0
Physical Driver Defect	4	0	0	4	0	0
Defective Trailing Unit	4	0	0	4	0	0
Animal in Roadway-Cow	4	0	0	4	0	0
Improp. Pedalcycle Action	0	3	0	3	3	0
Disregard Temp. Traffic Cont.	1	2	0	3	2	0
Animal in Roadway-Horse	3	0	0	3	0	0
Improper Backing	2	0	0	2	0	0
Wrong Side of Road	0	1	0	1	3	0
D.U.I. - Drugs	0	0	1	1	2	1
Wrong Way on One Way	0	1	0	1	2	0
Defective Roadway	0	1	0	1	1	0
Vehicle Stalled in Lane	1	0	0	1	0	0
Hit and Run	1	0	0	1	0	0
Defective Steering	1	0	0	1	0	0
Prior Accident	1	0	0	1	0	0
Loose Material on Surface	1	0	0	1	0	0
Totals	455	205	8	668	331	9

APPENDIX E

VMT Data
I-80: CA/NV border eastward to Vista Blvd.
U.S. 395: vicinity of Glendale Avenue

Data Source:
State of Nevada, Department of Transportation
ATTN: Charlie Cerocke

MACKAY SCHOOL OF MINES

UNIVERSITY OF NEVADA RENO

Department of Geological Sciences
Reno, Nevada
Ph.
FAX

April 1, 1996

Mike Lawson
Nevada Department of Transportation
1263 S. Stewart St.
Carson City, NV 89712

Dear Mike:

Thank you for taking the time to speak with me on the phone today.

As you suggested, I am writing to request information. In particular, I wish to obtain the following information: 1994 data characterizing:

1. Total VMT, I-80, from the California/Nevada border eastward to Wadsworth;
2. Truck VMT, I-80, from CA/NV border to Wadsworth;
3. HazMat VMT, I-80, from CA/NV border to Wadsworth;
4. Total VMT, U.S. 395, within 1 mile of the Truckee River;
5. Truck VMT, U.S. 395, within 1 mile of the Truckee River;
6. HazMat VMT, U.S. 395, within 1 mile of the Truckee River.

I would appreciate receiving these data by April 19, 1996.

I do realize how difficult it is to characterize highway data, and further realize and appreciate that you may not be able to honor my total request. I would be most grateful for any data that you may be able to provide.

As I explained, I am working on research funded by Sierra Pacific Power Company to characterize the potential risk to the Truckee River posed by the transport of hazardous materials.

Thank you very much for your time, and your help so far. I look forward to hearing from you.

Yours truly,

James (Jim) Carr
Professor, Geological Sciences

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
1263 S. Stewart Street
Carson City, Nevada 89712

April 19, 1996

BOB MILLER, *Governor*

TOM STEPHENS, P.E., *Director*

In Reply Refer to:

University of Nevada Reno
Mr. James Carr
Department of Geological Sciences/172
Reno, Nevada 89557/0138

PSD 4.00

Dear Mr. Carr:

Attached is the information you requested regarding trucks carrying hazardous materials. The methodology applied was as follows:

I reviewed the Commodity Report dated January, 1993 and manual vehicle classification data. Within the Commodity Report, Hazardous Materials Section, there is a table titled "Average Daily Hazmat Truck Traffic Percent of Distribution by Hazmat Class." I referenced the % of AADTT column for links 21, 22, 64 and 65, then compared them to the hazmat counts (manual class) done on those same links and the percentages were very close. Therefore, I was confident in utilizing the manual classification counts for the urban areas.

Should you require clarification on the material provided, or need additional information, please call me at (702) 888-7442.

Sincerely,

Charlie Cerocke
Transportation Analyst

CKC:nc

Attached

I-80

Segment	'94 AADT	'94 T%	Mileage	'94 Total AVMT	'94 Truck AVMT	'94 Hazmat AVMT
Stateline to W. Verdi	23,540	20%	2.840	24,401,564	4,880,312	136,649
W. Verdi to Verdi	23,740	20%	0.427	3,699,998	739,999	20,720
Verdi to Garson Rd.	24,020	19%	1.625	14,246,863	2,706,904	75,793
Garson Rd. to E. Verdi	27,225	19%	0.869	8,635,362	1,640,719	45,940
E. Verdi to Mogul	29,945	18%	1.321	14,438,431	2,598,918	72,770
Mogul to Lawton	35,585	16%	0.663	8,611,392	1,377,823	38,579
Lawton to Robb Dr.	28,645	15%	1.485	15,526,306	2,328,946	65,210
Robb Dr. to W. McCarran	32,080	17%	1.452	17,001,758	2,890,299	80,928
W. McCarran to Keystone	41,145	13%	1.786	26,822,014	3,486,862	97,632
Keystone to Sierra/Center	69,255	8%	0.956	24,165,840	1,933,267	37,892
Sierra/Center to Wells	87,800	6%	0.613	19,644,811	1,178,689	23,102
Wells to US-395	99,205	6%	0.825	29,873,106	1,792,386	35,131
US-395 to E. 4th	95,315	6%	0.522	18,160,367	1,089,622	21,357
E. 4th to Rock	91,650	7%	0.725	24,252,881	1,697,702	33,275
Rock to Pyramid	78,905	7%	0.680	19,584,221	1,370,895	26,870
Pyramid to E. McCarran	58,850	11%	0.777	16,690,154	1,835,917	35,984
E. McCarran to Sparks Blvd.	42,200	14%	1.324	20,393,572	2,855,100	55,960
Sparks Blvd to Vista	27,735	14%	0.787	7,967,017	1,115,382	21,861
Vista to Lockwood	21,730	23%	2.867	22,739,467	5,230,077	172,593
Lockwood to Mustang	19,055	23%	1.422	9,890,116	2,274,727	75,066
Mustang to Patrick	17,860	26%	4.195	27,346,786	7,110,164	234,635
Patrick to Tracy	17,265	26%	3.860	24,324,659	6,324,411	208,706
Tracy to Thisbe	16,800	23%	4.819	29,550,108	6,796,525	224,285
Thisbe to Orchard	16,795	23%	2.071	12,695,592	2,919,986	96,360
Orchard to Painted Rock	16,845	23%	1.165	7,612,915	1,647,470	54,367
Painted Rock to W. Wadsworth	16,965	23%	3.775	23,375,649	5,376,399	177,421
W. Wadsworth to Fernley	16,105	26%	2.360	13,872,847	3,606,940	119,029

US-395/I-580

Segment	'94 AADT	'94 T%	Mileage	'94 Total AVMT	'94 Truck AVMT	'94 Hazmat AVMT
Mill toGlendale	112,485	3%	0.534	21,924,451	657,734	22,363
Glendale to 395/80	118,235	3%	0.729	31,460,560	943,817	32,089
395/80 to Oddie	75,035	3%	0.566	15,501,481	465,044	15,811

APPENDIX F

This appendix is an expanded version of Appendix B to include all available information. The purpose of Appendix B is for determining accident frequency. The purpose of Appendix E is for determining (in some reasonable sense) the probability that a breach will occur in the event of a rail accident.

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	75	12	WP	2121875	
	75	12	SP	52415	75
	75	11	WP	2111775	
	75	11	SP	51825	
	75	11	SP	51595	
	75	09	SP	49825	
	75	08	UP	0875CA206	
	75	07	UP	0775CA212	
	75	07	SP	48535	
	75	07	SP	48285	
	75	07	NN	1275	
	75	06	UP	0675UT204	
	75	06	SP	47975	
	75	06	SP	47935	
	75	06	SP	47535	
	75	05	UP	0575UT201	
	75	05	SP	46895	
	75	04	SP	46205	
	75	03	WP	23775	
	75	03	WP	23675	
	75	02	WP	221575	
	75	02	SP	45115	75
	75	02	SP	44935	
	75	02	NN	775	
	76	12	WP	212976	
	76	12	WP	212376	
	76	12	UP	2121076	
	76	12	UP	1276CA215	
	76	11	WP	2113776	76
	76	11	WP	2111276	
	76	11	UP	1176CA229	
	76	11	UP	1176CA229	
	76	11	SP	56266	76
	76	10	SP	55286	
	76	10	SP	55216	
	76	10	SP	55096	
	76	09	WP	291676	
	76	09	WP	291176	76
	76	09	UP	0976UT201	
	76	09	UP	0976UT201	
	76	09	SP	54446	
	76	09	SP	53876	
	76	09	SP	53686	
	76	08	WP	283376	76
	76	08	WP	283276	76
	76	08	WP	283176	76
	76	08	WP	282476	76
	76	08	SP	53236	76
	76	08	SP	53216	76
	76	08	SP	53206	
	76	08	SP	53196	
	76	08	SP	52976	
	76	08	SP	52956	
	76	08	SP	52946	
	76	07	WP	27776	76
	76	07	WP	27476	

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	76	07	WP	27276	76
	76	07	SP	51846	
	76	07	SP	51746	76
	76	07	SP	51666	
	76	06	WP	261076	
	76	06	SP	48756	
	76	06	SP	48756	
	76	06	SP	48626	
	76	05	WP	25876	
	76	05	SP	47806	
	76	04	WP	243576	
	76	04	WP	242576	76
	76	04	WP	241976	
	76	04	SP	46836	
	76	03	WP	234976	76
	76	03	WP	23276	
	76	03	SP	46336	
	76	03	SP	45786	
	76	01	UP	0176CA220	
	77	12	WP	212777	
	77	11	UP	1177UT201	
	77	10	WP	2103277	
	77	10	WP	2102477	
	77	10	WP	2102177	77
	77	10	WP	2102077	77
	77	10	SP	53777	
	77	10	SP	53547	
	77	10	SP	53317	
	77	09	WP	292777	77
	77	09	SP	52157	
	77	08	WP	28977	77
	77	08	UP	0877CA302	
	77	08	SP	51627	
	77	08	SP	51597	
	77	08	SP	50977	
	77	08	SP	50967	
	77	07	WP	274577	77
	77	07	WP	274477	77
	77	07	WP	274377	
	77	07	WP	273677	
	77	07	WP	271777	
	77	07	SP	50417	
	77	07	SP	50407	
	77	07	SP	50207	
	77	07	SP	49977	
	77	06	WP	262877	
	77	05	SP	47517	
	77	04	WP	241677	
	77	04	SP	47437	
	77	03	WP	232877	77
	77	03	WP	232777	
	77	03	UP	0377CA214	
	77	03	UP	0377CA214	
	77	03	SP	46527	
	77	03	SP	46297	77
	77	02	WP	221477	

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	77	02	SP	45067	
	77	01	WP	212777	
	77	01	WP	211977	77
	77	01	UP	0177CA014	
	77	01	SP	44347	
	77	01	SP	44157	
	78	12	WP	2121178	
	78	12	UP	1278UT204	
	78	12	UP	1278UT003	
	78	12	UP	1278UT003	
	78	12	UP	1278CA208	
	78	12	UP	1278CA201	
	78	12	UP	1278CA201	
	78	12	SP	56598	
	78	11	SP	55648	
	78	10	WP	2103778	
	78	10	SP	54428	
	78	10	SP	54408	
	78	10	SP	54068	
	78	10	SP	54068	
	78	10	SP	54068	
	78	09	WP	292478	78
	78	09	SP	53968	
	78	09	SP	53458	78
	78	08	WP	283678	
	78	08	WP	283578	
	78	08	UP	0878UT203	
	78	08	UP	0878UT202	
	78	08	UP	0878UT201	
	78	08	SP	52288	
	78	07	WP	273978	
	78	07	WP	273278	
	78	07	UP	0778UT201	
	78	07	SP	51388	
	78	07	SP	50708	
	78	07	SP	50708	
	78	07	SP	50708	
	78	05	UP	0578UT208	
	78	05	SP	48888	
	78	05	SP	48648	
	78	04	UP	0478UT207	
	78	04	UP	0478UT202	
	78	04	SP	47918	
	78	04	SP	47548	
	78	03	UP	0378UT203	
	78	03	UP	0378CA208	
	78	02	WP	223378	78
	78	02	WP	221878	78
	78	02	SP	45838	
	78	02	SP	45658	
	78	02	SP	45268	78
	78	01	UP	0178CA225	
	78	01	UP	0178CA225	
	78	01	SP	45088	
	78	01	SP	44838	
	78	01	SP	44108	

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	78	01	SP	44048	
	78	01	SP	44038	
	78	01	SP	44028	
	79	12	WP	2121379	
	79	12	UP	1279UT201	
	79	12	UP	1279CA027	
	79	12	UP	1279CA027	
	79	12	SP	R8969	
	79	11	WP	211379	
	79	11	SP	R6919	
	79	11	SP	R6869	
	79	10	WP	2101779	
	79	10	UP	1079UT202	
	79	10	SP	R6099	
	79	10	SP	R5609	
	79	09	UP	0979UT207	
	79	09	UP	0979UT202	
	79	09	SP	R2949	
	79	08	UP	0879UT204	
	79	08	UP	0879UT203	
	79	08	SP	R0539	
	79	07	WP	273979	
	79	07	UP	0779UT205	
	79	07	UP	0779UT205	
	79	07	UP	0779CA205	
	79	07	UP	0779CA204	
	79	06	UP	0679UT202	
	79	05	WP	251079	
	79	05	WP	ROW5479	79
	79	05	UP	0579UT203	
	79	05	SP	51349	
	79	05	SP	49899	
	79	04	WP	243479	79
	79	04	WP	241479	79
	79	04	UP	0479UT207	
	79	04	SP	49079	
	79	04	SP	48539	
	79	04	SP	47609	
	79	03	WP	23279	
	79	03	WP	232679	79
	79	03	UP	0379UT207	
	79	03	UP	0379CA213	
	79	03	UP	0379CA213	
	79	03	SP	46179	79
	79	02	WP	222679	79
	79	02	UP	0279UT204	
	79	02	UP	0279UT204	
	79	02	SP	45459	
	79	02	SP	45299	
	79	01	WP	21879	
	79	01	SP	44879	
	79	01	SP	44539	
	79	01	SP	44169	
	80	12	WP	2121580	80
	80	12	UP	1280CA206	
	80	12	UP	1280CA206	

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	80	12	SP	72860	
	80	12	SP	72820	
	80	12	NN	380	
	80	11	WP	2111780	80
	80	11	WP	2111480	
	80	11	UP	1180UT204	
	80	11	UP	1180UT010	
	80	11	UP	1180UT010	
	80	11	UP	1180CA232	
	80	11	UP	1180CA201	
	80	11	UP	1180CA201	
	80	11	SP	71910	
	80	11	NN	280	
	80	10	WP	210480	
	80	10	WP	2101380	
	80	10	UP	1080UT206	
	80	10	UP	1080UT204	
	80	10	SP	69200	80
	80	10	SP	68980	
	80	10	SP	68220	
	80	10	SP	68210	80
	80	10	SP	68190	
	80	09	WP	293880	
	80	09	WP	293680	
	80	09	WP	293080	
	80	09	UP	0980UT201	
	80	09	UP	0980CA214	
	80	09	SP	67410	80
	80	09	SP	66640	
	80	08	WP	28380	
	80	08	WP	28380	
	80	08	UP	0880UT203	
	80	08	SP	63820	
	80	07	WP	273080	80
	80	07	UP	0780UT206	
	80	07	UP	0780CA203	
	80	07	SP	63250	
	80	07	SP	62440	
	80	06	WP	262980	80
	80	06	WP	261280	
	80	06	UP	0680CA201	
	80	06	SP	60300	
	80	05	WP	253280	80
	80	05	WP	251080	
	80	05	UP	0580UT202	
	80	05	SP	60260	
	80	05	SP	60260	
	80	05	SP	59790	
	80	05	SP	59780	80
	80	05	SP	59480	
	80	05	SP	58530	
	80	04	SP	56680	
	80	03	UP	0380UT204	
	80	03	UP	0380CA203	
	80	02	WP	22880	80
	80	02	WP	222580	80

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	80	02	WP	222280	
	80	02	UP	0280UT204	
	80	02	SP	52930	80
	80	02	SP	52910	
	80	02	SP	52790	80
	80	02	SP	52310	
	80	02	SP	52310	
	80	01	WP	212280	80
	80	01	WP	211580	
	80	01	WP	211580	
	80	01	WP	211480	
	80	01	SP	52160	
	81	12	WP	212681	
	81	12	SP	63131	
	81	11	SP	62111	
	81	11	SP	62111	
	81	10	UP	1081UT203	
	81	10	SP	61601	
	81	10	SP	61501	
	81	09	WP	29981	81
	81	09	WP	29881	81
	81	09	UP	0981UT206	
	81	09	SP	61041	81
	81	09	SP	60221	81
	81	08	WP	28981	
	81	08	WP	281281	
	81	08	WP	281081	
	81	08	UP	0881UT205	
	81	08	SP	58961	81
	81	08	SP	58741	81
	81	07	SP	57911	
	81	07	SP	57871	
	81	06	WP	261581	
	81	06	UP	0681UT207	
K	81	06	UP	0681UT202	81
	81	06	SP	57121	81
	81	06	SP	56381	
K	81	06	ATK	060681B	81
	81	05	WP	251681	
	81	05	UP	0581UT206	
	81	05	UP	0581UT205	
	81	05	UP	0581UT203	
	81	05	SP	55661	81
	81	05	SP	55101	
	81	04	WP	24881	
	81	04	UP	0481UT206	
	81	04	SP	53571	
	81	03	WP	233881	81
	81	03	WP	233181	
	81	03	UP	0381UT204	
	81	03	UP	0381UT028	
	81	03	UP	0381UT028	
	81	03	SP	53471	
	81	03	SP	53141	
	81	03	SP	52981	81
	81	03	SP	52481	

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	81	02	WP	222881	
	81	02	WP	222181	
	81	02	WP	221381	
	81	02	UP	0281UT202	
	81	01	WP	211681	
	81	01	UP	0181UT204	
	81	01	NN	181	
	82	11	WP	2112582	82
	82	11	SP	59872	
	82	10	WP	2101582	
	82	10	WP	2101182	
	82	10	UP	1082UT205	
	82	10	SP	58392	82
	82	09	WP	29282	
	82	09	SP	58202	
	82	09	SP	58202	
	82	08	SP	57112	
	82	08	SP	56742	
	82	08	SP	56742	
	82	07	WP	272082	
	82	05	UP	0582UT205	
	82	05	SP	54552	
	82	04	SP	53152	
K	82	03	SP	52732	82
K	82	03	ATK	032482B	82
	82	02	WP	221382	
K	83	01	ATK	013083A	83
K	83	01	SP	50503	83
	83	01	WP	212183	83
	83	02	SP	51033	
	83	02	UP	0283CA201	
	83	04	SP	53103	
	83	04	WP	24583	83
	83	05	SP	54473	
	83	06	WP	261483	
	83	06	SP	55643	
	83	06	WP	26383	83
	83	06	SP	55003	
	83	06	WP	26583	83
	83	08	SP	57693	
	83	11	UP	1183CA203	
	83	11	UP	1183CA207	
	83	11	UP	1183CA207	
	83	12	SP	60723	83
	84	01	SP	50004	
	84	01	SP	50174	
	84	01	UP	0184UT201	
	84	01	UP	0184WP218	
	84	02	UP	0284CA203	
	84	02	UP	0284CA203	
	84	03	SP	52404	
	84	04	SP	53214	
	84	04	SP	53354	
	84	04	SP	53704	84
	84	04	UP	0484UT205	
	84	05	SP	54574	

RAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	84	05	UP	0584UT205	84
	84	06	SP	55614	
	84	06	UP	0684WP212	84
	84	08	UP	0884CA202	
	84	09	SP	59294	
	84	09	SP	59494	
	84	09	SP	59494	
	84	11	SP	61334	
	85	02	UP	0285CA209	
	85	03	UP	0385CA203	
	85	03	UP	0385FR204	
	85	03	UP	0385UT203	
	85	04	SP	53485	
	85	05	SP	54275	
K	85	05	ATK	051685A	85
K	85	05	SP	54525	85
	85	06	SP	55785	
	85	06	SP	55785	
	85	08	SP	57875	
	85	09	SP	59015	
	85	09	UP	0985CA018	
	85	10	SP	60605	
	86	01	UP	0186CA201	
	86	01	UP	0186FR202	
	86	05	UP	0586CA014	
	86	06	UP	0686CA202	
	86	07	UP	0786CA204	
	86	08	SP	55756	
	86	09	SP	56546	
	87	05	SP	53437	
	87	05	SP	53807	
	87	12	SP	59377	
	88	01	UP	0188NV201	
	88	02	UP	0288NV201	
	88	03	SP	51038	
	88	04	SP	51428	
	88	04	UP	0488UT213	
	88	04	UP	0488UT213	
K	88	05	ATK	053088A	
	88	05	UP	0588NV202	
	88	06	UP	0688UT203	
	88	09	UP	0988CA005	
	88	11	UP	1188NV201	
	88	12	SP	54478	88
	89	01	SP	50409	
	89	01	UP	0189NV201	89
	89	02	UP	0289NV201	
	89	04	UP	0489NV201	
	89	04	UP	0489NV201	
	89	05	UP	0589NV202	
	89	06	SP	53969	
	89	06	UP	0689UT208	
	89	07	SP	54869	
	89	07	SP	54859	
	89	07	UP	0789UT202	
	89	07	UP	0789UT202	

AMTRAK	IYR	IMO	RAILROAD	INCDTNO	IYR2
	89	08	UP	0889UT212	
	89	09	SP	56109	
	89	09	UP	0989CA203	
	89	10	UP	1089CA206	
	89	10	UP	1089CA209	
	89	10	UP	1089FR206	
	90	01	UP	0190FR219	
	90	01	UP	0190FR213	
	90	02	UP	0290UT006	
	90	02	UP	0290UT214	
	90	03	UP	0390CA212	
	90	04	UP	0490CA217	
	90	05	UP	0590FR204	
	90	05	UP	0590FR204	
	90	06	SP	B2500	
	90	07	UP	0790UT205	
	90	08	UP	0890CA201X	
	90	09	UP	0990FR209	
	90	10	UP	1090FR205	

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
			75	12	SP
12	WP	2121875	75	12	SP
			75	11	WP
			75	11	SP
			75	11	SP
			75	09	SP
			75	08	UP
			75	07	UP
			75	07	SP
			75	07	SP
			75	07	NN
			75	06	UP
			75	06	SP
			75	06	SP
			75	06	SP
			75	05	UP
			75	05	SP
			75	04	SP
			75	03	WP
			75	03	WP
			75	02	SP
02	WP	221575	75	02	SP
			75	02	SP
			75	02	NN
			76	12	WP
			76	12	WP
			76	12	UP
			76	12	UP
11	SP	56266	76	11	SP
			76	11	WP
			76	11	UP
			76	11	UP
11	WP	2113776	76	11	SP
			76	10	SP
			76	10	SP
			76	10	SP
			76	09	WP
09	SP	53876	76	09	WP
			76	09	UP
			76	09	UP
			76	09	SP
			76	09	WP
			76	09	SP
08	SP	52976	76	08	WP
08	SP	52956	76	08	WP
08	SP	53216	76	08	SP
08	SP	53236	76	08	SP
08	WP	282476	76	08	SP
08	WP	283176	76	08	SP
			76	08	SP
			76	08	SP
			76	08	WP
			76	08	WP
			76	08	SP
07	SP	51746	76	07	WP
			76	07	WP

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
07	SP	51666	76	07	WP
			76	07	SP
07	WP	27776	76	07	WP
			76	07	WP
			76	06	WP
			76	06	SP
			76	06	SP
			76	06	SP
			76	05	WP
			76	05	SP
			76	04	WP
04	SP	46836	76	04	WP
			76	04	WP
			76	04	WP
03	SP	46336	76	03	WP
			76	03	WP
			76	03	WP
			76	03	SP
			76	01	UP
			77	12	WP
			77	11	UP
			77	10	WP
			77	10	WP
10	SP	53777	77	10	WP
10	SP	53547	77	10	WP
			77	10	WP
			77	10	WP
			77	10	SP
09	SP	52157	77	09	WP
			77	09	WP
08	SP	50967	77	08	WP
			77	08	UP
			77	08	SP
			77	08	SP
			77	08	SP
			77	08	WP
07	SP	50407	77	07	WP
07	SP	50207	77	07	WP
			77	07	WP
			77	07	WP
			77	07	WP
			77	07	SP
			77	07	WP
			77	07	WP
			77	07	SP
			77	06	WP
			77	05	SP
			77	04	WP
			77	04	SP
03	SP	46297	77	03	SP
			77	03	WP
			77	03	UP
			77	03	UP
			77	03	SP
03	WP	232877	77	03	SP
			77	02	WP

IMO2	RR2	INCDNO2	IYR3	IMO3	RR3
			77	02	SP
			77	01	WP
01	SP	44157	77	01	WP
			77	01	UP
			77	01	SP
			77	01	WP
			78	12	WP
			78	12	UP
			78	12	UP
			78	12	UP
			78	12	UP
			78	12	UP
			78	12	UP
			78	12	SP
			78	11	SP
			78	10	WP
			78	10	SP
			78	10	SP
			78	10	SP
			78	10	SP
			78	10	SP
09	SP	53458	78	09	SP
			78	09	SP
09	WP	292473	78	09	SP
			78	08	WP
			78	08	WP
			78	08	UP
			78	08	UP
			78	08	UP
			78	08	SP
			78	07	WP
			78	07	WP
			78	07	UP
			78	07	SP
			78	07	SP
			78	07	SP
			78	07	SP
			78	05	UP
			78	05	SP
			78	05	SP
			78	04	UP
			78	04	UP
			78	04	SP
			78	04	SP
			78	03	UP
			78	03	UP
02	SP	45838	78	02	WP
02	SP	45268	78	02	SP
			78	02	WP
			78	02	SP
02	WP	221878	78	02	SP
			78	01	UP
			78	01	UP
			78	01	SP
			78	01	SP
			78	01	SP

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
			78	01	SP
			78	01	SP
			78	01	SP
			79	12	WP
			79	12	UP
			79	12	UP
			79	12	UP
			79	12	SP
			79	11	WP
			79	11	SP
			79	11	SP
			79	10	WP
			79	10	UP
			79	10	SP
			79	10	SP
			79	09	UP
			79	09	UP
			79	09	SP
			79	08	UP
			79	08	UP
			79	08	SP
			79	07	WP
			79	07	UP
			79	07	UP
			79	07	UP
			79	07	UP
			79	06	UP
			79	05	WP
05	SP	51349	79	05	WP
			79	05	UP
			79	05	WP
			79	05	SP
04	SP	49079	79	04	WP
04	SP	48539	79	04	WP
			79	04	UP
			79	04	WP
			79	04	WP
			79	04	SP
			79	03	WP
03	SP	46179	79	03	SP
			79	03	UP
			79	03	UP
			79	03	UP
03	WP	232679	79	03	SP
02	SP	45459	79	02	WP
			79	02	UP
			79	02	UP
			79	02	WP
			79	02	SP
			79	01	WP
			79	01	SP
			79	01	SP
			79	01	SP
12	SP	72860	80	12	WP
			80	12	UP
			80	12	UP

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
			80	12	WP
			80	12	SP
			80	12	NN
11	SP	71910	80	11	WP
			80	11	WP
			80	11	UP
			80	11	UP
			80	11	UP
			80	11	UP
			80	11	UP
			80	11	UP
			80	11	WP
			80	11	NN
			80	10	SP
			80	10	SP
			80	10	UP
			80	10	UP
10	WP	2101380	80	10	SP
			80	10	SP
			80	10	SP
10	WP	210480	80	10	SP
			80	10	SP
			80	09	WP
			80	09	SP
			80	09	WP
			80	09	UP
			80	09	UP
09	WP	293680	80	09	SP
			80	09	SP
			80	08	WP
			80	08	WP
			80	08	UP
			80	08	SP
07	SP	63250	80	07	WP
			80	07	UP
			80	07	UP
			80	07	WP
			80	07	SP
06	SP	60300	80	06	WP
			80	06	WP
			80	06	UP
			80	06	WP
05	SP	59790	80	05	WP
			80	05	SP
			80	05	UP
			80	05	SP
			80	05	SP
			80	05	WP
05	WP	251080	80	05	SP
			80	05	SP
			80	05	SP
			80	04	SP
			80	03	UP
			80	03	UP
02	SP	52790	80	02	WP
02	SP	52930	80	02	SP

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
			80	02	WP
			80	02	UP
02	WP	222580	80	02	SP
			80	02	SP
02	WP	22880	80	02	WP
			80	02	SP
			80	02	SP
01	SP	52160	80	01	WP
			80	01	WP
			80	01	WP
			80	01	WP
			80	01	WP
			81	12	WP
			81	12	SP
			81	11	SP
			81	11	SP
			81	10	UP
			81	10	SP
			81	10	SP
09	SP	61041	81	09	SP
09	SP	60221	81	09	SP
			81	09	UP
09	WP	29981	81	09	SP
09	WP	29881	81	09	SP
			81	08	SP
			81	08	SP
			81	08	WP
			81	08	UP
08	WP	281281	81	08	SP
08	WP	28981	81	08	SP
			81	07	SP
			81	07	SP
			81	06	SP
			81	06	UP
06	ATK	060681B	81	06	UP
06	WP	261581	81	06	SP
			81	06	SP
06	UP	0681UT202	81	06	UP
			81	05	SP
			81	05	UP
			81	05	UP
			81	05	UP
05	WP	251681	81	05	SP
			81	05	SP
			81	04	WP
			81	04	UP
			81	04	SP
03	SP	52981	81	03	SP
			81	03	WP
			81	03	UP
			81	03	UP
			81	03	UP
			81	03	SP
			81	03	SP
03	WP	233881	81	03	SP
			81	03	SP

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
			81	02	WP
			81	02	WP
			81	02	WP
			81	02	UP
			81	01	WP
			81	01	UP
			81	01	NN
11	SP	59872	82	11	WP
			82	11	WP
			82	10	SP
			82	10	WP
			82	10	UP
10	WP	2101582	82	10	SP
			82	09	WP
			82	09	SP
			82	09	SP
			82	08	SP
			82	08	SP
			82	08	SP
			82	07	WP
			82	05	UP
			82	05	SP
			82	04	SP
03	ATK	032482B	82	03	SP
03	SP	52732	82	03	SP
			82	02	WP
01	SP	50503	83	01	WP
01	ATK	013083A	83	01	WP
01	SP	50503	83	01	WP
			83	02	SP
			83	02	UP
			83	04	WP
04	SP	53103	83	04	WP
			83	05	SP
			83	06	WP
			83	06	WP
06	SP	55643	83	06	WP
			83	06	WP
06	SP	55003	83	06	WP
			83	08	SP
			83	11	UP
			83	11	UP
			83	11	UP
12	UP	1283UT202	83	12	SP
			84	01	SP
			84	01	SP
			84	01	UP
			84	01	UP
			84	02	UP
			84	02	UP
			84	03	SP
			84	04	SP
			84	04	SP
04	UP	0484UT205	84	04	SP
			84	04	SP
			84	05	UP

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
05	SP	54574	84	05	UP
			84	06	UP
06	SP	55614	84	06	UP
			84	08	UP
			84	09	SP
			84	09	SP
			84	09	SP
			84	11	SP
			85	02	UP
			85	03	UP
			85	03	UP
			85	03	UP
			85	04	SP
			85	05	SP
05	SP	54525	85	05	SP
05	ATK	051685A	85	05	SP
			85	06	SP
			85	06	SP
			85	08	SP
			85	09	SP
			85	09	UP
			85	10	SP
			86	01	UP
			86	01	UP
			86	05	UP
			86	06	UP
			86	07	UP
			86	08	SP
			86	09	SP
			87	05	SP
			87	05	SP
			87	12	SP
			88	01	UP
			88	02	UP
			88	03	SP
			88	04	SP
			88	04	UP
			88	04	UP
			88	05	UP
			88	05	UP
			88	06	UP
			88	09	UP
			88	11	UP
12	UP	1288NV201	88	12	SP
			89	01	UP
01	SP	50409	89	01	UP
			89	02	UP
			89	04	UP
			89	04	UP
			89	05	UP
			89	06	SP
			89	06	UP
			89	07	SP
			89	07	UP
			89	07	UP
			89	07	UP

IMO2	RR2	INCDTNO2	IYR3	IMO3	RR3
			89	08	UP
			89	09	SP
			89	09	UP
			89	10	UP
			89	10	UP
			89	10	UP
			90	01	SF
			90	01	UP
			90	02	UP
			90	02	UP
			90	03	UP
			90	04	UP
			90	05	UP
			90	05	UP
			90	06	SP
			90	07	UP
			90	08	UP
			90	09	UP
			90	10	UP

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
52415			75	12	16
52415			75	12	16
2111775			75	11	11
51825			75	11	22
51595			75	11	17
49825			75	09	09
0875CA206			75	08	10
0775CA212			75	07	29
48535			75	07	27
48285			75	07	13
1275			75	07	08
0675UT204			75	06	24
47975			75	06	28
47935			75	06	25
47535			75	06	03
0575UT201			75	05	01
46895			75	05	12
46205			75	04	20
23775			75	03	04
23675			75	03	01
45115			75	02	14
45115			75	02	14
44935			75	02	17
775			75	02	19
212976			76	12	12
212376			76	12	03
2121076			76	12	15
1276CA215			76	12	13
56266			76	11	27
2111276			76	11	10
1176CA229			76	11	20
1176CA229			76	11	20
56266			76	11	27
55286			76	10	25
55216			76	10	21
55096			76	10	24
291676			76	09	20
291176			76	09	12
0976UT201			76	09	02
0976UT201			76	09	02
54446			76	09	27
291176			76	09	12
53686			76	09	02
283376			76	08	13
283276			76	08	09
53216			76	08	27
53236			76	08	22
53236			76	08	22
53216			76	08	27
53206			76	08	28
53196			76	08	24
283376			76	08	13
283276			76	08	09
52946			76	08	14
27776			76	07	01
27476			76	07	07

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
27276			76	07	04
51846			76	07	09
27776			76	07	01
27276			76	07	04
261076			76	06	05
48756			76	06	22
48756			76	06	22
48626			76	06	22
25876			76	05	10
47806			76	05	20
243576			76	04	28
242576			76	04	18
241976			76	04	15
242576			76	04	18
234976			76	03	30
23276			76	03	01
234976			76	03	30
45786			76	03	19
0176CA220			76	01	30
212777			77	12	07
1177UT201			77	11	09
2103277			77	10	07
2102477			77	10	26
2102177			77	10	12
2102077			77	10	09
2102177			77	10	12
2102077			77	10	09
53317			77	10	09
292777			77	09	03
292777			77	09	03
28977			77	08	04
0877CA302			77	08	05
51627		740746M	77	08	24
51597			77	08	19
50977			77	08	02
28977			77	08	04
274577			77	07	27
274477			77	07	20
274377			77	07	29
273677			77	07	22
271777		833519R	77	07	16
50417			77	07	20
274577			77	07	27
274477			77	07	20
49977			77	07	16
262877			77	06	06
47517			77	05	02
241677			77	04	25
47437			77	04	30
46297			77	03	28
232777			77	03	23
0377CA214			77	03	17
0377CA214			77	03	17
46527			77	03	29
46297			77	03	28
221477			77	02	21

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
45067			77	02	16
212777			77	01	21
211977			77	01	07
0177CA014			77	01	21
44347			77	01	23
211977			77	01	07
2121178			78	12	09
1278UT204			78	12	07
1278UT003			78	12	04
1278UT003			78	12	04
1278CA208			78	12	19
1278CA201			78	12	01
1278CA201			78	12	01
56598		740765S	78	12	18
55648			78	11	10
2103778			78	10	27
54428			78	10	11
54408			78	10	18
54068			78	10	09
54068			78	10	09
54068			78	10	09
53458			78	09	19
53968			78	09	14
53458			78	09	19
283678			78	08	24
283578			78	08	24
0878UT203			78	08	13
0878UT202			78	08	08
0878UT201			78	08	08
52288			78	08	02
273978			78	07	30
273278			78	07	27
0778UT201			78	07	02
51388			78	07	28
50708			78	07	01
50708			78	07	01
50708			78	07	01
0578UT208			78	05	26
48888			78	05	17
48648			78	05	07
0478UT207			78	04	22
0478UT202			78	04	06
47918			78	04	22
47548			78	04	01
0378UT203			78	03	03
0378CA208			78	03	06
223378			78	02	20
45268			78	02	12
223378			78	02	20
45658			78	02	17
45268			78	02	12
0178CA225			78	01	27
0178CA225			78	01	27
45088			78	01	20
44838			78	01	25
44108		740815T	78	01	09

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
44048			78	01	12
44038			78	01	10
44028			78	01	01
2121379	F		79	12	20
1279UT201	F		79	12	21
1279CA027	F		79	12	26
1279CA027	F		79	12	26
R8969	F		79	12	06
211379	F		79	11	01
R6919	F		79	11	12
R6869	F		79	11	05
2101779	F		79	10	18
1079UT202	F		79	10	13
R6099	F		79	10	31
R5609	F		79	10	24
0979UT207	F		79	09	29
0979UT202	F		79	09	11
R2949	F		79	09	13
0879UT204	F		79	08	26
0879UT203	F		79	08	21
R0539	F		79	08	21
273979	F		79	07	31
0779UT205	F		79	07	25
0779UT205	F		79	07	25
0779CA205	F		79	07	24
0779CA204	F		79	07	24
0679UT202	F		79	06	18
251079	F		79	05	05
ROW5479	F		79	05	29
0579UT203	F		79	05	08
ROW5479	F		79	05	29
49899		740744Y	79	05	10
243479	F		79	04	27
241479	F		79	04	17
0479UT207	F		79	04	26
243479	F		79	04	27
241479	F		79	04	17
47609	F		79	04	08
23279	F		79	03	01
46179	F		79	03	20
0379UT207	F		79	03	23
0379CA213	F		79	03	12
0379CA213	F		79	03	12
46179	F		79	03	20
222679	F		79	02	21
0279UT204	F		79	02	11
0279UT204	F		79	02	11
222679	F		79	02	21
45299	F		79	02	25
21879	F		79	01	05
44879	F		79	01	20
44539	F		79	01	15
44169	F		79	01	14
2121580	F		80	12	08
1280CA206	F		80	12	17
1280CA206	F		80	12	17

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
2121580	F		80	12	08
72820	F		80	12	03
380	F		80	12	22
2111780	F		80	11	14
2111480	F		80	11	12
1180UT204	F		80	11	14
1180UT010	F		80	11	07
1180UT010	F		80	11	07
1180CA232	F		80	11	22
1180CA201	F		80	11	03
1180CA201	F		80	11	03
2111780	F		80	11	14
280	F		80	11	14
68210	F		80	10	02
69200	F		80	10	07
1080UT206	F		80	10	25
1080UT204	F		80	10	19
69200	F		80	10	07
68980	F		80	10	20
68220	F		80	10	07
68210	F		80	10	02
68190	F		80	10	02
293880	F		80	09	30
67410	F		80	09	29
293080	F		80	09	28
0980UT201	F		80	09	15
0980CA214	F		80	09	16
67410	F		80	09	29
66640	F		80	09	15
28380	F		80	08	05
28380	F		80	08	05
0880UT203	F		80	08	11
63820	F		80	08	06
273080	F		80	07	19
0780UT206	F		80	07	16
0780CA203	F		80	07	05
273080	F		80	07	19
62440	F		80	07	01
262980	F		80	06	09
261280	F		80	06	05
0680CA201	F		80	06	07
262980	F		80	06	09
253280	F		80	05	20
59780	F		80	05	14
0580UT202	F		80	05	02
60260	F		80	05	30
60260	F		80	05	30
253280	F		80	05	20
59780	F		80	05	14
59480	F		80	05	25
58530	F		80	05	11
56680	F		80	04	12
0380UT204	F		80	03	22
0380CA203	F		80	03	14
22880	F		80	02	10
52930	F		80	02	16

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
222280	F		80	02	25
0280UT204	F		80	02	14
52930	F		80	02	16
52910	F		80	02	20
22880	F		80	02	10
52310	F		80	02	05
52310	F		80	02	05
212280	F		80	01	28
211580	F		80	01	16
211580	F		80	01	16
211480	F		80	01	10
212280	F		80	01	28
212681	F		81	12	07
63131	F		81	12	14
62111	F		81	11	10
62111	F		81	11	10
1081UT203	F		81	10	11
61601	F		81	10	30
61501	F		81	10	25
61041	F		81	09	17
60221	F		81	09	12
0981UT206	F		81	09	25
61041	F		81	09	17
60221	F		81	09	12
58741	F		81	08	12
58961	F		81	08	18
281081	F		81	08	10
0881UT205	F		81	08	28
58961	F		81	08	18
58741	F		81	08	12
57911	F		81	07	23
57871	F		81	07	22
57121	F		81	06	24
0681UT207	F		81	06	16
0681UT202	F		81	06	06
57121	F		81	06	24
56381	F		81	06	15
0681UT202	F		81	06	06
55661	F		81	05	16
0581UT206	F		81	05	12
0581UT205	F		81	05	20
0581UT203	F		81	05	05
55661	F		81	05	16
55101	F		81	05	14
24881	F		81	04	07
0481UT206	F		81	04	28
53571	F		81	04	01
52981	F		81	03	06
233181	F		81	03	25
0381UT204	F		81	03	24
0381UT028	F		81	03	26
0381UT028	F		81	03	26
53471	F		81	03	24
53141	F		81	03	31
52981	F		81	03	06
52481	F		81	03	12

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
222881	F		81	02	28
222181	F		81	02	22
221381	F		81	02	15
0281UT202	F		81	02	08
211681	F		81	01	12
0181UT204	F		81	01	19
181	F		81	01	30
2112582	F		82	11	30
2112582	F		82	11	30
58392	F		82	10	21
2101182	F		82	10	19
1082UT205	F		82	10	30
58392	F		82	10	21
29282	F		82	09	01
58202	F		82	09	14
58202	F		82	09	14
57112	F		82	08	23
56742	F		82	08	12
56742	F		82	08	12
272082	F		82	07	27
0582UT205	F		82	05	22
54552	F		82	05	28
53152	F		82	04	18
52732	F		82	03	24
52732	F		82	03	24
221382	F		82	02	16
212183	F		83	01	30
212183	F		83	01	30
212183	F		83	01	30
51033	F		83	02	20
0283CA201	F		83	02	12
24583	F		83	04	09
24583	F		83	04	09
54473	F		83	05	27
261483	F		83	06	17
26383	F		83	06	06
26383	F		83	06	06
26583	F		83	06	05
26583	F		83	06	05
57693	F		83	08	18
1183CA203	F		83	11	22
1183CA207	F		83	11	03
1183CA207	F		83	11	03
60723	F		83	12	07
50004	F		84	01	02
50174	F		84	01	24
0184UT201		833513A	84	01	05
0184WP218	F		84	01	25
0284CA203	F		84	02	02
0284CA203	F		84	02	02
52404	F		84	03	31
53214	F		84	04	02
53354	F		84	04	19
53704	F		84	04	10
53704	F		84	04	10
0584UT205	F		84	05	28

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INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
0584UT205	F		84	05	28
0684WP212	F		84	06	23
0684WP212	F		84	06	23
0884CA202	F		84	08	19
59294	F		84	09	27
59494	F		84	09	21
59494	F		84	09	21
61334	F		84	11	24
0285CA209	F		85	02	18
0385CA203	F		85	03	21
0385FR204	F		85	03	16
0385UT203	F		85	03	03
53485	F		85	04	02
54275	F		85	05	13
54525	F		85	05	16
54525	F		85	05	16
55785	F		85	06	22
55785	F		85	06	22
57875	F		85	08	09
59015	F		85	09	06
0985CA018		804015M	85	09	20
60605	F		85	10	17
0186CA201			86	01	24
0186FR202			86	01	17
0586CA014			86	05	18
0686CA202		804121V	86	06	26
0786CA204			86	07	16
55756	M060		86	08	20
56546			86	09	21
53437			87	05	04
53807			87	05	17
59377			87	12	04
0188NV201			88	01	25
0288NV201			88	02	20
51038			88	03	30
51428			88	04	08
0488UT213			88	04	28
0488UT213			88	04	28
ZZZZZZZZZ2			88	05	30
0588NV202			88	05	21
0688UT203	R020		88	06	05
0988CA005	M060		88	09	22
1188NV201			88	11	18
54478			88	12	27
0189NV201			89	01	18
0189NV201			89	01	18
0289NV201			89	02	05
0489NV201	R020		89	04	13
0489NV201	R020		89	04	13
0589NV202	R020		89	05	20
53969	R060	740796R	89	06	12
0689UT208			89	06	27
54869	X020		89	07	18
ZZZZZZZZZZ			89	07	14
0789UT202			89	07	06
0789UT202			89	07	06

INCDTNO3	DUMMY1	GXID	YEAR	MONTH	DAY
0889UT212		504015J	89	08	09
56109			89	09	07
0989CA203			89	09	15
1089CA206			89	10	14
1089CA209			89	10	17
1089FR206			89	10	11
504101		740863H	90	01	31
0190FR213			90	01	20
0290UT006		804011K	90	02	10
0290UT214			90	02	23
0390CA212			90	03	22
0490CA217	R060		90	04	28
0590FR204			90	05	07
0590FR204			90	05	07
B2500			90	06	30
0790UT205			90	07	16
0890CA201			90	08	09
0990FR209		833430L	90	09	26
1090FR205	R020		90	10	21

HRMI	AMPM	TYPE	CAR	CAR	CAR	EVACUA	DIVISION
110	AM	01	0	0	0	0	EASTERN
150	AM	01	0	0	0	0	SACRAMENTO
630	AM	01	3	0	0	0	EASTERN
715	AM	01	0	0	0	0	SACRAMENTO
1105	AM	01	0	0	0	0	SACRAMENTO
355	AM	01	0	0	0	0	SACRAMENTO
340	AM	01	0	0	0	0	CALIFORNIA
1050	AM	01	0	0	0	0	CALIFORNIA
1010	AM	01	0	0	0	0	SACRAMENTO
100	AM	01	0	0	0	0	SACRAMENTO
1100	AM	03	4	0	0	0	
1015	PM	01	0	0	0	0	UTAH
435	PM	02	0	0	0	0	SACRAMENTO
455	PM	11	0	0	0	0	SACRAMENTO
540	AM	01	0	0	0	0	SACRAMENTO
210	PM	09	0	0	0	0	UTAH
415	AM	11	0	0	0	0	SACRAMENTO
140	AM	01	0	0	0	0	SACRAMENTO
1010	AM	01	0	0	0	0	EASTERN
235	AM	01	1	0	0	0	EASTERN
1130	PM	01	0	0	0	0	EASTERN
1159	PM	01	0	0	0	0	SACRAMENTO
510	AM	12	0	0	0	0	SACRAMENTO
415	PM	01	0	0	0	0	
1140	AM	01	0	0	0	0	EASTERN
450	AM	01	0	0	0	0	EASTERN
905	AM	11	0	0	0	0	EASTERN
305	PM	01	0	0	0	0	CALIFORNIA
945	AM	01	0	0	0	0	EASTERN
310	AM	01	0	0	0	0	EASTERN
410	AM	02	4	0	0	0	CALIFORNIA
410	AM	02	0	0	0	0	CALIFORNIA
950	AM	01	0	0	0	0	SACRAMENTO
205	PM	09	0	0	0	0	SACRAMENTO
1145	AM	01	0	0	0	0	SACRAMENTO
1250	AM	01	1	1	0	0	SACRAMENTO
930	AM	11	0	0	0	0	EASTERN
305	AM	01	0	0	0	0	EASTERN
1120	AM	04	0	0	0	0	UTAH
1120	AM	04	0	0	0	0	UTAH
535	AM	01	0	0	0	0	SACRAMENTO
305	AM	01	1	1	0	0	SACRAMENTO
1025	AM	01	0	0	0	0	SACRAMENTO
110	PM	01		0	0	0	EASTERN
1205	PM	01		0	0	0	EASTERN
1250	PM	12	0	0	0	0	EASTERN
205	PM	01	1	0	0	0	EASTERN
210	PM	01					SACRAMENTO
1250	PM	12	0	0	0	0	SACRAMENTO
400	PM	01	0	0	0	0	SACRAMENTO
430	AM	01	0	0	0	0	SACRAMENTO
125	PM	01	0	0	0	0	SACRAMENTO
1205	PM	01	0	0	0	0	SACRAMENTO
130	AM	11	2	0	0	0	SACRAMENTO
1055	AM	02					EASTERN
610	PM	11	0	0	0	0	EASTERN

HRMI	AMPM	TYPE	CAR	CAR	CAR	EVACUA	DIVISION
140	AM	01				0	EASTERN
200	AM	12		0	0	0	SACRAMENTO
1100	PM	02	0	0	0	0	SACRAMENTO
140	PM	01	0	0	0	0	SACRAMENTO
640	PM	01	0	0	0	0	EASTERN
215	PM	01	0	0	0	0	SACRAMENTO
215	PM	01	0	0	0	0	SACREMENTO
140	PM	01	0	0	0	0	SACRAMENTO
655	AM	01	2	0	0	0	EASTERN
615	AM	01	0	0	0	0	SACRAMENTO
735	AM	01	0	0	0	0	EASTERN
930	PM	11	0	0	0	0	EASTERN
650	AM	01	0	0	0	0	EASTERN
915	PM	11	0	0	0	0	SACRAMENTO
300	AM	01	0	0	0	0	EASTERN
740	AM	01	0	0	0	0	EASTERN
320	AM	01	0	0	0	0	SACRAMENTO
935	AM	12	0	0	0	0	SACRAMENTO
748	PM	01	0	0	0	0	CALIFORNIA
135	PM	01				0	EASTERN
855	AM	01				0	UTAH
255	AM	01				0	EASTERN
655	PM	01				0	EASTERN
1130	AM	11				0	EASTERN
750	PM	11				0	EASTERN
1130	AM	11				0	SACRAMENTO
830	PM	11				0	SACRAMENTO
820	AM	01				0	SACRAMENTO
1215	PM	01				0	EASTERN
1215	PM	01				0	SACRAMENTO
205	PM	01				0	EASTERN
810	AM	11				0	CALIFORNIA
1155	PM	07				0	SACRAMENTO
315	PM	01				0	SACRAMENTO
1000	AM	01				0	SACRAMENTO
205	PM	01				0	SACRAMENTO
445	PM	01				0	EASTERN
700	AM	11					EASTERN
1150	PM	01					EASTERN
130	PM	03	1			0	EASTERN
900	AM	07				0	EASTERN
530	PM	01				0	EASTERN
415	PM	01				0	SACRAMENTO
555	PM	11	1	1		0	SACRAMENTO
115	AM	01				0	SACRAMENTO
115	PM	11				0	SACRAMENTO
330	PM	01	4			0	EASTERN
845	AM	01				0	SACRAMENTO
1100	AM	01				0	WESTERN
200	PM	01				0	SACRAMENTO
235	PM	01				0	EASTERN
115	AM	04	4			0	EASTERN
115	AM	04	1	1	1	0	CALIFORNIA
945	PM	01				0	CALIFORNIA
245	PM	01				0	SACRAMENTO
		01				0	SACRAMENTO
						0	WESTERN

HRMI	AMPM	TYPE	CAR	CAR	CAR	EVACUA	DIVISION
950	PM	01				0	SACRAMENTO
830	AM	01				0	EASTERN
445	PM	01					EASTERN
350	PM	01	4	2		0	CALIFORNIA
1220	PM	01				0	SACRAMENTO
425	PM	01				0	SACRAMENTO
430	AM	01				0	WESTERN
550	PM	01				0	UTAH
900	PM	03				0	UTAH
900	PM	03				0	UTAH
555	AM	12				0	CALIFORNIA
1255	AM	04				0	CALIFORNIA
1255	AM	04	1	1		0	CALIFORNIA
205	PM	07				0	SACRAMENTO
535	AM	01				0	SACRAMENTO
420	AM	01				0	WESTERN
730	PM	01				0	SACRAMENTO
625	PM	01				0	SACRAMENTO
1255	AM	01				0	SACRAMENTO
1255	AM	01				0	SACRAMENTO
1255	AM	01				0	SACRAMENTO
720	AM	01				0	EASTERN
130	AM	12				0	SACRAMENTO
745	AM	01				0	SACRAMENTO
1100	AM	11				0	WESTERN
945	AM	11				0	WESTERN
355	AM	01				0	UTAH
605	PM	01				0	UTAH
420	AM	01				0	UTAH
310	PM	01				0	SACRAMENTO
330	PM	01	2			0	EASTERN
425	PM	01				0	EASTERN
550	AM	01	3	2	1	0	UTAH
735	PM	01				0	SACRAMENTO
650	PM	04				0	SACRAMENTO
650	PM	04				0	SACRAMENTO
650	PM	04				0	SACRAMENTO
315	PM	01	0	0	0	0	UTAH
800	AM	01				0	SACRAMENTO
1100	AM	01				0	SACRAMENTO
1015	AM	01				0	UTAH
930	AM	01				0	UTAH
215	AM	01				0	SACRAMENTO
1030	AM	01				0	SACRAMENTO
550	AM	01				0	UTAH
220	PM	01				0	CALIFORNIA
1030	PM	12				0	WESTERN
1240	PM	01				0	WESTERN
1010	PM	12				0	SACRAMENTO
245	PM	01				0	SACRAMENTO
1230	PM	01				0	SACRAMENTO
145	PM	03				0	CALIFORNIA
145	PM	03				0	CALIFORNIA
1230	AM	01				0	SACRAMENTO
1240	AM	01				0	SACRAMENTO
845	AM	07				0	SACRAMENTO

HRMI	AMPM	TYPE	CAR	CAR	CAR	EVACUA	DIVISION
545	AM	01	1	1		0	SACRAMENTO
855	PM	01				0	SACRAMENTO
635	PM	01				0	SACRAMENTO
435	AM	01	0	0	0	0	EASTERN
540	AM	01	0	0	0	0	UTAH
250	AM	03	0	0	0	0	CALIFORNIA
250	AM	03	0	0	0	0	CALIFORNIA
1230	PM	12	0	0	0	0	SACRAMENTO
540	PM	01	0	0	0	0	WESTERN
600	PM	01	0	0	0	0	SACRAMENTO
1115	PM	01	0	0	0	0	SACRAMENTO
100	AM	01	0	0	0	0	EASTERN
940	PM	01	0	0	0	0	UTAH
515	PM	01	0	0	0	0	SACRAMENTO
1020	PM	01	0	0	0	0	SACRAMENTO
1120	PM	01	0	0	0	0	UTAH
910	PM	01	0	0	0	0	UTAH
715	PM	01	0	0	0	0	SACRAMENTO
505	AM	01	0	0	0	0	UTAH
601	AM	01	0	0	0	0	UTAH
1155	PM	01	0	0	0	0	
500	AM	11	0	0	0	0	EASTERN
1040	PM	04	0	0	0	0	UTAH
1040	PM	04	0	0	0	0	UTAH
915	AM	01	0	0	0	0	CALIFORNIA
1045	PM	01	0	0	0	0	CALIFORNIA
1125	PM	01	0	0	0	0	UTAH
935	AM	01	0	0	0	0	EASTERN
1010	PM	11	0	0	0	0	EASTERN
540	PM	01	0	0	0	0	UTAH
1010	PM	11	0	0	0	0	SACRAMENTO
440	PM	07	0	0	0	0	SACRAMENTO
735	PM	12	0	0	0	0	EASTERN
1020	PM	01	0	0	0	0	EASTERN
750	PM	01	0	0	0	0	UTAH
735	PM	12	0	0	0	0	SACRAMENTO
955	PM	01	0	0	0	0	SACRAMENTO
235	PM	11	0	0	0	0	SACRAMENTO
600	PM	01	0	0	0	0	EASTERN
255	AM	01	0	0	0	0	EASTERN
735	PM	01	0	0	0	0	UTAH
1245	PM	04	0	0	0	0	CALIFORNAI
1245	PM	04	0	0	0	0	CALIFORNIA
255	AM	01	0	0	0	0	SACRAMENTO
630	AM	01	0	0	0	0	EASTERN
720	AM	04	0	0	0	0	UTAH
720	AM	04	0	0	0	0	UTAH
635	AM	01	0	0	0	0	SACRAMENTO
627	AM	01	0	0	0	0	SACRAMENTO
745	PM	01	0	0	0	0	EASTERN
805	PM	09	0	0	0	0	SACRAMENTO
1135	PM	01	0	0	0	0	SACRAMENTO
850	PM	01	0	0	0	0	SACRAMENTO
600	PM	01	0	0	0	0	EASTERN
320	PM	04	0	0	0	0	CALIFORNIA
320	PM	04	0	0	0	0	CALIFORNIA

HRMI	AMPM	TYPE	CAR	CAR	CAR	EVACUA	DIVISION
600	PM	01	0	0	0	0	SACRAMENTO
130	PM	01	0	0	0	0	SACRAMENTO
815	PM	01	0	0	0	0	
615	PM	01	0	0	0	0	EASTERN
230	PM	01	0	0	0	0	EASTERN
435	PM	01	0	0	0	0	UTAH
1230	PM	04	0	0	0	0	UTAH
1230	PM	04	0	0	0	0	UTAH
245	AM	01	0	0	0	0	CALIFORNIA
815	AM	04	0	0	0	0	CALIFORNIA
815	AM	04	0	0	0	0	CALIFORNIA
615	PM	01	0	0	0	0	SACRAMENTO
900	AM	01	0	0	0	0	
955	PM	01	0	0	0	0	EASTERN
950	PM	01	0	0	0	0	EASTERN
545	PM	01	0	0	0	0	UTAH
125	PM	01	0	0	0	0	UTAH
950	PM	01	0	0	0	0	SACRAMENTO
1000	AM	01	0	0	0	0	SACRAMENTO
725	PM	01	2	0	0	0	SACRAMENTO
955	PM	01	0	0	0	0	SACRAMENTO
150	AM	01	0	0	0	0	SACRAMENTO
325	AM	01	0	0	0	0	EASTERN
645	AM	12	0	0	0	0	EASTERN
310	AM	01	0	0	0	0	EASTERN
245	PM	01	0	0	0	0	UTAH
820	AM	01	0	0	0	0	CALIFORNIA
730	AM	12	0	0	0	0	SACRAMENTO
840	AM	01	0	0	0	0	SACRAMENTO
810	AM	06	0	0	0	0	EASTERN
810	AM	06	0	0	0	0	EASTERN
700	PM	01	0	0	0	0	UTAH
720	PM	01	0	0	0	0	SACRMENTO
355	PM	01	0	0	0	0	EASTERN
200	AM	01	1	1	0	0	UTAH
1045	PM	01	0	0	0	0	CALIFORNIA
355	PM	01	0	0	0	0	SACRAMENTO
300	PM	01	0	0	0	0	SACRAMENTO
240	PM	01	0	0	0	0	EASTERN
145	PM	01	0	0	0	0	EASTERN
400	PM	01	0	0	0	0	CALIFORNIA
240	PM	01	0	0	0	0	SACRAMENTO
930	AM	12	0	0	0	0	EASTERN
1210	AM	01	0	0	0	0	EASTERN
835	AM	01	0	0	0	0	UTAH
415	PM	04	0	0	0	0	SACRAMENTO
415	PM	04	0	0	0	0	SACRAMENTO
825	PM	12	0	0	0	0	SACRAMENTO
1220	AM	01	0	0	0	0	SACRAMENTO
815	PM	01	0	0	0	0	SACRAMENTO
515	AM	01	0	0	0	0	SACRAMENTO
740	AM	01	0	0	0	0	SACRAMENTO
1245	AM	01	0	0	0	0	UTAH
1245	AM	01	0	0	0	0	CALIFORNIA
235	AM	03	0	0	0	0	EASTERN
1010	PM	12	0	0	0	0	EASTERN

HRNI	AMPM	TYPE	CAR	CAR	CAR	EVACUA	DIVISION
440	PM	01	0	0	0	0	EASTERN
600	PM	01	0	0	0	0	UTAH
1005	PM	12	0	0	0	0	SACRAMENTO
1125	PM	01	0	0	0	0	SACRAMENTO
240	AM	03	0	0	0	0	SACRAMENTO
115	PM	03	0	0	0	0	SACRAMENTO
115	PM	03	0	0	0	0	SACRAMENTO
200	AM	01	0	0	0	0	EASTERN
115	PM	02	0	0	0	0	EAST
115	PM	02	0	0	0	0	EAST
505	AM	01	0	0	0	0	EASTERN
425	AM	01	0	0	0	0	SACRAMENTO
1135	PM	01	7	1	1	30	EASTERN
135	AM	01	0	0	0	0	SACRAMETNO
1026	AM	02	0	0	0	0	SACRAMENTO
1026	AM	02	0	0	0	0	SACRAMENTO
1110	AM	01	0	0	0	0	UTAH
227	AM	01	0	0	0	0	SACRAMENTO
721	PM	01	0	0	0	0	SACRAMENTO
1240	PM	03	0	0	0	0	EASTERN
1105	PM	12	1	0	0	0	EASTERN
255	AM	01	0	0	0	0	UTAH
1240	PM	03	0	0	0	0	SACRAMENTO
1050	PM	12	0	0	0	0	SACRAMENTO
1210	AM	01	1	0	0	0	EASTERN
1255	PM	01	0	0	0	0	EASTERN
1201	AM	01	0	0	0	0	EASTERN
1145	PM	01	0	0	0	0	UTAH
130	PM	01	0	0	0	0	SACRAMENTO
1230	AM	01	0	0	0	0	SACRAMENTO
1005	AM	01	0	0	0	0	SACRAMENTO
1150	AM	01	0	0	0	0	SACRAMENTO
845	PM	01	0	0	0	0	EASTERN
1130	PM	01	0	0	0	0	UTAH
1045	PM	01	0	0	0	0	UTAH
745	PM	01	0	0	0	0	SACRAMENTO
1210	AM	01	1	1	0	0	SACRAMENTO
1045	PM	01	0	0	0	0	WESTERN
640	PM	01	0	0	0	0	EASTERN
215	PM	01	0	0	0	0	UTAH
410	AM	01	0	0	0	0	UTAH
1000	PM	01	0	0	0	0	UTAH
640	PM	01	0	0	0	0	SACRAMENTO
1250	AM	01	0	0	0	0	SACRAMENTO
600	PM	01	0	0	0	0	EASTERN
420	PM	01	0	0	0	0	UTAH
1145	PM	01	1	1	0	0	SACRAMENTO
1010	AM	03	0	0	0	0	SACRAMENTO
440	AM	01	0	0	0	0	EASTERN
835	AM	01	0	0	0	0	UTAH
950	PM	01	0	0	0	0	UTAH
950	PM	01	0	0	0	0	UTAH
1225	PM	12	0	0	0	0	SACRAMENTO
205	PM	01	0	0	0	0	SACARAMENT
1000	AM	03	0	0	0	0	SACRAMENTO
710	PM	01	0	0	0	0	SACRAMENTO

HRMI	AMPM	TYPE	CAR	CAR	CAR	EVACUA	DIVISION
1215	AM	01	0	0	0	0	EASTERN
800	AM	11	0	0	0	0	EASTERN
845	AM	01	0	0	0	0	EASTERN
955	AM	01	0	0	0	0	UTAH
800	PM	01	0	0	0	0	EASTERN
315	PM	01	0	0	0	0	UTAH
630	AM	01	0	0	0	0	
845	AM	01	0	0	0	0	EASTERN
850	AM	01	0	0	0	0	SACRAMENTO
1110	PM	01	2	2	0	0	EASTERN
830	PM	01	0	0	0	0	EASTERN
915	AM	01	0	0	0	0	UTAH
1115	PM	01	0	0	0	0	SACRAMENTO
340	AM	01	0	0	0	0	EASTERN
825	PM	04	0	0	0	0	SACRAMENTO
825	PM	04	0	0	0	0	SACRAMENTO
130	PM	12	0	0	0	0	SACRAMENTO
1010	AM	04	0	0	0	0	SACRAMENTO
1010	AM	04	0	0	0	0	SACRAMENTO
1245	PM	01	0	0	0	0	WESTERN
250	PM	01	0	0	0	0	UTAH
120	PM	01	0	0	0	0	SACRAMENTO
415	AM	01	0	0	0	0	SACRAMENTO
835	PM	01	0	0	0	0	SACRAMENTO
835	PM	01	0	0	0	0	WESTERN
925	PM	01	0	0	0	0	EASTERN
450	AM	04	0	0	0	0	WESTERN
450	AM	04	0	0	0	0	SACRAMENTO
450	AM	04	0	0	0	0	EASTERN
755	PM	01	0	0	0	0	SACRAMENTO
145	AM	01	10	3	0	0	CALIFORNIA
714	AM	01	0	0	0	0	SACRAMENTO
714	AM	01	0	0	0	0	EASTERN
1110	AM	12	0	0	0	0	SACRAMENTO
815	AM	01	0	0	0	0	EASTERN
935	AM	01	0	0	0	0	SACRAMENTO
910	AM	01	0	0	0	0	EASTERN
155	PM	01	0	0	0	0	SACRAMENTO
1240	PM	01	0	0	0	0	EASTERN
255	AM	12	0	0	0	0	SACRAMENTO
505	PM	01	0	0	0	0	CALIFORNIA
1130	AM	04	13	0	0	0	CALIFORNIA
1130	AM	04	0	0	0	0	CALIFORNIA
430	PM	01	0	0	0	0	SACREMENTO
1210	PM	01	0	0	0	0	SACRAMENTO
1242	PM	01	0	0	0	0	SACRAMENTO
830	AM	09	0	0	0	0	UTAH
320	AM	01	0	0	0	0	WESTERN
1145	AM	03	0	0	0	0	CALIFORNIA
1145	AM	03	0	0	0	0	CALIFORNIA
305	PM	01	0	0	0	0	SACRAMENTO
510	PM	01	0	0	0	0	SACRAMENTO
417	PM	01	0	0	0	0	SACRAMENTO
700	PM	01	0	0	0	0	SACRAMENTO
700	PM	01	0	0	0	0	UTAH
1157	AM	01	0	0	0	0	SACRAMENTO

SACRAMENTO) show showpage

saveobj restore

Appendix G

Source of information defining proportion of hazmat shipments by rail car used to develop Tables 1 through 6

...olving toxin is rare

Explosives and toxins by rail

Total hazardous materials moving through Reno on all trains on Feb. 20

Number of carloads	Hazardous material	Properties
12	Ammonium nitrate	[illegible]
9	Anhydrous ammonia	[illegible]
1	Butane	[illegible]
6	Butyl ether	[illegible]
1	Calcium carbide	[illegible]
1	Carbon disulfide	[illegible]
2	Diesel fuel	[illegible]
20	Explosive bombs, projectiles	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible] ether	[illegible]
1	Naphtha	[illegible]
12	Phosphoric acid	[illegible]
1	Potassium hydroxide	[illegible]
1	Propane	[illegible]
9	Sodium hydroxide	[illegible]
16	Sulfuric acid	[illegible]

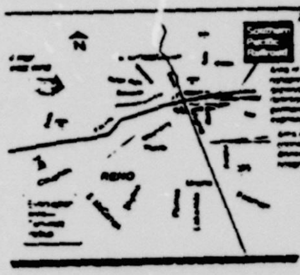
Potential rail hazards in Reno

[illegible]

1. Propane explosion

[illegible]

2. Chlorine spill



[illegible]

3. Acrolein spill

[illegible]

...open flames from pilot lights or pedestrians smoking matches.

"We're woefully undermanned for any kind of significant event," Cabill said. "I think there's a real recognition of how serious this is to our community."

Compounding the problem is Reno's relative isolation, said Marty Scheuerman, battalion chief for the Truckee Meadows Fire Protection District.

The local hazardous-materials team has about 50 members. Other, small teams are forming in the Lake Tahoe and Carson City areas, but each member must receive [illegible] to 400 hours of training.

...cleanup and his firm's Sparks office would be expected to participate in a rail cleanup here.

Southern Pacific, which now owns the rails in the area, has been "extremely cooperative" about rail maintenance, he said.

[illegible] Union Pacific's spokesman also dwells on the railroad's safety record. "The vast majority of the so-called incidents occur from leaky gaskets and valves in the tanks," he said.

"Going back to 1966, we've not had a single fatality in Union Pacific because of a hazardous-materials incident, which I think is a pretty impressive number."

...alternatives:

■ Putting the tracks underground through downtown.

■ Running the railroad along the Interstate 80 corridor, which moves the problem, but not much. The route move the trains closer to Saint Mary's Regional Medical Center, now a few blocks from the tracks.

Reno on the merger proposals.

Griffin is to meet Tuesday in Washington with Union Pacific President Drew Lewis and Nevada's congressional delegation on the rail merger.

But putting the tracks underground won't stop hazardous-material problems, [illegible] said. And it could make fighting a fire or mopping up a spill more difficult because of the confined space.

THE CITY OF WICHITA

ENVIRONMENTAL DOCUMENT

OFFICE OF THE MAYOR
CITY HALL — FIRST FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4331

CENTRAL ADMINISTRATIVE UNIT
REC'D: 8-13-97
DOCUMENT # 8-13-97 10:04:32am

FD #32760

WE.03 4 W.

August 8. 1997

Mr. Jerry Davis, President
Union Pacific Railroad Company
Room 1230
1416 Dodge Street
Omaha, NE 68179-1230

RE: Finance Docket No. 32760, Wichita Mitigation Study

Dear Mr. Davis:

We have reviewed your letter of July 24, 1997, to Elaine Kaiser and believe that a brief response is in order:

As you know, the STB's analysis places substantial importance on the number, length, and speed of trains. Recognizing this, and also recognizing the impact of the UP operations on Wichita and Sedgwick County, we have spent a considerable amount of time and effort in reviewing the data UP has submitted to the STB.

Your letter unequivocally states that the revised operation plan is the plan UP intends to use for the future and expresses surprise that we have not been confident as to the numbers reflected in that plan. In all candor, our lack of confidence is premised on the fact that, at least to date, UP has not been willing to commit itself to treat the numbers and length of through trains in the revised operating plans as maxima for any period into the future.

We asked questions along these lines on May 27, 1997, and received a very prompt response, dated May 30. That letter reminded us of your right to expand train operations in response to changing market and operating conditions without any governmental oversight or control and offered to

negotiate such maxima within the context of an agreement from us as to the mitigation measures and funding of those measures.

We do not think that UP can have it both ways. If a single set of mitigation measures is to be developed without including the possibility of a future reopener, those measures must reflect the likelihood that future activity may, and likely will, be greater than estimated in 1997. In contrast, if either the STB retains jurisdiction over these matters or we agree upon a method to address future increases in train numbers or lengths with commensurate future mitigation, then, the revised operating plan numbers may be used as the basis for the initial mitigation measures.

We had hoped to be able to present you with an initial settlement proposal at this time. However, we are unable to do so because of the STB's inability to share the formulae upon which its study is based. We are continuing to work on a more conceptual approach and will send something to you in the near future. In the meantime, we look forward to receiving your settlement thoughts.

Sincerely,

Tom Winters
Sedgwick County Chairman

Bob Knight
Mayor

Copies to: Governor Bill Graves
Lt. Governor Gary Sherrer
Congressman Todd Tiahrt
Senator Pat Roberts
Senator Sam Brownback
City Manager Chris Cherches
County Manager Bill Buchanan
Michael J. Dalton, SEA
Steve Kalish, Attorney for Wichita-Sedgwick County
Elaine Kaiser, SEA

CITY OF RENO

ENVIRONMENTAL DOCUMENT

P.O. Box 1900
Reno, Nevada 89505

July 15, 1997

Elaine K. Kaiser, Chief
Section of Environmental Analysis
Surface Transportation Board
1925 K Street, Northwest
Mercury Building
Washington, DC 20423-0001

CENTRAL ADMINISTRATIVE UNIT
REC'D: 8-11-97
DOCUMENT # 8-12-97 1:31:56 pm
RE.07 FD#32760

Re: Finance Docket No. 32760
Reno Mitigation Study

Dear Ms. Kaiser:

Your July 2 letter regarding City concerns about DeLeuw Cather & Co., the STB's "independent" environmental consultant, requires a brief response.

The City has generally been willing to rely on the good faith and fair dealing of government procedures and their implementation to achieve the public interest purposes in the "Reno Mitigation Study" effort.

However, willing to act on that belief at the outset of the "Study," the City's reliance has been shaken by the statements of those consultants in recent meetings which exhibit not only bias and pre-conceived ideas, but more critically, reflect that a predetermined result can be anticipated as well.

In short, the conduct and course of events, coupled with your refusal to provide or allow access to relevant information, reqauire that the City investigate various relationshps and "follow the money." To that end I have instructed our lawyers to take appropriate action.

Very truly yours,

CHARLES McNEELY
City Manager

MLB:cjg
cc: Mayor Jeff Griffin
Councilmember Pierre Hascheff, Councilman-at- Large
Councilmember Dave Aiazzi - Ward 5
Councilmember Tom Herndon - Ward 1

cc: (continued)
Councilmember Bill Newberg - Ward 3
Councilmember Candice Pearce - Ward 2
Councilmember Judy Pruett - Ward 4
Senator Richard H. Bryan
Senator Harry Reid
Congressman Jim Gibbons
Congressman John Ensign
Merri Belaustegui-Traficanti, Esq.
Mark Demuth, MADCON Consultation Services

Arkansas Louisiana & Mississippi Railroad Company
Fordyce & Princeton Railroad Company
P. O. Box 757
Crossett, AR 71635

July 31, 1997

Honorable Vernon A. Williams
Secretary
Surface Transportation Board
12th Street and Constitution Avenue, N. W.
Room 2215
Washington, DC 20423

Re: Comments on Effects of UP-SP Merger--Finance Docket 32760

Dear Mr. Secretary,

The purpose of this letter is to comment on the effects of the UP-SP merger on the Arkansas Louisiana & Mississippi Railroad Company.

The Arkansas Louisiana & Mississippi Railroad Company (ALM) and the Fordyce & Princeton Railroad Company (FP) are affiliated Class III carriers which connect end to end at Crossett, Arkansas and form a continuous route of 109 miles between Monroe, La. and Fordyce, Ark. (see attached map). The ALM markets and provides continuous service on this entire line via a haulage agreement with the FP between Crossett and Fordyce, Ark. It serves major customers at Monroe and Bastrop, La. and Crossett and Fordyce, Ark.

Prior to the UP-SP merger, the ALM connected with the UP at Monroe, La., the SP at Fordyce, Ark., and the Kansas City Southern at Monroe, La. Besides UP, the UP-SP merger reduced ALM to competitive access with only one other Class I carrier, the KCS, whose reach is extremely limited when compared with competitive access provided by the UP and SP prior to the merger. This restriction of access of ALM to effectively one Class I railroad, compared to its former position with competitive access to both UP and SP, has placed ALM and its shipper/customers at a substantial disadvantage in terms of competitive rates and service.

Since the UP-SP merger the ALM has experienced attempts by UP to increase rates significantly higher that those in effect via SP prior to the merger. The ALM has also been informed that UP considers other SP rates that were in effect prior to the merger are too low. Thus, the ALM is strongly concerned that further attempts will be made to increase rates above the competitive levels that were in effect prior to the merger.

Equally as important as the competitive rate issue due to ALM being effectively reduced to only one Class I connecting carrier is the service level which has deteriorated drastically since the merger. The ALM has experienced substantial disruptions in the pickup and delivery of cars on a daily basis at both of its junction points with the now merged UP-SP. Additionally, the ALM has

experienced problems of empty railcar supply from the connection with the former SP at Fordyce, Ark. (both from ALM cars returning under AAR Car Service Rules as well as furnishing other empty cars ordered to meet the needs of ALM's shippers when ALM's own cars were not returned).

While it may be claimed that the deterioration in service is only a natural but temporary disruption due to implementation of the merger of two major carriers, the ALM strongly believes that the absence of competition from another Class I carrier provides little incentive for the merged carrier to give any priority to service; i.e., pick up and delivery of cars on a daily basis, or in the furnishing of car supply to small carriers like the ALM. These problems create additional costs, above those incurred prior to the merger, to ALM's shipper/customers and threatens the viability of the ALM as well.

Because the ALM technically still has access to two Class I carriers, it is prohibited from access to a BNSF connection via its trackage rights through Fordyce, Ark., the former SP connection for the ALM, under the UP-SP two-to-one conditions of the merger decision. However, the ALM has in fact been effectively restricted to access to only one Class I railroad since the merger when compared to its former competitive position with access to UP and SP prior to the merger. This is true with regard to traffic not only to and from the Western states served directly by UP and SP, but also to gateways to the Midwest and Northeastern states which the KCS, a relatively small north-south Class I carrier, cannot provide.

In conclusion, this restriction of access of ALM to effectively only one Class I railroad after the merger has placed ALM and its shipper/customers at a substantial disadvantage in terms of competitive rates and acceptable service levels. The resulting market value of the ALM/FP has also been significantly reduced.

To alleviate these disadvantages, the ALM respectfully requests the Surface Transportation Board to reconsider the two-to-one conditions of its UP-SP merger decision to permit the ALM, a Class III carrier, and its shipper/customers to obtain access to BNSF at Fordyce, Ark., to restore the competitive position previously available to them.

Yours very truly,

S. Russell Tedder

S. Russell Tedder
President

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

August 1, 1997

ENVIRONMENTAL DOCUMENT

Mr. Charles E. McNeely
City Manager
City of Reno
P.O. Box 1900
Reno, Nevada 89505

CENTRAL ADMINISTRATIVE UNIT
REC'D: 8-1-97
DOCUMENT # 8-5-97 11:36:12am

RE.15 + R. FD#32760

Dear Mr. McNeely:

I was pleased to meet with you on July 19, 1997, to discuss the impacts on the City of Reno from the merger of the Union Pacific and Southern Pacific Railroads. I was interested to learn of your assessment that a depressed trainway, estimated to cost approximately $180 million, appears to offer the most viable, long-term approach to mitigating the effects of increased train traffic in your downtown. In that regard, you outlined the efforts you have made to cover the costs of that mitigation through direct negotiations with Union Pacific, communications with the Surface Transportation Board (STB), and by obtaining State legislative authority to finance the City's share. At that meeting, I offered to contact the STB and the Union Pacific Railroad regarding your concerns and to look into possible sources of federal funding assistance.

As a result of those contacts, I am informed that the STB has reaffirmed that its Preliminary Mitigation Plan for the Reno area will be released for comment in September 1997. We were advised that the Section of Environmental Analysis of the STB intends to conduct public meetings on the plan after it is released and will receive written comments, which will be considered in drafting the Final Mitigation Plan due for action by the Board by February 1998. We participated in the initial assessment of this issue as part of the general proceedings on the merger and continue to follow the STB's mitigation process closely. We intend to review the Preliminary Mitigation Plan when it is issued and will provide comments to the Board based on our review.

We also contacted officals at the Union Pacific Railroad. They have informed my staff that they are continuing to work with the STB's environmental staff in providing rail operating data for the Reno Preliminary Mitigation Plan and intend to provide comments on that plan. They indicated interest in resuming direct discussions with the City.

With regard to the availability of additional funding assistance, I recommend that you discuss this with the Nevada Department of Transportation. As mentioned in your meeting here in Washington with the Federal Railroad Administration, funds from the Intermodal Surface Transportation Efficiency Act of 1991(ISTEA) may be used to support these mitigation projects. This could include funding from either the National Highway System, the Congestion Mitigation/Air Quality or the Surface Transportation Programs. State funds may also be available. As you are aware, the Nevada Department of Transportation, together with your Metropolitan Planning Organization, the Regional Transportation Commission, play key roles in determining which transportation projects receive ISTEA funding. The Federal Highway Division Office in Carson City, Nevada, stands ready to help facilitate discussions on this issue.

One matter that does concern me is that recent news reports appear to have gone beyond what we actually discussed on July 19. I refer specifically to speculation that I may intervene to mediate directly between you and Union Pacific, as you have now requested in your letter. This may, in part, stem from a misunderstanding of the respective roles played by the U.S. Department of Transportation (DOT) and the STB which, although nominally a part of DOT, is entirely independent. Congress has assigned the STB the authority to examine, condition, and approve proposals for rail mergers and under the National Environmental Policy Act to assess and mitigate adverse environmental impacts on communities like Reno that may result from a merger. The STB does this in a quasi-judicial process where the public as well as the parties with a direct stake in the outcome have access to the information being considered and have the opportunity to comment.

After contacting the STB and Union Pacific, as you requested, we have determined that direct intervention by the Department would be inappropriate while this matter is still pending before the Board. I want to assure you of DOT's commitment to assuring an equitable solution to this issue. However, it is necessary to await issuance of the STB's Preliminary Mitigation Plan to have a complete record on which to base our recommendations. Please be assured we will continue to remain involved and will continue to support appropriate mitigation.

Thank you again for the opportunity to meet and discuss this matter with you. If we can be of further assistance, please feel free to contact Assistant Secretary for Governmental Affairs Steven Palmer at (202) 366-4573 or Federal Railroad Administrator Jolene Molitoris at (202) 632-3114.

Sincerely,

Rodney E. Slater

U.S. DEPARTMENT OF TRANSPORTATION
OFFICE OF GOVERNMENTAL AFFAIRS

Room 10408
400 Seventh Street, S.W.
Washington, D.C. 20590

(202) 366-4563

Date August 7, 1997

From: John Horsley, Deputy Assistant Secretary for Governmental Affairs

To: Elaine Keyser

Fax: 202-565-9000

Pages: 2 following this cover sheet

Comments: Because of your interest in Reno, I thought you should receive a copy of the attached letter.

This fax originated at (202) 366-7346. Please call Joyce Green at (202) 366-4563 if there were any problems in transmission.

COVINGTON & BURLING
1201 PENNSYLVANIA AVENUE, N. W.
P.O. BOX 7566
WASHINGTON, D.C. 20044-7566
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KUNSTLAAN 44 AVENUE DES ARTS
BRUSSELS 1040 BELGIUM
TELEPHONE: 32-2-549-5230
FACSIMILE: 32-2-502-1598

July 30, 1997

ENVIRONMENTAL DOCUMENT

HAND DELIVERY

Elaine K. Kaiser
Chief, Section of Environmental Analysis
Surface Transportation Board
1925 K Street, N.W.
Mercury Building
Washington, D.C. 20423-0001

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-30-97
DOCUMENT # 8-6-97 5:04:31 pm
RE. 15 + R.
FD#32760

Re: Finance Docket No. 32760,
Reno Mitigation Study

Dear Ms. Kaiser:

Union Pacific offered long ago to report to SEA regarding the status of its efforts to pursue voluntary mitigation arrangements with local governmental entities. Please accept this update for your public records.

1. East Bay Regional Parks District MOU

Pursuant to the MOU, Union Pacific and the District filed an application with the California Public Utilities Commission to obtain authorization for one pedestrian crossing. The District is developing plans for other pedestrian crossings, for which PUC approvals will also be sought. Union Pacific and the District are working on construction and maintenance agreements in connection with easements for seven recreational trails along Union Pacific rights of way.

2. Town of Truckee MOU

Union Pacific contributed $300,000 to Truckee's wood stove replacement program. The railroad and Truckee are developing a contingency plan for environmental and hazardous material emergencies; field trips have been completed and work on the plan is underway. The parties to the MOU are awaiting state permits to proceed with the western undercrossing east of the Interstate 80 Central Truckee exit. The eastern undercrossing is not planned until 2000 or later. The railroad has modified its

operations to avoid blocking California Highway 267 and remains in contact with town officials to address any problems that may arise.

3. Placer County MOU

The complex Placer County MOU involves dozens of components. While progress on some of its requirements was interrupted by changes in County management, significant progress continues to be made on most items where governmental entities are ready to move forward. As examples, Union Pacific has provided engineering services, pursuant to the MOU, to support the County's plan for passenger rail service. The railroad provided its plans for rebuilding Roseville Yard and has received most of the necessary approvals; construction is underway. It has provided a mitigation plan to the City of Roseville to address future increases in train service and to reduce parking of trains outside the yard. The railroad is developing a hazardous materials response plan in connection with local officials.

In Colfax, Union Pacific is ready to donate the SP station to the city when it is prepared to accept it, and Union Pacific has conveyed two acres of property for parking near the station. The city and the railroad have agreed on a plan for a passenger platform. Union Pacific has made available a layover facility for passenger rail service. In Lincoln, the railroad is waiting for the city to proceed with work on an overpass of Moore Road, and it has granted two acres for parking facilities. In Loomis, locations have been established where Union Pacific will hold trains awaiting entry into Roseville, and the railroad is waiting for city action on other projects.

Rocklin is not yet ready to proceed with the overpass at Argonaut Avenue. The railroad is pursuing funding of crossing improvements in Rocklin and is prepared to lease parcels for rail passenger service. The railroad has designated train holding zones that are acceptable to the city, as it has in Roseville. Roseville and railroad security forces have developed a security plan to deal with transients and trespassers, and the railroad has inspected and improved fencing along Church Street. The city is working with the railroad to define the scope of a study of a pedestrian overpass at Lincoln Street.

4. Reno

Little needs to be said about the negotiations with the City of Reno, as their progress and recent collapse have been reported in the press, and Mr. McNeely registered his views in a recent letter. To summarize, the City originally took the position that it would negotiate only with respect to a bypass along an Interstate 80 routing. The City eventually revised that position, authorizing officials to discuss a depressed trainway with the railroad. Union Pacific offered $35 million toward the cost

of the trainway, a contribution substantially greater than the five percent (approximately $2.5 million) that SP agreed to pay for the same type of trainway in 1980. Union Pacific was willing to offer this sum largely as an exercise of corporate goodwill, but also recognizing that it would provide modest benefits to the railroad in terms of reduced liability risk and improved operating flexibility.

Union Pacific maintains its $35 million offer for purposes of trainway construction, and it remains willing to engage in discussions should the City withdraw its insistence on a huge railroad contribution that we consider wholly unwarranted. Meanwhile, the railroad has offered to meet with the City and other affected interests to consider alternatives to the trainway. Thus far, the City has not been willing to participate in such discussions.

5. Wichita/Sedgwick County

Before the UP/SP merger was negotiated, starting in 1994, Union Pacific participated in a substantial planning effort that resulted in the so-called "Four Phase Plan." In order to get the project started, Union Pacific offered $455,000 toward Phase 1, which would have allowed Union Pacific to close crossings on its line toward Hutchinson, the Hutchinson Industrial Lead. This project did not move forward.

At approximately the same time, Union Pacific was involved in discussions with the City regarding replacement of the Broadway Viaduct over Union Pacific's track. Union Pacific wanted the overpass to span two tracks, while the City insisted on spanning only one. To break the impasse, Union Pacific offered to contribute $270,000 to the costs of spanning two tracks, if the City would close six low-volume grade crossings. This issue is unresolved and has not been revisited since 1995.

After the UP/SP merger was announced, Bill Wimmer led a group to Wichita on March 21, 1996 to attempt to reach agreement on merger mitigation measures. In hopes of avoiding protracted and expensive disputes about mitigating the effects of coal train traffic, Union Pacific offered $10 million, comprised of $4 million in property from the Hutchinson Industrial Lead and the Midland Valley Industrial Lead tracks and $6 million in cash to help defray the cost of three grade separations ($2 million for each). The following day, Wichita declined that offer. Since then, several meetings have been held but no new or additional offers have been made.

With the assistance and intervention of the State of Kansas, the State, the City, the County and Union Pacific are participating in a joint study of alternative rail routes through and around the City, with Union Pacific providing half of the funding.

The study report is expected soon. It may be hoped that the completion of the study might provide a basis for renewed discussions among interested parties.

Sincerely,

J. Michael Hemmer
Counsel for Union Pacific Railroad Company

cc: Mr. Kalish
Mr. Lamboley

CITY OF RENO

P.O. Box 1900
Reno, Nevada 89505

ENVIRONMENTAL DOCUMENT

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-29-97
DOCUMENT # 7-31-97 11:40:54am

July 23, 1997

RE.15 & R.
FD #32760

Elaine K. Kaiser, Chief
Section of Environmental Analysis
Surface Transportation Board
1925 K Street, N.W.
Mercury Building
Washington, DC 20423-0001

Re: Finance Docket No. 32760 - Reno Mitigation Study

Dear Ms. Kaiser:

The July 21, 1997 letter of Union Pacific attorney Michael Hemmer requires comment.

First, let me say that settlement negotiations between the City and UP/SP is not, and has never been, a subject of review by the Board in the Reno Mitigation Study. To the contrary, the SEA has repeatedly made clear its intention to limit the scope of that inquiry.

Moreover, to my knowledge, voluntary settlement negotiations between litigants is never made a matter of record in contested cases, be it in judicial or administrative proceedings, nor is it proper to attempt to do so. I note that this is the second such effort by the UP/SP to place evidence of negotiation in the record and make it an issue. The UP/SP purposes appear as obvicus as is the reason why comment on negotiations is routinely excluded from the record.

Let me also say that even if good faith in negotiation was properly an issue, there are clearly recognized criteria for evaluating the quality of a party's bargaining conduct. And it surely cannot be based on the ad hoc observations of Mr. Hemmer and Mr. Starzell, neither of whom have been designated as part of the negotiating team for sessions at which I have been the City's chief negotiator.

More importantly, Mr. Hemmer and Mr. Starzell are flatly wrong in their reports concerning the course of bargaining conduct and positions of the parties in negotiations.[1] But I am not surprised at their attempt to redeem "good faith" for the UP/SP when one considers:

- the UP/SP proposed an infrastructure project at no cost to the City, and
- offered funding contributions that were knowingly non-existent (State of Nevada) and otherwise virtually inadequate (UP/SP's share) to implement the proposed project.

Simple arithmetic would demonstrate a disingenuous nature in the UP/SP initial proposal and, coupled with the fixed position taken thereafter, offers little evidence of good faith in bargaining.

Were parties' good faith at issue, the City would amply demonstrate that its own effective effort to secure state and federal public funds, as well as private funding for the project, stands in marked contrast to the UP/SP conduct or absence hereof.[2]

Finally, from what I know about the "Reno Mitigation Study," the UP/SP's "constructive role" to date has been to attempt the following:

- discredit the engineering report of SEA consultant, Mr. Selin, that disagrees with UP/SP position but is consistent with that of the City;
- propose a "whistle ban" contrary to state and federal safety laws as well as Decision No. 44; and
- at the same time, also propose to increase train speeds three fold (from 10 mph to 30 mph) through the City.

---

[1] Equally unfortunate are the Hemmer and Starzell comments on the success of public funding legislation in the Nevada legislature (which neither attended to my knowledge.) Their comments now made after the legislature's passage of AB-291 (funding authorization) and adjournment *sine die* substantially distort significant facts.

[2] In fact, legislation in Nevada was passed in spite of UP/SP positions.

The UP/SP notion of "run silent - run fast" deserves little serious consideration.

At present it is difficult to reconcile the UP/SP statement that they are "willing to meet with all interested parties that might join in a meaningful dialog" with the fixed position announced by the UP/SP negotiators in a recent joint meeting with the City team and other responsible Nevada business interests. It is even more difficult to credit such statement given my own personal experiences in the negotiation process, which should not be a "fool's errand."

And, to avoid that prospect, I have met with Secretary of Transportation Rodney Slater, who has agreed to chair the next meeting between the City and UP/SP in nis Washington, DC offices. Per your instructions, the City requests that this letter be made part of the record in this action.

Sincerely,

Charles McNeely

CHARLES McNEELY
City Manager

MLB:cjg
cc :Michael Hemmer, Esq.
Mayor Jeff Griffin
Councilmember Pierre Hascheff, Councilman-at- Large
Councilmember Dave Aiazzi - Ward 5
Councilmember Tom Herndon - Ward 1
Councilmember Bill Newberg - Ward 3
Councilmember Candice Pearce - Ward 2
Councilmember Judy Pruett - Ward 4
Senator Richard H. Bryan
Senator Harry Reid
Congressman Jim Gibbons
Congressman John Ensign
Merri Belaustegui-Traficanti, Esq.
Mark Demuth, MADCON Consultation Services

UNION PACIFIC RAILROAD COMPANY

JERRY DAVIS
PRESIDENT AND
CHIEF OPERATING OFFICER

1416 DODGE STREET
ROOM 1230
OMAHA, NEBRASKA 68179-1230

July 24, 1997

ENVIRONMENTAL DOCUMENT

Ms. Elaine K. Kaiser
Chief, Section of Environmental Analysis
Surface Transportation Board
1925 K Street, N.W.
Mercury Building
Washington, D.C. 20423-0001

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-29-97
DOCUMENT # 7-30-97 12:14:53 pm

Re: Finance Docket No. 32760, Wichita Mitigation Study

Dear Ms. Kaiser:

Union Pacific Railroad Company received a copy of the July 8, 1997 letter from Mayor Bob Knight of the City of Wichita and Sedgwick County Chairman Tom Winters to Michael Dalton of your office. Some of the statements and accusations in the letter are mistaken. I want to set the record straight and review Union Pacific's position.

Mayor Knight and Chairman Winters complain that SEA and its consultants appear to be accepting Union Pacific's revised operating plan for the former OKT line through Wichita. It would be unreasonable for SEA to do anything else. The revised operating plan is the plan Union Pacific intends to employ. Any other set of operating assumptions would be inaccurate, and using them would be misleading.

The best proof of Union Pacific's intent to follow its new operating plan is how we are spending our scarce capital resources. When Union Pacific revised its operating plan, it simultaneously decided to redirect tens of millions in capital dollars from the OKT line to Union Pacific's pre-merger coal route for Powder River Basin coal via Kansas City. Union Pacific already is spending those funds. We are expanding our Topeka-Kansas City mainline to three main tracks. We are extending Centralized Traffic Control westward from Kansas City to Topeka. We are expanding capacity south and east of Kansas City. Except for mitigation-related investments in the Wichita area, we have not made any major new investments on the OKT line.

When we said we plan to run our Powder River Basin-Texas coal trains via Kansas City instead of Wichita, we meant it. It would make no sense for Union Pacific to spend many millions of dollars in shareholders' funds to influence an SEA mitigation study where there is, in our opinion, much less at stake than the amounts we are investing.

Mayor Knight and Chairman Winters continue to tell you that Union Pacific is misleading you or hiding a plan to operate more trains through Wichita. That is false. Union Pacific modified its operating plan and reduced the number of planned trains through Wichita partly to respond to Wichita's concerns about train traffic and partly because it was economically and operationally attractive. We spent weeks studying the options before making that decision. It is unfortunate that Mayor Knight and Chairman Winters are unable to accept that one of Wichita's major corporate citizens could act responsibly or that it might be willing to take the City's interests into account. Their assertion that Union Pacific changed its operating plan because of some expectation that the "STB would revisit Order No. 44" or based on an analysis of the environmental effects of the original operating plan is absolutely false. Union Pacific has not misrepresented its plans to SEA or to the City and County, and any suggestion that it has is unfounded.

The Knight/Winters allegations against our Company are nothing more than speculation and suspicion. We have never seen the Wichita research that supposedly shows that Wichita will "solely as a result of the merger" become a "conveyor belt" for coal. That research could not be accurate, because our revised operating plan is our actual operating plan, and we do not have another. The letter asks you to look more than five years into the future to find a different operating plan, but you would find nothing different if you took that look. The Wyoming-Texas coal trains will be running through Kansas City. We assume that the Board will not base its decisions on speculation and suspicion.

Finally, Mayor Knight and Chairman Winters ask you to consider whether the proposed Conrail transaction will affect rail traffic through Wichita. Any effects of that transaction, if it occurs, would not be effects of the UP/SP merger and would not be our responsibility. It may be useful for you to know, however, that Union Pacific does not expect its traffic through Wichita to change as a result of the Conrail transaction, even assuming Norfolk Southern reroutes large volumes of Conrail traffic via Kansas City. Conrail traffic to and from Union Pacific points in southern Kansas and Oklahoma is already passing through Wichita, so it will not be affected. For traffic to and from other points on its system, Union Pacific has more direct routes than the line through Wichita.

At Union Pacific, we think it is unfortunate that Wichita and Sedgwick County public officials appear to be preoccupied by their distrust of the Railroad and by their legal strategies. The better course, which we have always been prepared to follow, would be to negotiate a win-win solution. Union Pacific has done that with many other communities for many years.

Sincerely,

Jerry Davis

Copies:
Governor Bill Graves
Lt. Governor Gary Sherrer
Congressman Todd Tiahrt
Senator Pat Roberts
Senator Sam Brownback
Mayor Bob Knight
City Manager Chris Cherches
County Manager Bill Buchanan
County Chairman Tom Winters
Michael J. Dalton, SEA
Steve Kalish, Attorney for Wichita-Sedgwick County

ENVIRONMENTAL DOCUMENT

Reno Gazette-Journal Monday, July 28, 1997

EDITORIALS

Slater's mediation in dispute welcome

Railroad project: Transportation secretary offered to help solve argument over funding

One of the most important side effects of this weekend's summit on Lake Tahoe was U.S. Secretary of Transportation Rodney Slater's offer to mediate the dispute between Reno and the Union Pacific Railroad over funding of the project to lower the railroad's tracks through the city.

Slater's intervention is welcome. If by mediating the ongoing argument he can bring about an equitable solution, he would be performing an invaluable service to the citizens of Reno. Such a solution certainly would be preferable to continuing the battle of words that has been heating up in recent months. Union Pacific has refused to budge on its offer of $35 million toward the project, an offer that the city considers too low by about $65 million. Reno plans to take the fight to court, which will prolong the debate and end up costing both the city and the railroad considerable sums of money.


Slater

Union Pacific led local leaders to believe it would put up more than just $35 million for the $182 million project when they unveiled it in February. Describing the advantages of the trenching project, a railroad official said that the best part of it was that it wouldn't cost Reno taxpayers a penny. Despite that promise, Union Pacific has steadfastly stuck to its $35 million figure, meaning that it *will* cost taxpayers money — probably a sales-tax increase; the only question right now is how much the taxpayers will be asked to pony up.

The intervention of Slater, who was in Reno earlier this month for a forum on transportation issues at Lake Tahoe, could mean that some federal money could be freed up to help with the project. The well-respected Slater also might be able to soften up the railroad a little bit to increase its offer to something closer to the $100 million that Reno's been pressing for.

Certainly, it's a better prospect for Reno *and* the railroad than a drawn-out court battle. Slater deserves all the support the community can give him for his offer.

Surface Transportation Board
Washington, D.C. 20423-0001

Section of Environmental Analysis

ENVIRONMENTAL DOCUMENT

July 23, 1997

Finance Docket No. 32760

Ms. Cherilyn Widell
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296-0001

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-28-97
DOCUMENT # 7-29-97 4:05:58 pm
FD#32760 R. + RE. 15
W. + WE. 15

Attention: Dr. Hans Kreutzberg

Regarding: Union Pacific/Southern Pacific proposed railroad merger, Section 106 Compliance
CA OHP: ECC951009A-Y

Dear Ms. Widell:

As a result of our ongoing Section 106 consultation with your office regarding the merger of the Union Pacific and Southern Pacific Railroads (UPRR), the STB has completed its inventory of prehistoric and historic archaeological sites along the proposed Alturas to Wendel rail line abandonment. The abandonment would result in the removal of bridges, water tanks, and a telephone booth at 24 locations between mileposts 366.81 and 439.32 along the 84-mile Alturas to Wendel rail segment. As discussed in our October 17, 1996 meeting, these areas and adjacent potential lay-down areas constitute the Areas of Potential Effect (APEs).

The inventory was prepared according to the standards set forth in *48 FR 44716*, and it entailed prefield preparation, general prehistoric/historic site survey and prehistoric site recordation, and report preparation. The purpose of the study was to locate, identify, and discuss cultural resource areas within the project APEs which can be targeted for NRHP evaluation, if necessary, in a subsequent study.

Based on the evidence summarized in the attached report, the STB is requesting your concurrence with the following findings for the UP/SP railroad merger:

- Three historic archaeological sites were determined to be NRHP-ineligible. None of these sites are located on Bureau of Land Management (BLM) land.

- Five prehistoric archaeological sites are recommended for evaluation if the UPRR cannot avoid disturbing them. The typical process for bridge removal would take place from the railbed. In some cases, only decking would be removed and the support structure left in place. Therefore, in this scenario, no resources would be disturbed, and there would be

no effect on historic properties. If it is necessary to use off-track equipment, it is recommended that an archaeologist be hired to monitor the removal process. The STB will notify UPRR, and does so here, of the sensitivity of these five sites so that UPRR may take measures to perform all removal procedures from the tracks. Three of these sites are on BLM lands and two are on non-federal property.

The STB and UPRR shall assume your concurrence with these findings unless you notify us within 30 days of your receipt of this letter. As you are aware, HABS/HAER recordation is under preparation for other sites in California and copies will be submitted to your office on their completion. If you need to contact us, please call Richard Starzak of Myra L. Frank & Associates, Inc. at (213) 627-5376. We thank you again for your continuing cooperation in this matter.

Sincerely,

Elaine K. Kaiser

Elaine K. Kaiser
Chief, Section of Environmental Analysis

Enclosures: Cultural Resources Inventory of 24 Locations along the UPRR ROW Lassen and Modoc Counties, CA

cc: Tom Greenland, UPRR
Steve Brooks, DCC
Richard Starzak, MFA
John Snyder, PS
Amy Gilreath, FW
Project Files, nos:_____

CULTURAL RESOURCES INVENTORY OF 24 LOCATIONS

ALONG THE

UNION PACIFIC RAILROAD RIGHT-OF-WAY,

LASSEN AND MODOC COUNTIES, CALIFORNIA

prepared for the

Surface Transportation Board

at the request of

DeLeuw, Cather & Co.
11320 Random Hills Road
Fairfax, Virginia 22030

and

Myra L. Frank & Associates
811 West 7th Street, Suite 800
Los Angeles, CA 90017

by

Randall Milliken, Ph.D.
FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP, INC.
P.O. Box 413, Davis, CA 95617

with contribution by

Adrian Praetzellis, Ph.D.
SONOMA STATE ACADEMIC FOUNDATION ANTHROPOLOGICAL STUDIES CENTER
Sonoma State University, Rohnert Park, CA 94928

June 27, 1997

BLM Cultural Resource Use Permit Number CA-97-01-0037

CULTURAL RESOURCES INVENTORY OF 24 LOCATIONS ALONG THE UNION PACIFIC RAILROAD RIGHT-OF-WAY, LASSEN AND MODOC COUNTIES, CALIFORNIA

prepared for the

Surface Transportation Board

at the request of

DeLeuw, Cather & Co.
11320 Random Hills Road
Fairfax, Virginia 22030

and

Myra L. Frank & Associates
811 West 7th Street, Suite 800
Los Angeles, CA 90017

by

Randall Milliken, Ph.D.
FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP, INC.
P.O. Box 413, Davis, CA 95617

with contribution by

Adrian Praetzellis, Ph.D.
SONOMA STATE ACADEMIC FOUNDATION ANTHROPOLOGICAL STUDIES CENTER
Sonoma State University, Rohnert Park, CA 94928

June 27, 1997

BLM Cultural Resource Use Permit Number CA-97-01-0037

ABSTRACT

In May of 1997, Far Western Anthropological Research Group, Inc. and Sonoma State University Academic Foundation Anthropological Studies Center personnel conducted a cultural resource inventory of 24 locations along the 84 mile long Alturas to Wendel segment of the Union Pacific railroad line in Lassen and Modoc counties. The Union Pacific Railroad Company anticipates action to abandon the 84 mile long railroad segment, an action resultant from its recent merger with the Southern Pacific Railroad Company. The survey was conducted at the request of the federal agency which approved the merger, the Surface Transportation Board, in partial fulfillment of the terms of the merger approval.

The purpose of the survey was to identify possible National Register eligible historic properties within abandonment Areas of Potential Effect (APEs). APEs include bridge support structures, water tanks, and telephone booths that will be removed prior to abandonment, as well as construction lay-down areas adjacent to those locations.

Seven of the 24 APE locations are on railroad right-of-way on Bureau of Land Management (BLM) land, the other 17 APEs were on railroad right-of-way on non-federal parcels.

The survey resulted in the identification of three historic and five prehistoric archaeological sites within abandonment APEs. None of the three historic sites are on BLM land. Three of the five prehistoric sites are on BLM land.

Data are sufficient to recommend the three historic archaeological sites as insignificant resources. NRHP evaluation of the five prehistoric sites, including the three sites on BLM land, awaits completion of a testing program recommended in this document.

TABLE OF CONTENTS

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INTRODUCTION

This report documents a cultural resources inventory of small parcels surrounding 24 specific locations (20 small ballast and open deck trestles, three water tank locations, and one telephone booth location) along the Union Pacific Railroad Company's (UPRRs) 84 mile long Alturas-Wendel rail line segment (Map 1). The survey was undertaken to comply with an agreement between the United States Surface Transportation Board (STB), the UPRR and the California Historic Preservation Office regarding possible impacts to historic properties in light of UPRR plans to abandon the rail line. All 24 areas were subjected to intensive surface reconnaissance by personnel from Far Western Anthropological Research Group, Inc. (Far Western) and the Sonoma State University Academic Foundation Anthropological Studies Center (ASC) between May 12 and May 28, 1997. Seven of the 24 locations are on railroad right-of-way on Bureau of Land Management land, the other 17 were on railroad right-of-way on private parcels.

Archaeological sites were recorded at eight of the 24 locations, five prehistoric and three historic archaeological sites. The five prehistoric sites have not been evaluated for potential inclusion on the National Register of Historic Places (NRHP); recommended testing procedures are included in the "Recommendations" section of this report. The three historic sites are recommended as ineligible for the NRHP; documentation for the recommendations are included in the "Recommendations" section of this report.

This survey project came about as a result of the following events: In July of 1996 the Union Pacific Railroad Company (UP) and the Southern Pacific Transportation Company (SP) received permission from the (STB) to merge their operations into a single Union Pacific Railroad Company (UPRR), with the stipulation that the company coordinate with pertinent State Historic Preservation officers to comply with the National Historic Preservation Act regarding historic properties that may be affected by merger-related activities. On October 10, 1996 STB Chief of Environmental Analysis Section Elaine Kaiser, acting on behalf of the STB as lead federal agency, requested agreement from the California State Historic Preservation Officer Cherilyn Widell regarding the nature of merger-related activities in California and the steps necessary to resolve them. Regarding the proposed Alturas-Wendel rail line abandonment element of the merger, Ms. Kaiser wrote:

> The STB requests your concurrence that the APE for pre-historic and historic archaeological resources is limited to the removal of bridge support structures. Far Western and Adrian Praetzellis will be responsible to determine whether any eligible or potentially eligible resources are within the APE and to recommend appropriate mitigation measures, if necessary. The resulting report and recommendations will be submitted on behalf of the STB to your office for concurrence (Kaiser to Widell, October 10, 1996, page 5).

Far Western and its sub-contractor, the ASC, were given the notice to proceed with the survey of bridge structure support locations along the Alturas-Wendel railroad segment in late April, 1997. This report includes documentation of prefield preparation, survey methods, and survey results.

ENVIRONMENTAL SETTING

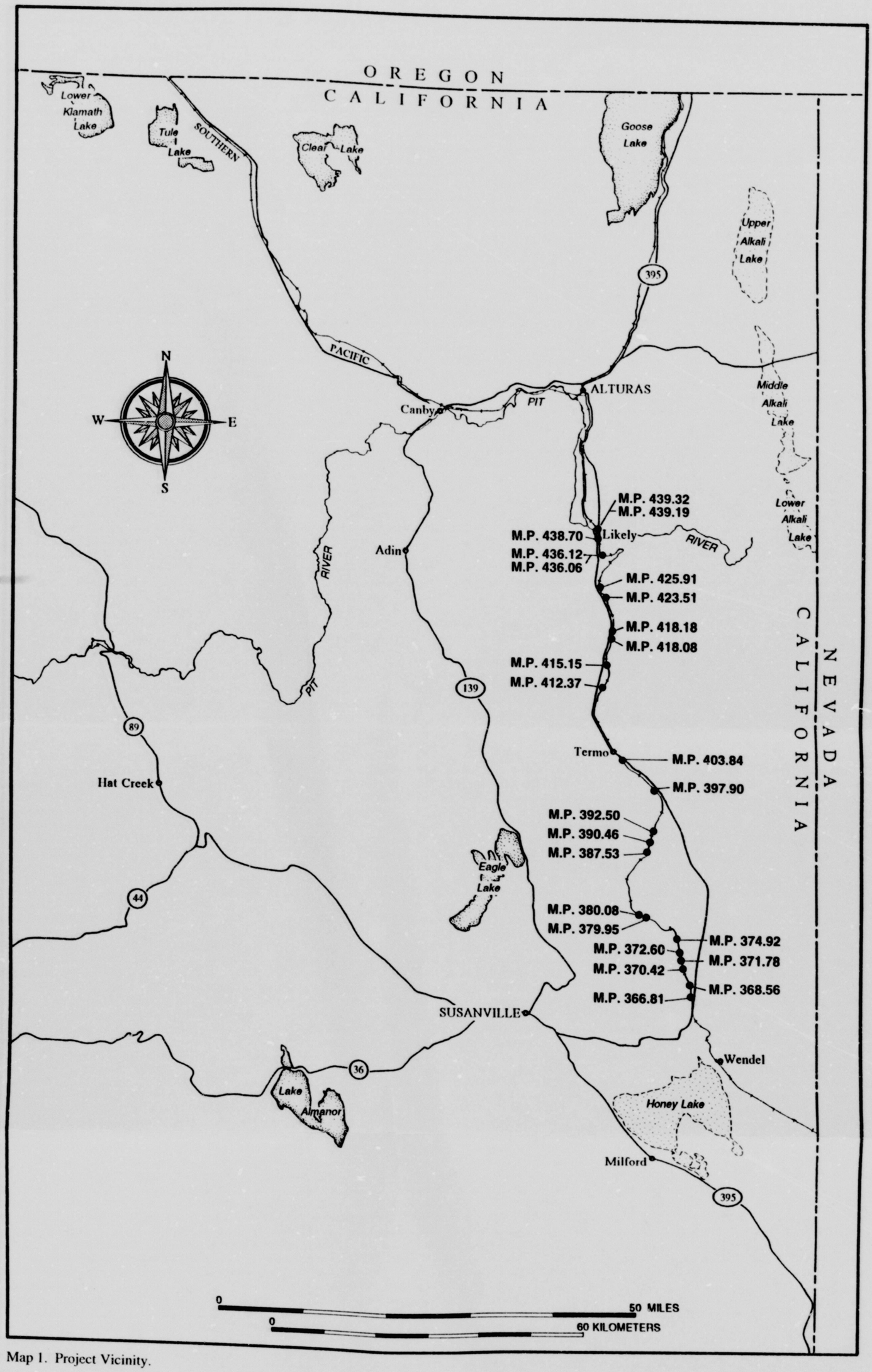
The project area lies in an area of basaltic mountains and wide alluvium-filled valleys in Lassen and Modoc counties, northeastern California. Bridges in the northern portion of the rail line cross tributaries of South Fork of the Pit River, the central portion crosses ephemeral drainages on the Madeline Plains, while the southern portion of the route crosses portions of Snowstorm, Secret, and Deep creeks, drainages which meet in Secret Valley and flow eventually into the Susan River and Honey Lake to the south.

Table 1. APE locations, land ownership, map cross-references, and cultural resources.

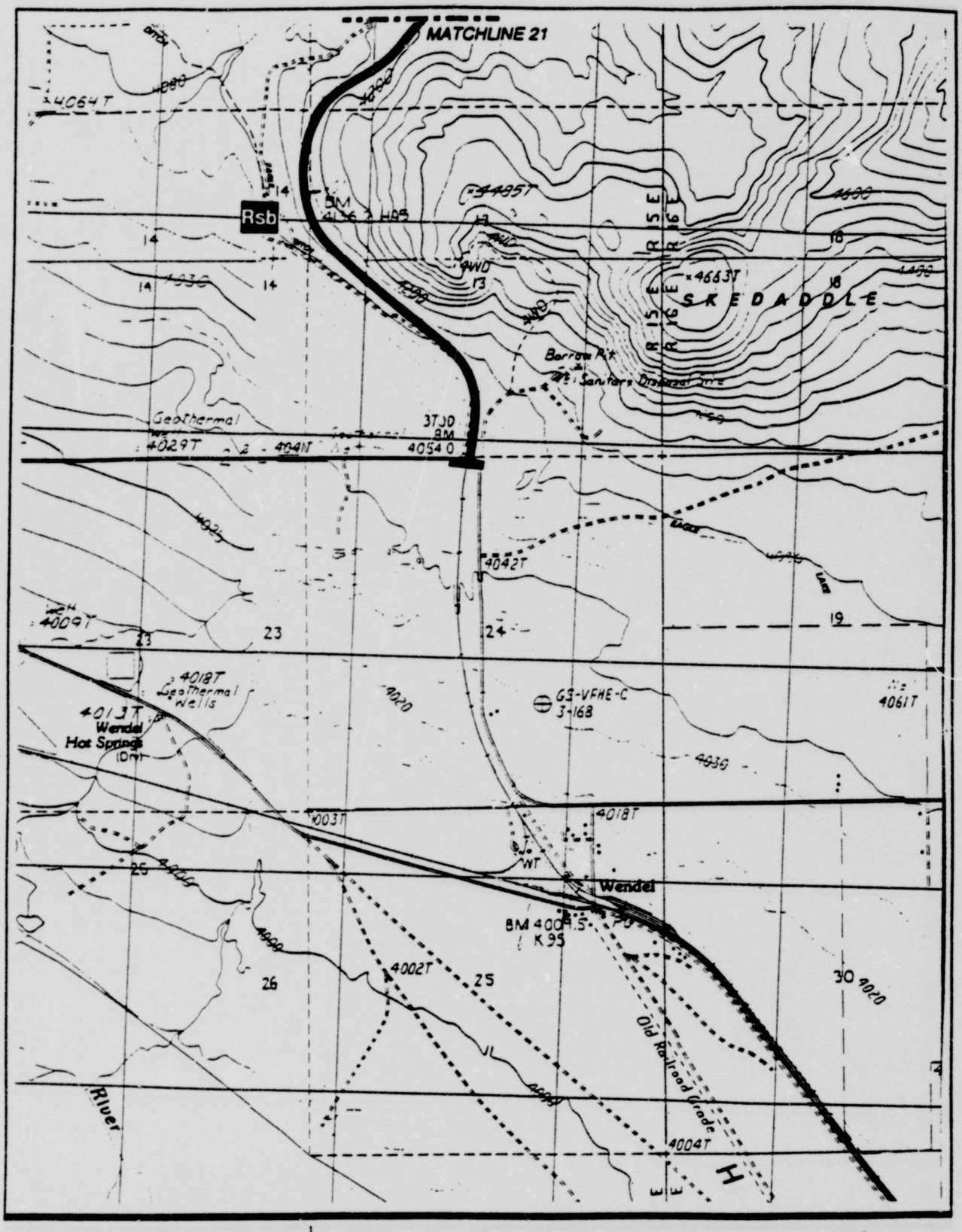
Map	Mile Post	Description	BLM	7.5 ' Topo Map	Survey Hectares	Resources Pre	Resources Hist
4	366.81	BDT Bridge	Yes	Shaffer Mtn	1.0	0	0
4	368.56	BDT Bridge	No	Shaffer Mtn	1.0	0	0
5	370.42	BDT Bridge	No	Shaffer Mtn	1.0	0	0
5	371.78	BDT Bridge	No	Karlo	1.0	0	0
6	372.60	BDT Bridge	No	Karlo	15.0	1	0
6	374.92	BDT Bridge	No	Karlo	1.0	0	0
8	379.95	BDT Bridge	Yes	Pete's Valley	1.0	1	0
8	380.08	BDT Bridge	Yes	Pete's Valley	2.0	0	0
9	387.53	BDT Bridge	No	West of Snowstorm Mtn	1.0	0	0
10	390.46	BDT Bridge	Yes	West of Snowstorm Mtn	1.0	1	0
11	392.50	Telephone Booth	Yes	Snowstorm Mtn	1.0	1	0
12	397.90	Water Tank	No	Ravendale	1.0	0	1
14	403.84	BDT Bridge	No	Termo	2.0	1	0
16	412.37	BDT Bridge	No	McDonald Peak	1.0	0	0
17	415.15	BDT Bridge	No	Madeline	1.0	0	0
18	418.08	BDT Bridge	No	Madeline	1.0	0	0
18	418.18	Water Tank	No	Madeline	1.0	0	1
19	423.51	BDT Bridge	Yes	Madeline	1.0	0	0
20	425.91	BDT Bridge	Yes	Tule Mtn	1.0	0	0
21	436.06	BDT Bridge	No	Likely	1.0	0	0
21	436.12	BDT Bridge	No	Likely	1.0	0	0
22	438.70	Water Tank	No	Likely/Tule Mtn	1.0	0	1
22	439.19	2 ODT Bridges	No	Likely	0.5	0	0
22	439.32	2 ODT Bridges	No	Likely	0.5	0	0
Total					39.0	5	3

Note: BDT = Ballast Deck Trestle; ODT = Open Deck Trestle.

The South Fork of the Pit River, Madeline Plains and Secret Valley areas are marked by extreme cold with a small amount of rain and occasional snow from Pacific storm fronts in the winter, and extreme heat with little precipitation in the summer. Vegetation north of the Madeline Plains is open juniper woodland, as is the vegetation on the rim country that separates the Madeline Plains from Secret Valley to the south. The Madeline Plains themselves are open grassland and sagebrush scrub lands. The Secret Valley area, also treeless, grades from sagebrush scrub around its rim to greasewood/sagebrush scrub around the low Mud Lake area.

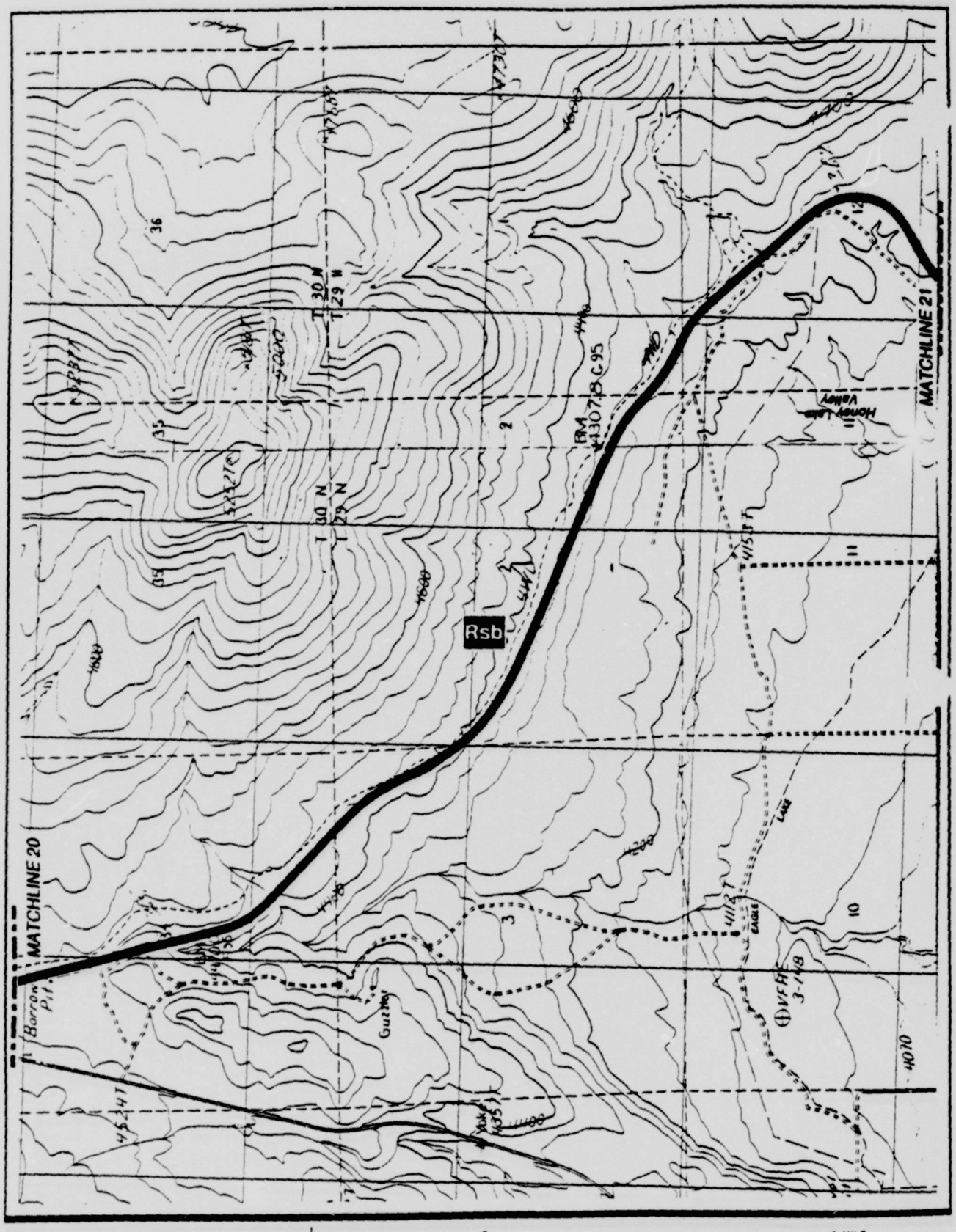


Map 1. Project Vicinity.



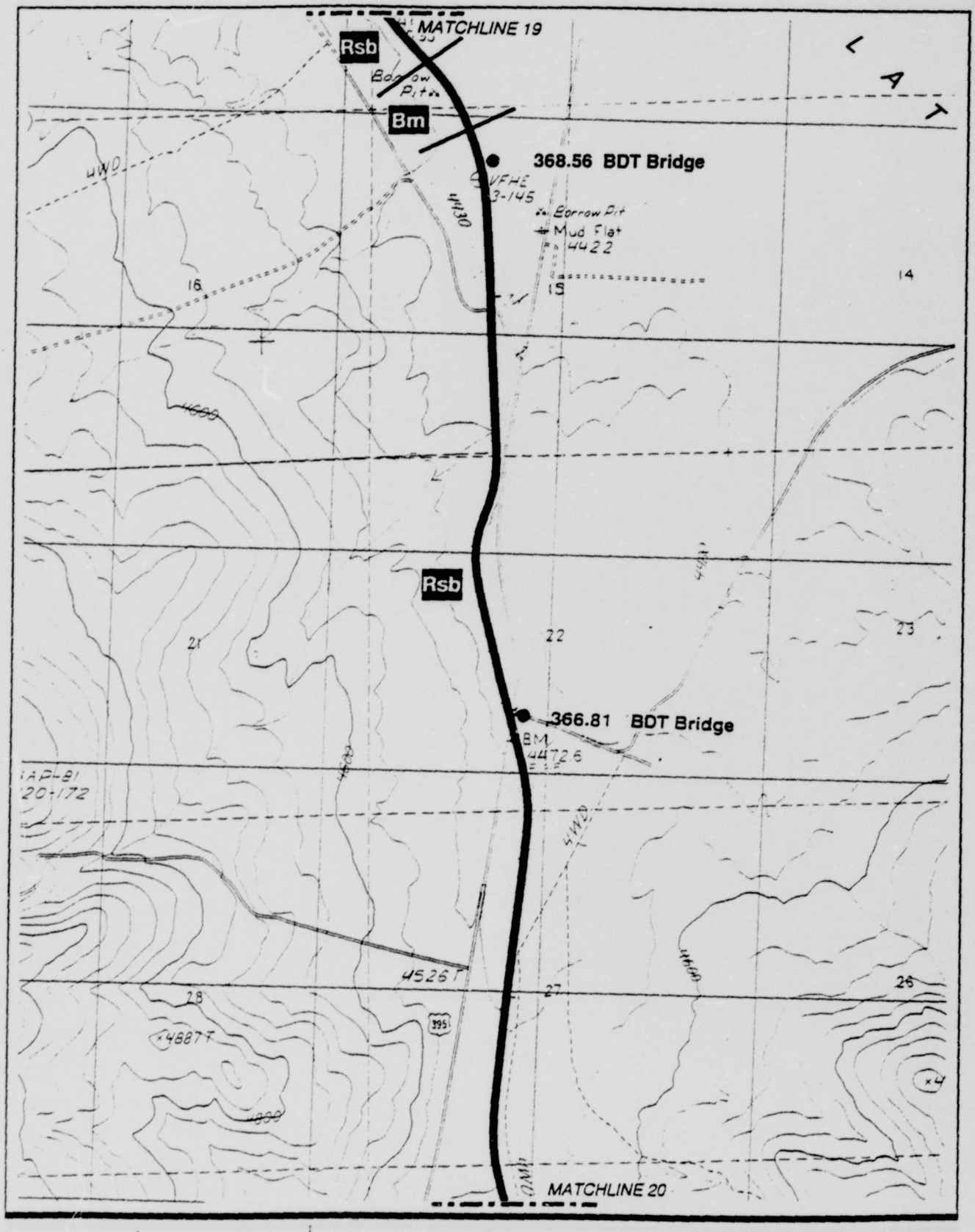
Base Map: *USGS 7.5' Topographic Quadrangles: Shaffer Mountain, California (Provisional Edition 1988); Little Mud Flat, California (Provisional Edition 1988); Wendel Hot Springs, California (Provisional Edition 1988); Wendel, California (Provisional Edition 1988)*

Map 2. Wendel Area (No Survey Locations).



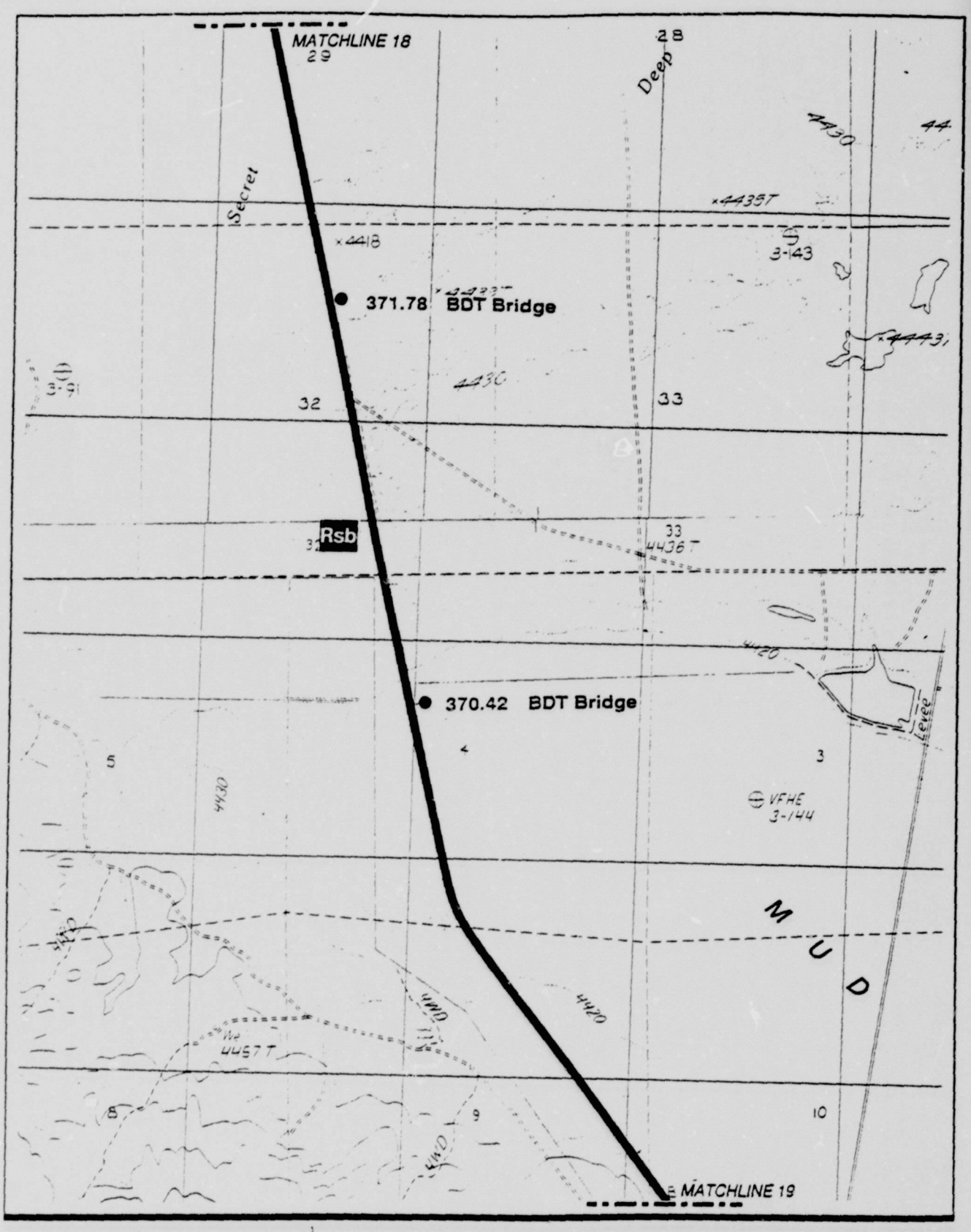
Base Map: *USGS 7.5' Topographic Quadrangle:* Shaffer Mountain, California (Provisional Edition 1988); Little Mud Flat, California (Provisional Edition 1988)

Map 3. North End of Honey Lake Valley (No Survey Locations).



Base Map: *USGS 7.5' Topographic Quadrangle:* Shaffer Mountain, California (Provisional Edition 1988)

Map 4. South End of Secret Valley (M.P. 366.81 and M.P. 368.56).



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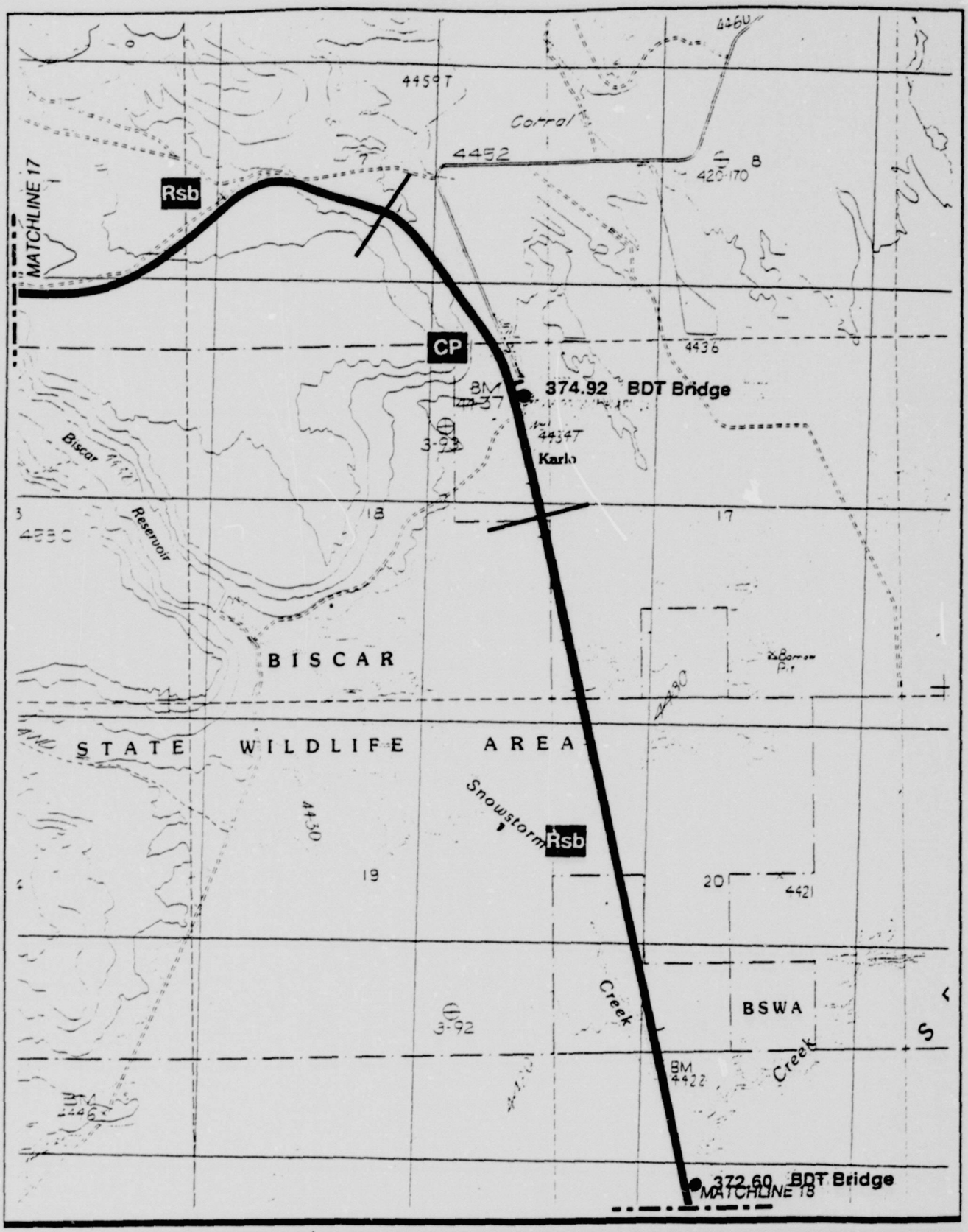
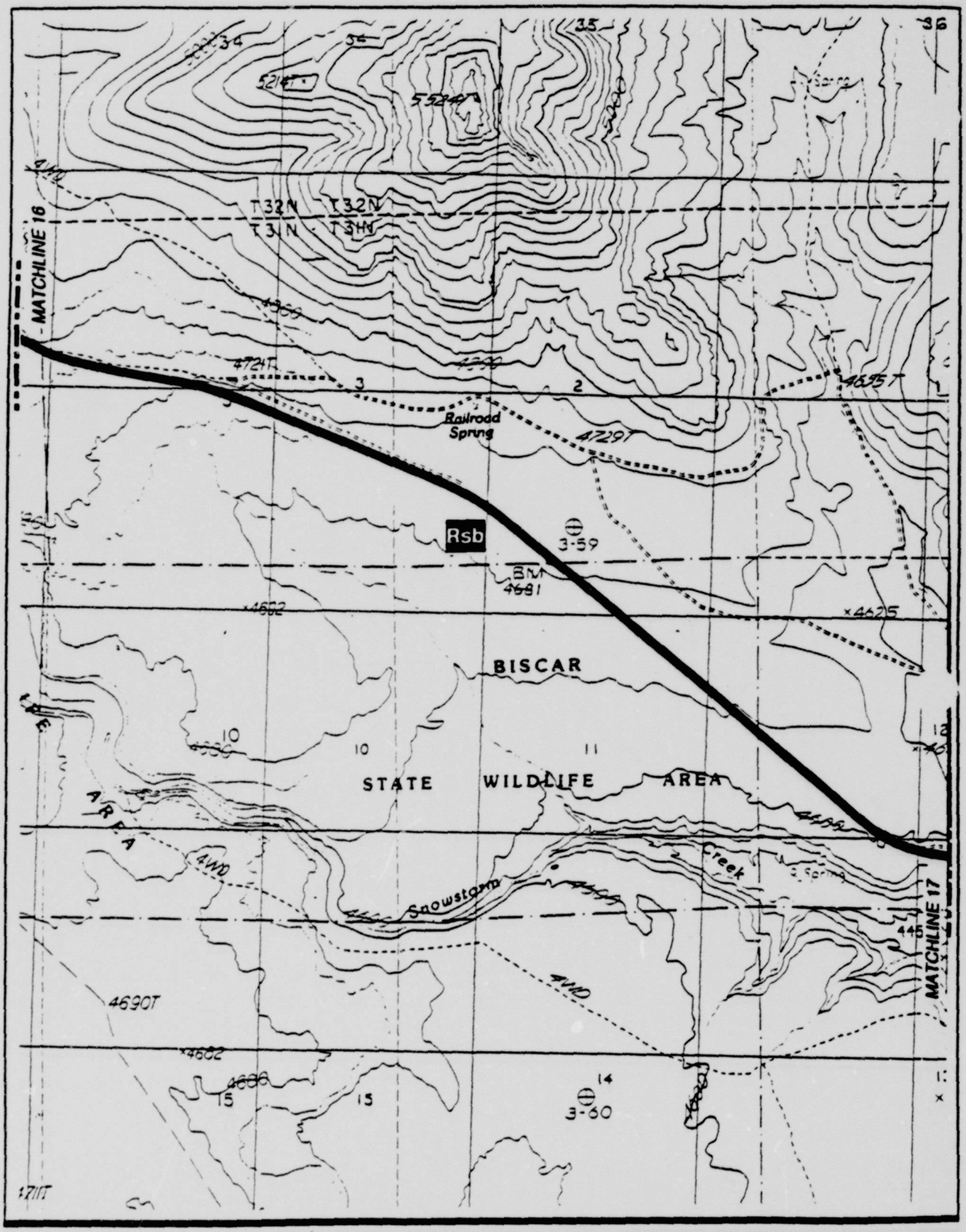
Base Map: *USGS 7.5' Topographic Quadrangles:* Karlo, California (Provisional Edition 1989); Shaffer Mountain, California (Provisional Edition 1988)

Map 5. Mud Lake Portion of Secret Valley (M.P. 370.42 and M.P. 371.78).



Base Map: *USGS 7.5' Topographic Quadrangle:* Karlo, California (Provisional Edition 1989)

Map 6. North End of Secret Valley (M.P. 372.60 and M.P. 374.92).



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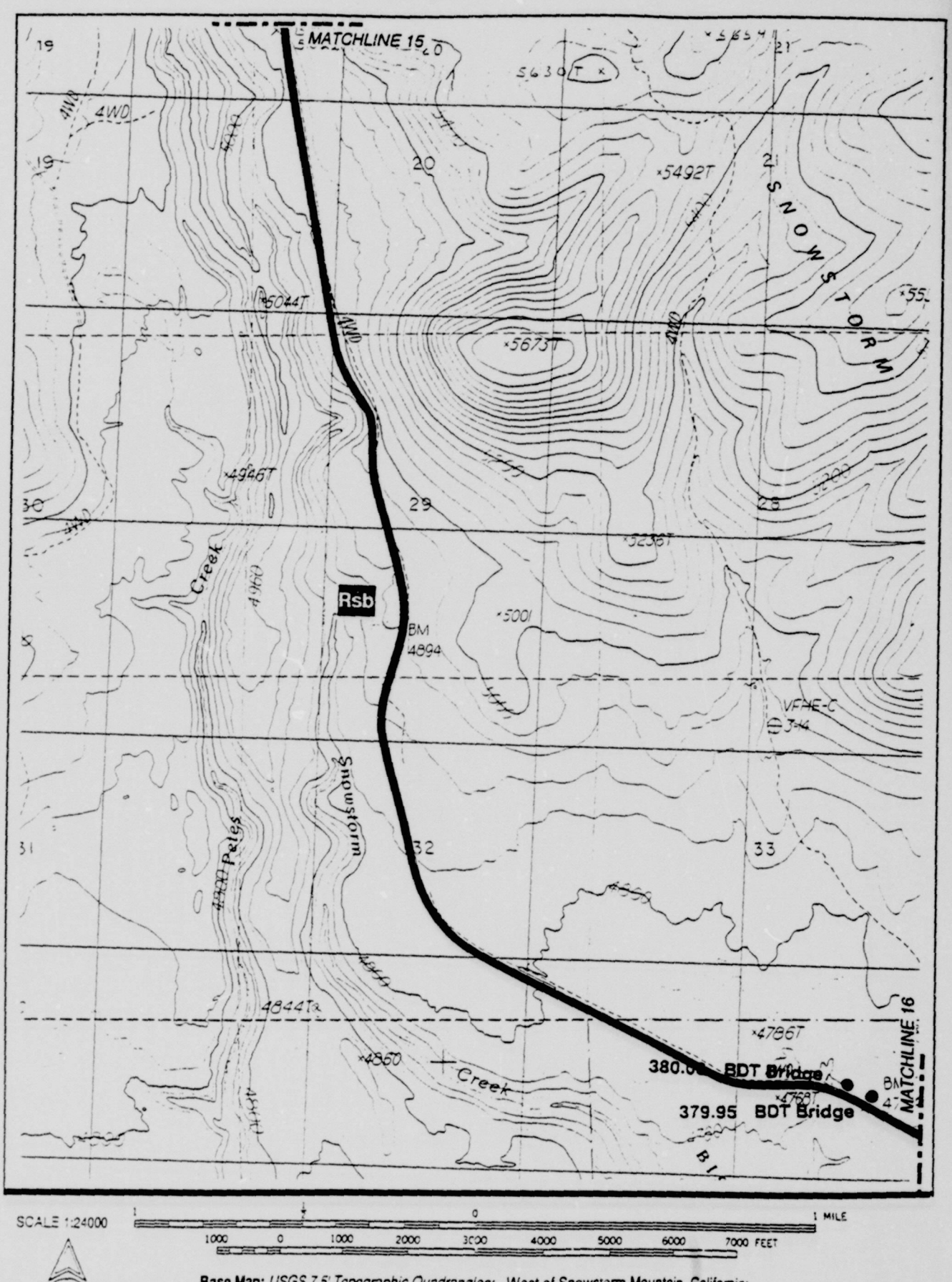
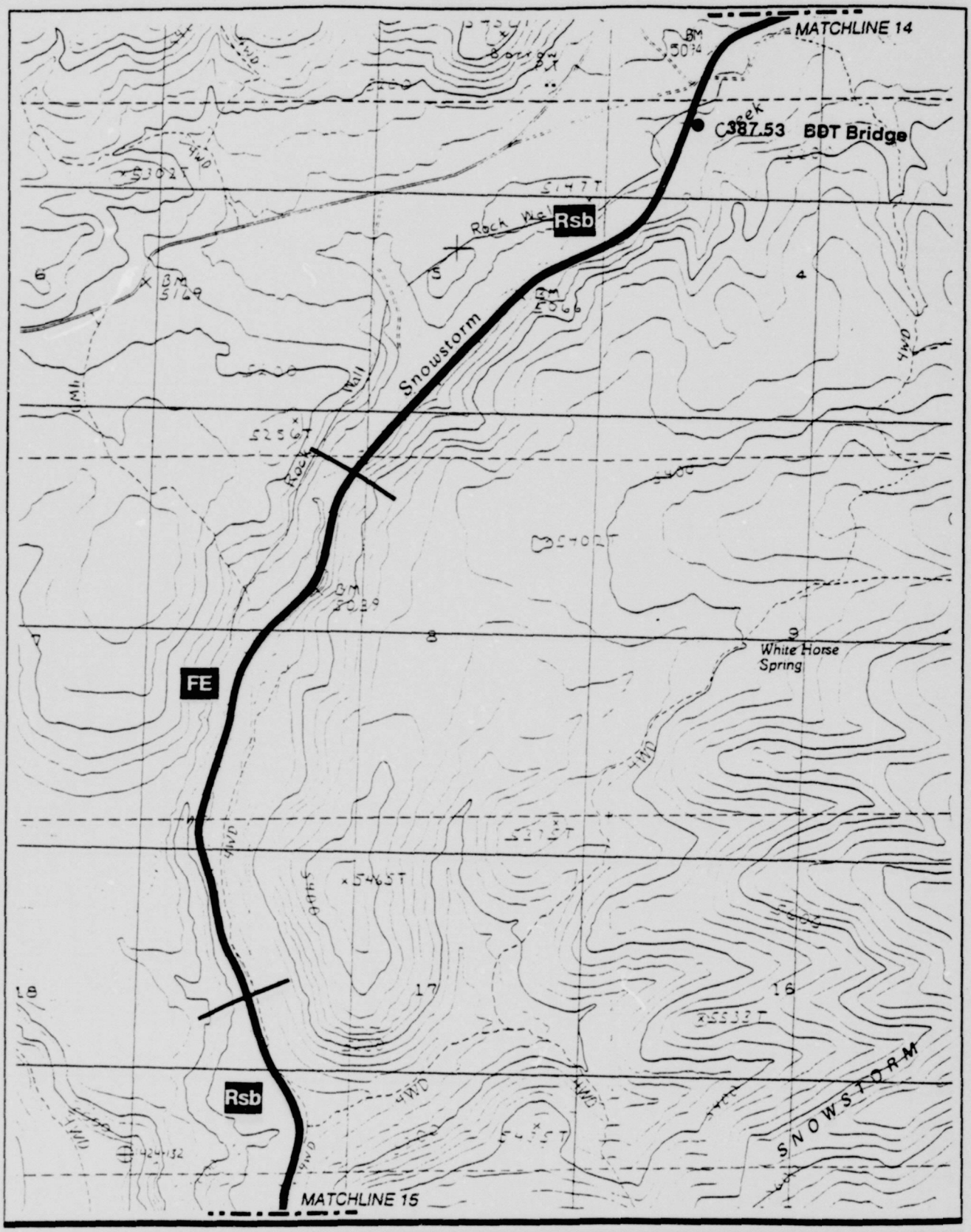
Base Map: *USGS 7.5' Topographic Quadrangles:* Petes Valley, California (Provisional Edition 1989); Karlo, California (Provisional Edition 1989)

Map 7. Northwest of Secret Valley (No Survey Locations).



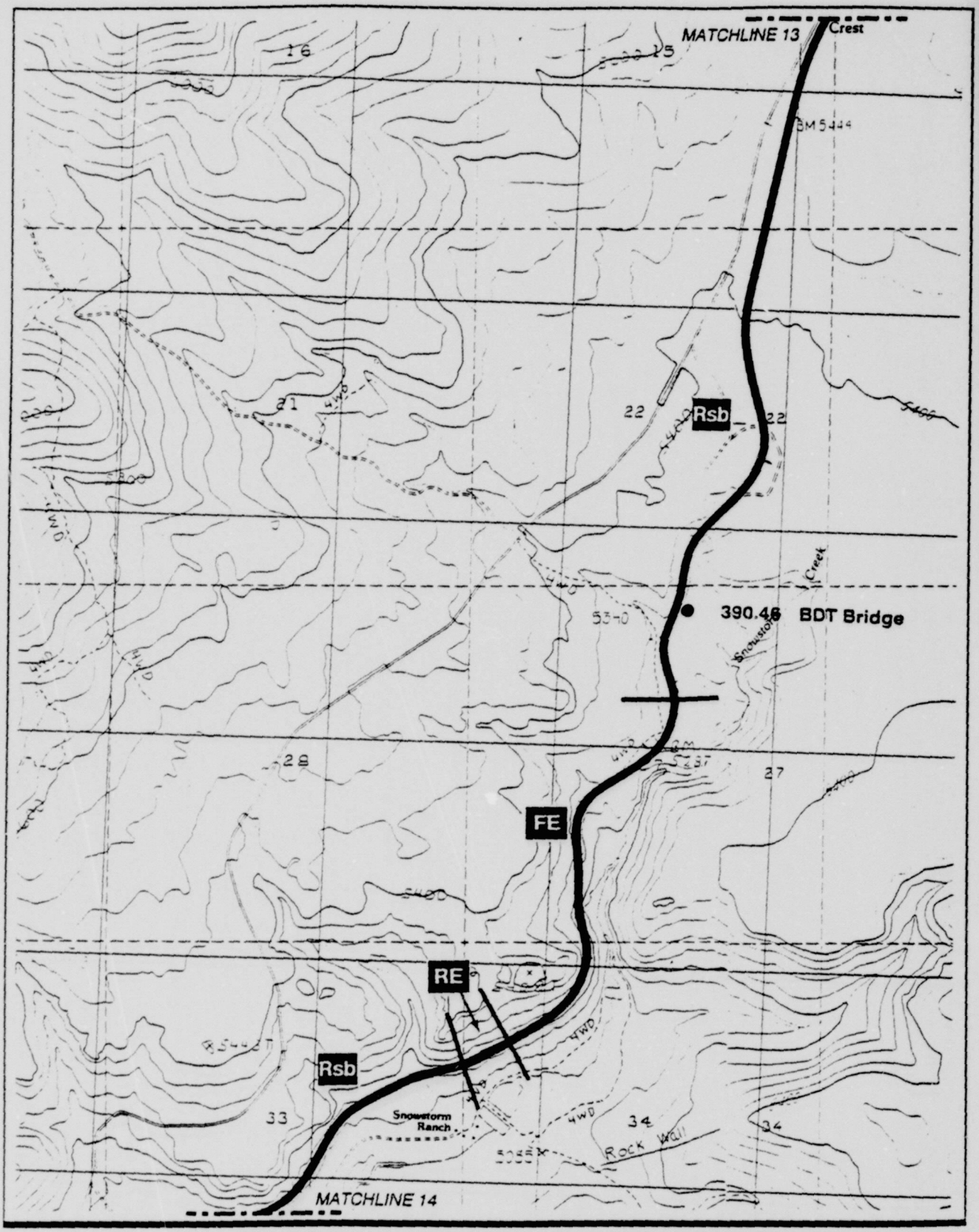
Base Map: *USGS 7.5' Topographic Quadrangles:* West of Snowstorm Mountain, California; Petes Valley, California (Provisional Edition 1989)

Map 8. Southwest of Snowstorm Mountain (M.P. 379.95 and 380.08).



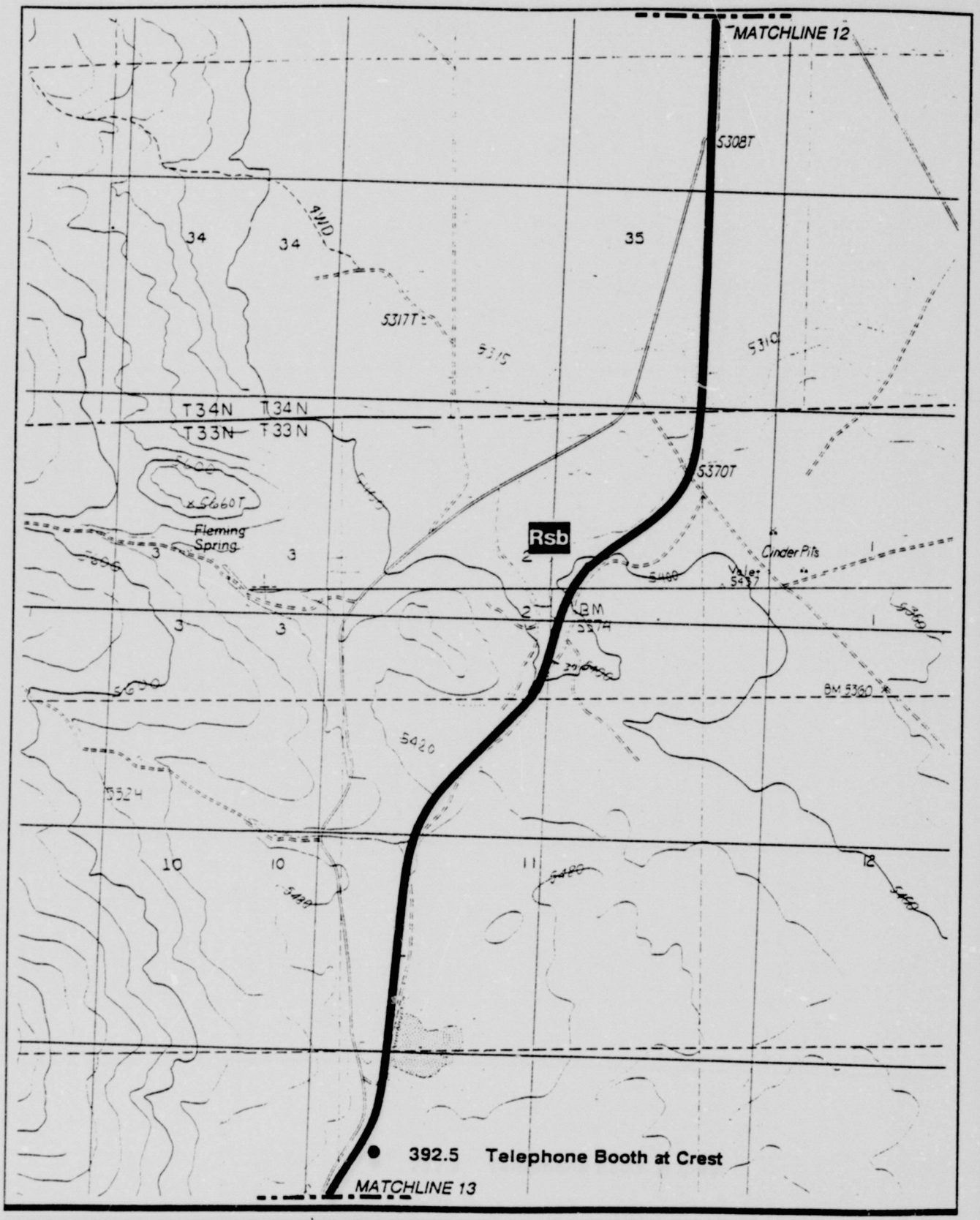
Base Map: *USGS 7.5' Topographic Quadrangle:* West of Snowstorm Mountain, California

Map 9. West of Snowstorm Mountain (M.P. 387.53).



Base Map: *USGS 7.5' Topographic Quadrangles:* West of Snowstorm Mountain, California (Provisional Edition 1989); Snowstorm Mountain, California (Provisional Edition 1989)

Map 10. Northwest of Snowstorm Mountain (M.P. 390.46).



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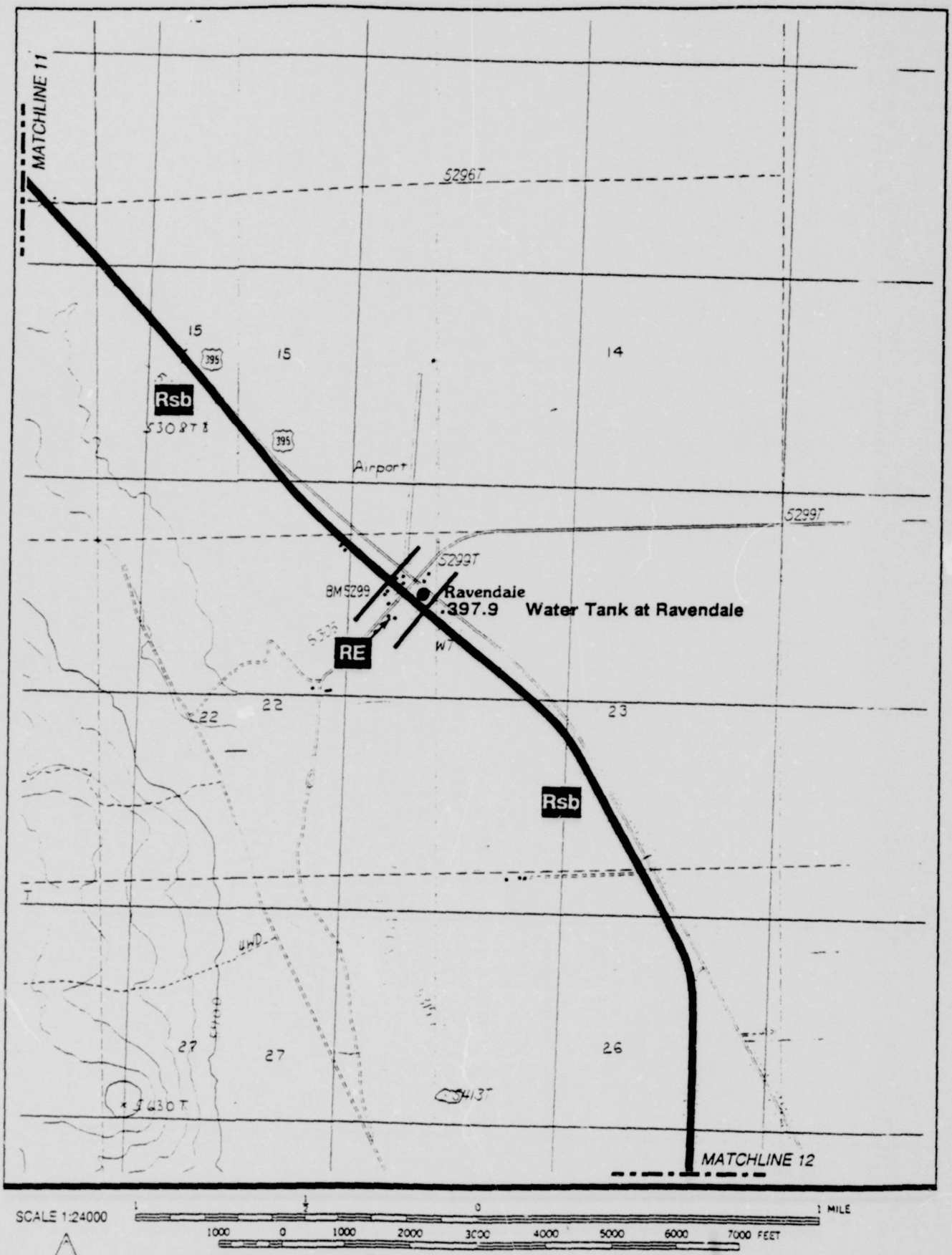
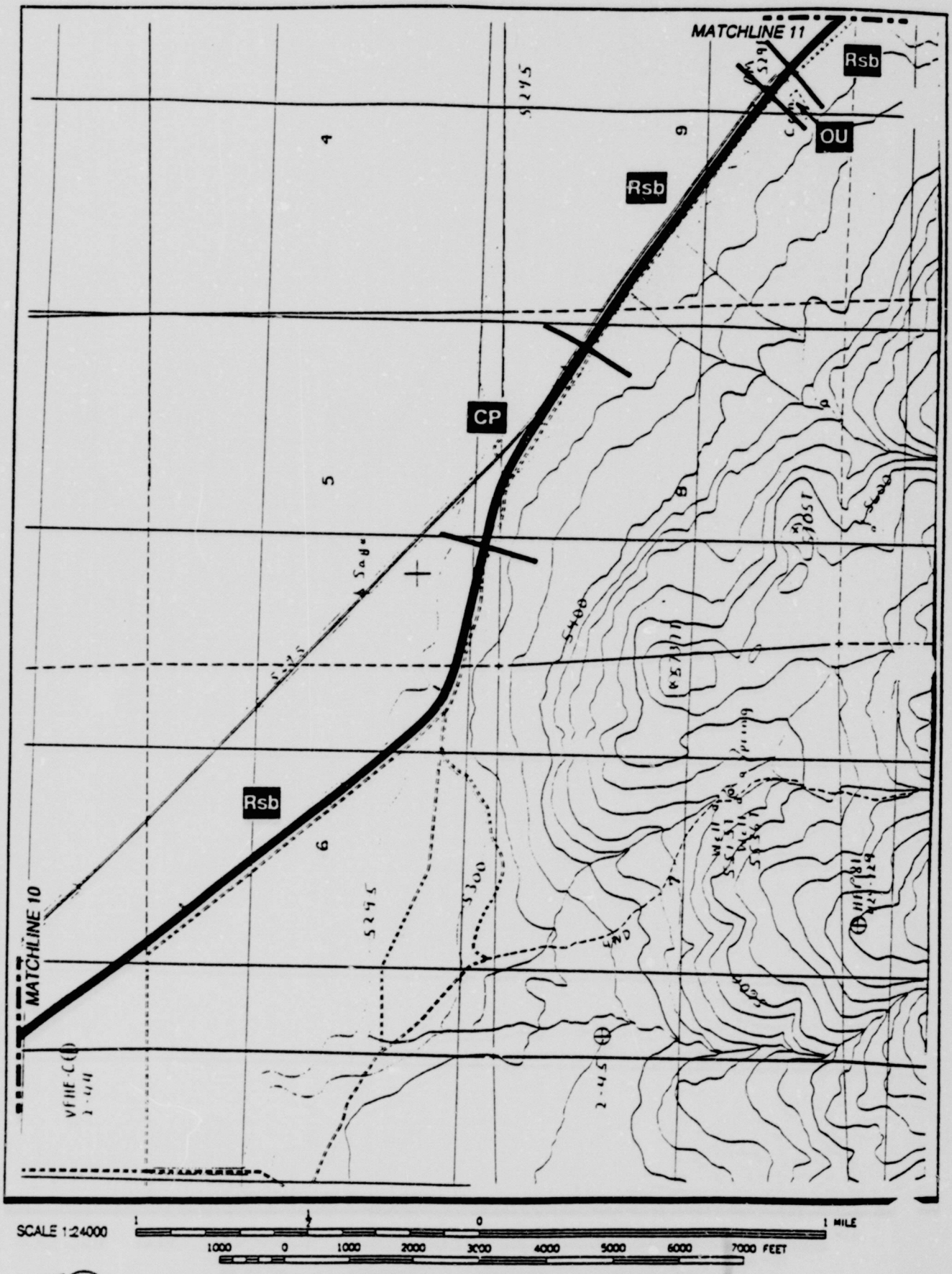
Base Map: *USGS 7.5' Topographic Quadrangles:* Termo, California (Provisional Edition 1989); Ravendale, California, California (Provisional Edition 1989); West of Snowstorm Mountain, California (Provisional Edition 1989); Snowstorm Mountain, California (Provisional Edition 1989)

Map 11. South Edge of Madeline Plains (M.P. 392.50).

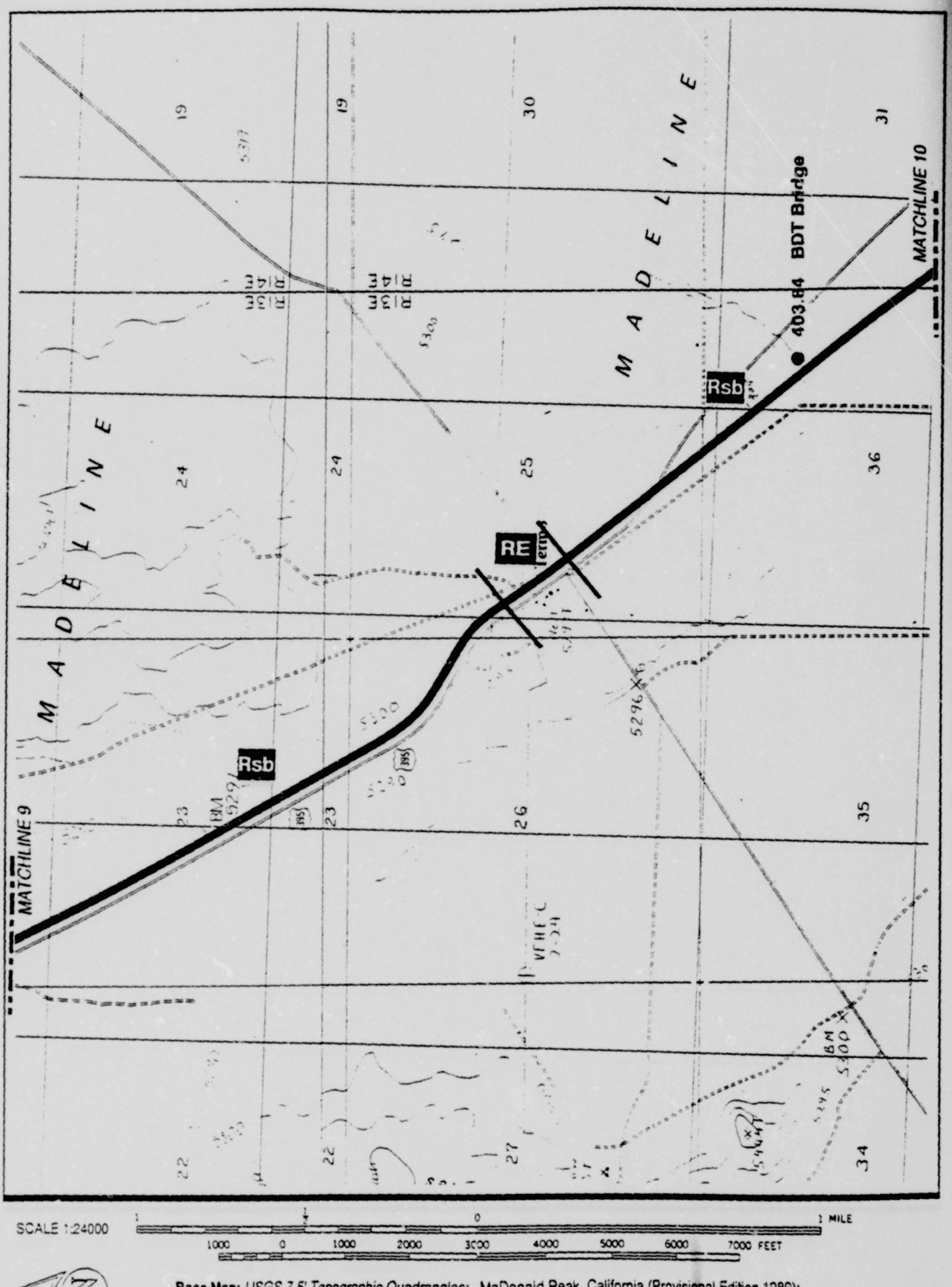


Base Map: *USGS 7.5' Topographic Quadrangles:* Termo, California (Provisional Edition 1989); Ravendale, California (Provisional Edition 1989)

Map 12. Ravendale Area of Madeline Plains (M.P. 397.90).

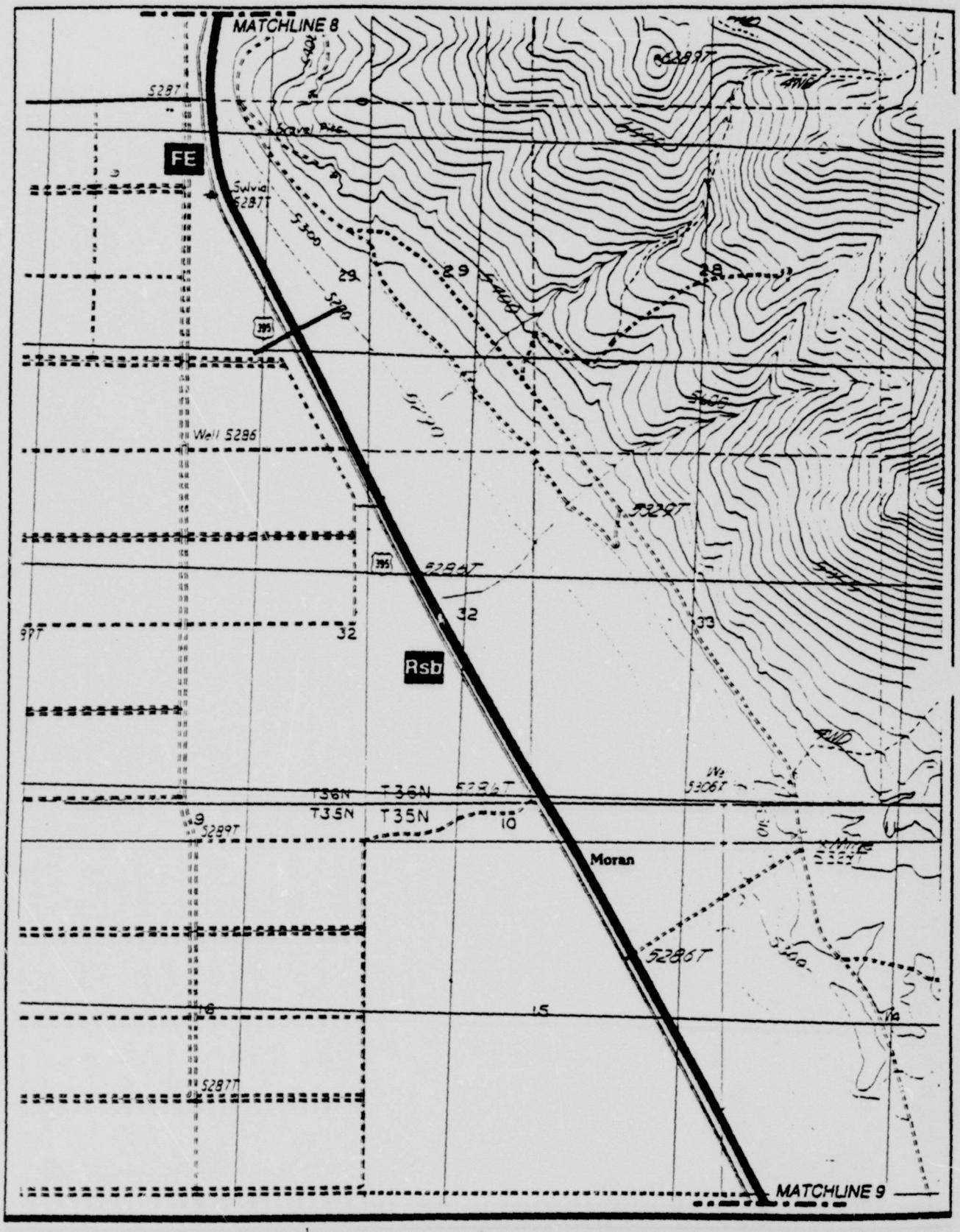


Map 13. Madeline Plains South of Termo (No Survey Locations).



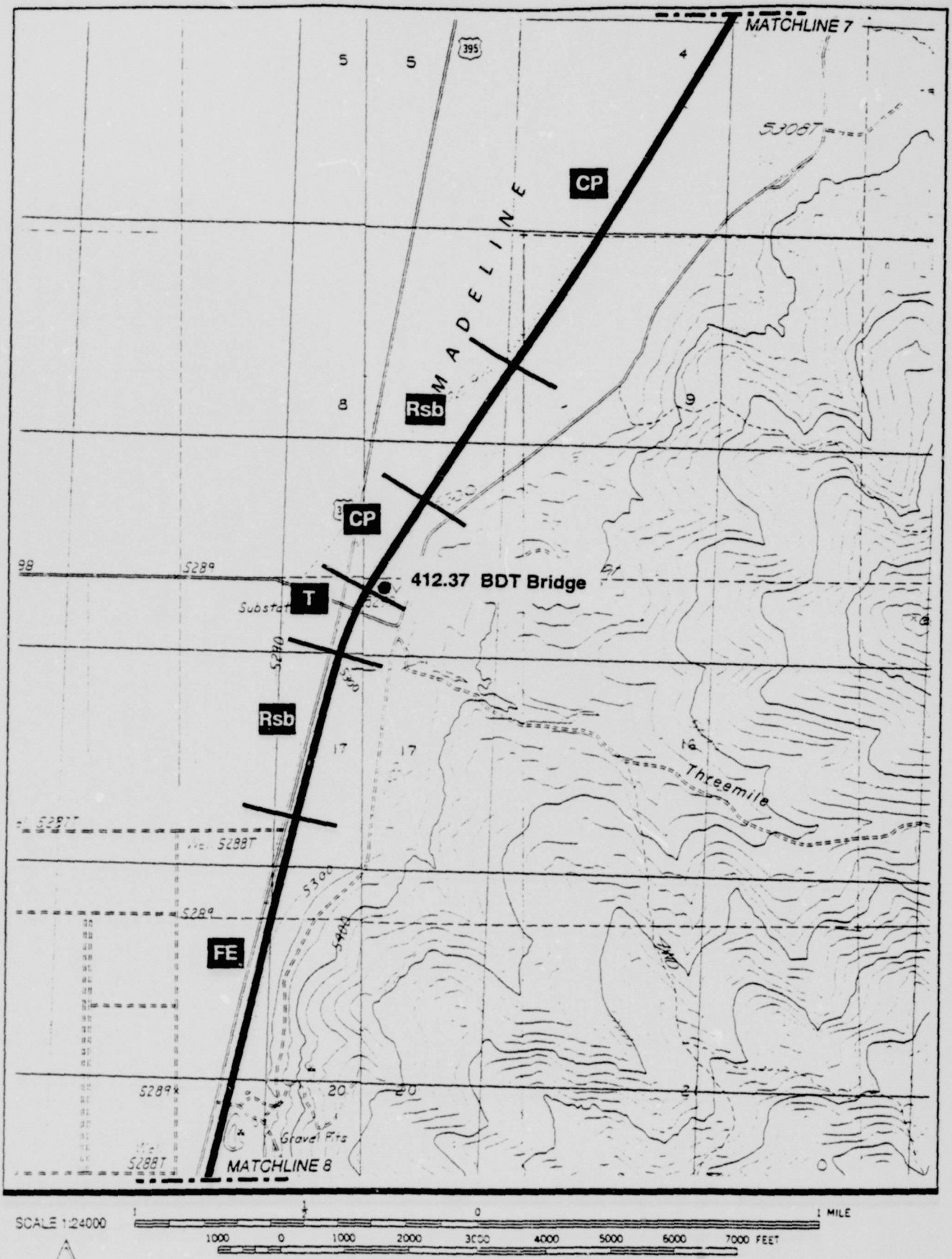
Base Map: *USGS 7.5' Topographic Quadrangles:* McDonald Peak, California (Provisional Edition 1989); Termo, California (Provisional Edition 1989)

Map 14. Termo Area of Madeline Plains (M.P. 403.84).



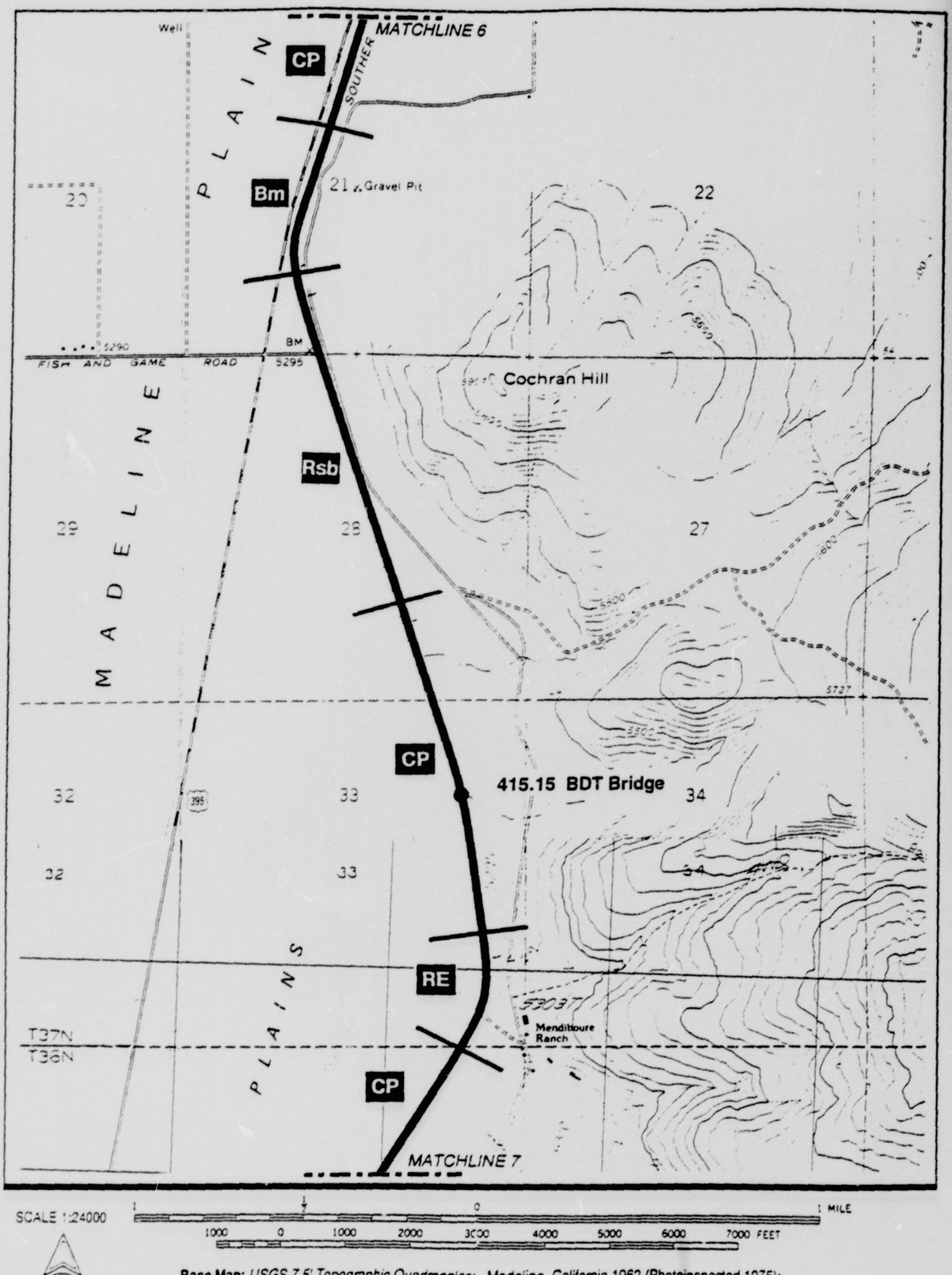
Base Map: *USGS 7.5' Topographic Quadrangles:* Anderson Mountain, California (Provisional Edition 1989); McDonald Peak, California (Provisional Edition 1989)

Map 15. Moran Area of Madeline Plains (No Survey Locations).



Base Map: *USGS 7.5' Topographic Quadrangles:* Anderson Mountain, California (Provisional Edition 1989); McDonald Peak, California (Provisional Edition 1989)

Map 16. Madeline Plains West of McDonald Peak (M.P. 412.37).



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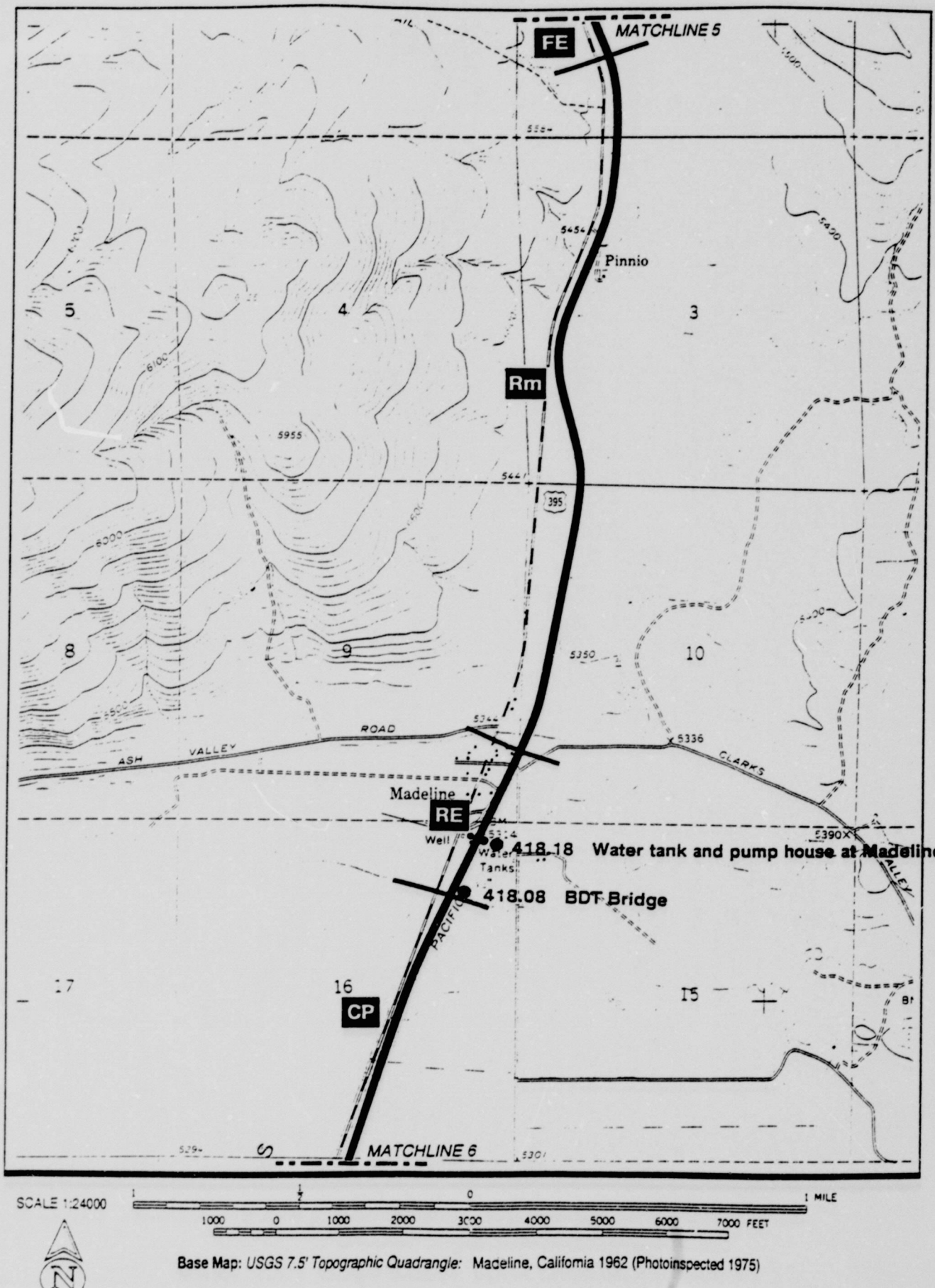
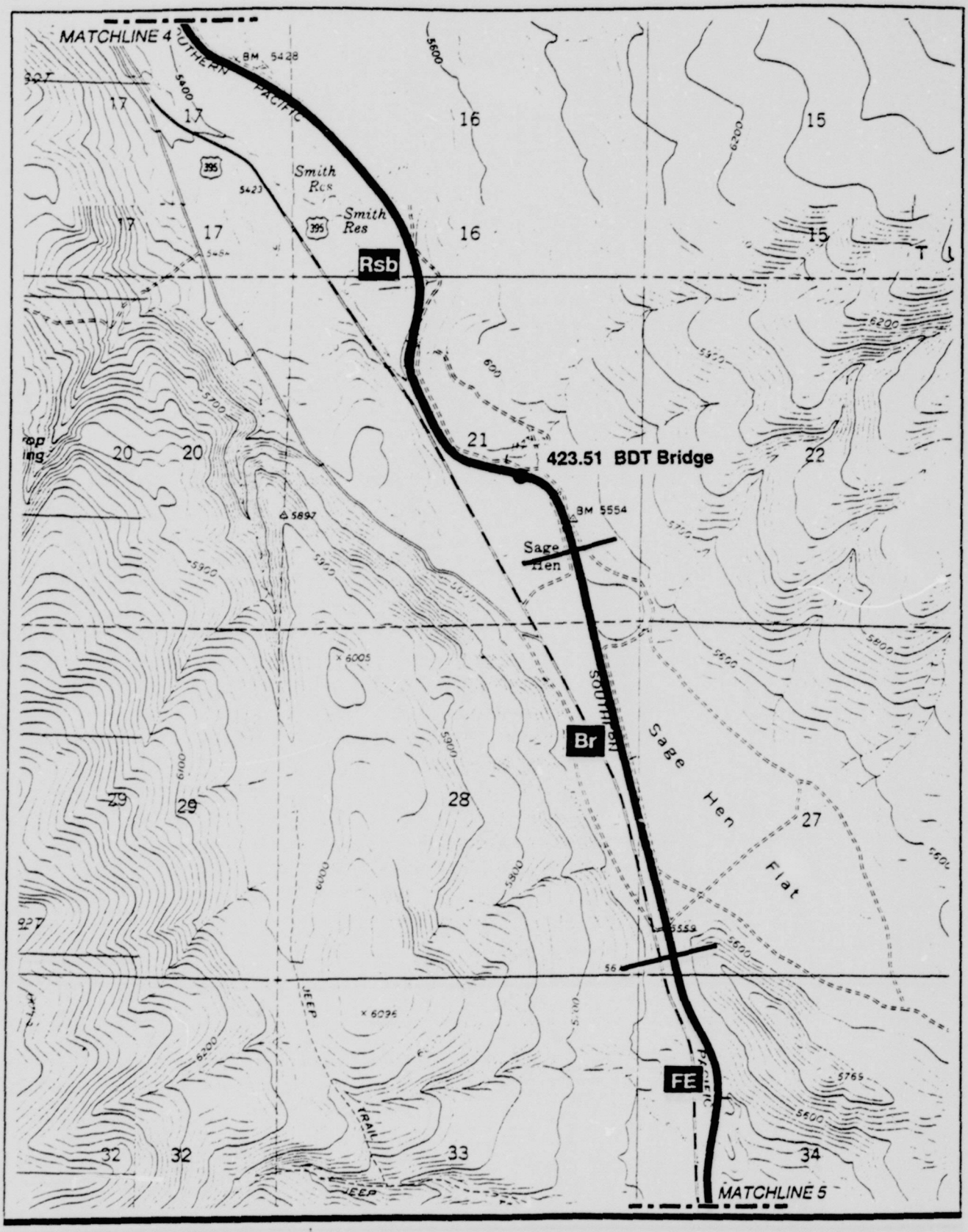
Base Map: *USGS 7.5' Topographic Quadrangles:* Madeline, California 1962 (Photoinspected 1975); McDonald Peak, California (Provisional Edition 1989)

Map 17. Madeline Plains West of Cochran Hill (M.P. 415.15).



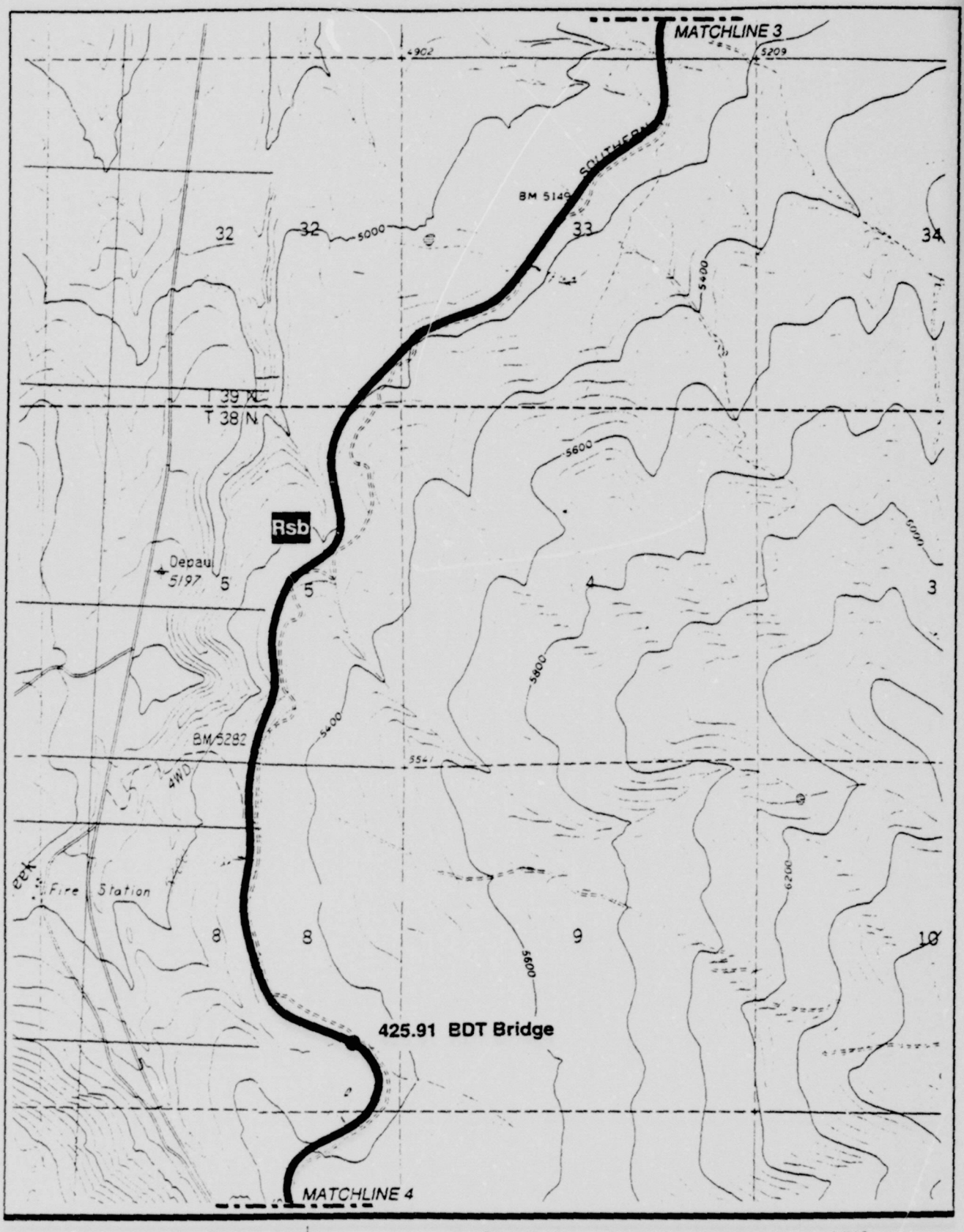
Base Map: *USGS 7.5' Topographic Quadrangle:* Madeline, California 1962 (Photoinspected 1975)

Map 18. Madeline Area of Madeline Plains (M.P. 418.08 and M.P. 418.18).



Base Map: *USGS 7.5' Topographic Quadrangles:* Likely, California (Provisional Edition 1990); Tule Mountain, California 1962 (Photorevised 1982); Holbrook Canyon, California (Provisional Edition 1990); Madeline, California 1962 (Photoinspected 1975)

Map 19. Sage Hen Flat Area (M.P. 423.51).

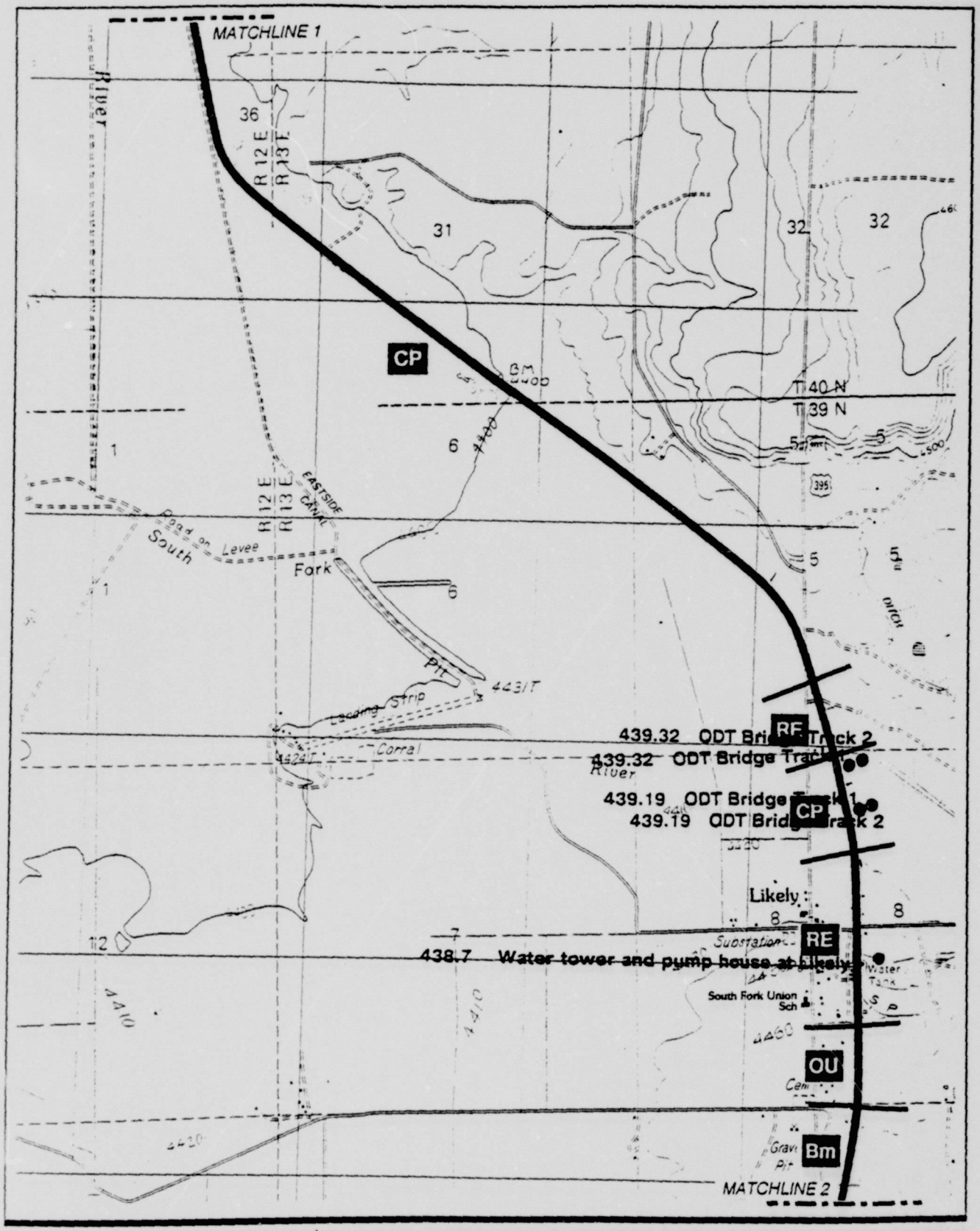


Base Map: *USGS 7.5' Topographic Quadrangles:* Likely, California (Provisional Edition 1990); Tule Mountain ,California 1962 (photorevised 1982)

Map 20. West of Tule Mountain (M.P. 425.91).

Base Map: *USGS 7.5' Topographic Quadrangles:* Likely, California (Provisional Edition 1990); Tule Mountain ,California 1962 (photorevised 1982);

Map 21. North of Tule Mountain (M.P. 436.06 and M.P. 436.12).



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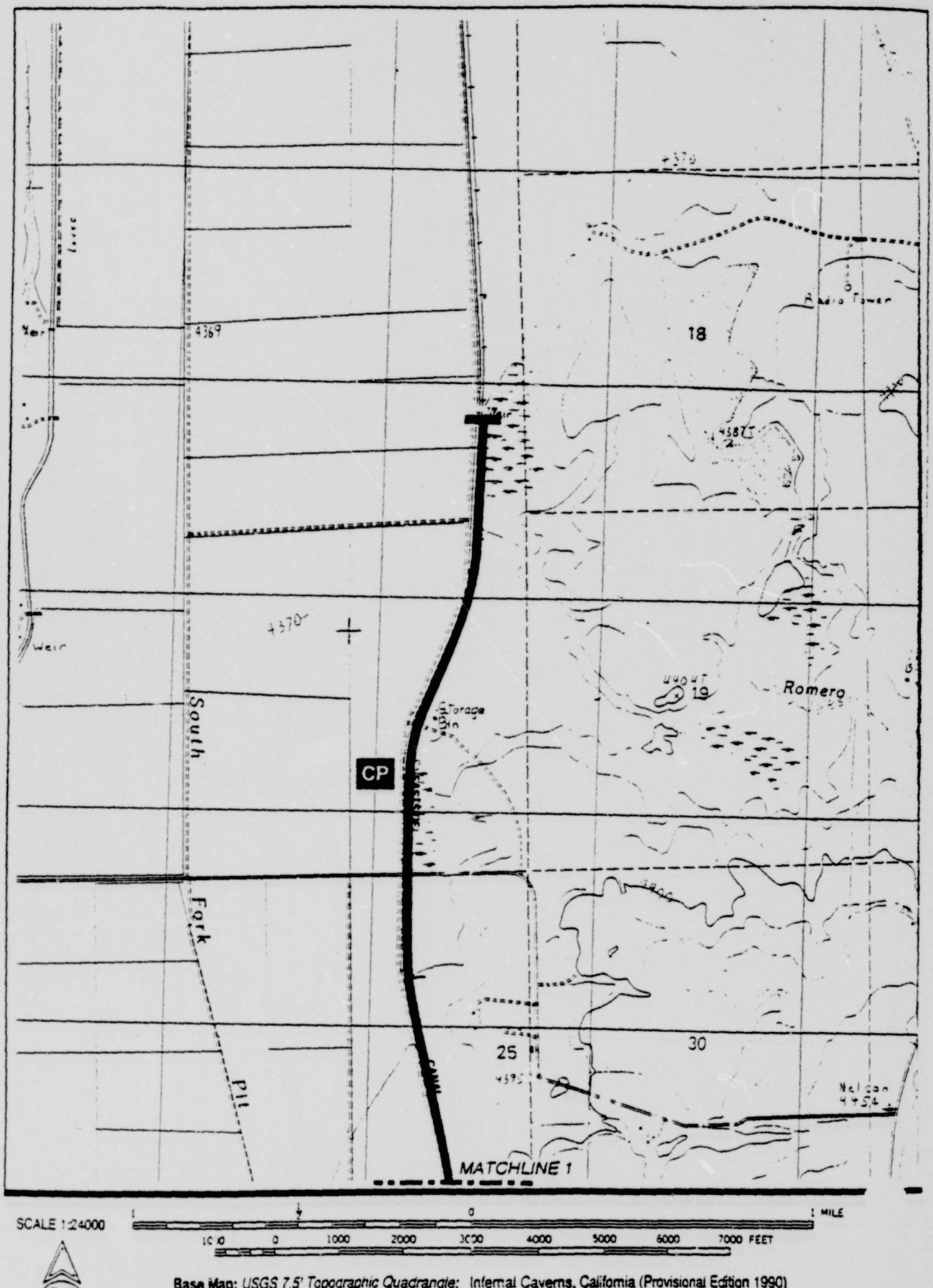
Base Map: *USGS 7.5' Topographic Quadrangles:* Infernal Caverns, California (Provisional Edition 1990); Little Juniper Reservoir, California 1963 (Photorevised 1982); Likely, California (Provisional Edition 1990); Tule Mountain, California 1962 (Photorevised 1982)

Map 22. Likely Area (M.P. 438.70, M.P. 439.19, and M.P. 439.32).



Base Map: *USGS 7.5' Topographic Quadrangle:* Infernal Caverns, California (Provisional Edition 1990)

Map 23. Bayley Area of the South Fork of the Pit River (No Survey Locations).

Dominant mammals and birds of the treeless areas are mice, voles, hares, and small passerine birds; antelope were once common in grassy areas. Mice, cottontail rabbits, and mule deer are the dominant mammals of the juniper pine woodland. Hawks, owls, and coyotes are the dominant predators in both environments.

CULTURAL RESOURCES BACKGROUND

Prehistory

This section reviews the prehistory for the portion of the western Great Basin research area that encompasses the Wendel-Alturas railroad corridor. Clearly, however, studies of the prehistory of the northern Madeline Plains and the South Fork of the Pit River must take into account research further west along the Pit River and in the Modoc Plateau, while studies of the southern segment must take into account the prehistory of the contiguous northern Sierra Nevada. This review follows Elston's (1986) temporal breakdown of western Great Basin prehistory.

Pre-Archaic (10,000-7000 B.P.)

Evidence for early Holocene occupation is much more abundant in the low deserts of the western Great Basin than in upland areas in or near the Sierra Nevada and Warner ranges, probably due to the presence of early Holocene lake shores in the lower valleys. In the Black Rock Desert, 80 miles to the east of the rail line, Clewlow (1968) recovered numerous Great Basin Stemmed projectile points, crescents, and concave-based points (some fluted) there along the old shores of Lake Lahontan. Based on correlations between the distribution of these artifacts and chronological reconstructions of changing lake levels, he concluded that the Black Rock Desert was first occupied by small groups of hunters sometime after 9800 B.P.

During the recent Tuscarora Gas Pipeline project, four extensive Early Holocene sites were found at the 4010 ft level along Honey Lake in the Wendel area (Milliken and Hildebrandt 1997). Even closer, Pre-Archaic Early Holocene site CA-Las-1625/H, on the east side of the Madeline Plains just five miles north of Termo, was recently examined by Delacorte (1997). Many questions remain regarding the intensity of land-use during the Pre-Archaic in the various valleys crossed by the Wendel-Alturas railroad route.

Early Archaic (7000-4000 B.P.)

Early Archaic materials are sparse in the desert area east of the rail line until after 5000 B.P. The Early Archaic was a period of warm-dry climatic conditions (Grayson 1993). Radiocarbon dates indicate that caves and open sites in the Lake Winnemucca area were in use during that time; two dates exist in the 6800-6500 B.P. time period at Falcon Hill, one at approximately 6500 B.P. at Guano Cave, and one at approximately 5700 B.P. at Cowbone Cave (Heizer and Hester 1978; Hattori 1982). The driest period of the Middle Holocene occurred from 5000-4800 B.P., following which effective moisture is believed to have rapidly increased in the Lahonton Basin. However, there is no evidence that a renewed population expansion or intensification happened prior to 4000 B.P.

An important Early Archaic assemblage, the Menlo Phase, has been defined by O'Connell in the Surprise Valley area, just east of the Madeline Plains and the South Fork of the Pit River. The assemblage includes stable pit house winter villages, dressed bowl mortars, and Northern Side-notched projectile points. Note that Northern Side-notched points have been found recently in great numbers at Early Archaic sites on the Madeline Plains, but that they were not accompanied by mortars or pit house features (Delacorte 1997).

Evidence of Early Archaic occupation around the edges of Secret Valley has been found, but such evidence does not include the pit houses and mortars of the Menlo Phase further north (McGuire 1997).

Middle Archaic (4000-1500 B.P.)

Cool and moist conditions developed during the first part of the Middle Archaic, creating meadows, marshes, and shallow lakes in many lowland areas (Elston 1986). Radiocarbon date evidence for intensification of use in the area picks up at this time. Kramer Cave at Falcon Hill, overlooking the Winnemucca Basin, was occupied between 3900 and 3600 B.P., during a time of improved lacustrine-marsh resources in the lowlands (Hattori 1982). Lovelock Cave began to be used intensively at approximately 3500 B.P., believed to be a time of high stand for Humboldt Lake (Heizer and Napton 1970:1-86). These caves contain large numbers of baskets, nets, fur and bird-skin robes, mats, cordage, atlatls, darts, bone awls, ornaments, and finished projectile points, but little debitage and food waste. This suggests that the caves were used for burials and/or food and equipment storage (Elston 1986:140). Specialized hunting camps are also common (marked by Elko series points) and often include faunal assemblages dominated by bighorn sheep, while lowland areas tend to have well-developed milling assemblages and fauna dominated by rabbits and rodents (Seck 1980). Finally, a greater emphasis is placed on the production of bifaces using high quality stone.

The cemetery at the Karlo Site (CA-Las-7) in Secret Valley dates to 4,000-3,000 B.P. and perhaps earlier. Specific burial lots in that cemetery contained a mix of projectile points that are difficult to reconcile with expectations, Elko Eared, Gatecliff Split-stemmed and Northern Side-notched. This mixture of points suggests that at least this one aspect of cultural expression followed a slightly different temporal sequence in the Secret Valley area than farther east in the Great Basin. Riddell (1956) suggested that cultural material in the Karlo cemetery was similar to both Pit River and Lovelock Cave culture of the same time period.

Bennyhoff and Hughes (1987:159-161) note that trade of marine shell beads into the Great Basin from California reached its peak in the first part of the Middle Archaic, roughly 3500-2200 B.P. That time span includes the latter phases of Central California's Early Period and its Early/Middle Period Transition. During the late Middle Archaic, 2200-1300 B.P., trade in marine shell beads from California into the Great Basin seems to have been significantly reduced. Obsidian was probably distributed through well-developed trade networks (Elston 1986:142). The timing of rise and dip corresponds with the rise and decrease of effective moisture in the Great Basin during the Middle Archaic as defined by Elston (1982).

Late Archaic (1500 B.P.-Historic)

Intervals of warm-dry climatic conditions, which began during the previous Middle Archaic, reached their maximum proportions during this period. Changes in settlement and subsistence are noted in the rich archaeological record. Villages at the mouths of the Truckee and Humboldt rivers continued to be occupied, but houses became smaller and shallower (Elston 1986:146). Cave sites overlooking Winnemucca Lake continued to be used for burials and caches and all ecological zones in the Black Rock Desert continued to be exploited, but the Trego Hot Springs and Barrel Springs village sites were abandoned (Elston 1986:147). Faunal evidence indicates that the diet during this period included the greatest variety of fauna recorded in the entire prehistoric sequence. Large amounts of milling equipment at numerous sites suggest that plant food processing was also an important activity. This settlement pattern shift has been documented in the Black Rock Desert (Seck 1980), Buffalo Hills region (Kolvet 1995), and Duck Valley (Creger 1991).

Large dart projectile points were replaced by smaller arrow-sized projectile points at the outset of the Late Archaic period. Researchers agree that this represents the acceptance of the bow and arrow in the Great Basin. In the Monitor Valley area of central Nevada, over 200 miles southeast of Honey Lake, Rose

Springs points appear at 1300 B.P., and were replaced by Desert Side-notched points at 850 B.P. (Thomas 1981:13). However, the time period of a shift from Rosegate to Desert Side-notched style arrow points further north in the Great Basin is not yet clear.

It has been inferred that the spread of Numic-speaking populations into the Great Basin from southeastern California is associated with the abandonment of initial Late Archaic residential bases and the replacement of Rose Springs projectile points by Desert Side-notched projectile points (Bettinger and Baumhoff 1982). Tuohy (1974) has pointed out that Middle Archaic Lovelock Wickerware basketry, which begins to decline in use in the central Great Basin during the Late Archaic, is last noted at approximately 600 B.P. Also, the distinctive Northern Paiute twill twined water bottle first appears in the Lahontan Basin at approximately 350 B.P. (Tuohy 1974). These dates give grounds for an argument that the Northern Paiute ancestors entered the Honey Lake and Secret Valley areas as late as 400 B.P..

Ethnography

At the time of European entry into northeastern California, the Likely vicinity and the Madeline Plains belonged to the Hammawi people, speakers of the Achumawi (Pit River) language (Olmsted and Stewart 1978). Farther south, Secret Valley and the Honey Lake Valley belonged to the Wadatkuht people, speakers of the Northern Paiute language (Fowler and Liljeblad 1986). It is also possible that another Northern Paiute-speaking group, the Kamodokado of the Smoke Creek Desert, used the eastern Madeline Plains during the summer season (Stewart 1939:137). Riddell reports that the Madeline Plains were not an area of rich resources; it was used only periodically for hunting by the Wadatkuht and was only a peripheral use area to the Kamodokado (Riddell 1960:12-13).

Prior to European contact, Wadatkuht permanent winter villages were established in favored locations where fuel and water were available near Honey Lake and Secret Valley. Such a settlement might have only three houses (ca. 15 persons), but a large one might have a population of up to 50 persons (Fowler and Liljeblad 1986:443). Riddell noted that there were two Wadatkuht winter camp groups in the 1880-1890 period, a Honey Lake camp group of 30 people and a Secret Valley camp group of approximately the same size. He suggested that another 25 or more individuals were scattered throughout the area at that time, and that the total Wadatkuht population in the late nineteenth century was approximately 100 persons. Riddell agreed with Wadatkuht descendant Gladys Mankins that a pre-contact population of 200 people is "about as close a guess as can now be made" (Riddell 1978:31).

Hammawi villages on the South Fork of the Pit River were more permanent than were the Northern Paiute villages further south, due to the greater reliability of year round water. The villages were oriented toward exploitation of fish and waterfowl in the lowlands, but the people also harvested a variety of foods in the surrounding juniper woodlands, pine forests and sagebrush lands. Kniffen (1928:301) notes that the Hammawi people visited the Madeline Plains to dig roots in the more moist areas, and to gather sage hen eggs.

Northern Paiute and Pit River people continue to live in northeast California today, some as non-reservation members of the general population, others as members of reservation populations. Many of them have an active concern for the cultural resources of the State of California. Currently, members of the appropriate tribal groups represent their groups as monitors during archaeological excavations.

History

The historic era in northeast California began during the mid-nineteenth century, when emigrants to California from the eastern United States established wagon trails through the area. The best-known of

these are the Applegate Trail in Modoc County and the Nobles Trail in Lassen County, blazed in 1846 and 1851 respectively. Historic settlement began in Lassen and Modoc counties in the 1850s, when Isaac Roop founded a small Honey Lake Valley community along the Nobles Trail (Gates 1968). However, few farmers or ranchers settled in either the Pit River valley or the Honey Lake area until after the Civil War.

The U.S. Army founded Fort Bidwell in Modoc County northeast of the project area during the 1860s. During those years miners followed improved versions of the old trails northeastward to new gold fields in southwest Idaho. By 1872 newcomers were developing farms and ranches in the Likely area along the Pit River and in the Susanville area of the Honey Lake Basin, filing land claims under both the Homestead Act of 1862 and the Swamp Act of 1850 (Gates 1968; Pease 1965). Settlement on the Madeline Plains , however, did not begin until passage of the Lassen County Desert Land Act in 1875. This act, along with the subsequent Desert Land Act of 1877, allowed settlers to claim up to 640 acres of public land, instead of the 160 acres allotted under the Homestead Act. Those acts did not carry the stringent residency requirements of the homestead legislation (Gates 1968; Purdy 1983, 1988). Local roads date to the early 1870s throughout the project area. Nineteenth century roads, built by private consortiums, were designed for travel through the area from more densely inhabited portions of the west; they only incidentally served local settlements.

A group of Reno, Nevada investors organized the Nevada, California, and Oregon Railroad (NCO) in 1880. The narrow-gauge line, initiated from Reno, reached the California border in 1882, then went bankrupt. Soon it was acquired by the Moran Bros. investment firm; new construction began in 1887, and the line soon reached Honey Lake. The NCO Railroad stimulated agriculture and lumbering in Lassen County during the 1890s. Construction northward to the Madeline Plains took place in 1900; in that year the line reached Ravendale and Termo. Madeline, first reached in 1901, remained the terminus until 1906, when the NCO segment north to Alturas was initiated. The line reached Likely in 1907 and Alturas in 1908. In 1913 Southern Pacific Railroad Company (SP) entered the Honey Lake Basin, extending its Fernley-Lassen Branch from Nevada; it crossed the NCO at Wendel, the junction between the narrow-gauge NCO and broad-gauge SP.

An irrigation scheme for the Madeline Plains was begun by the Madeline Meadow Land and Irrigation Company in 1905. Investments were solicited through advertisements, mainly in the Midwest and in Europe. A reservoir was constructed on Cedar Creek, east of Madeline, but it failed to supply enough water for extensive irrigation. The company collapsed by 1917 and a number of settlements that had grown in anticipation of its success also disappeared.

In 1922, Southern Pacific purchased what remained of the NCO railroad. In 1927 SP began a program of widening and strengthening the rails from Herlong to Lakeview to accommodate heavier standard-gauge rolling stock. The company also built a connector between the old NCO track at Alturas and the established Southern Pacific track at Klamath Falls. The demise of the NCO and its takeover by the Southern Pacific contributed to the decline of the small towns of Ravendale, Madeline, and Termo (Myrick 1962; Pease 1965). The decline was accelerated when Southern Pacific discontinued passenger service along the line in 1937 (Garate 1982: 409).

The Alturas to Susanville Road along the general alignment of modern U.S. 395 was constructed by Lassen and Modoc counties during the 1920s. This unpaved highway allowed year round contact among the towns along its route, ending the considerable isolation of people living in the area. The roadway was taken over by the State of California in 1933 as part of a statewide highway improvement project. The Division of Highways immediately paved the road. Its alignment, however, was not improved until the early 1950s. At that time, many segments of the original highway were cut off.

SURVEY PROCEDURES AND RATIONALE

Personnel

Field personnel for the initial survey consisted of two persons, the field director and an assistant. The field director was Dr. Randall Milliken of Far Western. Dr. Milliken holds a Ph.D. in Anthropology from the University of California at Berkeley and a Masters Degree in Cultural Resource Management from Sonoma State University. He has carried out field archaeological survey since 1979 in northern and southern California. The assistant was Sunshine Psota, of the ASC. Ms. Psota has carried out prehistoric and historic archaeological research in California since 1979, including intensive identification work with historic material culture over the past three years.

A second phase of the survey, historic site recordation, was carried out by Sunshine Psota of the ASC with the aid of Carl Hansen, archaeological technician with Far Western.

Prefield Research

Dr. Milliken conducted a record search at the Northeast California Information Center of the California Historical Resources Information System on May 8, 1997. The record search revealed that one of the 24 APE locations, the ballast deck bridge at Mile Post 366.81, had been subjected to adequate prior archaeological inventory, and that no archaeological sites had been found at the location. The other 23 areas had not been surveyed. Important surveys on lands adjacent to our APEs, however, include those by Kautz and Hutchins (1996) and Price et al. (1994).

Two other listings were checked at the Information Center at Chico. The computerized listing National Register-eligible sites, of course, gave no listings of eligible sites within the APEs, since no sites at all are known to exist within them. The State Office of Historic Preservation listing of historic building survey results did list three structures in the town of Likely, but none of those structures was within the immediate area of the survey APE at Likely.

Milliken and Psota visited BLM archaeologist Don Manuel at Susanville on the morning of May 12, 1997 to check for survey and site status at the seven APE locations on BLM land. BLM records indicate that none of those seven locations had been surveyed. Mr. Manuel shared information on road access and cultural resource sensitivity for each location on BLM land.

Field Methods

Field survey methods were identical at all 24 APEs. Once a trestle, water tower, or telephone booth area was located, a one hectare area (100 x 100 m) centered on the facility was surveyed, if possible. In some cases waterways precluded survey outward 50 meters on one side of the railroad track. In other cases it became necessary to survey a greater-than-one-hectare area, in order to determine archaeological site boundaries.

In all cases, the survey area was large enough to cover all logical parking and construction lay-down areas adjacent to the pertinent bridge, water tank, or telephone booth. The areas were surveyed by pedestrian linear transects at intervals no greater than 10 meters.

California Department of Parks and Recreation site records were used for site recordation (see Appendix A). Site sketch maps were drawn on the basis of paced distances and hand-held compass

directions. The single isolated prehistoric artifact was recorded using a Parks and Recreation primary record (see Appendix B).

SURVEY LOCATIONS AND RESULTS

Each of the 24 survey APE locations are discussed below. Information is provided on location, cultural resource sensitivity expected prior to survey, and the results of survey findings. The language of this section ignores the railroad line itself as a cultural resource, although we recognized that it is provisionally recorded in Modoc County as 25-3117 and in Lassen County as 18-1734.

Mile Post 366.81 (Map 4)

Location: This is a ballast deck trestle bridge location in the pass down to Secret Valley from Honey Lake, in Lassen County (NE 1/4 of the SW 1/4 of section 22, T.30N, R.15E, MDM -- USGS 7.5' Topographic Map for Shaffer Mountain, provisional 1988 edition). The spot is just a few yards north of the railroad track crossing of Highway 395. The vegetation is big sagebrush. This location is BLM land.

Cultural Resource Sensitivity: This APE location was deemed to lack prehistoric cultural resources at the outset of the 1997 survey because it had been subjected to intensive reconnaissance survey by Peter M. Jensen and Larry D. Roberts (1977) of California State University, Chico on April 4-5, 1977.

Findings: The 100 x 100 meter APE was quickly inspected for historic materials during the 1997 Far Western/ASC survey on the morning of May 16, 1997. Neither prehistoric nor historic cultural resources were discovered.

Mile Post 368.56 (Map 4)

Location: This ballast deck trestle bridge location lies in the southern part of Secret Valley, Lassen County, on a slope at the south of Mud Lake (NE 1/4 of the NW 1/4 of section 15, T.30N, R.15E, MDM -- USGS 7.5' Topographic Map for Shaffer Mountain, California, provisional 1988 edition). The APE is reached from the graveled Balls Canyon Road by an 0.4 mile long dirt access road northward along the east side of the railroad track. The vegetation is big sagebrush. It is non-Federal property.

Cultural Resource Sensitivity: This APE location may have been previously surveyed by Francis Riddell, but documentation was not available. It was deemed sensitive for prehistoric flaked stone scatters, due to the presence of previously recorded prehistoric flake scatter sites CA-Las-168, -171, -172, -173, and prehistoric/historic site CA-Las-377 (complex Archaic residential site/historic highway features) within a 1/4 mile radius.

Findings: The 100 x 100 meter APE was subjected to intensive pedestrian reconnaissance on the morning of May 13, 1997 by the Far Western/ASC crew. One obsidian flake, one chert flake, and some Prince Albert tobacco cans were noted. Within the regional context, these items are not worthy of recording as isolates. The APE is essentially devoid of cultural resources.

Mile Post 370.42 (Map 5)

Location: This ballast deck trestle bridge location lies in the southern part of Secret Valley, Lassen County, in the western porion of Mud Lake (SE 1/4 of the NW 1/4 of section 4, T.30N, R.15E, MDM -- USGS 7.5' Topographic Map for Shaffer Mountain, California, provisional 1988 edition). The APE is reached from

Highway 395 by an east-west dirt road along section line just north of Mud Lake, generally west to the railroad track, then south along the track access dirt road out onto Mud Lake. The vegetation is sparse low sedges, grasses, and forbs. It is non-Federal property.

Cultural Resource Sensitivity: This APE location has not been surveyed previously. CA-Las-948, a large prehistoric flaked stone scatter, lies on a sandy ridge at the north side of Mud Lake, almost a half mile northeast of the APE. Because this APE is on Mud Lake, the possibility of surface cultural material was considered low.

Findings: The 100 x 100 meter APE was subjected to intensive pedestrian reconnaissance on the morning of May 13, 1997 by the Far Western/ASC crew. No cultural material was seen.

Mile Post 371.78 (Map 5)

Location: This ballast deck trestle bridge location lies in the south-central part of Secret Valley, Lassen County, north of Mud Lake (NW 1/4 of the NE 1/4 of section 32, T.31N, R.15E, MDM -- USGS 7.5' Topographic Map for Karlo, California, provisional 1989 edition). The APE is reached from Highway 395 by an east-west dirt road along section line just north of Mud Lake, generally west and west-northwest, to the railroad track, then north along the east side of the tracks to Deep Creek (currently dry). The vegetation is greasewood, rabbitbrush, and big sagebrush. It is non-Federal property.

Cultural Resource Sensitivity: This APE location may have been surveyed previously by Francis Riddell, but documentation is lacking. Prehistoric lithic scatter CA-Las-946 is 0.4 miles downstream on Deep Creek, and prehistoric lithic scatter CA-Las-958 is 0.6 miles upstream on Deep Creek. The possibility of encountering surface cultural material was considered high.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the morning of May 13, 1997 by the Far Western/ASC crew. A single basalt flake was encountered in a disturbed context along the access road, deemed unworthy of recording as an isolate within the regional context. For all professional intents and purposes the APE was deemed to be devoid of cultural resources.

Mile Post 372.60 (Map 6)

Location: This ballast deck trestle bridge location lies in the central part of Secret Valley, Lassen County, at the confluence of Secret Creek and Snowstorm Creek (SE1/4 of the NW 1/4 of section 29, T.31N, R.15E, MDM -- USGS 7.5' Topographic Map for Karlo, California, provisional 1989 edition). The APE is reached from the abandoned Karlo railroad stop by driving south along the frontage road on the west side of the tracks until halted by Snowstorm Creek, then walking south along the east side of the tracks for approximately 600 yards to the BDT Bridge at Secret Creek (currently flowing one cfs). The vegetation is greasewood, rabbitbrush, and big sagebrush. It is non-Federal property.

Cultural Resource Sensitivity: This APE location has not been previously surveyed. A group of recorded prehistoric lithic scatters lie between Secret Creek and Deep Creek approximately one mile to the east (CA-Las-966-969). Due to the presence of a creek confluence within the APE, the possibility of encountering surface cultural material was considered high.

Findings: The bridge was visited on the afternoon of May 12, 1997 by the Far Western/ASC crew. The APE was considered to reach only 20 meters west of the railroad track, due to the fact that the floors of Snowstorm and Secret creeks were right along the west side of the track, precluding any construction activity on ground surfaces further to the west. Obsidian, basalt, and chert flakes were apparent on the ground

surface to the east side of the tracks within 100 meters of the bridge. Although a few of them were north of Secret Creek, the preponderance of them were south of the creek. The prehistoric site was recorded on the morning of May 14, 1997. In order to determine the site boundaries, the crew surveyed outward beyond the APE area to the south and east. Eventually, approximately 15 hectares of land were surveyed in order to determine the boundary of this large prehistoric site (see Appendix A, Site UPRR 372.6).

Mile Post 374.92 (Map 6)

Location: This ballast deck trestle bridge lies at the base of a hill at the northern edge of Secret Valley, Lassen County (NE 1/4 of the NE 1/4 of section 18, T.31N, R.15E, MDM -- USGS 7.5' Topographic Map for Karlo, California, provisional 1989 edition). The APE is just 300 yards north of the abandoned railroad stop at Karlo. It crosses a swampy drainage filled with sedge, surrounded by greasewood, rabbit brush, and big sagebrush, just a few meters off of the dirt road from Highway 395 to Karlo. It is non-Federal property.

Cultural Resource Sensitivity: This APE location may have been surveyed previously by Francis Riddell, but documentation is lacking. Prehistoric lithic scatter CA-Las-116 is within a few meters up slope to the west. The famous Karlo Site (CA-Las-7), an Early Period residential/cemetery site, is just 0.7 miles to the north. The possibility of encountering surface cultural material was considered high.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the afternoon of May 13, 1997 by the Far Western/ASC crew. No cultural materials were encountered within this highly disturbed area.

Mile Post 379.95 (Map 8)

Location: This ballast deck trestle bridge lies on an ephemeral gully in the basalt uplands west of Secret Valley, Lassen County (NE 1/4 of the NE 1/4 of section 4, T.31N, R.14E, MDM -- USGS 7.5' Topographic Map for Pete's Valley, California, provisional 1989 edition). The APE is reached by the poorly-maintained Secret Valley-Horse Lake Road. It is 1.5 miles west of Railroad Spring. Vegetation is big sagebrush with scattered junipers. It is BLM property.

Cultural Resource Sensitivity: This APE location had not been surveyed. The nearest previously-recorded prehistoric site is CA-Las-189 at Railroad Spring. Numerous unrecorded petroglyph sites are known to exist along Snowstorm Creek in this vicinity (Don Manuel, personal communication). The possibility of encountering cultural material was considered moderate.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the afternoon of May 13, 1997 by the Far Western/ASC crew. A very light lithic scatter was recorded (see Appendix A, Site UPRR 379.95).

Mile Post 380.08 (Map 8)

Location: This ballast deck trestle bridge crosses a wide-shallow swale in the basalt uplands west of Secret Valley, Lassen County (NE 1/4 of the NE 1/4 of section 4, T.31N, R.14E, MDM -- USGS 7.5' Topographic Map for Pete's Valley, California, provisional 1989 edition). The APE is reached by the poorly-maintained Secret Valley-Horse Lake Road. It is 1.6 miles west of Railroad Spring. Vegetation is big sagebrush with scattered junipers. It is BLM property.

Cultural Resource Sensitivity: This APE location had not been surveyed. The nearest previously-recorded prehistoric site is CA-Las-189 at Railroad Spring. Numerous unrecorded petroglyph sites are known to exist

along Snowstorm Creek in this vicinity (Don Manuel, personal communication). The possibility of encountering cultural material was considered moderate.

Findings: The 100 x 100 meter (one hectare) APE around the bridge and an additional one hectare area was subjected to intensive pedestrian reconnaissance on the afternoon of May 13, 1997 by the Far Western/ASC crew. A single basalt flake and a single obsidian flake were noted within the APE. Within this region such material constitutes neither a site nor an isolate. The survey was extended another 50 meters north of the APE, as well as throughout the 50 meter wide corridor between the APE and the APE of adjacent bridge 379.95, an extra hectare of coverage. Two more isolated flakes (not recorded) and Isolate No. 1, an obsidian convex based/corner-notched dart point base, were discovered. Isolate No. 1 was found on the rocky ground surface approximately 150 meters northeast of the BDT bridge (see Appendix B, Isolate Record 1). The 380.08 APE is, for all professional intents and purposes, devoid of cultural resources.

Mile Post 387.53 (Map 9)

Location: This ballast deck trestle bridge crosses Snowstorm Creek below a basalt outcrop in a canyon northwest of Snowstorm Mountain, Lassen County (NW 1/4 of the NW 1/4 of section 4, T.32N, R.14E, MDM -- USGS 7.5' Topographic Map for West of Snowstorm Mountain, provisional 1989 edition). The APE is reached from the Ravendale vicinity via the well-maintained Horse Lake Road. Take the Snowstorm Ranch side road down to the railroad track, then walk south about 250 yards to the APE. Vegetation is big sagebrush with scattered junipers, except for grasses and *Juncus* on the low flood plain. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had not been surveyed. No sites have been formally recorded within a half-mile radius. BLM archaeologist Don Manuel cautioned that there were many unrecorded sites in the Snowstorm Ranch vicinity. The possibility of encountering cultural material was considered high.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the morning of May 12, 1997 by the Far Western/ASC crew. The landscape east of the track was a low boggy flood plain; west of the track was low floodplain and a rugged basalt outcrop. No cultural resources were encountered in the APE.

Mile Post 390.46 (Map 10)

Location: This ballast deck trestle bridge crosses an unnamed seasonal tributary of Snowstorm Creek near the head of the canyon south of the Madeline Plains, Lassen County (NW 1/4 of the NE 1/4 of section 27, T.33N, R.14E, MDM -- USGS 7.5' Topographic Map for West of Snowstorm Mountain, California provisional 1989 edition). The APE is reached by traveling 6.3 miles south and southwest on Horse Lake Road, from Highway 395 in the Ravendale vicinity, to a 4-wheel drive dirt road on the north side of a southeast-flowing ephemeral drainage. Drive down the drainage to the BDT bridge at the railroad track. Vegetation is big sagebrush with scattered junipers, with grasses, forbs, and *Juncus* in the low drainage. It is BLM property.

Cultural Resource Sensitivity: This APE location had not been surveyed. Approximately 0.4 miles to the east on Snowstorm Creek is complex lithic scatter site CA-Las-1831. The possibility of encountering cultural material was considered moderate.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the morning of May 12, 1997 by the Far Western/ASC crew. The survey resulted in the recording of a

light lithic scatter in the hollow west of the bridge, within the APE. Additionally, two obsidian flakes were encountered on the rock slab flat east of the bridge; the two flakes were ignored as part of the ubiquitous background noise of the general vicinity.

Mile Post 392.50 (Map 11)

Location: A cylindrical emergency telephone booth stands on the south side of the double track at this location, the crest of the saddle between the Snowstorm Creek Canyon and the Madeline Plains (SW 1/4 of the NW 1/4 of section 14, T.33N, R.14E, MDM -- USGS 7.5' Topographic Map for Snowstorm Mountain, California, provisional 1989 edition). The APE is reached by traveling from Highway 395 in the Ravendale vicinity for 4.35 miles south and southwest on Horse Lake Road. At that point, the APE will be a few meters to the east of Horse Lake Road. (The telephone booth is scheduled for removal, so it may not be there.) Vegetation is big sagebrush with scattered junipers. It is BLM property.

Cultural Resource Sensitivity: This APE location is very close to the survey corridor of the initial Alturas 345K Electric Transmission Line Project Survey, if not within it (Kautz and Hutchins 1996). That survey had identified CA-Las-1810, an extensive light obsidian/CCS lithic scatter, 300 meters north of the present APE, as well as a similar site, CA-Las-1811, a few hundred meters further north. The possibility of encountering cultural material was considered moderate to low.

Findings: The 100 x 100 meter APE around the telephone booth was subjected to intensive pedestrian reconnaissance on the afternoon of May 12, 1997 by the Far Western/ASC crew. The survey resulted in the identification of a light obsidian flake scatter (1 flake/10m^2) on a rocky surface, approximately 30% of which has been disturbed by railroad access road construction (see Appendix A, Site UPRR 392.5). An even lighter obsidian flake scatter (1 flake/400m^2), considered regional background noise, continues to the north for 300 meters to CA-Las-1810.

Mile Post 397.90 (Map 12)

Location: This APE consists of the 100 x 100 meter area of ground around a standing water tank along the east side of the railroad track at Ravendale, Lassen County (SE 1/4 of the NW 1/4 of section 23, T.34N, R.14E, MDM -- USGS 7.5' Topographic Map for Ravendale, California, provisional 1989 edition). Vegetation in the area is big sagebrush, but the site itself is heavily disturbed ground with various introduced weeds, big sagebrush, rabbit brush, and shadscale. It is non-Federal property.

Cultural Resource Sensitivity: This APE surrounds a standing water tank constructed in 1931 during a Southern Pacific line upgrade project. Our study addresses only archaeological resources; elements of the built environment are considered elsewhere (Richard Starzak of Myra L. Frank and Associates, personal communication). The APE is only 40 meters west of an extensive recorded prehistoric complex flaked stone and ground stone scatter, CA-Las-1267/H. Historic elements of that same site include features associated with the town of Ravendale.

Findings: The 100 x 100 meter APE around the water tank was subjected to intensive pedestrian reconnaissance on the morning of May 28, 1997 by a Far Western/ASC crew. Only one prehistoric flake was found in the area; it was not recorded. Numerous historic foundations and artifacts were, however, identified and recorded as the Ravendale Water Tank Complex (see Appendix A, Site UPRR 397.9-H).

Mile Post 403.84 (Map 14)

Location: This ballast deck trestle bridge location lies on the Madeline Plains near Termo in Lassen County (SE 1/4 of the NE 1/4 of section 36, T.35N, R.13E, MDM -- USGS 7.5' Topographic Map for Termo, California, provisional 1989 edition). The APE from Highway 395 at the drainage crossing 0.9 miles south of Termo by walking west up the drainage for about 130 meters to the bridge along the raised railroad track. The vegetation is big sagebrush and rabbit brush. It is non-Federal property.

Cultural Resource Sensitivity: This APE location has not been previously surveyed, although the survey corridor of the Tuscarora Gas Pipeline Project passed along the east side of Highway 395 just 200 meters to the east. Prehistoric site CA-Las-2513, a light obsidian and white chert flaked stone scatter, was recorded in the pipeline right-of-way about 0.4 miles north of the APE. The APE, closer to a stream than the site discovered to the north, was thus considered to be highly sensitive for prehistoric cultural resources.

Findings: The 100 x 100 meter APE was visited on the afternoon of May 14, 1997 by the Far Western/ASC crew. Obsidian, basalt, and white chert flakes were apparent on the ground surface on the east side of the railroad tracks, and north of the creek bed that passed under the bridge. The prehistoric site was recorded on the morning of May 16, 1997. In order to determine the site boundaries, the crew surveyed outward beyond the APE area eastward to Highway 395, an additional hectare of land coverage (see Appendix A, Site UPRR 403.84).

Mile Post 412.37 (Map 16)

Location: The ballast deck trestle bridge at this APE is just east of Highway 395 on the Madeline Plains west of McDonald Peak and Threemile Canyon, Lassen County (NW 1/4 of the NW 1/4 of section 4, T.32N, R.14E, MDM -- USGS 7.5' Topographic Map for McDonald Peak, provisional 1989 edition). Vegetation is big sagebrush with occasional rabbit brush. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had previously been surveyed for the Tuscarora Gas Pipeline Project by Infotec in 1993. Prehistoric/historic site CA-Las-193/H had been recorded 300 meters to the north, but no site had been recorded at the APE. The possibility of encountering cultural material was considered low.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the afternoon of May 15, 1997 by the Far Western/ASC crew. Access roads had created quite a bit of disturbance adjoining the track. No cultural resources were encountered in the APE.

Mile Post 415.15 (Map 17)

Location: The ballast deck trestle bridge at this APE is on the Madeline Plains 0.75 miles north of the Mendiboure Ranch and 0.9 miles east of Highway 395, Lassen County (SE 1/4 of the NE 1/4 of section 33, T.37N, R.13E, MDM -- USGS 7.5' Topographic Map for Madeline, provisional 1989 edition). Vegetation is limited to irrigated alfalfa and grasses. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. The nearest prehistoric site was 1.5 miles to the north. The ranch complex 0.75 miles to the south probably qualifies as an historic site. The possibility of encountering cultural material was considered moderate.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the afternoon of May 15, 1997 by the Far Western/ASC crew. The land on the west side of the track is

irrigated alfalfa, that on the east side is a disked pasture. The bridge crosses a completely altered irrigation drainage. No cultural resources were encountered in the APE.

Mile Post 418.08 (Map 18)

Location: The ballast deck trestle bridge at this APE is on the Madeline Plains just over 100 meters east of Highway 395 and 0.2 miles south of the town of Madeline, Lassen County (NE 1/4 of the NE 1/4 of section 16, T.37N, R.13E, MDM -- USGS 7.5' Topographic Map for Madeline, provisional 1989 edition). Vegetation is big sagebrush, sedges and grasses. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. The nearest recorded prehistoric site was the prehistoric component of CA-Las-1633/H at Madeline, 0.6 miles to the northwest. Because a creek crossed the area, the possibility of encountering cultural material was considered high.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the afternoon of May 15, 1997 by the Far Western/ASC crew. To the west of the tracks, the area was badly disturbed by access roads along the tracks. To the east, an irrigated field was separated from the tracks by a low swale filled with stagnant water. The drainage crossed by the bridge is not natural, but an irrigation ditch. No cultural resources were encountered in the APE.

Mile Post 418.18 (Map 18)

Location: This archaeological survey area consists of the a 100 x 100 meter area of ground around a standing water tank along the east side of the railroad track just 200 meters south of Madeline, Lassen County (NE 1/4 of the NE 1/4 of section 16, T.37N, R.13E, MDM -- USGS 7.5' Topographic Map for Madeline, California, photoinspected 1975). Vegetation in the area is big sagebrush, but the site itself is heavily disturbed ground with various introduced weeds. It is non-Federal property.

Cultural Resource Sensitivity: This APE surrounds a standing water tank constructed in 1931 during a Southern Pacific line upgrade project. Our study addresses only archaeological resources; elements of the built environment are considered elsewhere (Richard Starzak of Myra L. Frank and Associates, personal communication). A portion of the adjacent town of Madeline west of Highway 395 was previously recorded as provisional site 18-1633/H. The prehistoric component of 18-1633/H is 0.5 miles northwest of the APE; nevertheless the ground area around the water tank was considered to be moderately sensitive for prehistoric resources. As the vicinity of the Madeline railroad yard since 1901, it was considered to be highly sensitive for historic railroad-related archaeological resources.

Findings: The 100 x 100 meter APE around the water tank was subjected to intensive pedestrian reconnaissance on the morning of May 28, 1997 by a Far Western/ASC crew. No prehistoric artifacts were found in the area. Historic foundations and can dumps, however, were identified and recorded as the Madeline Water Tank Complex (see Appendix A, Site UPRR 418.18-H).

Mile Post 423.51 (Map 19)

Location: The ballast deck trestle bridge at this APE is at the north end of Sage Hen Flat in Lassen County (NW 1/4 of the SE 1/4 of section 21, T.38N, R.13E, MDM -- USGS 7.5' Topographic Map for Madeline, provisional 1989 edition). Vegetation is grass, forbs, and junipers. It is BLM property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. No historic or prehistoric sites have been recorded within a mile radius of the site. Nevertheless, the flatness of the area and the proximity to water suggested a high possibility of encountering cultural material.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the morning of May 14, 1997 by the Far Western/ASC crew. The north portion of the APE west of the track is the very bottom of an open meadow. The ephemeral stream from that meadow passes under the BDT bridge. South and west of the bridge a basalt spur ridge rises, defining the bottom of the meadow. Obsidian flakes were noted, but not recorded, on the spur ridge outside of the APE, about 80 meters west of the railroad track. On the east side of the track, an area of springs makes the gently sloping hillside boggy at this time of year. No cultural resources were encountered in the APE.

Mile Post 425.91 (Map 20)

Location: The ballast deck trestle bridge at this APE is on an ephemeral tributary of Dry Creek that runs down off the west slope of Tule Mountain, Modoc County (SE 1/4 of the SE 1/4 of section 8, T.38N, R.13E, MDM -- USGS 7.5' Topographic Map for Tule Mountain, 1982 photorevision). The location is approached from the north via a 4-wheel drive that leaves Highway 395 in the NW 1/4 of Section 8, drops down into Dry Creek from the west, then comes up the east slope above Dry Creek to the access road on the east side of the railroad track. From there follow the access road south for approximately 0.8 miles to the APE. Vegetation is big sagebrush, sparse grass, forbs, and junipers. It is BLM property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. No historic or prehistoric sites have been recorded within half mile radius of the site. The local stream is ephemeral and the soils are rocky. The probability of encountering cultural material was considered to be moderate.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the morning of May 14, 1997 by the Far Western/ASC crew. The rocky soil of the area was highly disturbed by access roads. No cultural resources were encountered in the APE.

Mile Post 436.06 (Map 21)

Location: The open deck trestle bridge at this APE is on one of two adjacent channels of Dry Creek where it comes down out of the mountains to the plain south of Likely, Modoc County (NW 1/4 of the NE 1/4 of section 29, T.39N, R.13E, MDM -- USGS 7.5' Topographic Map for Likely, provisional 1990 edition). The location is approached from the Likely cemetery on the north by driving down the county road between Highway 395 and the railroad track for 1.6 miles, then continuing south along the east side of the railroad track on the 4-wheel drive access road for approximately 1.0 mile to the first bridge location at Dry Creek. Vegetation is juniper woodland, big sagebrush, grass, and near the creek, willow thickets. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. Prehistoric flaked stone scatter CA-Las-3090/H lies on the ridge 250 meters to the northwest of the APE. The probability of encountering cultural material directly adjacent to this permanent stream was considered to be high.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the morning of May 15, 1997 by the Far Western/ASC crew. The area was a low floodplain of Dry Creek. Non-cultural small obsidian cobbles (3-7 cm in diameter) were found in the creek bank gravels. To the surprise of the crew, however, no cultural resources were encountered in the APE.

Mile Post 436.12 (Map 21)

Location: The open deck trestle bridge at this APE is on one of two adjacent channels of Dry Creek where it comes down out of the mountains to the plain south of Likely, Modoc County (NW 1/4 of the NE 1/4 of section 29, T.39N, R.13E, MDM -- USGS 7.5' Topographic Map for Likely, provisional 1990 edition). The location is approached from the Likely cemetery on the north by driving down the county road between Highway 395 and the railroad track for 1.6 miles, then continuing south along the east side of the railroad track on the 4-wheel drive access road for approximately 1.0 mile to the first bridge location at Dry Creek. Vegetation is juniper woodland, big sagebrush, grass, and near the creek, willow thickets. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. Prehistoric flaked stone scatter CA-Las-3090/H lies on the ridge 150 meters to the northwest of the APE. The probability of encountering cultural material directly adjacent to this permanent stream was considered high.

Findings: The 100 x 100 meter APE around the bridge was subjected to intensive pedestrian reconnaissance on the morning of May 15, 1997 by the Far Western/ASC crew. The area was a low floodplain of Dry Creek, with a higher bench on the west side of the creek. No cultural resources were encountered in the APE.

Mile Post 438.70 (Map 22)

Location: This APE is a 100 x 100 meter area surrounding a standing water tank along the east side of the double railroad tracks at Likely, Modoc County (NW 1/4 of the SE 1/4 of section 8, T.39N, R.13E, MDM -- USGS 7.5' topographic maps for Tule Mountain, California, 1982 revised edition, and for Likely, California, provisional 1989 edition). Vegetation in the area is grass, *Juncus*, sedge and cottonwood trees. It is non-Federal property.

Cultural Resource Sensitivity: This APE surrounds a standing water tank constructed in 1931 during a Southern Pacific line upgrade project. Our study addresses only archaeological resources; elements of the built environment are considered elsewhere (Richard Starzak of Myra L. Frank and Associates, personal communication). Neither the APE nor any area within a quarter mile have been surveyed. Three structures in the town of Likely are listed on the California Historic Property Data File for Modoc County, including one dated to 1890. The railroad siding and yard was initially developed at the time of the NCO Alturas extension, in 1907. Thus the area was considered sensitive for historic resources.

Findings: The 100 x 100 meter APE around the water tank was subjected to intensive pedestrian reconnaissance on the afternoon of May 27, 1997 by a Far Western/ASC crew. Numerous historic foundations and artifacts were identified and recorded as the Likely Water Tank Complex (see Appendix A, Site UPRR 438.70-H).

Mile Post 439.19 (Map 22)

Location: The two open deck trestle bridges at this double track APE cross a channel of the South Fork of the Pit River 0.5 miles north of central Likely, Modoc County (NW 1/4 of the NE 1/4 of section 8, T.39N, R.13E, MDM -- USGS 7.5' Topographic Map for Likely, provisional 1990 edition). The APE at these bridges is very narrow; private yards and fields are fenced to within five meters of either side of the double track railroad grade. The APE is approximately 0.5 hectares. Vegetation is willow, cottonwood, blackberry, and alfalfa. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. Because the site was adjacent to the Pit River, the probability of encountering cultural material was considered high.

Findings: The 100 x 50 meter APE along the track around the bridge was subjected to intensive pedestrian reconnaissance on the afternoon of May 14, 1997 by the Far Western/ASC crew. The area was a low floodplain. No cultural resources were encountered in the APE.

Mile Post 439.32 (Map 22)

Location: The two open deck trestle bridges at this double track APE cross a channel of the South Fork of the Pit River 0.6 miles north of central Likely, Modoc County (NW 1/4 of the NE 1/4 of section 8, T.39N, R.13E, MDM -- USGS 7.5' Topographic Map for Likely, provisional 1990 edition). The APE at the location is very narrow; private yards and fields are fenced to within five meters of either side of the double track railroad grade. The APE is approximately 0.5 hectares. Vegetation is willow, cottonwood, blackberry, and alfalfa. It is non-Federal property.

Cultural Resource Sensitivity: This APE location had not previously been surveyed. Because the site was adjacent to the Pit River, the probability of encountering cultural material was considered high.

Findings: The 100 x 50 meter APE along the track around the bridge was subjected to intensive pedestrian reconnaissance on the afternoon of May 14, 1997 by the Far Western/ASC crew. The area was a low floodplain. No cultural resources were encountered in the APE.

SUMMARY OF FINDINGS AND MANAGEMENT RECOMMENDATIONS

One isolated prehistoric artifact, three historic archaeological sites, and five prehistoric archaeological sites were encountered and recorded within the APE areas. All of the sites were previously unknown. They were recorded during the present survey. The site records have been filed at Northeast California Information Center of the California Historic Resources Information System at California State University, Chico and the Susanville BLM office. Copies of the eight site records are found in Appendix A; their characteristics are summarized below.

Sufficient information exists to assess the National Register Eligibility Status of the isolated find and the historic sites; however, additional investigations would be needed to determine the NRHP eligibility of the prehistoric sites.

Isolated Artifact

A single isolated prehistoric artifact was recorded. The item, a non-diagnostic obsidian dart point base, was found on the rocky alluvial fan 150 meters northeast of site UPRR 379.95. Designated UPRR Isolate-1, it was sketched and left in place (see Appendix B for the Isolate Record).

Historic Sites Management Recommendations by Adrian Praetzellis

All three historic archaeological sites recorded along the Wendel-Alturas UPRR line abandonment APEs were water tank areas on non-federally owned parcels in or directly adjacent to small towns (Table 2). Although the towns themselves, Ravendale, Madeline, and Likely, probably qualify as historical archaeological sites or districts, the three water tank complex areas were each recorded as separate sites.

The properties that are described in this section are complexes of features that contain both extant buildings and structures, as well as archaeological remains. This preliminary evaluation treats only the archaeological remains. Standing buildings and structures have been evaluated in the historic architectural component of the UP/SP Merger project. Although no focused historical research has been undertaken of these archaeological properties, the author believes that enough is known about their historical associations, structure, content, and research potential to justify evaluating the sites at this time.

Table 2. Historic archaeological sites within the survey APEs.

Map	Temporary Site No.	BLM Land	Site Description	Area	Depth
12	397.90	No	Ravendale Water Tank Complex	200 x 130 ft	surface
18	418.18	No	Madeline Water Tank Complex	120 x 110 ft	surface
22	438.70	No	Likely Water Tank Complex	260 x 190 ft	surface

Ravendale Water Tower Complex (UPRR #397.90)

Description. This property is situated adjacent to the former Southern Pacific Rail Road (SP) line at the south edge of the town of Ravendale. It consists of a water tower and pump house – which are currently in use – a concrete building slab, and a scatter of domestic and industrial refuse which contains numerous sanitary cans, some battery rods, oil and lard buckets, a few fragments of sun-tinted glass, and some white improved earthenware (see Appendix A, Site UPRR 397.9-H). The current water tank was constructed by the Southern Pacific Railroad in 1930 or 1931 as part of an upgrade of the line, which it had purchased in 1927. Note: the eastern portion of the town of Ravendale, to the north and east of the water tank complex, were previously recorded as part of CA-Las-1267/H.

Historical Association and Date of Materials. All of these materials are believed to be associated with the operation of the Nevada, California, and Oregon railroad [NCO] which extended its line through Ravendale in 1900. The presence of sun-tinted bottle glass, which was manufactured from the mid 1880s until 1916, as well as modern, plastic artifacts, indicates that the refuse scatter represents the period from the establishment of Ravendale until the present day. The function of the concrete footing is unknown.

Eligibility Recommendation. This property is most appropriately evaluated in relation to National Register criterion D, the potential to yield important information (36 CFR Part 60). There appear to be two areas in which this site might contribute information: documenting the function of the concrete building pad and reconstructing the everyday life of rail road workers.

First, it may be assumed that the concrete footing is associated with a building or structure that contributed to the functioning of the NCO railroad. However, there are no remains on the site that indicate what this role may have been. Although historical research may reveal the function of this building, the slab itself does not appear to have any characteristics that would add to information that could be gathered from archival sources.

The refuse scatter appears to represent the entire period of Ravendale's history, from 1900 to the present. For the most part, the artifacts are of types that have not changed their form appreciably during this

possible to date or to distinguish between discrete disposal incidents. As a result, it would not be possible to use these materials to reconstruct, with much confidence, the daily life of the railroad workers who used this facility.

In summary, the Ravendale Water Tower Complex site does not appear to be eligible to NRHP under criterion D due its lack of research potential.

Madeline Water Tower Complex (UPRR #418.18)

Description. This property is situated immediately to the west of the SP line at the southern edge of the town of Madeline. It consists of a water tower, pump house, a concrete-lined pond (82 feet in diameter) that is partly filled with soil, and a scatter of domestic refuse, including sanitary cans and machine-made bottles (see Appendix A, Site UPRR 397.9-H). The current water tank was constructed by the Southern Pacific Railroad in 1930 or 1931 as part of an upgrade of the line, which it had purchased in 1927. Note: features of the town of Madeline, to the north and west of the water tank complex, were previously recorded as CA-Las-1633/H. Madeline became a railroad stop and fairly significant small town when the Nevada, California, and Oregon Railroad reached that point in 1901.

Historical Association and Date of Materials. All of these materials are believed to be associated with the operation of the NCO railroad which extended its line through Madeline in 1901. The oldest materials in the domestic refuse scatter, sanitary cans, recent beer cans, and a 1950s bottle made by the Owens-Illinois Company, accumulated during the 1940s and 1950s.

Eligibility Recommendation. The archaeological elements of this property do not meet the NRHP criteria consideration that requires a property to be at least 50 years old before it is eligible to the Register (36CFR Part 60). In summary, it does not appear that this property is eligible to the NRHP.

First, it may be assumed that the concrete footing is associated with a building or structure that contributed to the functioning of the NCO railroad. However, there are no remains on the site that indicate what this role may have been. Although historical research may reveal the function of this building, the slab itself does not appear to have any characteristics that would add to information that could be gathered from archival sources.

Likely Water Tower Complex (UPRR #438.70)

Description. This property is situated on both sides of the SP track at the northeast edge of the town of Likely. The standing buildings and structures consist of a water tank, pump house, underground storage containers, and a wood frame building. The archaeological component consists of a scatter of rail road construction and maintenance debris and a rectangular, reinforced concrete building slab (see Appendix A, Site UPRR 397.9-H). Likely became a railroad stop when the Nevada, California, and Oregon Railroad reached that point in 1907. The current water tank was constructed by the Southern Pacific Railroad in 1930 or 1931 as part of an upgrade of the line, which it had purchased in 1927.

Historical Association and Date of Materials. All of the archaeological materials within the site boundary are believed to be associated with the operation of the NCO railroad which extended its line through Likely in 1900. The function of the concrete slab is unknown; however, its steel reinforcement bars are consistent with a 20th-century date. The scatter of rail road litter contains such items as spikes for attaching sections of track to sleepers, and plates that are used to fasten adjoining sections of track. These artifacts are ubiquitous along rail road lines and reflect the ongoing processes of track maintenance.

Eligibility Recommendation. An undefinable portion of the rail road litter component of this property meets the NRHP criteria consideration that requires a property to be at least 50 years old before it is eligible to the Register (36CFR Part 60). Conversely, there is little doubt that some of the artifacts are less than 50 years old. Furthermore, it seems unlikely that any of these materials could contribute important information about rail road technology and the maintenance process that could not be obtained more directly through documentary research or oral interviews, or that may be obtained from many simila. locations.

It is assumed that the concrete footing is associated with a building or structure that contributed to the functioning of the NCO railroad. However, there are no remains on the site that indicate what this role may have been. Although historical research may reveal the function of this building, the slab itself does not appear to have any characteristics that would add to information that could be gathered from archival sources.

In summary, it does not appear that the archaeological component of this property is eligible to NRHP.

Prehistoric Sites Management Recommendations

Of five prehistoric sites recorded within the Wendel-Alturas UPRR line abandonment APEs, three are on BLM lands and two are on lands of unknown non-Federal ownership (Table 3). None of the sites have been evaluated for their potential NRHP eligibility, and insufficient information is currently available to support eligibility recommendations. It is recommended that UPRR avoid impacting these unevaluated sites. If avoidance is not feasible, it will not be necessary to evaluate them to determine if they constitute significant properties.

Below are provided summary descriptions of the five prehistoric sites. A testing program to support NRHP eligibility/ineligibility recommendations is presented below to help the client in further project planning.

Table 3. Prehistoric archaeological sites within the survey APEs.

Map	Temporary Site No.	BLM Land	Site Description	Flake Density	Site Area	Estimated Depth
6	UPRR 372.60	No	Flaked/Ground Stone Scatter	1-30/ m^2	560x300m	Probable Subsurface
8	UPRR 379.95	Yes	Flaked Stone Scatter	1 / $4m^2$	15 x 12m	Surface Only
10	UPRR 390.46	Yes	Flaked Stone Scatter	1 / m^2	50 x 25m	Prob. Surface Only
11	UPRR 392.50	Yes	Flaked Stone Scatter	1 / $4m^2$	45 x 30m	Surface Only
14	UPRR 403.84	No	Flaked/Ground Stone Scatter	1-10/ m^2	70 x 70m	Prob. Surface Only

Site UPRR 372.60 (non-Federal ownership).

Description. This extensive (560 x 300 meters) prehistoric site is a dense scatter of obsidian, chert, and basalt flakes and fragmentary ground stone on the flat floor of Secret Valley on the east side of the confluence of Secret and Snowstorm creeks. Flake densities vary from 1 to 30/m^2. No complete projectile points were seen while determining the site boundary. Three complete handstones were noted. Flakes and

ground stone fragments are most noticeable on areas of flat light-gray sandy silt pavement, but are also seen on intervening low (10-30 cm high) hummocks of brown silty sand held in place by shrubs.

Testing Recommendation. The extensive size, great lithic density and variety, and key location of this site at the confluence of Snowstorm and Secret creeks suggest that it may be eligible for inclusion on the NRHP under Criterion D (36 CFR 800, Section 106). On the other hand, because surface geomorphology suggests that the site may lack a buried component, not all parts of the site may contain significant deposits. Site evaluation should emphasize, but not be confined to, the APE. It should include (1) surface collection of diagnostic tools, (2) a 1/2 day backhoe test of the western portion of the site in the vicinity of the railroad bridge, (3) excavation of 2-3 cubic meters in some combination of surface transect units (0-10 cm depth) and full excavation units (to sterile) to be determined upon interpretation of the back hoe trench, and (4) a sourcing/hydration study of 60 obsidian flakes, perhaps 20 each from three circumscribed areas. This program would involve a 4-person archaeological field crew for 2.5 days. Such a testing program will allow a determination of the NRHP eligibility for the site, and consideration of potential effects to that part of the site within 50 meters of BDT Bridge 372.60.

Site UPRR 379.95 (BLM ownership).

Description. This small (15 x 12 meters) prehistoric site is light scatter of obsidian flakes and a single fragmentary thick milling slab on the east side of a small ephemeral drainage on an alluvial fan/plateau overlooking the canyon of Snowstorm Creek south of Snowstorm Mountain. Flake density is 1/ 4m^2. The ground here is very stony, lacking any soil development beyond the silts and sands between rocks and boulders; artifacts may be buried beneath alluvially deposited stones at the site, but there is little likelihood of it.

Testing Recommendation. The small size (180 m^2) and probable lack of subsurface component of this sparse obsidian scatter suggests that it may be not be eligible for inclusion on the NRHP. This site should be tested under the procedures outlined by the California Office of Historic Preservation under the Sparse Lithic Scatter Program (Jackson et al. 1988). Site evaluation should include (1) surface collection of tools, (2) systematic determination of flake density, (3) placement of two 50 cm square Subsurface Exploratory Excavation units (SEEUs), (3) collection of 30 obsidian flakes from a circumscribed area which reflect the technological range of flake types within the area, (4) sourcing and hydration studies on 15 of the 30 collected obsidian flakes. This program would involve a 2-person archaeological field crew for less than one day. Such a testing program will allow a determination of the NRHP eligibility for the site.

Site UPRR 390.46 (BLM ownership).

Description. This small (50 x 25 meters) prehistoric site is light scatter of obsidian debitage on both sides of an ephemeral tributary of Snowstorm Creek, in the area where those tributaries begin to cut down into the Snowstorm Creek canyon south of the Madeline Plains. Flake density is approximately 1/m^2. No complete projectile points were seen during investigation to determine the site boundary. Nor was ground stone noted. The ground here is very stony, with only a thin sandy soil layer (0-10 cm) over rocks and boulders; some artifacts may be buried in this shallow soil layer. The area is littered with historic materials suggestive of a 1970s era hoboo camp.

Testing Recommendation. The small size (1,250 m^2) and probable lack of subsurface component of this sparse obsidian scatter suggests that it may be not be eligible for inclusion on the NRHP. This site should be tested under the procedures outlined by the California Office of Historic Preservation under the Sparse Lithic Scatter Program (Jackson et al. 1988). Site evaluation should include (1) surface collection of tools, (2) systematic determination of flake density, (3) placement of four 50 cm square Subsurface

Exploratory Excavation units (SEEUs), (3) collection of 30 obsidian flakes from a circumscribed area which reflect the technological range of flake types within the area, (4) sourcing and hydration studies on 15 of the 30 collected obsidian flakes. This program would involve a 2-person archaeological field crew for one day. Such a testing program will allow a determination of the NRHP eligibility for the site.

Site UPRR 392.50 (BLM ownership).

Description. This small (45 x 30 meters) prehistoric site is a very light scatter of obsidian flakes on a nearly flat rocky ground surface at the crest of the saddle separating the Madeline Plains from the Snowstorm Creek canyon. Flake density is 1/ 4m^2. No complete projectile points were seen during investigation to determine the site boundary. Three complete hand stones were seen. The ground here is very stony, lacking any soil development beyond the silts between rocks and boulders; artifacts may be buried beneath alluvially deposited stones at the site, but there is little likelihood of it. Visibility is good between the scattered big sagebrush shrubs at the site.

Testing Recommendation. The small size (1,350 m^2) and probable lack of subsurface component of this sparse obsidian scatter suggests that it may be not be eligible for inclusion on the NRHP. This site should be tested under the procedures outlined by the California Office of Historic Preservation under the Sparse Lithic Scatter Program (Jackson et al. 1988). Site evaluation should include (1) surface collection of tools, (2) systematic determination of flake density, (3) placement of four 50 cm square Subsurface Exploratory Excavation units (SEEUs), (3) collection of 30 obsidian flakes from a circumscribed area which reflect the technological range of flake types within the area, (4) sourcing and hydration studies on 15 of the 30 collected obsidian flakes. This program would involve a 2-person archaeological field crew for less than one day. Such a testing program will allow a determination of the NRHP eligibility for the site.

Site UPRR 403.84 (non-Federal ownership).

Description. This medium-sized (70 x 70 meters) prehistoric site is a medium density flaked stone debitage scatter, obsidian and white chert, on the north side of an ephemeral drainage on an alluvial fan on the Madeline Plains. Flake densities vary from 1-3/m^2. No complete projectile points were seen during investigation to determine the site boundary. Three complete hand stones were seen. Flakes and ground stone fragments are most noticeable on areas of flat light-gray sandy silt pavement, but are also seen on intervening low (10-20 cm high) hummocks of brown silty sand held in place by shrubs.

Testing Recommendation. The size (4,900 m^2) , lithic distribution, and lithic variety at this site make it difficult to initially predict whether or not it may be eligible for inclusion on the NRHP under Criterion D (36 CFR 800, Section 106). Experience at nearby sites on the Madeline Plains suggests that this site will prove to lack any subsurface component; furthermore, average flake density is less than 3 flakes/m^2. Thus it is a candidate for initial examination under procedures outlined by the California Office of Historic Preservation under the Sparse Lithic Scatter Program (Jackson et al. 1988). Test investigations should emphasize, but not be confined to, the APE. The evaluation program should include (1) surface collection of diagnostic tools, (2) systematic determination of site flake density (3) placement of six 50 x 50 cm Subsurface Exploratory Excavation units (SEEUs), (3) collection of 30 flakes of each type of flaked stone material from circumscribed areas which will reflect the technological range of flake types within said area, (4) sourcing and hydration studies on 40 obsidian flakes, including 15 from the technological sample, and 25 randomly gathered from across the site. This program would involve a 2-person archaeological field crew for 1.5 days. Such a testing program will allow a determination of the NRHP eligibility for the site, and consideration of potential effects to that part of the site within 50 meters of BDT Bridge 403.84.

CONCLUSION

The May 1997 survey of 24 locations along the 84 mile long Alturas to Wendel segment of the Union Pacific railroad line in Lassen and Modoc counties resulted in the identification of five prehistoric and three historic archaeological sites. Five of the eight sites are on non-Federal parcels; three of the sites, all prehistoric, are on BLM parcels.

Adrian Praetzellis of the ASC recommends that the three historic archaeological sites, the Ravendale, Madeline, and Likely water tank complexes, are insignificant resources with relation to NRHP criteria, on the basis of field survey and historic data. The five prehistoric sites, on the other hand, must be subjected to a testing program before their potential significance under NRHP criteria can be determined.

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1956 Archaeological Research in Lassen County, California. *University of California Archaeological Survey*, No. 33. University of California, Berkeley.

1960 *Honey Lake Paiute Ethnography*. Nevada State Museum Anthropological Papers 4. Carson City.

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1981 How to Classify the Projectile Points from Monitor Valley, Nevada. *Journal of California and Great Basin Anthropology* 3:7-43.

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1974 A Comparative Study of Late Paleo-Indian Manifestations in the Western Great Basin. *Nevada Archaeological Research Paper* 5:91-116.

APPENDIX A

SITE RECORDS

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 ***Resource Name or #:** (Assigned by recorder) UPRR #372.60

P1. **Other Identifier:** _____

*P2. **Location:** ■ **Not for Publication** □ **Unrestricted**

*a. **County** Lassen **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. **USGS 7.5' Quad** Karlo **Date** Provisional Edition 1989

T 31N ; **R** 15E ; SE ¼ **of** NW ¼ **of Sec** 29 ; MDM **B.M.**

c. Address _____ City _____ Zip _____

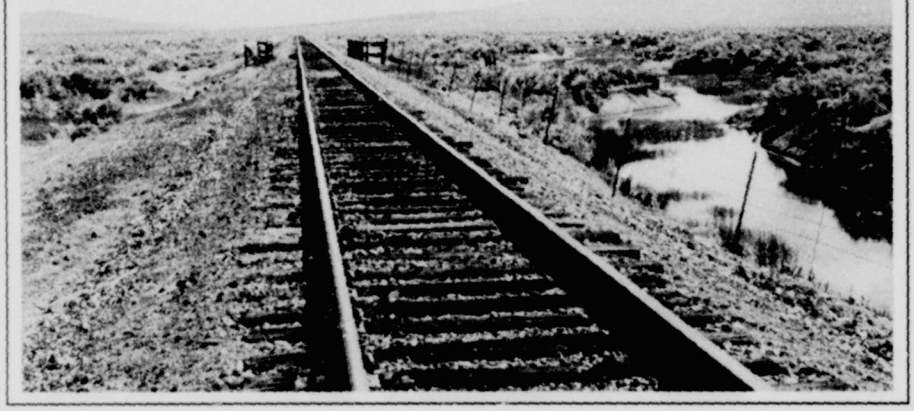
d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 728,240 mE/ 4,488,930 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

From Hwy 395 drive west on Karlo Road about 5.5 miles to the railroad track at the abandoned townsite of Karlo. Follow the 4-wheel access road along the west side of the track south approximately 2.0 miles until halted by Snowstorm Creek; walk south 600 yards along the east side of the tracks to the bridge at Secret Creek. Site begins south of creek and east of railroad track.

*P3a. **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This site is a large lithic scatter with milling equipment, extending south of Secret Creek and east of the railroad track. Flake density ranges from 4/m² to 40/m². Seventy percent of flaked stone is obsidian with 35% of this containing residual cortex (primary = 10%, secondary = 25%). Another 20% of the flaked stone is CCS in a wide variety of colors (very little cortex noted), while 10% of the scatter is fine-grained basalt. Most milling equipment is highly fragmented; it occurs as dispersed items and occasional pockets of 10-20 pieces per 10m².

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



*P3b. **Resource Attributes:** (List attributes and codes) AP2. Lithic scatter

*P4. **Resources Present:** □ Building □ Structure □ Object ■ Site □ District □ Element of District

P5b. Description of Photo: (view, date, accession #) UPRR-1, frame #6; Site on left beyond BDT bridge, Secret Creek / Snowstorm Creek confluence on right.

*P6. **Date Constructed/Age and Source:** □ Historic ■ Prehistoric

*P7. **Owner and Address:** Unknown, non-Federal

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED
Page 2 of 6

***Resource Name or #:** (Assigned by recorder) UPRR #372.60

***P8. Recorded by:** (Name, affiliation, and address) R. Milliken and S. Psota, Far Western Anthropological Research Group, Inc., Davis CA 95617

***P9. Date Recorded:** 5/14/97

***P10. Survey Type:** (Describe) Reconnaissance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California*, (Milliken 1997)

***Attachments:** ☐NONE ■Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ■ Other (List): Site Map

***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

 *Resource Name or # (Assigned by Recorder) UPRR #372.60

A1. **Dimensions:** a. Length 560 m (E-W) × b. Width 300 m (N-S)
Method of Measurement: ■ Paced ☐ Taped ☐ Visual estimate ☐ Other: _____
Method of Determination (Check any that apply.): ■ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____
Reliability of Determination: ■ High ☐ Low Explain: Two hours of work employed to determine artifact distribution.
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other (Explain): _____

A2. Depth: _____ ☐ None ■ Unknown Method of Determination: _____

*A3. **Human Remains:** ☐ Present ☐ Absent ☐ Possible ■ Unknown (Explain): _____

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.) None seen on site surface.

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)
One obsidian rounded base point, one obsidian tool (almost unifacial), and two spent obsidian cores from small cobbles were noted, in addition to thousands of flakes (1-30/m²). Ground stone noted includes three whole handstones, ten handstone fragments, and many small millingstone fragments under 15 cm in size.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** ☐ Good ☐ Fair ☐ Poor (Describe disturbances.):
A dirt access road cuts through the western and northern edge of the site. Large animal burrows were seen in eastern portion. The railroad may have disturbed/covered the very western boundary of site.

*A8. **Nearest Water:** (Type, distance, and direction.)
Secret Creek is situated at the northern boundary of site. Presently containing 15cm of running water and wire grass. Snowstorm Creek meets Secret Creek just west of site.

*A9. **Elevation:** 4,419 ft.

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)
50% big sage brush, 50% greasewood brush. Scattering of grass and occasional lupine. Deflated soil areas contain mainly small greasewood brushes. Site soil is brown silty sand and in areas of deflated soil, light grey sandy silt pavement with cracking. Landform is a valley floor adjacent to creek (Secret Valley).

A11. Historical Information: N/A

*A12. Age: ■ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945
☐ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

CONTINUED
Page 4 of 6

***Resource Name or #** (Assigned by Recorder) UPRR #372.60

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)

A14. Remarks: Higher concentrations of materials are visible in areas with deflated soils. No small obsidian cobbles or large pebbles are present, though there is much evidence of cobble core reduction.

A15. References: (Documents, informants, maps, and other references)

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): Roll UPRR-1.

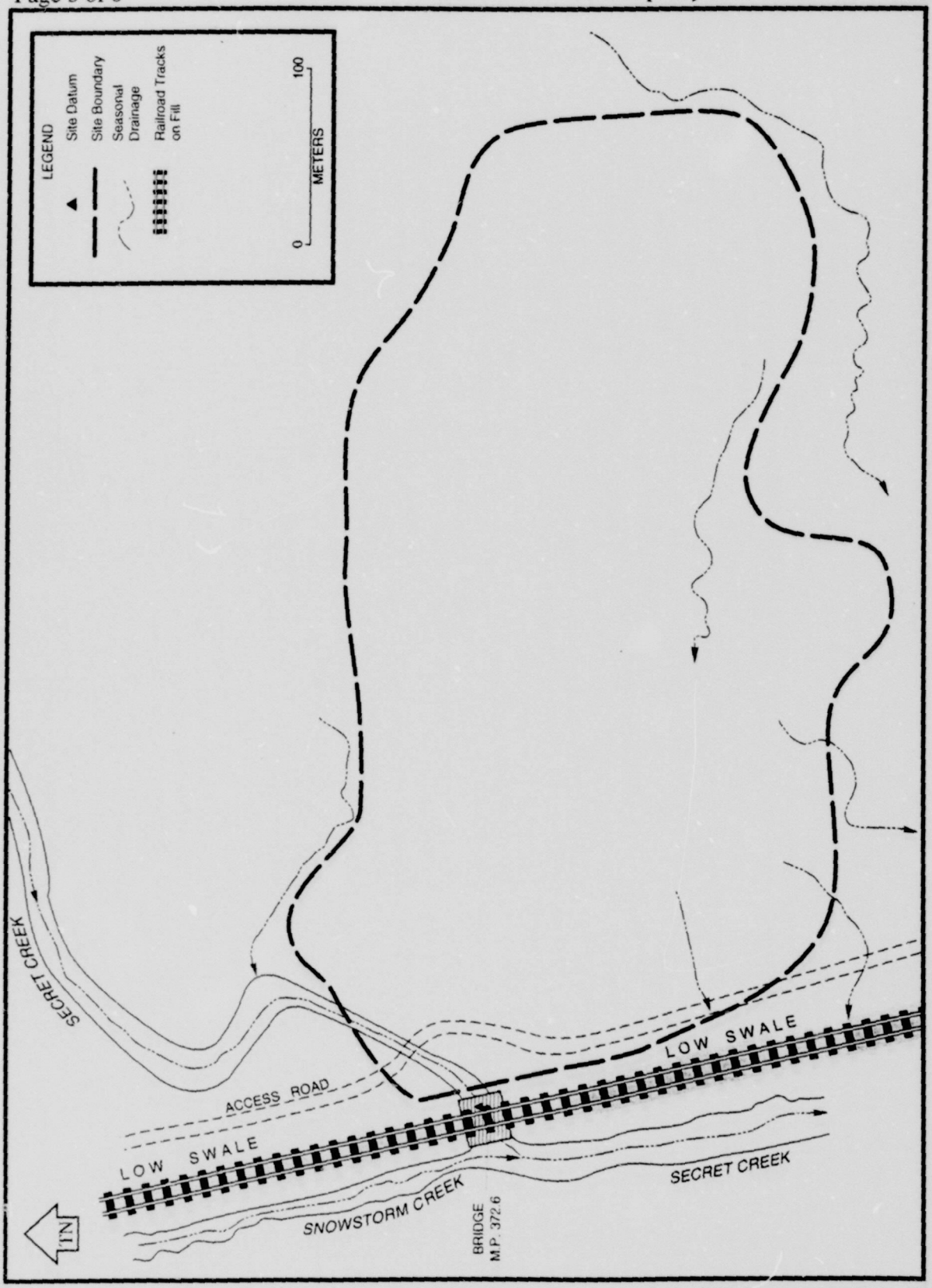
Mo.	Day	Time	Frame	Subject/Description	Unit #	Facing
5	12	3:15	6	Site on left,BDT bridge center, Snowstorm Creek on left.	372.60	S
5	14	11:20	19	View SE across western portion of site from BDT Bridge 372.60.	372.60	SE
5	14	11:25	20	View east across north portion of site from BDT Bridge 372.60	372.60	E

Original Media/Negatives Kept at: Far Western Anthropological Research Group, Inc.

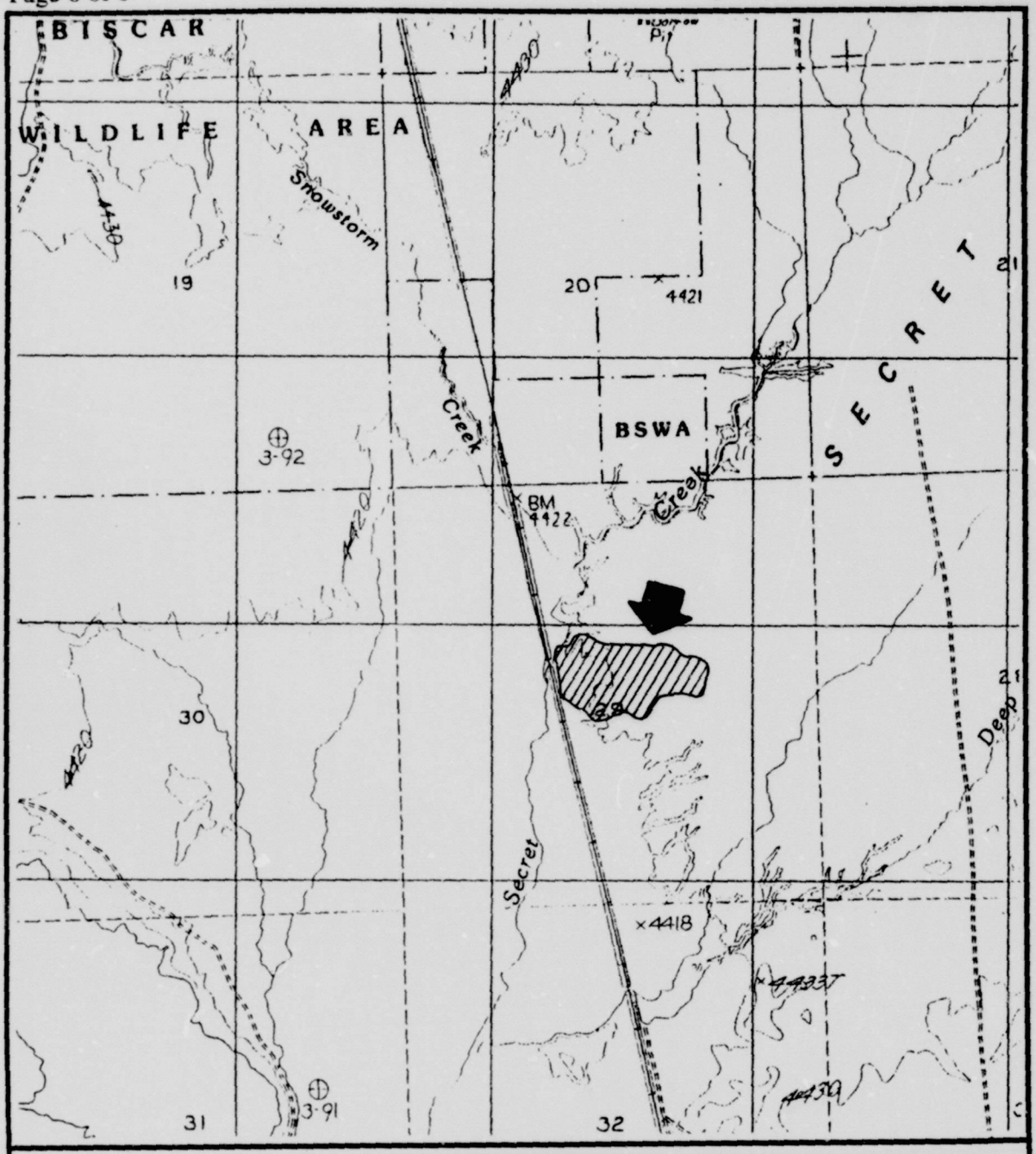
***A17. Form Prepared by:** R. Milliken and S. Psota **Date:** 5/14/97
Affiliation and Address: Far Western Anthropological Research Group, Inc., Davis, California 95617

***Required information**

State Number :
Agency Number:
Temporary Number : UPRR# 372.60



State Number :
Agency Number:
Temporary Number : UPRR# 372.60



A PORTION OF
KARLO QUADRANGLE
7.5 MINUTE
PROVISIONAL EDITION 1989

TN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

1 0 1
MILES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 *Resource Name or #: (Assigned by recorder) UPRR #379.95

P1. Other Identifier: _____

*P2. Location: ■ Not for Publication □ Unrestricted

*a. County Lassen and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Pete's Valley Date Provisional Edition 1989

T 31N ; R 14E ; NE ¼ of NE ¼ of Sec 4 ; MDM B.M.

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 720,640 mE/ 4,495,390 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

From Hwy 395 drive west on Karlo Road for 4.8 miles to a fork in road. Take the right fork (Horse Lake 4-wheel drive road) and travel west for 3.95 miles to Railroad Springs (conditions of road varies). Proceed westward 0.45 miles to a road split; take the left hand road and travel 0.5 miles to the railroad track, then continue another 0.75 miles west to the site at a drainage with a juniper tree to the north.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This is a light scatter of obsidian flakes (1 flake/4m²). Flakes are primary, secondary, and predominately tertiary decortation flakes. The site lies on a sloping volcanic plateau overlooking the canyon of Snowstorm Creek.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

*P3b. Resource Attributes: (List attributes and codes) AP2. lithic scatter

*P4. Resources Present: □ Building □ Structure □ Object ■ Site □ District □ Element of District □ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) UPRR-1, frame #10; View across site.

*P6. Date Constructed/Age and Source: □ Historic ■ Prehistoric □ Both _____

*P7. Owner and Address: Bureau of Land Management, 2950 Riverside Dr., Susanville, CA 96103

*P8. Recorded by: (Name, affiliation, and address) R. Milliken and S. Psota, Far Western Anthropological Research Group, Inc., Davis CA

*P9. Date Recorded: 5/13/97

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED
Page 2 of 6

*Resource Name or #: (Assigned by recorder) UPRR #379.95

*P10. Survey Type: (Describe) Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California*, (Milliken 1997).

*Attachments: ☐NONE ■Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ■ Other (List): Site Map

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

*Resource Name or # (Assigned by Recorder) UPRR #379.95

A1. **Dimensions:** a. Length 15 m (E-W) × b. Width 12 m (N-S)
Method of Measurement: ■ Paced ☐ Taped ☐ Visual estimate ☐ Other: _____
Method of Determination (Check any that apply.): ■ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____
Reliability of Determination: ■ High ☐ Low Explain: Rocky ground precludes sub-surface component.
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other (Explain): _____

A2. Depth: _____ ■ None ☐ Unknown Method of Determination: Deduction (see A1.)

*A3. **Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): Deduction (see A1.)

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.) None

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)

See (A14.) Remarks.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** ☐ Good ☐ Fair ☐ Poor (Describe disturbances.): A 4-wheel drive cuts through the south portion of the site.

*A8. **Nearest Water:** (Type, distance, and direction.) Unnamed seasonal drainage is the western boundary of site. No water was flowing in May, 1997.

*A9. **Elevation:** 4,760 ft.

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.) Vegetation at the site is 95% big sage with 5% bitterbrush. The community vegetation also includes junipers, lupine and seasonal wildflowers with concentrations of Yampah and sunflowers. Site soil is reddish brown sandy silt with a surface scatter of rounded and subrounded pebbles, as well as volcanic cobbles and boulders. Site is on a high flat terrace at north end of Secret Valley overlooking canyon of Snowstorm Creek. The geology is an open rolling terrace of vesicular basalt flow with basalt cobbles.

A11. Historical Information: N/A

*A12. **Age:** ■ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945
☐ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**

CONTINUED

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

 *Resource Name or # (Assigned by Recorder) UPRR #379.95

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)

A14. Remarks: A possible ground stone milling slab (Item A) was relocated from the seasonal drainage to the juniper tree on the southwest boundary. The slab is in 2 pieces and is of volcanic material. Another dirt road is 45 meters and magnetic north of the site.

A15. References: (Documents, informants, maps, and other references)

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): Roll: UPRR-1.

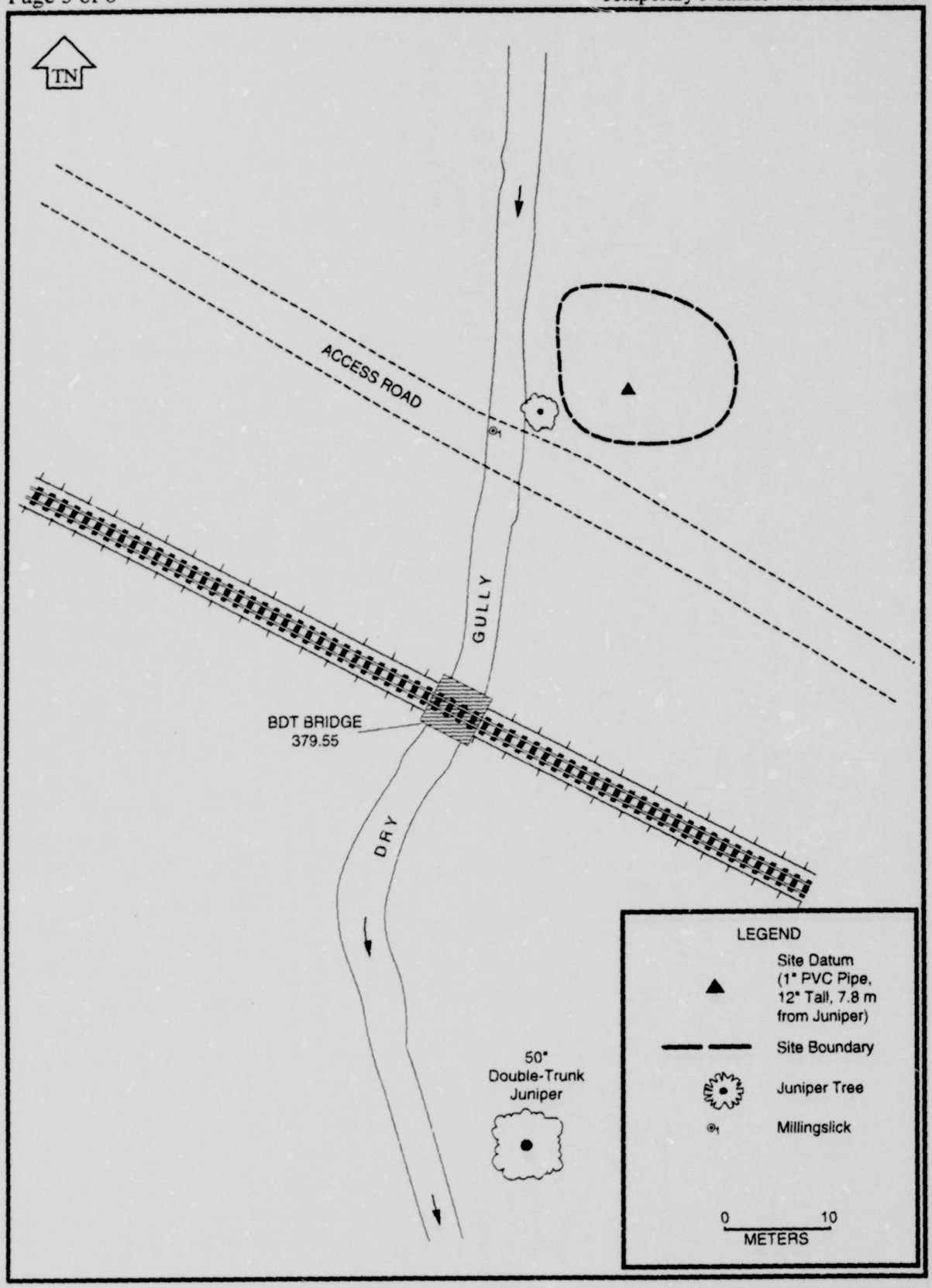
Mo	Day	Time	Frame	Subject/Description	Unit #	Facing
5	13	1:30	10	View across site, S. Psota in center.	379.95	SW
5	13	1:30	11	View across site, S. Psota in center.	379.95	SW
5	13	2:35	14	UPRR P-1, showing rock berm.	379.95	SE

Original Media/Negatives Kept at: Far Western Anthropological Research Group, Inc.

*A17. Form Prepared by: R. Milliken and S. Psota Date: 5/13/97
Affiliation and Address: Far Western Anthropological Research Group, Inc., P.O. Box 413, Davis, California 95617

*Required information

State Number :
Agency Number:
Temporary Number : UPRR# 379.95



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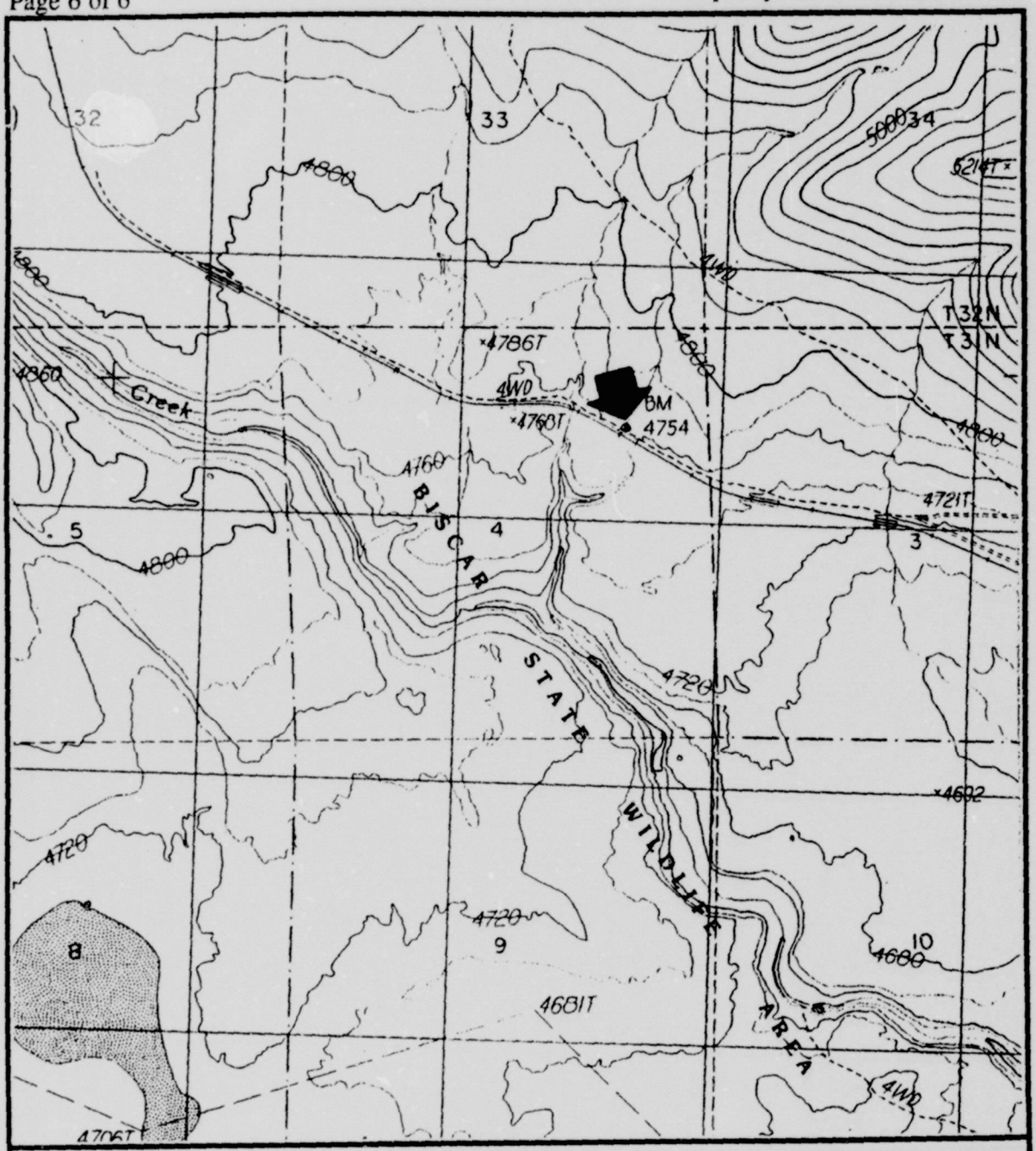
Agency Number:
Temporary Number : UPRR# 379.95



A PORTION OF
PETES VALLEY QUADRANGLE
7 5 MINUTE
PROVISIONAL EDITION 1989

TN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

1 0 1
MILES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 ***Resource Name or #:** (Assigned by recorder) UPRR #390.46

P1. Other Identifier: _____

*P2. Location: ■ Not for Publication □ Unrestricted

*a. County Lassen and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad West of Snowstorm Mtn. Date Provisional Edition 1989

T 33N ; R 14E ; NW ¼ of NE ¼ of Sec 27 ; MDM B.M.

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 721,540 mE/ 4,508,630 mN

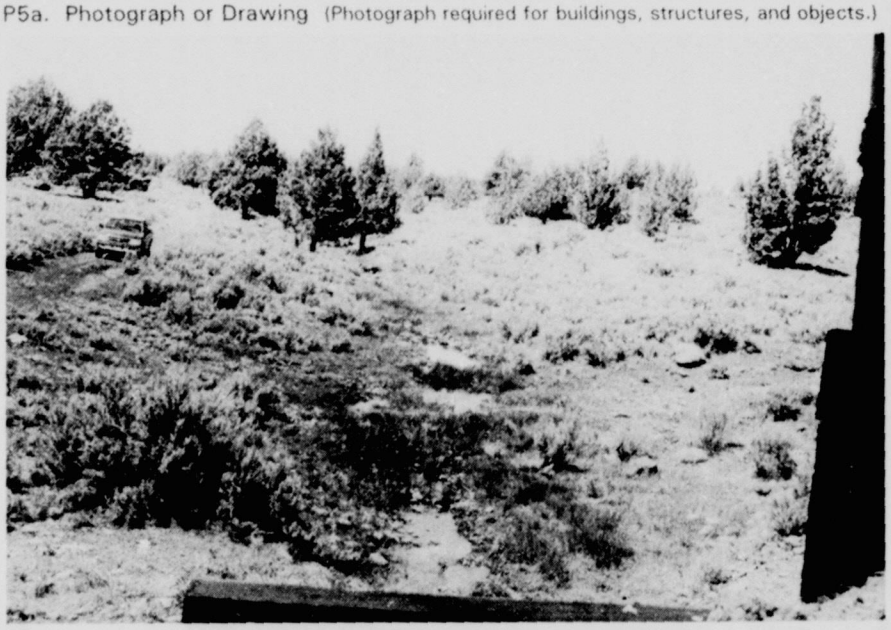
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

From Hwy 395 travel south on Horselake Rd (Lassen 536) for 6.3 miles to a 4-wheel drive dirt road along south side of a small seasonal drainage. Travel 0.5 miles on this dirt road to Railroad Bridge M.P.#390.46.

*P3a. **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This site is an obsidian lithic scatter with light concentrations of flakes on both sides of unnamed creek. The main concentration is located north of drainage. At least 2 flakes with cortex, no more than 40 flakes noted, in total.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



*P3b. **Resource Attributes:** (List attributes and codes) AP2. lithic scatter

*P4. **Resources Present:** □ Building □ Structure □ Object ■ Site □ District □ Element of District

P5b. Description of Photo: (view, date, accession #) Roll UPRR-1, frame #4; view WNW across site from BDT bridge.

*P6. **Date Constructed/Age and Source:** □ Historic ■ Prehistoric □ Both _____

*P7. **Owner and Address:** Bureau of Land Management, 2950 Riverside Dr., Susanville, CA 96103

*P8. **Recorded by:** (Name, affiliation, and address) R. Milliken and S. Psota, Far Western Anthropological Research Group, Inc., Davis CA

*P9. **Date Recorded:** 5/19/97 *P10. **Survey Type:** (Describe) Reconnaissance

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED

 ***Resource Name or #:** (Assigned by recorder) UPRR #390.46

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California.* (Milliken 1997).

***Attachments:** ☐NONE ■Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ■ Other (List): Site Map

***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

Page 3 of 6 *Resource Name or # (Assigned by Recorder) UPRR #390.46

A1. **Dimensions:** a. Length 50 M (E-W) × b. Width 25 M (N-S)
Method of Measurement: ■ Paced ☐ Taped ☐ Visual estimate ☐ Other: _____
Method of Determination (Check any that apply.): ■ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____
Reliability of Determination: ■ High ☐ Low Explain: Good ground visibility.
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other (Explain): _____

A2. Depth: Possible ☐ None ■ Unknown Method of Determination: Logic = Soil has 20-30cm depth.

*A3. **Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): Deduction.

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.) None

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)
No tools. Obsidian debitage only.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** ☐ Good ■ Fair ☐ Poor (Describe disturbances.): A maintenance road for railroad disturbs the eastern portion of the site. It has made an artificial berm between the road and drainage.

*A8. **Nearest Water:** (Type, distance, and direction.) Unnamed seasonal drainage runs through site. It has standing water in May.

*A9. **Elevation:** 5,320 ft.

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.) Big sage brush and junipers make up the vegetation community. Vegetation on the site consists of sagebrush, grasses, phlox, wildflowers and various grasses - wire grasses and seasonal succulents in drainage. Site soil is reddish brown silty sand with angular gravels - vesicular basalt cobbles in creek bed. Landform is a swale and bench in gently rolling volcanic uplands.

A11. Historical Information: N/A

*A12. **Age:** ■ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945
☐ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

CONTINUED
Page 4 of 6

*Resource Name or # (Assigned by Recorder) UPRR #390.46

A14. Remarks: There are occasional outlying flakes (n=2) east of railroad about 400 yards towards LAS-1831.

A 1970s artifact scatter is located predominately within site boundaries of site: bedspring mattress frame, large tins, localized concentrations of milk cans, or alcohol and food cans/jars (majo, pancake syrup, meats), pull tabs and taper proof aluminum screw cap bottles.

A15. References: (Documents, informants, maps, and other references) None

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): Roll: UPRR-1

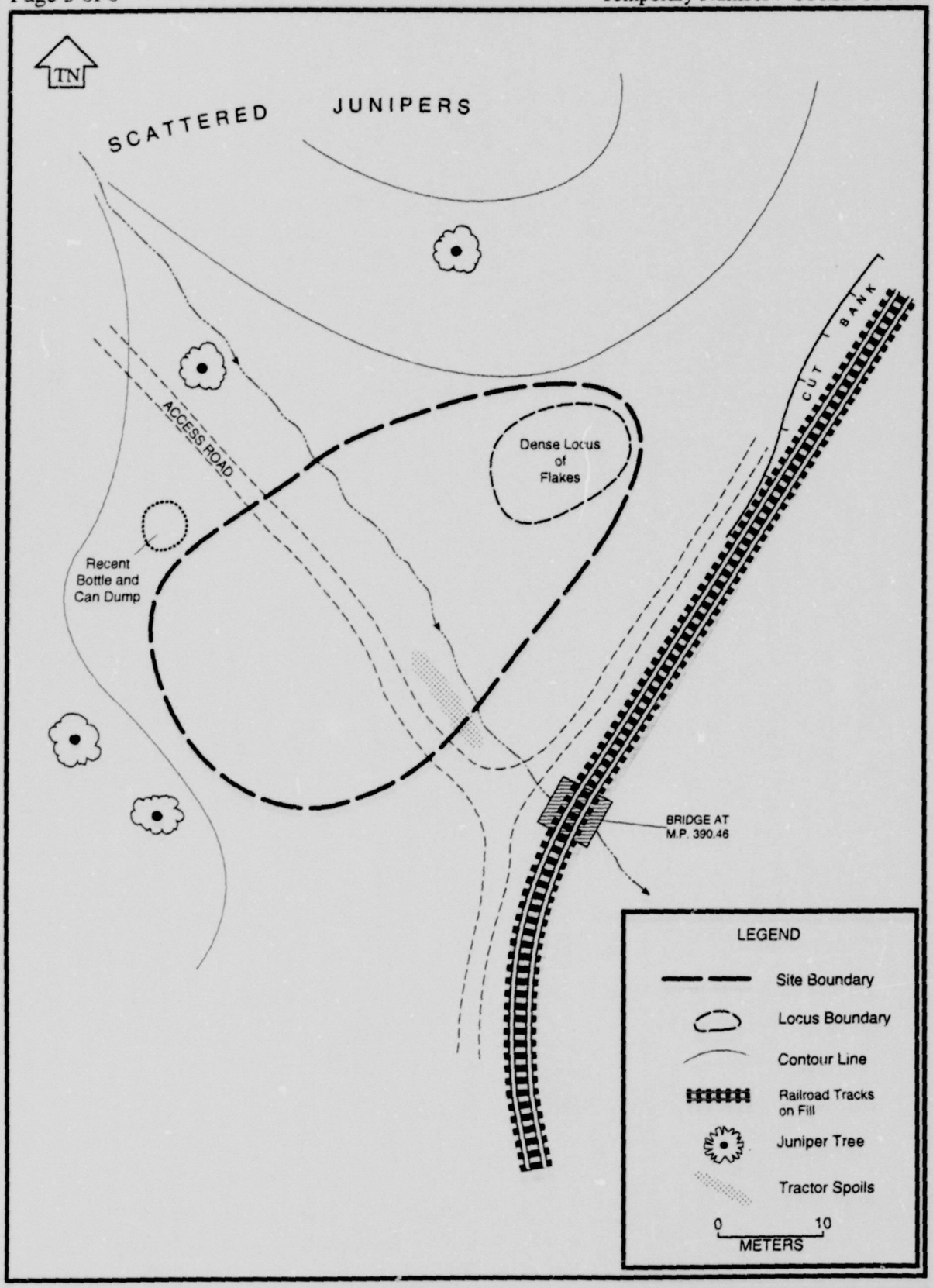
Mo.	Day	Time	Frame	Subject/Description	Unit #	Facing
5	12	1:35	4	View across site from BDT bridge.	390.46	WNW
5	12	1:45	5	View across site toward datum.	390.46	E

Original Media/Negatives Kept at: Far Western Anthropological Research Group, Inc.

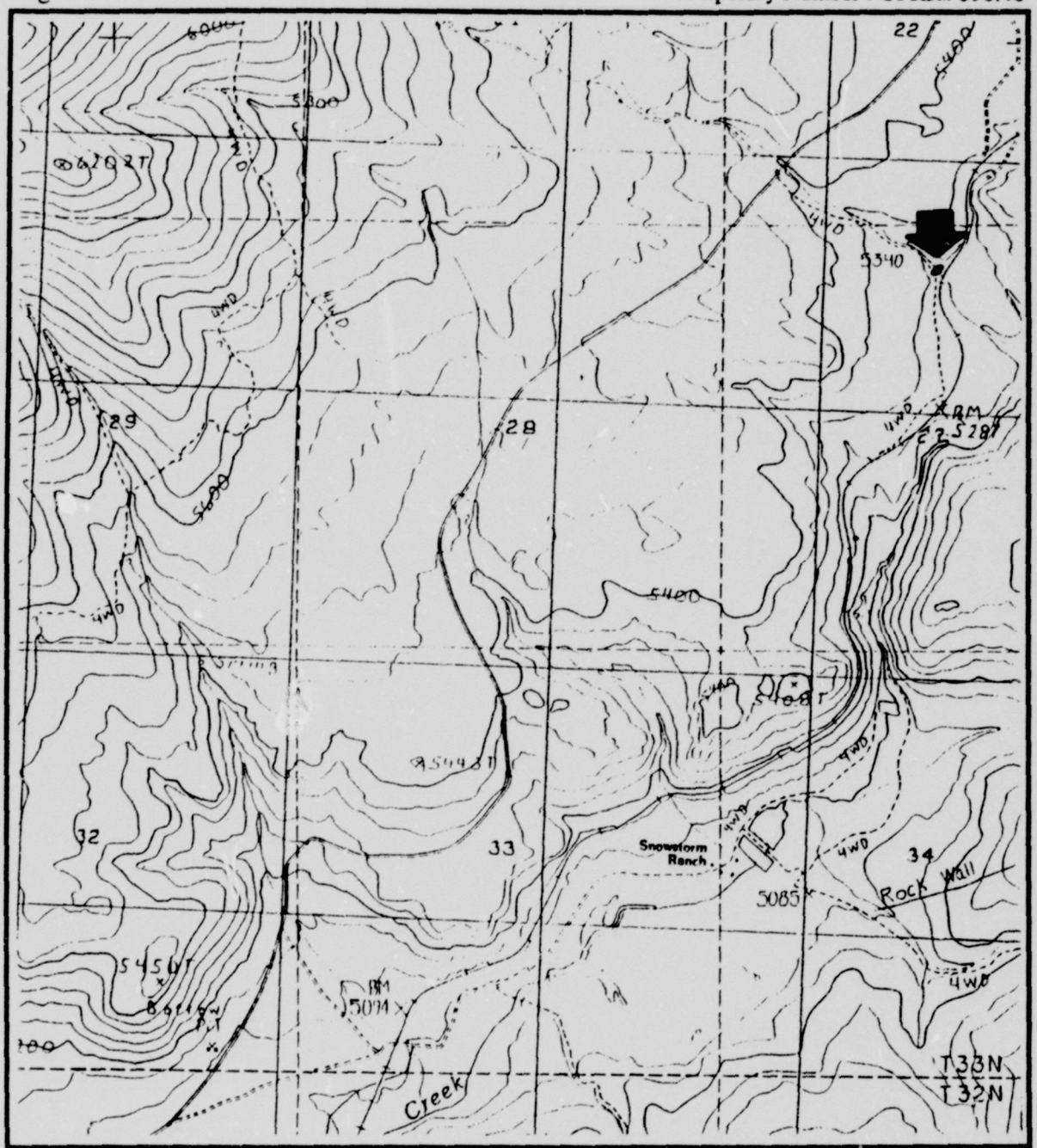
*A17. Form Prepared by: R. Milliken and P. Psota Date: 5/19/97
Affiliation and Address: Far Western Anthropological Research Group, Inc., P.O. Box 413, Davis CA 95617

*Required information

State Number :
Agency Number:
Temporary Number : UPRR# 390.46



State Number :
Agency Number:
Temporary Number : UPRR# 390.46



A PORTION OF
WEST OF SNOWSTORM MTN. QUADRANGLE
7.5 MINUTE
PROVISIONAL EDITION 1989

IN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 ***Resource Name or #:** (Assigned by recorder) UPRR #392.50

P1. Other Identifier: _____

*P2. Location: ■ Not for Publication □ Unrestricted

*a. County Lassen and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Snowstorm Mtn. Date Provisional Edition 1989

T 33N ; R 14E; SW ¼ of NW ¼ of Sec 14 ; MDM B.M.

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 722,250 mE/ 411,550 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

From Hwy 395 proceed west on Horselake Rd for 4.35 mile to a turn-off to the left at the top of a gradual rise (railroad closes into the road). Presently there is a short maintenance road to railroad. Site is southeast of Horselake Rd and within and south of maintenance Rd.

*P3a. **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Site is a light lithic scatter of obsidian flakes, many with residual cortex (primary and secondary decortation flakes). Two obsidian pebbles were noted; although this suggests that such cobbles are naturally occurring in this area, we note that obsidian cobbles are common in the imported railroad bed fill here. 60% of the flakes had no cortex, 10% had one face covered completely with cortex, and 30% retained some cortex.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

*P3b. **Resource Attributes:** (List attributes and codes) AP2. lithic scatter

*P4. **Resources Present:** □ Building □ Structure □ Object ■ Site □ District □ Element of District

P5b. Description of Photo: (view, date, accession #) UPRR-1, frame #21; view ENE across site, telephone booth left of juniper tree datum.

*P6. **Date Constructed/Age and Source:** □ Historic ■ Prehistoric □ Both _____

*P7. **Owner and Address:** Bureau of Land Management, 2950 Riverside Dr., Susanville, CA 96103

*P8. **Recorded by:** (Name, affiliation, and address) R. Milliken and S. Psota, Far Western Anthropological Research Group, Inc., Davis, CA

*P9. **Date Recorded:** 5/14/97 *P10. **Survey Type:** (Describe) Reconnaissance

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED
Page 2 of 6

***Resource Name or #:** (Assigned by recorder) UPRR #392.50

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California*, (Milliken 1997).

***Attachments:** ☐NONE ■Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ■ Other (List): Site Map

***Required information**

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

Page 3 of 6 *Resource Name or # (Assigned by Recorder) UPRR #392.50

A1. **Dimensions:** a. Length 45 M (N-S) × b. Width 30 M (E-W)
Method of Measurement: ■ Paced ☐ Taped ☐ Visual estimate ☐ Other: _____
Method of Determination (Check any that apply.): ■ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____
Reliability of Determination: ■ High ☐ Low Explain: Good visibility.
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other (Explain): _____

A2. Depth: _____ ■ None ☐ Unknown Method of Determination: Rocky soil, deflated.

*A3. **Human Remains:** ☐ Present ☐ Absent ☐ Possible ■ Unknown (Explain): _____

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.) None

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)
No tools. Obsidian flakes only.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** ☐ Good ☐ Fair ☐ Poor (Describe disturbances.): Maintenance road cuts through northern boundary of site, then abruptly turns north. Light scatter of recent cans, glass bottles, and occasional ceramics.

*A8. **Nearest Water:** (Type, distance, and direction.)
There is a seasonal drainage .75 miles north of site (taken off topo).

*A9. **Elevation:** 5,460 ft.

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)
The vegetation community consists of 90% big sage with a scatter of greasewood brush, and the occasional juniper, grasses and wildflowers. Vegetation on site is 100% big sage with one juniper tree, scatter of grasses, lupine, and the occasional penstemon. Site soil is light tan sandy silt with angular gravel and angular volcanic cobbles - deflated.

A11. Historical Information: N/A

*A12. **Age:** ■ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945
☐ Post 1945 ☐ Undetermined Describe position in regional prehistoric chronology or factual historic dates if known:

A13. Interpretations: (Discuss data potential, function(s), ethnic affiliation, and other interpretations)

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

CONTINUED
Page 4 of 6 *Resource Name or # (Assigned by Recorder) UPRR #392.50

A14. Remarks: Where are the bigger cobbles that appear in reduced stages for this area? Prehistoric site CA-LAS-1810 is 250 meters to the north. There are a few flakes on the surface between these two sites.

A15. References: (Documents, informants, maps, and other references)

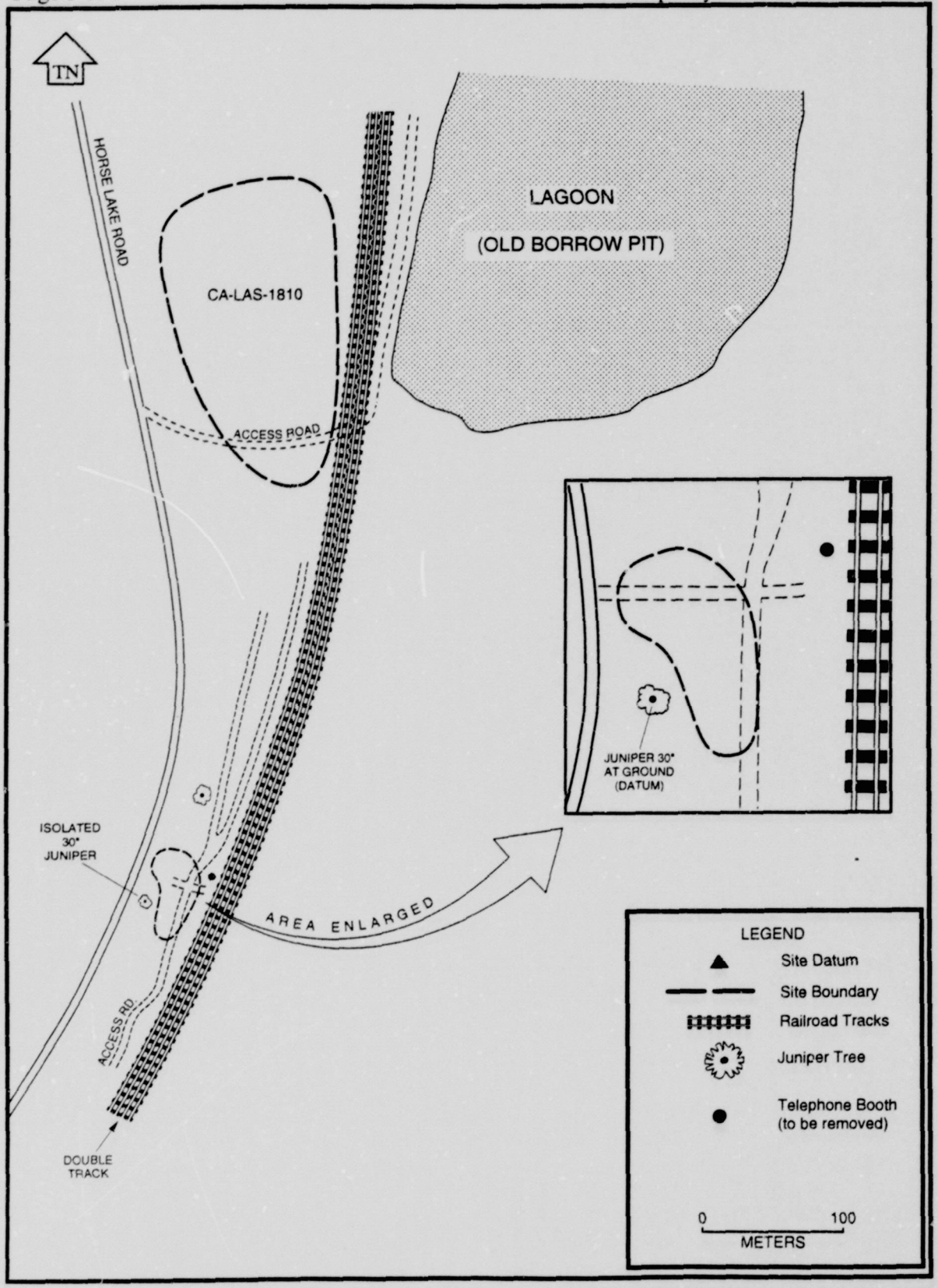
A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): Roll: UPRR-1.

Mo.	Day	Time	Frame	Subject/Description	Unit #	Facing
5	14	2:30	21	Overview of site, datum tree at right, telephone booth in background.	392.5	ENE
5	14	2:40	22	View WSW across site toward datum tree from telephone booth.	392.5	WSW

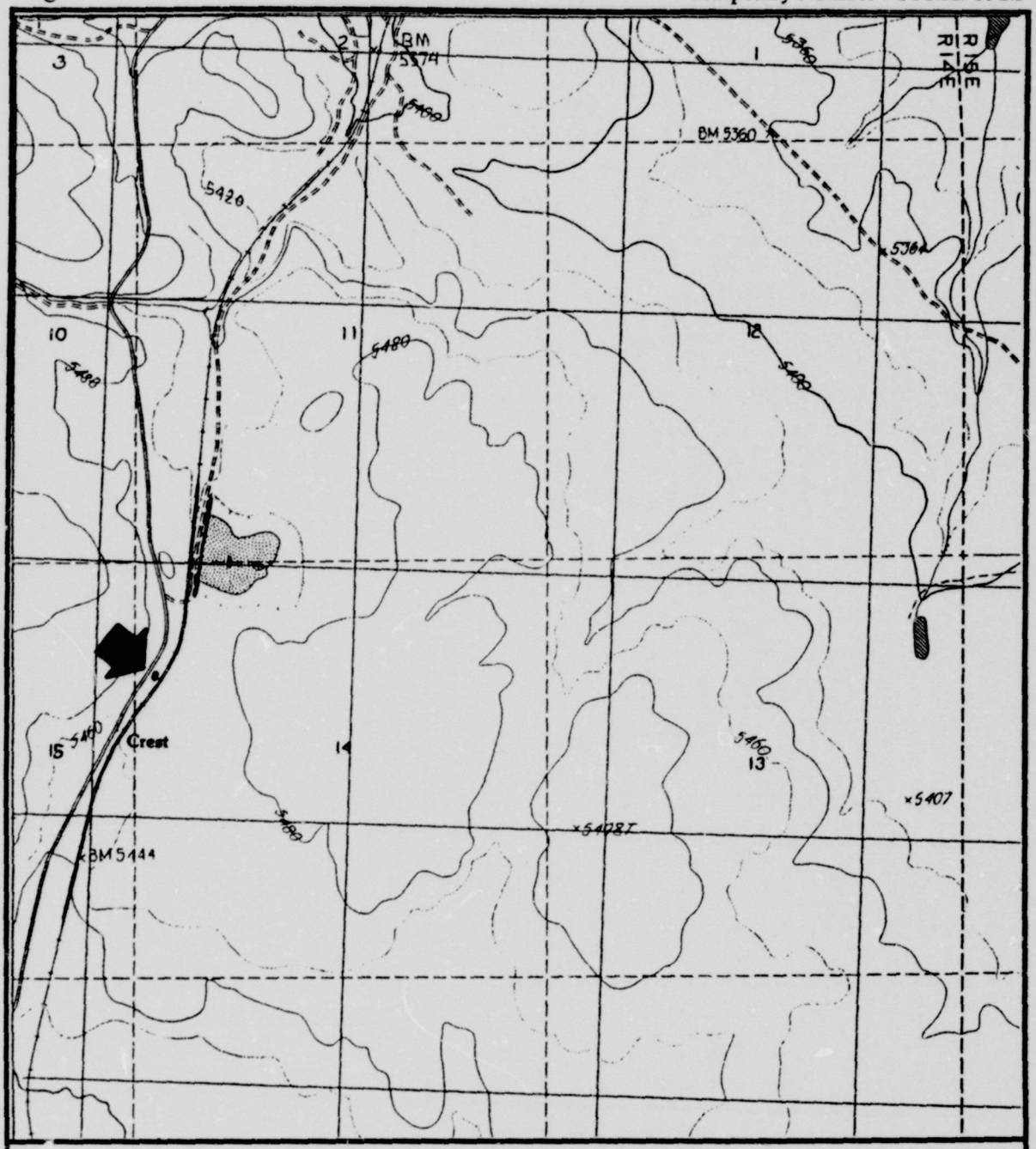
Original Media/Negatives Kept at: Far Western Anthropological Research Group, Inc.

*A17. Form Prepared by: R. Milliken and S. Psota Date: 5/14/97
Affiliation and Address: Far Western Anthropological Research Group, Inc., P.O. Box 413, Davis, CA 95617

State Number :
Agency Number:
Temporary Number : UPRR# 392.5



State Number :
Agency Number:
Temporary Number : UPRR# 392.5



A PORTION OF
SNOWSTORM MOUNTAIN QUADRANGLE
7.5 MINUTE
PROVISIONAL EDITION 1989

TN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

1 0 1
MILES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 6Z (recommended ineligible)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 ***Resource Name or #:** (Assigned by recorder) UPRR #397.90H

P1. **Other Identifier:** Ravendale Water Tower Complex

*P2. **Location:** ■ **Not for Publication** □ **Unrestricted**

*a. **County** Lassen **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. **USGS 7.5' Quad** Ravendale **Date** Provisional Edition 1989

T 34N ; **R** 14E ; NE ¼ **of** NE ¼ **of Sec** 22 ; MDM **B.M.**

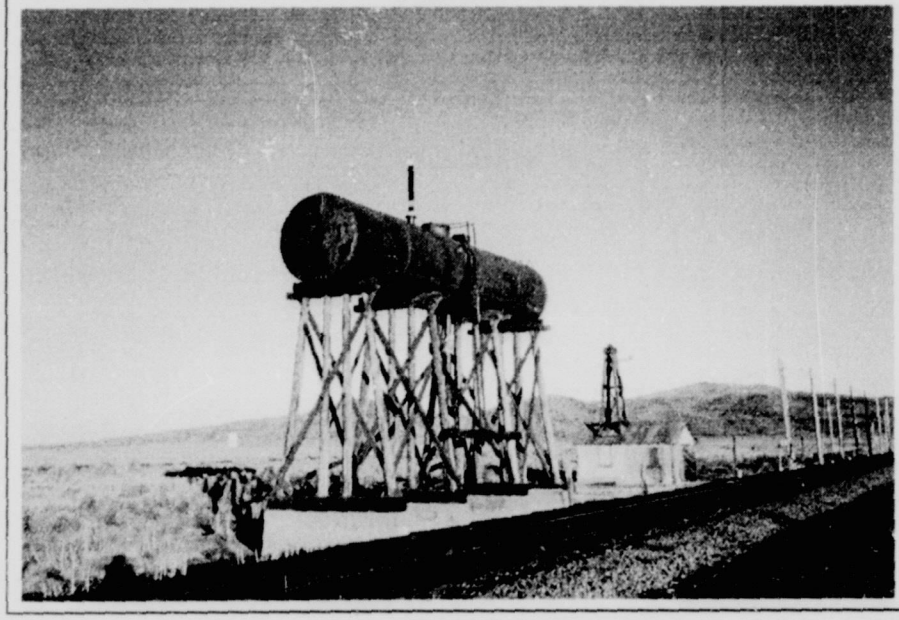
c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 722,340 mE/ 4,519,480 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
From Hwy 395 at the motel in Ravendale, drive 0.2 miles southeast along unnamed frontage road paralleling the west side of Hwy 395. The site extends north and south of the maintenance road. Railroad tracks form the west and southwest boundary of site.

*P3a. **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The Ravendale Water Tower Complex consists of a water tower, a pump house, a concrete building slab, and a historic debris scatter. The black painted water tower consists of a railroad steam engine boiler (#5053) placed on a tall wooden platform bolted to cement footings. Two pipes attach to the center of the boiler and travel down to the ground; one of them then angles and stops near a shallow ditch. The pump house is a wooden frame building with corrugated metal siding and roof. Windows are boarded up and all doors are locked. Electricity still hums from within. A concrete building slab is situated between the tower and pump house. Reinforced ferrous rods jutting from its base. In the center is a 2-tiered concrete block with ferrous rods. Old 1" water pipes lead from this block southwest to the edge of building. A ferrous valve is situated just west of the slab with an old yellow rosebush on the north side.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



There is a concentration of debris scatter north of maintenance road containing primarily food-related items.

*P3b. **Resource Attributes:** (List attributes and codes) AH2. foundation, AH4. trash scatter, AH15. standing structure, AH16. water tower

*P4. **Resources Present:** ■ Building ■ Structure □ Object ■ Site □ District □ Element of District

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 6Z (recommended ineligible)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED
Page 2 of 6

***Resource Name or #:** (Assigned by recorder) UPRR #397.90H

P5b. Description of Photo: (view, date, accession #) View toward east, water tank in foreground, Fall of 1996.

***P6. Date Constructed/Age and Source:** ■ Historic □ Prehistoric □ Both _____

***P7. Owner and Address:** Unknown, non-Federal

***P8. Recorded by:** (Name, affiliation, and address) S. Psota and C. Hansen, Far Western Anthropological Research Group, Inc., Davis, CA

***P9. Date Recorded:** 5/28/97 ***P10. Survey Type:** (Describe) Reconnaissance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California*, (Milliken 1997).

***Attachments:** □NONE ■Location Map □Continuation Sheet □Building, Structure, and Object Record
□Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record
□Artifact Record □Photograph Record ■ Other (List): Site Map

***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

*Resource Name or # (Assigned by Recorder) UPRR #397.90H

A1. **Dimensions:** a. Length 159 ft (48.5 m) (E-W) × b. Width 88 ft (27 m) (N-S)

Method of Measurement: ■ Paced ■ Taped ☐ Visual estimate ☐ Other: _____

Method of Determination (Check any that apply.): ■ Artifacts ■ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____

Reliability of Determination: ■ High ☐ Low Explain: _____

Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined ☐ Disturbances ☐ Vegetation ☐ Other (Explain): _____

A2. Depth: _____ ☐ None ■ Unknown Method of Determination: _____

*A3. **Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): _____

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.)

- Water tower: 32' x 12'2"
- Pump house: 20'2" x 16'4"
- Concrete building slab: 24'4" x 14'5"
- Debris scatter is concentrated along the edge of a shallow ditch. It centers around a sheet metal ferrous rectangular stove with tea kettle. All cans are straight-sided, sanitary-seam variety. There are approximately 40 beverage cans with church-key openings (an Olympia beer can label is still readable), and 15 hole-in-top evaporated milk cans (No.1/2) with slitted openings. There are a few No. 1 & 2, very large cans, food cans, one bucket (lard, pail type), gallon pt. can, square oil can (food or railroad maintenance), enamel basin, plastic brush, white improved earthenware sided cup with green trim banding, and graphite rods from an old battery.

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)

Lightly scattered to the north of the can concentration are the occasional can (a few rectangular tobacco size) and strap metal. This light scatter probably adds another 40 cans to the debris scatter, mainly beverage and evaporated milk cans. Barb wire from fencing is strewed across the northern portion of the site. Two pieces of sun-tinted amethyst glass bottle fragments lay northeast of pump house.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** ■ Good ☐ Fair ☐ Poor (Describe disturbances.):

*A8. **Nearest Water:** (Type, distance, and direction.) Well on site.

*A9. **Elevation:** 5,299 ft.

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

CONTINUED
Page 4 of 6 *Resource Name or # (Assigned by Recorder) UPRR #397.90H

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)

Wide open part of Madeline Plains. Native floral consists of 45% rabbitbrush, 45% big sagebrush, with scattered grasses, wildflowers and tumbleweed. East of the pump house is a row of seven electric poles, two with overhead lights. The pump house is wired to the first electrical pole.

A11. Historical Information: A rosebush covered with hundreds of buds continues to thrive next to the concrete building pad. The site is just southeast of the Ravendale community. The new water tower built in 1930, was probably placed in the old water tower's location.

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ■ 1880-1914 ■ 1914-1945 ■ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**
Railroad reached Ravendale by 1906. Water tower was replaced in 1930.

A13. Interpretations: (Discuss data potential, function(s), ethnic affiliation, and other interpretations)
While the community of Ravendale did not prosper as others did along this line (Likely), it has maintained a sense of town first centered along the railroad and then Hwy 395. This railroad maintenance complex depicts the working aspect of the railroad as opposed to the goods and services it provided to Ravendale. Its continued operation may provide water to the community. Also, these water towers were important to the general operations of the NCO/SP railroad.

A14. Remarks: A telephone pole is the site's datum. It is the third one southeast of Ravendale (currently). The concrete building pad may have been the original pump house. CA-LAS-1267/H , encompassing the historic town of Ravendale, is a large site located 329 ft (100 m) north of the water tower.

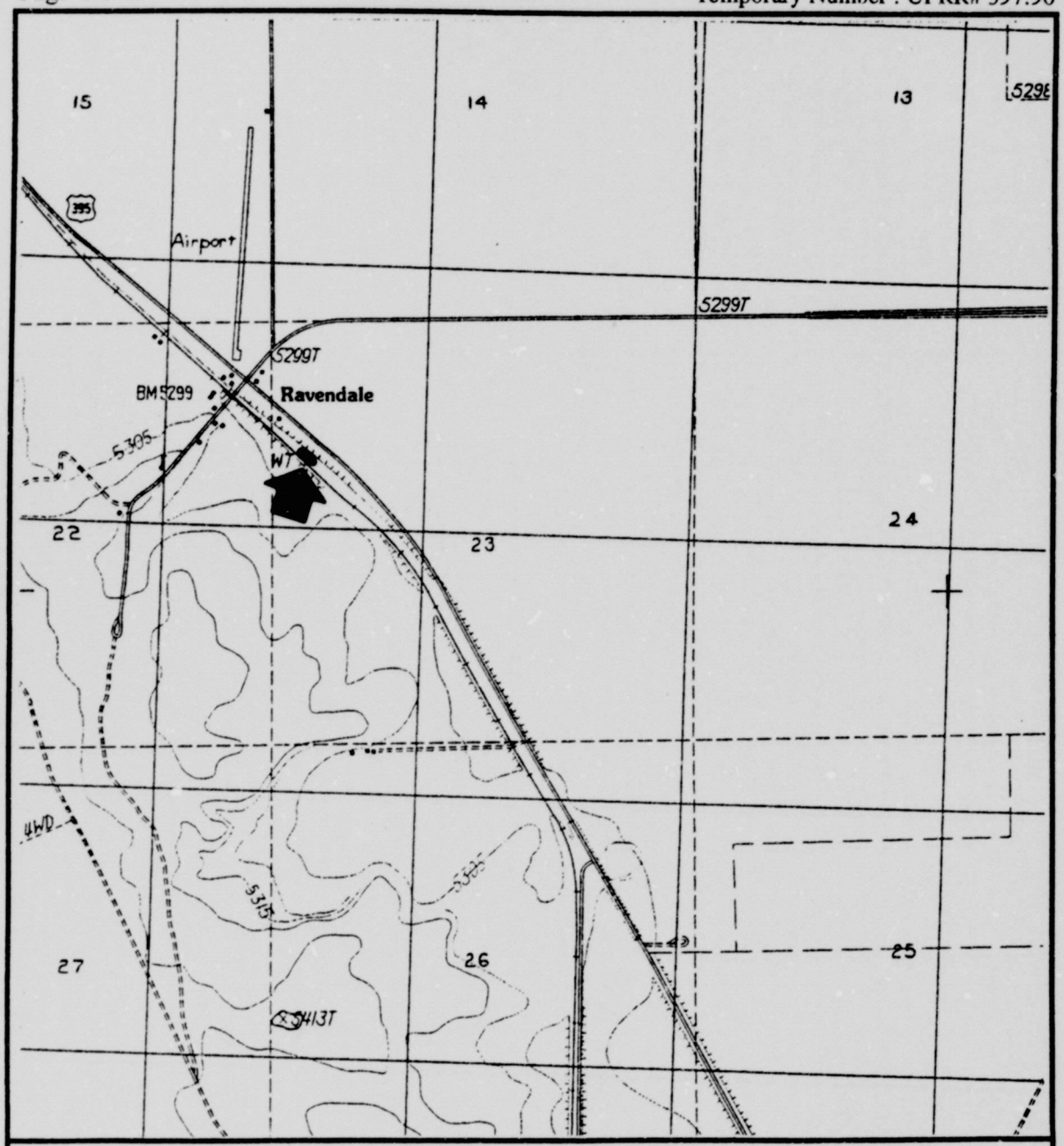
A15. References: (Documents, informants, maps, and other references)
Garate, Donald
1982 *Termo to Madeline.*

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): _____
None taken; photo P5a provided by Myra L. Frank & Associates, Inc.
Original Media/Negatives Kept at: N/A

*A17. Form Prepared by: S. Psota and C. Hansen Date: 5/28/97
Affiliation and Address: Far Western Anthropological Research Group, Inc., P.O. Box 413, Davis, CA 95617

State Number :
Agency Number:
Temporary Number : UPRR# 397.9

State Number :
Agency Number:
Temporary Number : UPRR# 397.90



A PORTION OF
RAVENDALE QUADRANGLE
7.5 MINUTE
PROVISIONAL EDITION 1989

TN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

1 0 1
MILES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 *Resource Name or #: (Assigned by recorder) UPRR #403.84

P1. Other Identifier: _____

*P2. Location: ■ Not for Publication □ Unrestricted

*a. County Lassen and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Termo Date Provisional Edition 1989

T 35N ; R 13E ; SE ¼ of NE ¼ of Sec 36 ; MDM B.M.

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 715,190 mE/ 4,525,650 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
From Termo drive southeast on Hwy 395 for 0.8 miles to the unnamed seasonal drainage at Post Mile 114.24. Walk 135 meters southwest to railroad line at BDT Bridge 403.84. The site is situated northwest of the bridge on the north side of the drainage.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This site is a lithic scatter, predominately obsidian debitage, with flake density of 1-3/m^2. Also noted was one non-diagnostic point base, occasional CCS flakes and one handstone fragment. Some flakes have cortex, while most are without. There are no primary decortation flakes. There is a cluster of dozens of white CCS flakes in the northern portion of the site, an area with very few obsidian flakes.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

*P3b. Resource Attributes: (List attributes and codes) AP2. lithic scatter

*P4. Resources Present: □ Building □ Structure □ Object ■ Site □ District □ Element of District □ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) UPRR-1, frame #24a; view NE across site from BDT bridge, truck on Hwy 395 in background.

*P6. Date Constructed/Age and Source: □ Historic ■ Prehistoric □ Both _____

*P7. Owner and Address: Unknown, non-Federal land ownership.

*P8. Recorded by: (Name, affiliation, and address) R. Milliken and S. Psota, Far Western Anthropological Research Group, Inc., P.O. Box 413, Davis, CA 95617

*P9. Date Recorded: 5/16/97 *P10. Survey Type: (Describe) Reconnaissance

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 7 (undetermined)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED
Page 2 of 6

***Resource Name or #:** (Assigned by recorder) UPRR #403.84

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California*, (Milliken 1997).

***Attachments:** ☐NONE ■Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ■ Other (List): Site Map

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

 *Resource Name or # (Assigned by Recorder) UPRR #403.84

A1. **Dimensions:** a. Length 70 M (N-S) × b. Width 70 M (E-W)
Method of Measurement: ■ Paced ☐ Taped ☐ Visual estimate ☐ Other: _____
Method of Determination (Check any that apply.): ■ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____
Reliability of Determination: ■ High ☐ Low Explain: Good visibility.
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other (Explain): _____

A2. Depth: _____ ☐ None ■ Unknown Method of Determination: Not determined.

*A3. **Human Remains:** ☐ Present ☐ Absent ☐ Possible ■ Unknown (Explain): Sandy soil may have buried component.

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.) None

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)
One broken projectile point base, probably eared; of black, shiny, opaque obsidian. All other flaked stone noted is debitage, many colors of obsidian, also white chert. A single handstone fragment was noted.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** ☐ Good ☐ Fair ☐ Poor (Describe disturbances.): Railroad and access maintenance roads cut through west portion of site. Additionally, there is a light scatter of recent materials [flasks and rusted cans (beer or soda)] on the eastern portion of site.

*A8. **Nearest Water:** (Type, distance, and direction.) An unnamed seasonal creek forms the southeast boundary.

*A9. **Elevation:** 5,295 ft.

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.) Vegetation on the site is comprised of 65% big sagebrush, 35% rabbitbrush, with a scatter of grasses and occasional wildflowers. Site soil is light grey silt with occasional small angular pebbles of volcanic rock. There are shrinking and swelling cracks throughout area.

A11. Historical Information: N/A

*A12. **Age:** ■ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945 ☐ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

CONTUNUED
Page 4 of 6 *Resource Name or # (Assigned by Recorder) UPRR #403.84

A14. Remarks: 0.3 miles to the north is CA-LAS-2512, a small lithic scatter that was recommended ineligible for NRHP following shovel probe testing in 1994 (Delacorte et al. 1995: 4.22-32-34).

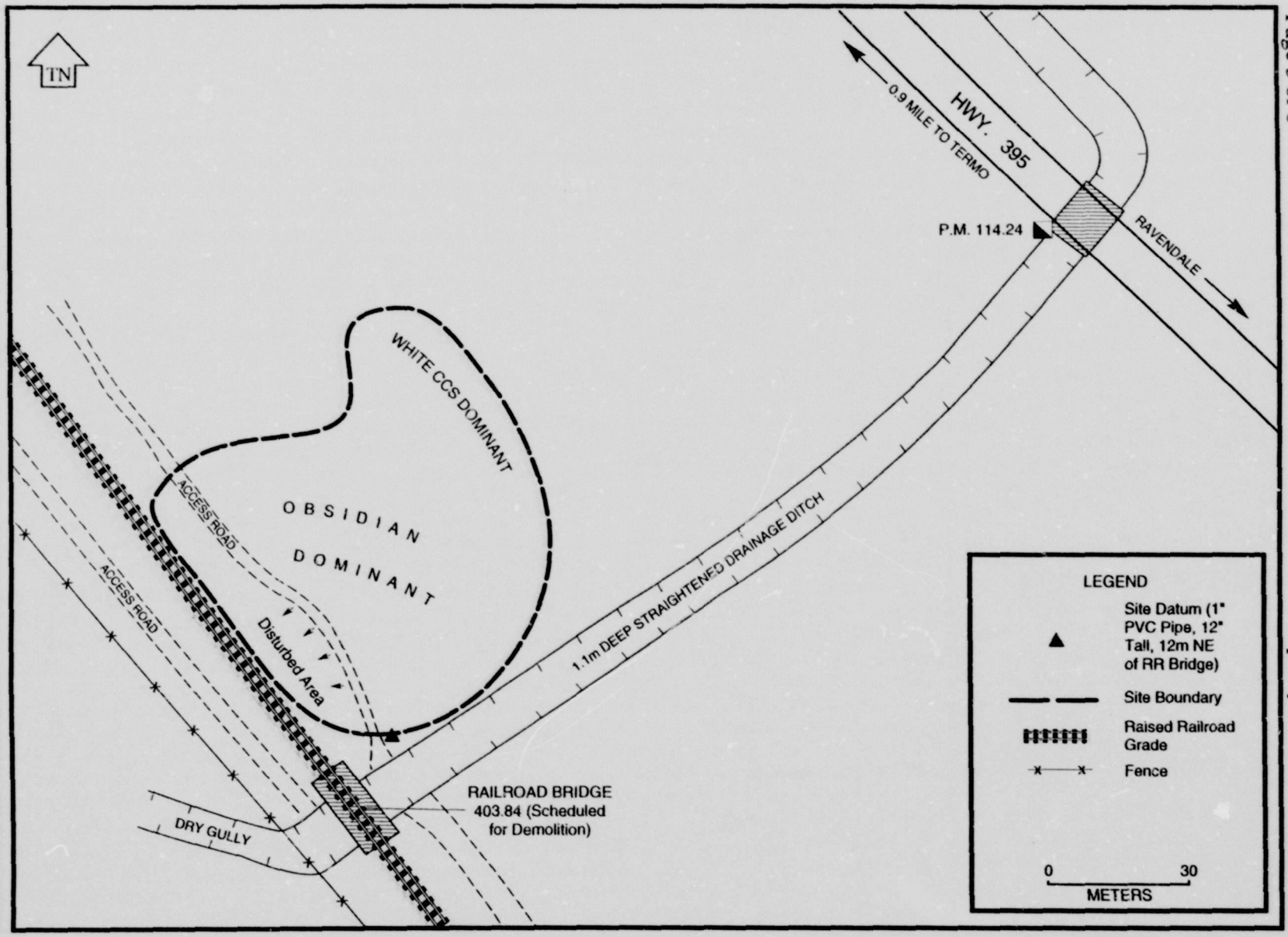
A15. References: (Documents, informants, maps, and other references)
Report on Archaeological Test Investigations Along the Proposed Tuscarora Pipeline, from Malin, Oregon to Tracy, Nevada by M. Delacorte, R. Reno, T. Burke, S. Mikesell, and K. McGuire (1995) - limited distribution document by Far Western Anthropological Research Group, Inc.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): Roll: UPRR-1.

Mo.	Day	Time	Frame	Subject/Description	Unit #	Facing
5	16	8:45	24a	View across site from BDT bridge, truck on Hwy 395 in background.	403.84	NE

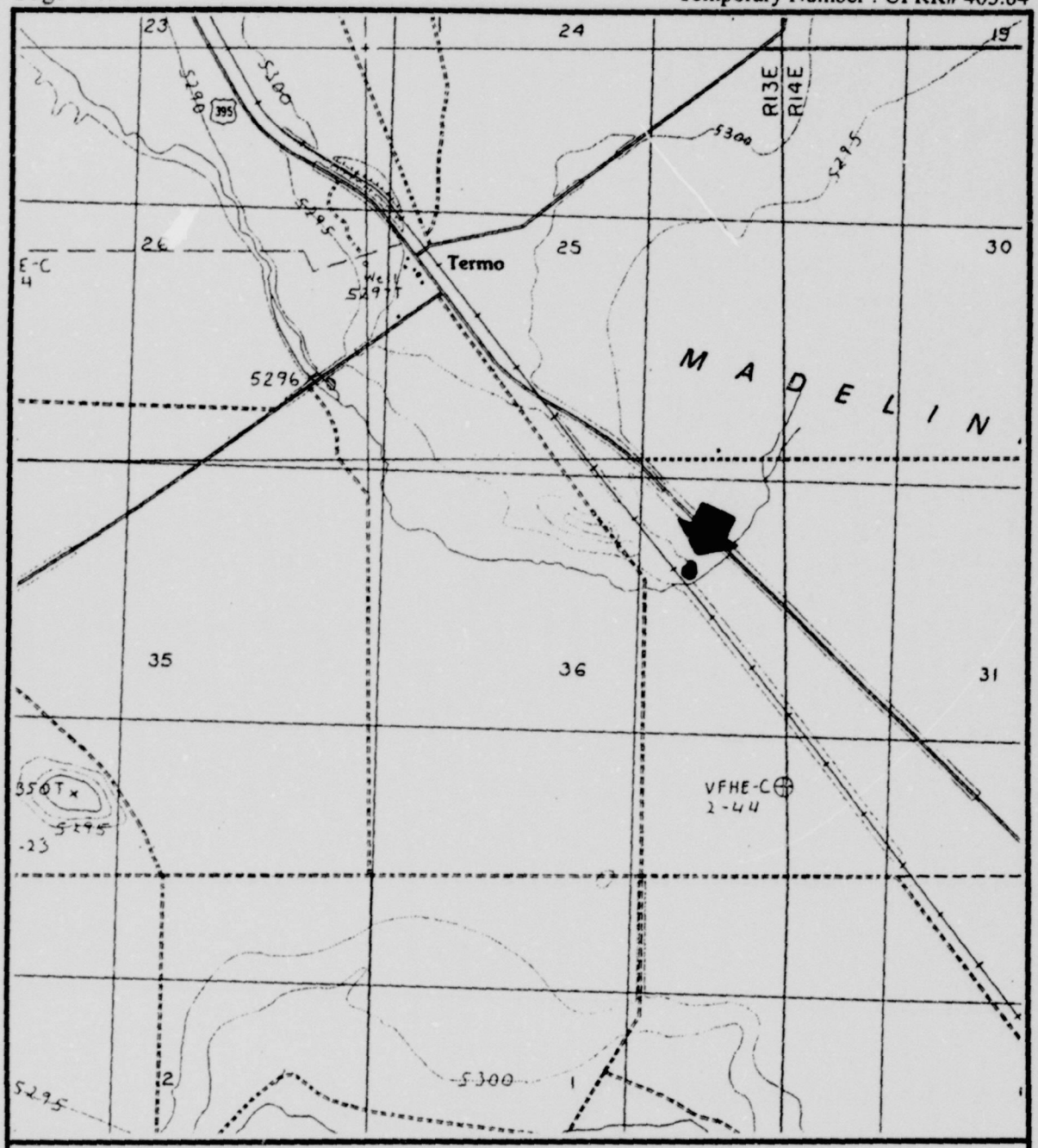
Original Media/Negatives Kept at: Far Western Anthropological Research Group, Inc.

*A17. Form Prepared by: R. Milliken and S. Psota Date: 5/16/97
Affiliation and Address: Far Western Anthropological Research Group, Inc., P.O. Box 413, Davis, CA 95617



State Number :
Agency Number:
Temporary Number : UPRR# 403.84

State Number :
Agency Number:
Temporary Number : UPRR# 403.84



A PORTION OF
TERMO QUADRANGLE
7.5 MINUTE
PROVISIONAL EDITION 1989

TN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

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MILES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 6Z (recommended ineligible)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 ***Resource Name or #:** (Assigned by recorder) UPRR #418.18H

P1. Other Identifier: Madeline Water Tower Complex

***P2. Location:** ■ **Not for Publication** □ **Unrestricted**

***a. County** Lassen **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** Madeline **Date** Photoinspected 1975

T 37N ; **R** 13E ; NE ¼ **of** NE ¼ **of Sec** 16 ; MDM **B.M.**

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 712300 mE/ 4547020 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
From Hwy 395 and Lassen Rd in Madeline, drive south on Hwy 395 for 0.2 miles to an eastern gravel driveway. Eastern boundary of the site is the railroad tracks.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The Madeline Water Tower Complex consists of a large black painted water tower, pump house, and an empty pond littered with a can scatter. The water tower is round with a four-sided frame bolted into five cement footings. At its base is a wooden covered water valve and metal pipe hose. The pump house is a wood frame, yellow painted metal corrugated sided building on a cement slab. Portions of visible pipe run to the water tower. A fire extinguisher box has been nailed to the building's side. The unlocked sliding metal door is ajar, and glass windows unbroken, though a few are missing. Inside electricity still hums from the box. There is a 1950s General Electric four-burner stove, and old Christmas pageant materials are stored here. There is a cement pond, 82' in diameter, approximately 12' deep. The concrete is 6" thick. At the base of the pond is a 1950s can dump. Electric lines link water tower to pump house and to a telephone pole.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

***P3b. Resource Attributes:** (List attributes and codes) AH15. structure, AH4. trash scatter, AH16. water tower.

***P4. Resources Present:** ■ Building ■ Structure ■ Object ■ Site □ District □ Element of District □ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) View of water tank and pump, fall of 1996.

***P6. Date Constructed/Age and Source:** ■ Historic □ Prehistoric □ Both _____

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 6Z (recommended ineligible)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED
Page 2 of 6

***Resource Name or #:** (Assigned by recorder) UPRR #418.18H

***P7. Owner and Address:** Private - town of Madeline

***P8. Recorded by:** (Name, affiliation, and address) S. Psota and C. Hansen, Far Western Anthropological Research Group, Inc., Davis CA ***P9. Date Recorded:** 5/28/97

***P10. Survey Type:** (Describe) Reconnaissance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California*, (Milliken 1997).

***Attachments:** ☐NONE ■Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ■ Other (List): Site Map

***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-_____

*Resource Name or # (Assigned by Recorder) UPRR #418.18H

A1. **Dimensions:** a. Length 129 ft (39 m) (N-S) × b. Width 94 ft (29 m) (E-W)

Method of Measurement: ☐ Paced ■ Taped ☐ Visual estimate ☐ Other. _____

Method of Determination (Check any that apply.): ■ Artifacts ■ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____

Reliability of Determination: ■ High ☐ Low Explain: _____

Limitations (Check any that apply): ■ Restricted access ☐ Paved/built over ■ Site limits incompletely defined ☐ Disturbances ☐ Vegetation ☐ Other (Explain): Portions of other railroad maintenance features lie east and possibly south of site (Garate 1982).

A2. Depth: _____ ☐ None ■ Unknown Method of Determination: _____

*A3. **Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): _____

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.)

- Water tower: 27' diameter
- Pump house: 13'4" x 17'4"
- Cement pond: 82' diameter, approximately 12' deep; cement was mixed with local obsidian pebbles when made. Pond is filled with silt and local soil, red cinder cobbles (used for roads), bricks, and the 1950's can scatter.
- 1950s scatter: 90% cans that have been opened by knives (slit), church-key, or pull-tab.

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)

There is a light scatter of cans along the southern boundary of the pond.

Can scatter - most are various size food cans (50% corrugated) with rectangular oil cans, beer cans, and strap metal. Bottles are all machine made with adhesive decals for Pepsi and "Mt. Lassen/Beverages..." made in Susanville from a 1950s Owens Illinois bottle. Bottles are for liquor, soda, condiments, and a cheeseborough salve jar.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. **Site Condition:** ☐ Good ■ Fair ☐ Poor (Describe disturbances.):

*A8. **Nearest Water:** (Type, distance, and direction.) An east-west irrigation ditch runs just south of the southern boundary, crosses under the track, and runs north-south just east of the railroad tracks.

*A9. **Elevation:** 5,314 ft.

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.) Big sagebrush with alfalfa and grasses on Madeline Plains. Wide open to the elements. The APE is a slightly built up area compared to surrounding north and south boundaries. Lots of Swallows nest under bulb of water tower.

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

CONTINUED
Page 4 of 6 *Resource Name or # (Assigned by Recorder) UPRR #418.18H

A11. Historical Information: This 1930s water tower replaced the original turn of the century tower in the exact location.

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ■ 1880-1914 ■ 1914-1945 ■ Post 1945 ☐ Undetermined Describe position in regional prehistoric chronology or factual historic dates if known:

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)
Madeline was one of the main railroad maintenance areas for the NCO/SP line and an important commercial link to nearby communities and ranches. The arrival of the NCO Railroad at the turn of the century concentrated the community of Madeline into a town. For seven years (1901-1908), this town was either the terminus or acted as the terminus town for the railroad. It supported a large hotel (since moved to Alturas) and other companies providing amenities to the railroad workers, and its passengers and cargo. The town of Madeline owns and maintains the pump house, probably to supply water to the community. The railroad water tower complex area recorded here is an important part of the town and of the original larger railroad siding complex.

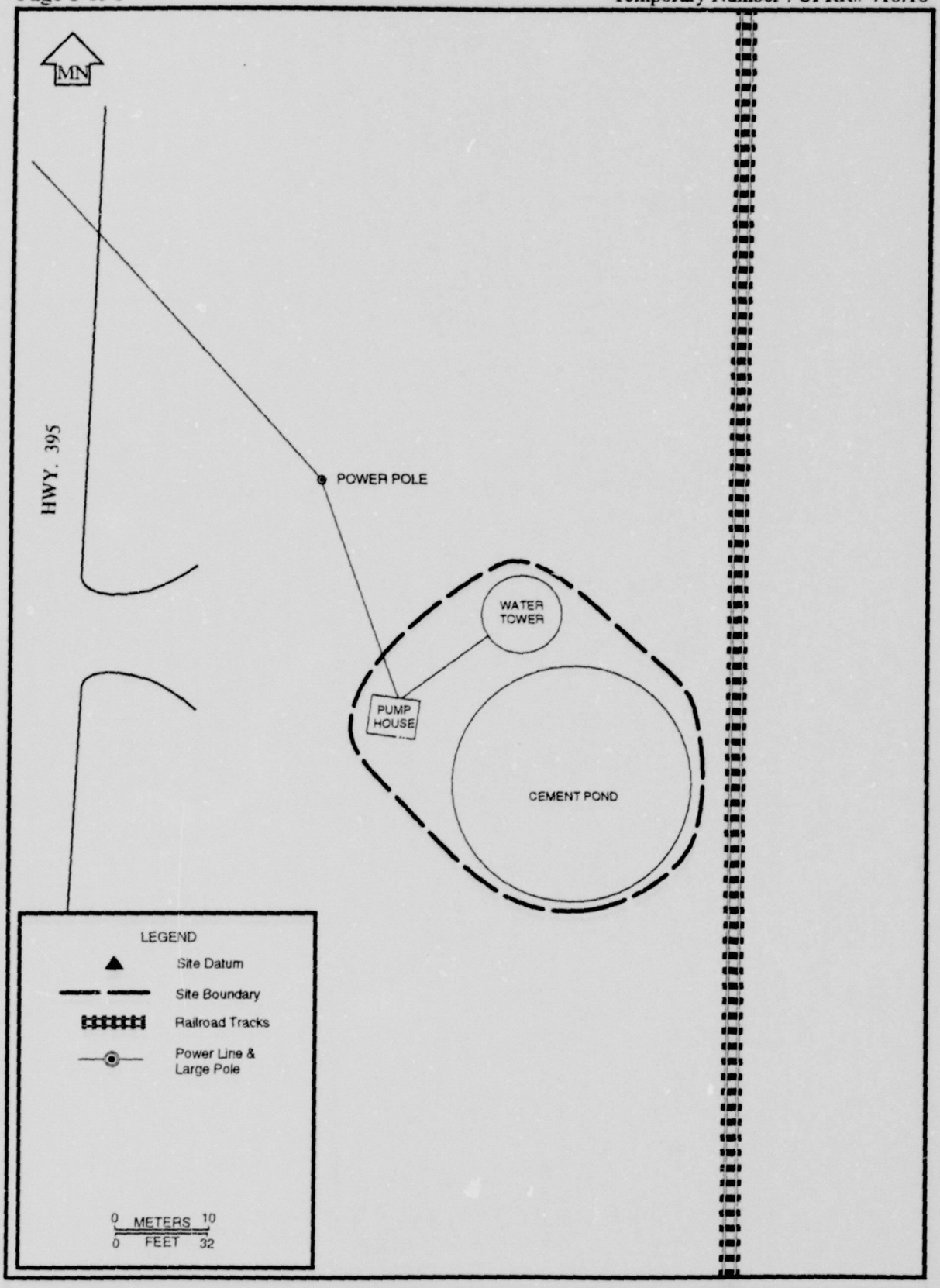
A14. Remarks: This railroad operations area is located a short distance 754 ft (230 m) from the historic town of Madeline, assigned the trinomial CA-LAS-1633/H.

A15. References: (Documents, informants, maps, and other references)
Garate, Donald
1982 *Termo to Madeline.*

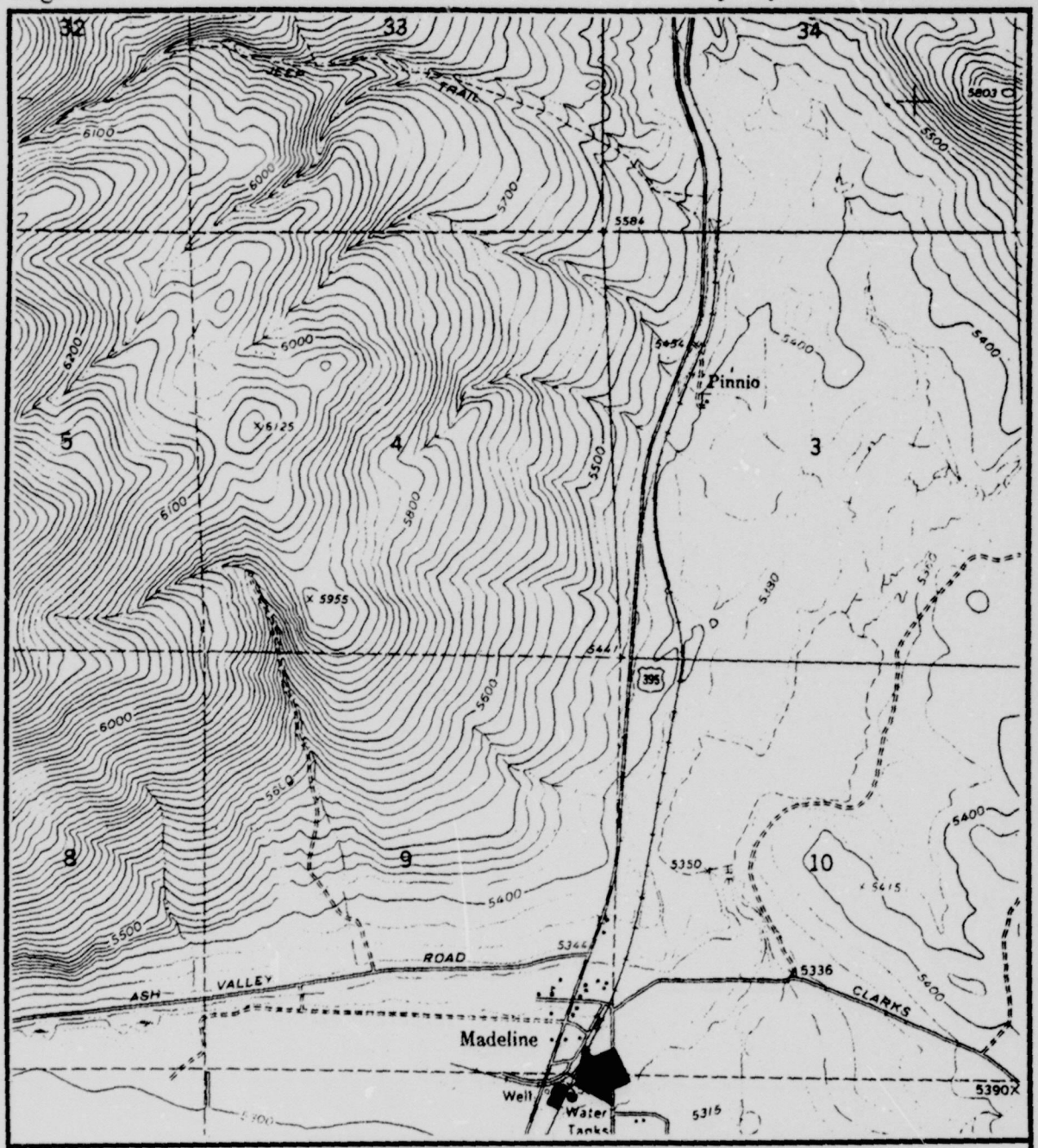
A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): _____
None taken; photo P5A, courtesy of Myra L. Frank & Associates, Inc.
Original Media/Negatives Kept at: N/A

*A17. Form Prepared by: S. Psota and C. Hansen Date: 5/28/97
Affiliation and Address: Far Western Anthropology Research Group, Inc., P.O. Box 513, Davis, CA 95617

State Number :
Agency Number:
Temporary Number : UPRR# 418.18



State Number :
Agency Number:
Temporary Number : UPRR# 418.18



A PORTION OF
MADELINE QUADRANGLE
7.5 MINUTE
1962; PHOTOINSPECTED 1975

TN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

1 0 1
MILES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 6Z (recommended ineligible)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 6 ***Resource Name or #:** (Assigned by recorder) UPRR #438.70H

P1. **Other Identifier:** Likely Water Tower Complex

*P2. **Location:** ■ **Not for Publication** □ **Unrestricted**

*a. **County** Lassen **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. **USGS 7.5' Quad** Tule Mtn. **Date** Photorevised 1982

T 39N ; **R** 13E ; NW ¼ **of** SE ¼ **of Sec** 8 ; MDM **B.M.**

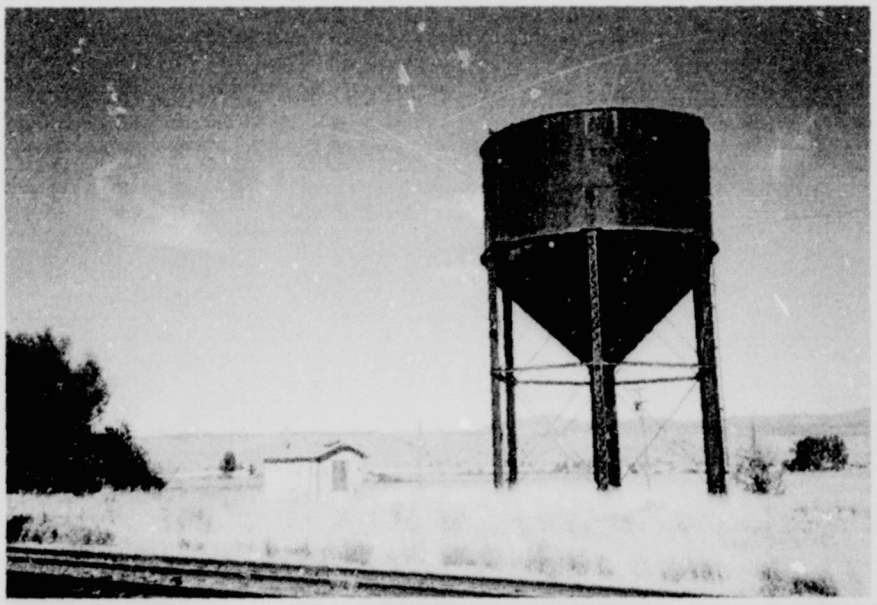
c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 709,560 mE/ 4,567,000 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
From Hwy 395 in Likely, travel east on Jess Valley Rd for 0.1 miles to railroad intersection. Walk south for 135 meters past row of non-native willows to first cottonwood tree west of tracks. This is the site datum.

*P3a. **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The Likely Water Tower Complex consists of a railroad ferrous water tank (rebuilt in 1931, probably in the same location as the 1909 one) with pump house and underground hook-up, a rectangular 2-tiered concrete building slab (reinforced with threaded ferrous rods), water pipes, two areas of underground storage containers, and an "L" shaped building (Building 1). The boarded up pump house has a wooden frame with corrugated metal siding on a concrete slab. The black painted water tower rests on six cement blocks in a raised dirt area. Portions of the pumping mechanisms are visible approximately 5' below present surface. There is a small spur in the track where a third line veers from the main track and appears to head southeast to a granery. There is one above-ground water pipe in the southeastern portion of the site; a nearby concrete slab with two ferrous plates covering holes; and to the northeast there is a valve approximately 2' below the present surface covered by wooden pallet. There is a rectangular depression in the northeast portion of the site. - a possible building pad. West of the track are the wooden foundation of a building (north of Building 1), and a cluster of water pipes, three capped cisterns or wells, and a plastic vent.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



*P3b. **Resource Attributes:** (List attributes and codes) AH15. structure, AH5. cistern or well, AH2. foundation, AH16. water tower.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-LAS-
NRHP Status Code 6Z (recommended ineligible)
Other Listings _____
Review Code _____ Reviewer _____ Date _____

CONTINUED
Page 2 of 6

***Resource Name or #:** (Assigned by recorder) UPRR #438.70H

***P4. Resources Present:** ■ Building ■ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) Looking towards Warner Mtns. with pump house, water tower & poplars, fall of 1996.

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both _____

***P7. Owner and Address:** Private - Town of Likely

***P8. Recorded by:** (Name, affiliation, and address) S. Psota and C. Hansen

***P9. Date Recorded:** 5/27/97

***P10. Survey Type:** (Describe) Reconnaissance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railroad Right-of-way, Lassen and Modoc Counties, California.* (Milliken 1997).

***Attachments:** ☐NONE ■Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ■ Other (List): Site Map

***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

Page 3 of 6 *Resource Name or # (Assigned by Recorder) UPRR #438.70H

A1. **Dimensions:** a. **Length** 242 ft (74 m) (N-S) × **b. Width** 137 ft (42 m) (E-W)
Method of Measurement: ☐ Paced ■ Taped ☐ Visual estimate ☐ Other: _____
Method of Determination (Check any that apply.): ☐ Artifacts ■ Features ☐ Soil ■ Vegetation ■ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ■ Property boundary ☐ Other (Explain): _____
Reliability of Determination: ■ High ☐ Low Explain: _____
Limitations (Check any that apply): ■ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other (Explain): _____

A2. Depth: _____ ☐ None ■ Unknown Method of Determination: _____

*A3. **Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): _____

*A4. **Features:** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.)
- Water tower: circular with 6-sided frame, 40' deep; raised earth portion links to pump house with tower.
- Pump house: 17' x 12'; metal painted yellow.
- Building 1: yellow painted, board and grooved and porch; 41' & 9'5" x 22'6" ("L" shaped).
- Concrete building slab: 38' x 15'.
- Wooden building foundation: 42'6" x 15' & 33' ("L" shaped?).

*A5. **Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)
Various railroad related parts, such as spikes, plates, tiers, etc., litter near the main tracks. Nothing else other than features and vegetation noted.

*A6. **Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record and identify where specimens are curated.)

*A7. **Site Condition:** ☐ Good ■ Fair ☐ Poor (Describe disturbances.): Dirt road runs through most of the site. Sequences of track, plus facility construction and destruction have rendered the entire area highly disturbed.

*A8. **Nearest Water:** (Type, distance, and direction.) A small creek curves around the site, runs past the water tower complex, and heads northeast near the pump house.

*A9. **Elevation:** 4,450 ft.

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.) Imported railroad gravel bed contains obsidian cobbles. Vegetation consists of native deerbrush and grasses with four poplar trees to the southeast, a few cottonwoods around Building 1 and on western boundary. Just north of site, large non-native willows line both sides of the track. Tree 1 is a non-native and grows through northeast portion of a wooden building foundation.

A11. Historical Information: The Nevada-California-Oregon line was built through Likely in 1907. When Southern Pacific purchased this railroad, they standardized the guage (approximately 1927). They replaced the Likely Water Tower in 1931. The town of Likely is situated 800 ft west of this area. The town still retains some of the historic buildings such as the post office and general store.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

Primary # _____
Trinomial CA-LAS-

CONTINUED
Page 4 of 6

*Resource Name or # (Assigned by Recorder) UPRR #438.70H

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ■ 1880-1914 ■ 1914-1945 ■ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)
The area recorded under this site record is where the railroad unloaded and took on goods and passengers while it refilled water. So in many ways, this was the focal point for the town of Likely from 1907 until service declined. This site provided the stop-over point on a long railroad journey, or the shipping off or on of cargo needed to sustain this community.

A14. Remarks: The northeast portion of the site may have been scraped to form the raised earth platform for the 1931 water tower. The western portion of site may have been for passengers while eastern portion was for maintenance and non-passenger cargo. The main railroad tracks (and entire railroad line) running through the site have been recorded separately. Patricia S., a waitress at the Most Likely Cafe stated to S. Psota, that an African-American family with nine children lived in Building 1 in the past.

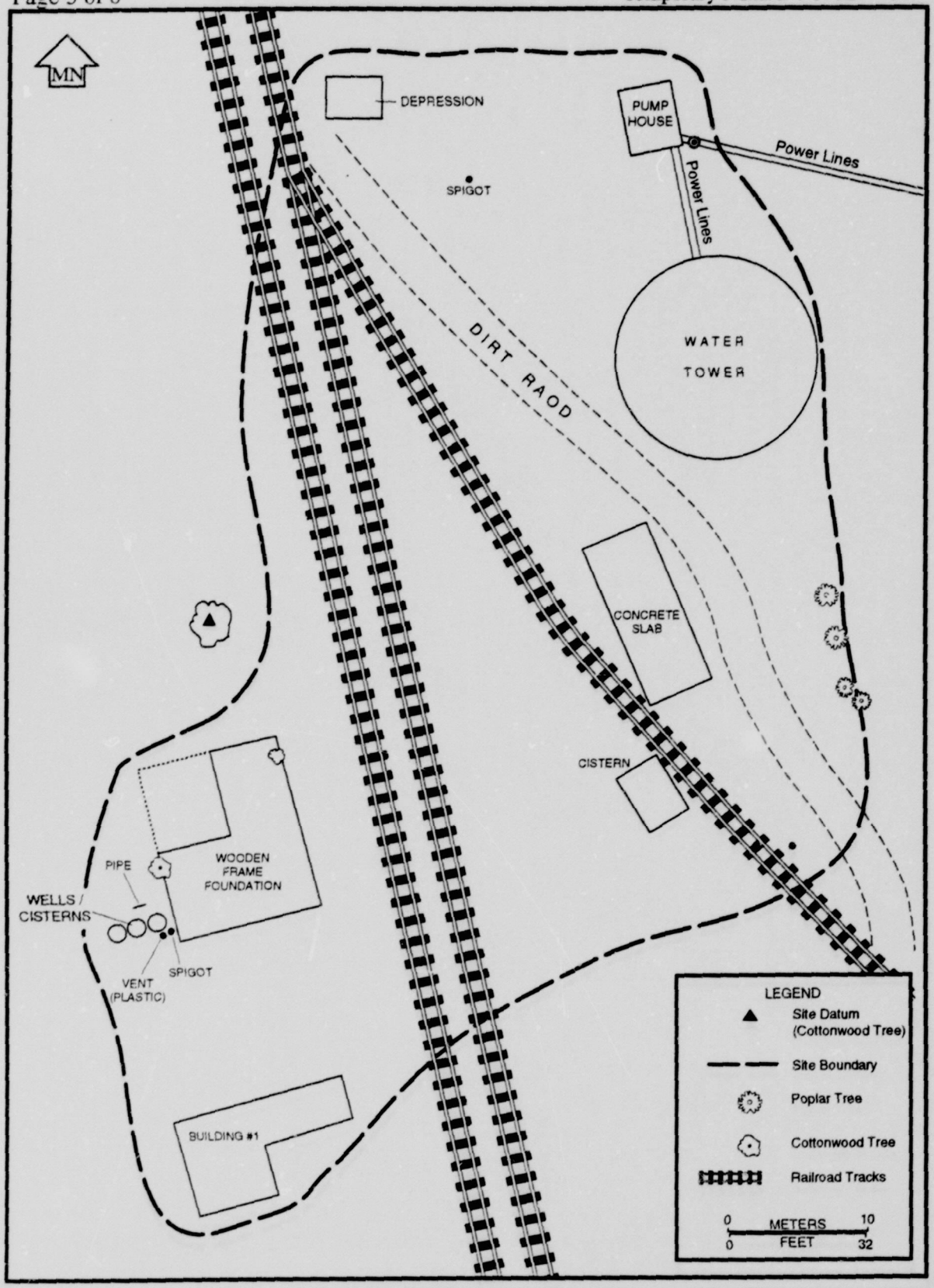
A15. References: (Documents, informants, maps, and other references)
Garate, Donald
1982 *Termo to Madeline.*

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): _____
None taken; photo P5a. courtesy of Myra L. Frank & Associates, Inc.
Original Media/Negatives Kept at: N/A

*A17. **Form Prepared by:** S. Psota and C. Hansen **Date:** 5/27/97
Affiliation and Address: Far Western Anthropological Research Group, Inc., Davis, California

*Required information

State Number :
Agency Number:
Temporary Number : UPRR# 438.7



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Agency Number:
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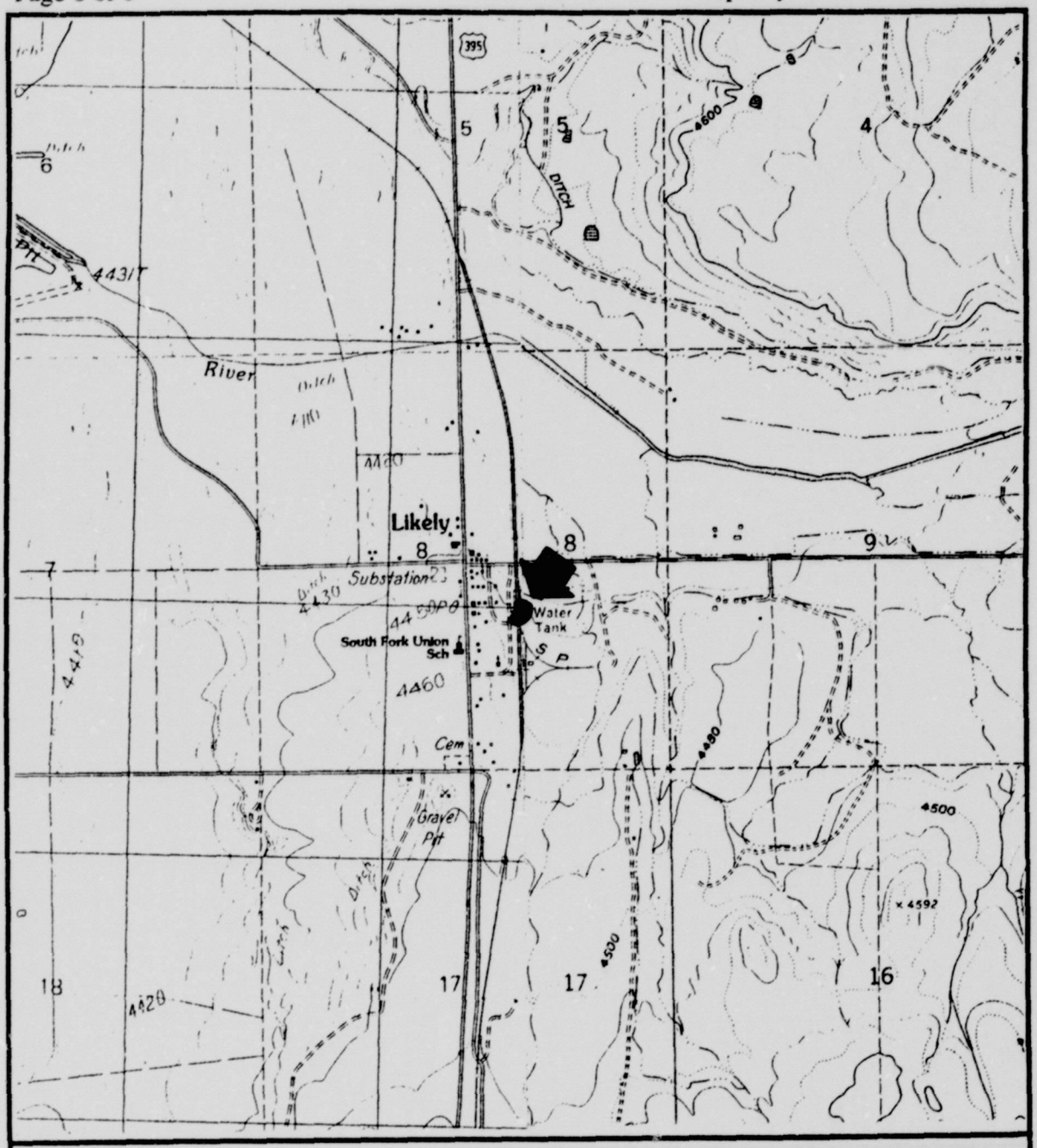


PORTIONS OF
LIKELY AND TULE MOUNTAIN QUADRANGLES
7.5 MINUTE
PROVISIONAL EDITION 1990; 1962, PHOTOREVISED 1982

TN

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

1 0 1
MILES

APPENDIX B

ISOLATE RECORD

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 2 ***Resource Name or #:** (Assigned by recorder) ISOLATE #UPRR-1

P1. **Other Identifier:** _____

*P2. **Location:** ■ **Not for Publication** □ **Unrestricted**

*a. **County** Lassen **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. **USGS 7.5' Quad** Pete's Valley **Date** Provisional Edition 1989

T 31N ; R 14E ; NE ¼ of NE ¼ of Sec 4 ; MDM **B.M.**

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10 , 720,600 mE/ 4,495,480 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

From Hwy 395 drive west on Karlo Road for 4.8 miles to a fork in road. Take the right fork (Horse Lake 4-wheel drive road) and travel west for 3.95 miles to Railroad Springs (conditions of road varies). Proceed westward 0.45 miles to a road split; take the left hand road and travel 0.5 miles to the railroad, then continue another 0.75 miles west to site Temp. No. UPRR 379.95 just north of the railroad access road at bridge 379.95, adjacent to a drainage with a juniper tree. The isolate lay on rocky ground among low sagebrush about 100 meters northwest of the site datum. The location is also about 100 northeast of railroad bridge 380.1.

*P3a. **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

A fragmented projectile point of obsidian was found on the ground surface about 10.0 miles east of an unnamed dirt road. The point is a base and midsection of gray, partially translucent obsidian, not streaked or banded. It is dart-sized, with shallow corner-notching and a convex base. Some may call it a poorly-made Elko Corner-notched point, others may call it a Fish Slough Side-notched point. It was left in place.

*P3b. **Resource Attributes:** (List attributes and codes) N/A

*P4. **Resources Present:** □ Building □ Structure □ Object □ Site □ District □ Element of District ■ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) (UPRR-1, frame 12) Clipboard at Isolate, BDT bridge 380.1 in background to SSW (photo not reproduced here

*P6. **Date Constructed/Age and Source:** □ Historic ■ Prehistoric □ Both _____

*P7. **Owner and Address:** Bureau of Land Management, 2950 Riverside Dr., Susanville, CA 96103

*P8. **Recorded by:** (Name, affiliation, and address) Randy Milliken, Far Western Anthropological Research Group, Inc., P.O. Box 413, Davis, CA 95617

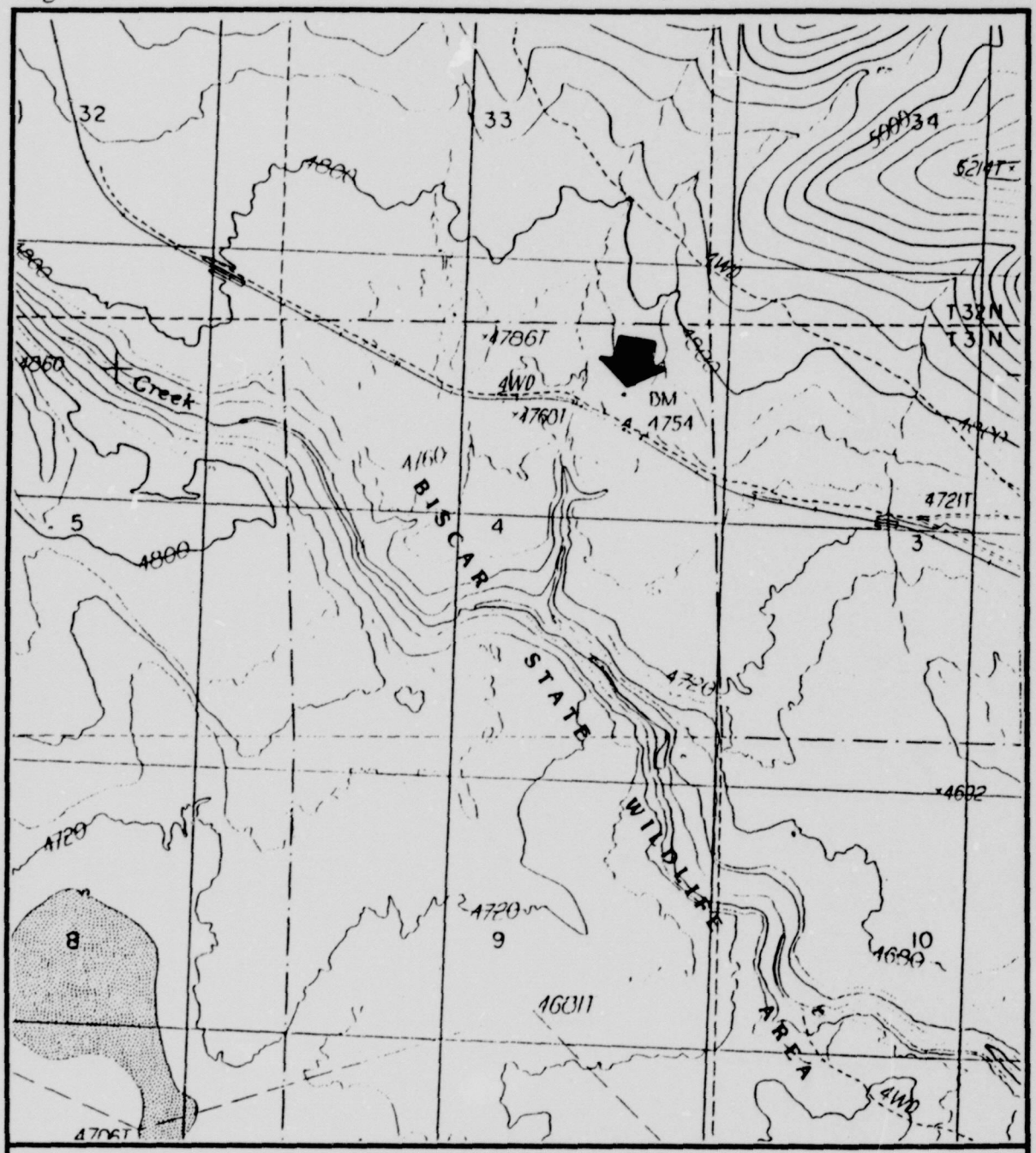
*P9. **Date Recorded:** 5/13/97

*P10. **Survey Type:** (Describe) Reconnaissance

*P11. **Report Citation:** (Cite survey report and other sources, or enter "none.") *Cultural Resources Inventory of 24 Locations Along Union Pacific Railrod Right-of-way, Lassen and Modoc Counties, California.* (Milliken 1997)

***Attachments:** □NONE ■Location Map □Continuation Sheet □Building, Structure, and Object Record
□Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record
□Artifact Record □Photograph Record □ Other (List):_____

State Number :
Agency Number:
Temporary Number : ISOLATE #UPRR-1



A PORTION OF
PETES VALLEY QUADRANGLE
7.5 MINUTE
PROVISIONAL EDITION 1989

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000

1 0 1
MILES

APPENDIX C

PHOTOGRAPH RECORD

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PHOTOGRAPH RECORD

Primary # _____
HRI # _____
Trinomial _____

Page 1 of 1 Project Name: UPRR Year 1997
Camera Format: Ricoh XR-10 Lens Size: 35x70
Film Type and Speed: TMAX Negatives Kept at: _____

Mo.	Day	Time	Exp./ Frame	Subject/Description	Unit #	Facing
5	12	11:00	3	Location 387.53 - no site.	387.53	SSW
5	12	1:35	4	View across site from BDT bridge.	390.46	WNW
5	12	1:45	5	View across site toward datum.	390.46	E
5	12	3:15	6	Site on left,BDT bridge center, Snowstorm Creek on left.	372.60	S
5	13	8:55	7	View of BDT bridge on Mud Lake.	368.36	NNW
5	13	9:15	8	Overview of Mud Lake, bridge in distance.	370.42	S
5	13	10:10	9	View of BDT bridge and Deep Creek.	371.80	NNE
5	13	1:30	10	View across site, S. Psota in center.	379.95	SW
5	13	1:30	11	View across site, S. Psota in center.	379.95	SW
5	13	2:15	12	Clipboard at Isolate #UPRR-1, BDT bridge in distance.	380.08	W
5	13	2:25	13	UPRR P-1 at left, new access road bears right.	380.08	E
5	13	2:35	14	UPRR P-1, showing rock berm.	379.95	SE
5	-	-	15	-	-	-
5	-	-	16	-	-	-
5	-	-	17	-	-	-
5	-	-	18	-	-	-
5	14	11:20	19	View SE across western portion of site from BDT Bridge 372.60.	372.60	SE
5	14	11:25	20	View east across north portion of site from BDT Bridge 372.60	372.60	E
5	14	2:30	21	Overview of site, datum tree at right, telephone booth in background.	392.5	ENE
5	14	2:40	22	View WSW across site toward datum tree from telephone booth.	392.5	WSW
5	15	11:20	23	Unnumbered culvert along right-of-way north of 425.91.	-	SE
5	15	12:20	24	Bridge 425.91.	425.91	W
5	16	8:45	24a	View across site from BDT bridge, truck on Hwy 395 in background.	403.84	NE

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KUNSTLAAN 44 AVENUE DES ARTS
BRUSSELS 1040 BELGIUM
TELEPHONE: 32-2-549-5230
FACSIMILE: 32-2-502-1598

July 25, 1997

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-25-97
DOCUMENT # 7-25-97 2:41:14pm
FD# 32760 WE.07

BY HAND

Michael J. Dalton, III
Wichita Study Director
Surface Transportation Board
1925 K Street, N.W.
Mercury Building
Room 258
Washington, D.C. 20423-0001

ENVIRONMENTAL DOCUMENT

Re: Finance Docket No. 32760,
Wichita Mitigation Study

Dear Mr. Dalton:

Union Pacific's President, Jerry Davis, is responding in a separate letter to some aspects of the July 8, 1997 letter to you from Mayor Bob Knight and Sedgwick County Chairman Tom Winters. I wish to comment on a few others from a legal perspective.

First, I was surprised by their statement that SEA will study additional grade separations at their request, both because I would have expected Union Pacific to be informed about this expanded scope of your studies and because these additional separations do not appear to be warranted by the results of SEA's investigations. As we understand it, SEA made its initial independent judgment about the scope of potentially justified mitigation measures when it evaluated options for zero, one or two grade separations. While we have no objection to SEA studying, at the request of Wichita and the County, additional construction projects not warranted by merger impacts, those parties must bear the cost of the studies, not Union Pacific.

Second, the Knight/Winters letter contains assertions based on "research" into the demand for Powder River Basin coal and assertions about the reasons Union Pacific revised its operating plan. If Wichita has concrete information on either subject, it ought

to be presented to us so that we will have an opportunity to comment on it. Until that happens, these assertions should not be considered.

Third, Mayor Knight and Chairman Winters express amazement about the possibility that speed increases might be among the mitigation measures for Wichita. It is difficult to understand how they could be amazed. Shortly after the mitigation study was announced, Union Pacific began to take steps to increase train speeds through downtown Wichita in order to reduce the effects of the merger. As you know, Wichita's lawyer has been quizzing us about those speed increases since January, so this mitigation measure can hardly be considered a surprise. Indeed, I understand that a study prepared for the City of Wichita in the 1960s suggested that speed increases would offset vehicular traffic conflicts with train operations.

Fourth, based on our review of the applicable case law, we find no requirement that all mitigation be completed before a transaction can move forward, as long as the mitigation measures are sufficiently definite and sufficiently likely to be performed. It is quite common for federal agencies to proceed with actions in which a mitigated FONSI has been issued but before the mitigation measures have been completed. Decision No. 41 in this proceeding, like most of the other recent ICC and STB merger approval orders, is an example. UP/SP was authorized to carry out the merger on September 11, 1996, while only beginning -- with all deliberate speed -- to implement dozens of environmental mitigation conditions. Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989); Morris v. Myers, 845 F. Supp. 750, 756 (D. Or. 1993) ("NEPA does not require that mitigation measures actually be taken before an agency can act").

I would appreciate your taking these views into consideration.

Sincerely,

Mike Hemmer

J. Michael Hemmer

cc: Steve Kalish, Esq.

1402 W. 5th St.
Newton KS 67114
Feb. 14, 1997

Mr. Denny Clements
c/o The Wichita Eagle
P.O. Box 820
Wichita KS 67201

ENVIRONMENTAL DOCUMENT

Dear Mr. Clements:

During your career at the EAGLE, in the majority of the time, I have agreed with your opinions and considered you fair minded.

My attitude is changed after reading "Pols blather as Wichita faces train torture". Your misrepresentations in that story are many. As a retired Santa Fe railroad employe and Union Pacific stockholder I am calling some of your statements to your attention, in hope that you might write a retraction.

No mile and one half long trains are operated out of the Powder River Basin. Most trains, consist of 115 hopper cars, 6160 feet, plus two or three locomotives, of about 70 feet each. A mile and one half is 7920 feet. I suppose many residents, including you, have forgotten the six daily Rock Island trains, of up to 135 cars, that were restricted on some Wichita trackage to 10 m.p.h. that ran through Wichita. No houses burned down, nor did delays to emergency vehicles cause any problem. There were ample grade separations then, as now, and also hospitals and fire stations on both side of the rail route. A 115 car coal train will block a crossing two minutes 25 seconds at 30 m.p.h. Add the activation time of warning signals, and it will not exceed three minutes. Stockwell who admits he is no expert on railroads, and his study comes with an average of 12.5 minutes. You say, eight or nine. I wonder when the City Officials, allied with EAGLE writers will stop this charade. Mayor Knight thinks he has a good political issue. Blasting the Union Pacific is a lot easier than solving the waste disposal problem.

Why should U.P. pay for any bypass, (an impossible option that would affect as many people in Sedgwick County, as the present route), or overpasses/underpasses, expenditures that are unwarranted. This former Rock Island line came through Wichita in 1887 and its owners, then and now have some property rights. Twelve trains in 24 hours, blocking crossings for 36 minutes, or less, is insignificant. BNSF runs 50-55 trains per day, many in the 6000 foot range, between Kansas City and Augusta, where two important lines diverge. U.P. operates 65 plus trains a day west of Kansas City through populous areas such as Lawrence and Topeka, yet we hear of no big problems with delays to motorists. Only Wichita seems to think they will be affected to the extent of spending money for legal advice. I live in a city that has had one hospital for the last 20 years and no reports have been made that anybody suffered death due to waiting for a train to cross,although BNSF runs 12 trains per day through the principal intersections of Main, Broadway and First streets. These include four intermodal trains of about 6500 feet,plus occasional coal trains with the usual 110-115 cars. These, due to "yard limit" territory are restricted to 20 m.p.h. I have yet to read a written complaint about this situation.

The coal traffic will increase as natural gas supplies are exhausted, and thankfully we have railroads who can move that traffic at low enough rates to permit its mining. A portion of Wichita's electricity is produced at a coal fired plant, i.e. the Jeffrey Energy Center, which is served by that "arrogant" Union Pacific. You, Mr. Clements, should remember that when you turn on the lights.

Any "stink" for diesel-electric locomotives is neglible. These locomotives move a ton for one fourth of the emissions created by a heavy truck. Instead of baiting the U.P. your paper would do well to focus on a real problem, i.e. 40 ton trucks exceeding the speed limit on the canal route, emitting noxious fumes, and in most cases paying no local taxes. Most,too, are "going through" and unlike U.P. pay no local property taxes.

As for noise, the real problem is at the airport, a non tax-paying entity, and the air force base. I submit, that anyone living in the flight path of these two facilities is faced by more noise daily, than eight more trains will make. Make that fifty more trains.

On the front page map, we see that "most of the coal from Dallas-Ft.Worth, etc.". No coal has ever been mined in that area. Put that down to another stupid mistake by the EAGLE. Also, U.P. completely owns the routes south from Kansas City. That has been true since the merger with Missouri Pacific in 1982; and purchase of the Missouri-Kansas-Texas in 1988. MKT operated the former Rock Island line through Wichita, but the City took no part in the proceedings when UP applied to buy-out the Katy. There was never any mention of this in the EAGLE, except a small story on the financial pages, when the merger became effective. Now,in 1997, there is a big holler about an insignificant increase in traffic that will amount to far less than Rock Island handled during World War II, when solid trains of oil moved from Texas for the war effort, plus six daily passenger trains.

Union Pacific, which has served this nation well in war and peace for 132 years deserves better than being accused of arrogance and wanting to keep Wichita from maintaining its single identity. Most readers will take that last comment for what it is, pure "malarkey". A corporation that earns only about five percent on its investment, should not be criticized for taking steps to increase efficiency and keeping coal rates reasonable.

Sincerely,

Lloyd E. Stagner

Lloyd E. Stagner

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

ENVIRONMENTAL DOCUMENT

Section of Environmental Analysis

July 23, 1997

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-23-97
DOCUMENT # 7-24-97 9:50:42am
WE.03 FD#32760
W.

Mayor Bob Knight
City Hall - First Floor
455 North Main Street
Wichita, KS 67202

Chairman Tom Winters
Sedgwick County Commission
525 North Main Street, 3rd Floor
Wichita, KS 67202

RE: Finance Docket No. 32760--UPSP Merger--Wichita Mitigation Study

Dear Mayor Knight and Commissioner Winters:

Thank you for your letter dated July 8, 1997 raising several questions and comments about the Wichita Mitigation Study. Your questions and comments are helpful as we begin to prepare the Preliminary Mitigation Plan for public review.

In preparing the Preliminary Mitigation Plan, which we plan to issue in September, we will consider the issues and concerns that you, Mitigation Committee members, and the public have raised over the last several months. The Preliminary Mitigation Plan will include specific information on the study data, assumptions and definitions, methodologies, mitigation options, and evaluation results.

SEA will hold a 30-day public review period following the release of the Preliminary Mitigation Plan in September. SEA will conduct a public meeting in late September or early October to discuss the report and receive public comments. SEA will then prepare a Final Mitigation Plan which will include responses to issues raised by the public. The Final Mitigation Plan will also be made available for public review before it is presented to the Surface Transportation Board for consideration. The Board will consider all public comments, the Preliminary and Final Mitigation Plans, and SEA's final recommendation in issuing its decision imposing final mitigation for Wichita. These mitigation measures will be in addition to those that the Board has already imposed in Decision No. 44, issued August 12, 1996.

In response to concerns you and others raised in Wichita over the last several months regarding the increased train traffic, particularly unit coal trains, SEA asked Union Pacific to reexamine available train routes. UP's response to this request was to reroute proposed unit coal trains through Kansas City, which results in a smaller increase in through trains in Wichita. UP also eliminated proposed improvements on the rail line segments between Lost Springs and Chickasha that would be necessary for increased unit coal train traffic through Wichita.

We are continuing to review several issues you raised regarding the train traffic projections, including the five year time frame and mitigation monitoring. We will include information about these topics in the Preliminary Mitigation Plan. Until then, we welcome your ideas for suggested mitigation to address these issues and assist our environmental review.

Increasing train speeds as a mitigation option for the environmental impacts of increased train traffic resulting from the merger has been previously discussed at several Mitigation Committee meetings and the public meeting in January 1997. The new information presented at the June 25, 1997 Mitigation Committee meeting was the preliminary evaluation results of this option. Our analysis assumes that the speed of only the through trains would be increased to 30 miles per hour. Because the planned additional trains would not stop in Wichita, existing yard and local train operations are assumed to remain as they were in the pre-merger conditions. Our railroad operations specialists are reviewing what is required to achieve 30 mph speeds. We have requested specific information from UP describing the physical and operational feasibility of increasing speeds through Wichita. We intend to provide additional details about the train speed enhancement concept at the July 30th Mitigation Committee meeting and complete details in the Preliminary Mitigation Plan.

Regarding the evaluation of mitigation options, we will present evaluation results for additional mitigation options as you requested. The Preliminary Mitigation Plan will include a preliminary package of reasonable actions to mitigate the potential environmental impacts of the merger-related increase in train traffic through Wichita. The package may include some actions that more than mitigate some impacts and do not fully mitigate others. We will provide an estimated range of costs for proposed mitigation. The work you are conducting as part of the Kansas/Union Pacific bypass and grade-separation study will also help inform us about separation costs.

We appreciate your input throughout the mitigation study process. We look forward to continued dialogue at the next Mitigation Committee meeting on July 30th and during the public review period for the Preliminary Mitigation Plan. Please call Mike Dalton at (202) 565-1530 if you have any questions.

Sincerely yours,

Elaine K. Kaiser
Chief
Section of Environmental Analysis

Mike Dalton
Study Director
Wichita Mitigation Study

cc: Governor Bill Graves
Lt. Governor Gary Sherrer
Congressman Todd Tiahrt
Senator Pat Roberts
Senator Sam Brownback
City Manager Chris Cherches
County Manager Bill Buchanan
Steve Kalish, Attorney for Wichita-Sedgwick County
Mike Hemmer, Attorney for Union Pacific Railroad

Daily Sparks Tribune

OPINION

SUNDAY, JULY 13, 1997 THE TRIBUNE 4A

Stop blaming the railroad

A study released this week will not surprise anyone who has lived in northern Nevada a long time.

Union Pacific Railroad commissioned a study conducted by the University of Nevada, Reno, on the railroad tracks that split the city in half. Not surprisingly, the study concluded Reno has had ample opportunity to address the problem for more than 60 years but has done nothing.

Not only that, the report states the railroad is not the only issue where city officials have made poor decisions or no decisions at all.

"The portrait which emerges in the study is one longtime residents will find familiar...," said Paul F. Starrs, associate professor of geography at UNR, who compiled the report with two assistants. "In its long history, Reno has almost never dealt effectively or decisively with growth and development issues. The railroad tracks running through downtown represent one more manifestation of that larger inability to 'get it done.'"

The city is worried about increased train traffic after Southern Pacific Railroad and Union Pacific merged late last year. About 24 trains a day are expected to rumble through Reno, causing delays for motorists at several crossings and safety concerns for emergency vehicles, the city contends.

The study also points out the obvious fact that the railroad existed first. It states the city continually moved closer and closer to the rail line and allowed its business district, especially casinos, to build adjacent to the tracks. It also notes that since 1937, the city examined seven plans to lower the tracks below street level but never did anything to make it happen.

In contrast, Sparks planned its growth around the tracks. Rail traffic does not disturb traffic here because officials had the foresight to realize the railroad tracks are a permanent fixture that can impact daily activities if not considered when building permits are issued.

Reno can't dismiss the study or claim it was not properly done. The city council often uses studies conducted by the university to justify land use, traffic and other decisions.

The study will surely be used by the railroad as Reno sues Union Pacific in federal court in an attempt to make the company pay $100 million to lower the tracks through town. Union Pacific has offered $35 million towards the project, which is expected to cost a total of $182 million. A copy of the report has also been sent to the Surface Transportation Board, the group that will decide if the railroad company should chip in more to lower or move the tracks.

The best thing Reno officials can do at this point is give up the fight. The facts and historical data all favor the railroad's position. A costly court battle appears futile, especially in light of the evidence uncovered in the recent study.

Sometimes it is wiser to admit past mistakes and take the responsibility for correcting those errors rather than placing the blame elsewhere.

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-22-97
DOCUMENT# 7-23-97 12:33:42 pm
FD#32760 WL.02

ENVIRONMENTAL DOCUMENT

16 July 1997

1752 S. Wichita
Wichita, KS 67213

Mike Dalton, Study Director
STB
Washington, D.C. 20423

Dear Mr. Dalton:
Please take time to read the attached to help you make the *right decision* regarding Wichita's train non crisis. Mayor Knight has manifested unjustified hatred of trains ranting, raving falsities and exaggerations about how Wichita will be virtually doomed because of a mere 10 30mph trains thru town. He scoffed at possibility... about 16 months ago...Amtrak service might be restored to Wichita/Okla/Ft.W after 18 years absence. Said it'd be *insignificant*. Perhaps he's afraid Boeing/Beech/Cessna/Lear Jet would be destroyed because of running a 4 car Amtrak train thru here.

His hysterical performance at Jan. 28 night meeting at City Hall was disgraceful. He asked at that meeting "..how many people will be killed by those *dangerous* UP coal trains? How many children will be maimed by those *dangerous* U.P. coal trains?" **Nobody will be killed except law breakers who disregard the signals and go around the lowered gates and get hit by a train.** The trains won't go out of their way to pick on innocent Wichitans. Fortunately, no children will be maimed by the trains because kids are not enticed to *play* with trains moving at 30mph. They haven't played with S.Fe trains here. They didn't even play with the 10 mph U.P. trains past few years. (..5 year old boy about 20 years ago, *played* with a MOP (now KSW) train going approx. 5 mph and lost a leg.)

Our paranoid Mayor has repeatedly given the impression that once Sept. approval is given to U.P., that the people at 1416 Dodge St., Omaha, will institute various tortures exclusively to torment Wichita. "Why, I hear some of them will be 2 miles long! I hear some of them will take 15 minutes to cross any one street!" And droning so on into the night.

Incidentally, 73 year old me hasn't received a cent from the U.P. since Great Kansas Flood of July, 1951. And I don't like being inconvenienced any more than the next guy. But fair is fair and B. Knight is grossly unfair. I cross U.P. tracks on Harry St. eight times a week and have never once been stopped by a U.P. train in past year. Slim odds! 10 trains a day at 30 mph would not block any more than 4 trains at 10 mph.

In your approval of running thru Wichita..instead of a bypass or even one overpass..please decree/order **that Union Pacific install a nrthbnd block signal just a few yards south of Pawnee and a southbnd block signal just north of 21st street...tied in with Santa Fe dispatcher...so that NO U.P. TRAIN IS HAMSTRUNG BY A SANTA FE TRAIN AT NORTH Jct. or SOUTH Jct. THUS BLOCKAGE OF WICHITA STREETS. S.Fe dispatcher caused A 40 MIN DELAY TO U.P. TRAIN for A SANTA FE TRAIN WHICH WAS STILL IN VALLEY CENTER, KS! THIS HAPPENED JUST PRIOR TO 1-28-97.** This should never happen again but it doesn't justify an unconscionable bypass.

If you are faxed, receive/get every Wichita Eagle article and editorial, Letter to Editor regarding Bob Knight vs U.P.RR I hope you were not deceived by Eagle Editorial Writer D. Clemments blatant absurdities in the 2-14-97 editorial: "..Old Town will become a noisy, dreary place..omniprescent stink and rumble of those U.P. trains." That is absolutely stupid. I went to and talked to people in the Eagle Bldg and was told that they don't hear the trains. I inquired on both sides of the street in the businesses to Eaton Hotel and Cable's Union Station. I was told that there was no disturbing train noise. All of them said they didn't notice any fumes. The S.Fe trains and 10 U.P. trains have not/will not have any impact whatsoever on 'downtown Wichita'. Again, the only 'downtown' Wichita involved is at Central Av. Downtown Wichita is about half dead anyway.

Please give the Union Pacific the green light to run 10 trains thru Wichita. Wichita is not a priviledged island of exception. Thank you.

Yours truly,
James A. McClellan

316-265-8903

85 Movements over Central Ave

THE WICHITA UNION TERMINAL RY. CO.

Hall 1 47

TOWER North Jct DATE Dec 10 1947

TOWERMEN & SIGNALMEN ON DUTY	TIME FROM	TIME TO	WEATHER	ORDERS AND SPECIAL INSTRUCTIONS TRANSFERRED
A L Herrington	1200	7a	Cloudy	18 Nothing 650 a HH
H H Sutton	7a	3p	Cloudy	24 Nothing 250pm HHF Jr
Geo Fitzgibbons Jr	3p	11p	Cloudy	20 Nothing 1050pm ALH
A L Herrington	11p	1200		
Hugh Auchterlonie	8am	5p.		

TRAIN OR ENGINE	DIRECTION	Track	ARRIVED	SIGNAL GIVEN	CLEARED PLANT	No. CARS	DELAYS AND REMARKS
R.I. 18	E	1			1201		
R.I. 507	W	2			148		
R.I.S 1315	W	4			200	13	
ATS 747	W	2			207		with 45-47 Equip.
ATX 1004	W	3			237		
AT 1/24	E	1			258		
ATX 4022	W	4			258		
AT 1/23	W	2			307		
AT 2/23	W	2			314		
AT 28	E	1			322		
SFS 3540	E	3			326	8	
AT 2/24	E	1			337		
R.I. 17	W	1			402		
AT 27	W	2			425		
R.I. 508	E	1			449		
SF 333	W	4			503		
SFS 3542	W	4			553	0	
ATS 747	E	1			603	0	
R.I.X 5030	W	4			618		
R.I.S 1715	E	3			624	18	
SFS 3540	E	3			626	0	
ATS 750	E	3			638	17	
ATX 3106	W	4			648		
SF 330	E	3			645		
ATS 833	W	4			652	14	
ATX 1020	W	4			655-		
✓ 1009	W	2			717-		
ATS 833	E	3			755	0	
✓ 750	W	4			751	7	
RI 93	W	4			814		
ATX 1004	E	3	814	822	825-		SFS 3540
SFS 3540	W	4	808	814	822	23	RI 93
ATX 3173	E	3			935-		2nd
AT 12	E	1 4/8			951-		
ATS 608	W	4			953	2	
SF 334	E	3			1154		
RIS 522	W	4			1206	11	
RI 96	E	3			1209-		
ATX 1835	E	3			1221-		
ATS 747	W	4			1213	5	
AT 16	E	1 4/6			108-		
SFS 724	E	3			100	7	
RI 509	W	2 5/7			104-		
ATS 608	E	1			111	0	
RIX 1715	W	4			[illegible]		
ATS 609	W	2			144		With No. 13.
✓ 750	E	3			225	15	
RIS 522	E	3			237	15	
AT 5	W	2			308		
ATS 747	E	3			315	0	
AT 1	W	2			325		
ATS 750	W	2			333	5	
RI 510	E	1 3/4			340		
SF 310	E	1			336		

This is list of 85 train movements at No. Junction..over Central Ave., just west of Steffens Dairy..Dec. 10, 1947.

It shows 14 "R.I." = Rock Island trains. 4 of them were passenger trains. They ran on same track..Kechi-Wichita-Haysville..that U.P. trains run on now.

"AT" equals Atchison, Topeka & S.Fe Ry. trains. Approximately 60. Several were psngr trains.

"SFS" equals Frisco trains. Guess 6.

All these 85 trains obviously crossed over Douglas..northbound or southbound. 85 is four times the number of trains dreaded by the mayor.

There was no "devastation" "no air pollution" "no reduction in our quality of life" "no traffic congestion" "no excessive noise", etc. because of a mere 85 trains. Those trains ran on old fashion style of track, unlike today's much quieter track.

So what's the problem?

#6

Continue With Record on Other Side Sheet

RECORD CONTINUED

TRAIN OR ENGINE	DIRECTION	Track	ARRIVED	SIGNAL GIVEN	CLEARED PLANT	No. CARS	DELAYS AND REMARKS
SFs 724	W	4			344	11	
ats 608	E	2			347	1	Bag. [illegible] O.D.C. 340P and 14's Equip.
ats 2542	W	4			348	42	
RI 98	E	3			357		
atx 3198	W	4			420		
at 2	E	1	9		429		
ats 747	W	2			431	1	
at68-1009	E	3			433		
ats 608	W	2			439	0	
at 6	E	1	3		518		
at 15	W	2			530		
RIX 5025	W	4			606		
atx 4061	E	3			630		
ats 608	E	1			626		with 48's Equip.
ats 747	E	3			634	15	
SFs 3540	E	3			640	11	
RIX 5019	E	3			648		
atx 1086	E	3			651		
SF 345	W	4			708		
ats 608	W	2			744	4	
SFs 3540	W	4			825	17	
atx 3203	W	4			853		
at 11	W	2			918		
RIX 5027	W	4			936		
RIS 522	W	4			946	2	
SF 330	W	4			941		
ats 750	E	3			1016	31	
ats 2542	E	3			1052	16	
ats 608	E	3			1125	0	
ats 750	W	4			1147	15	
RI. 18	E	1			1052		

LOG. COVERING ALL SIGNAL FAILURES: TRACKS OUT OF SERVICE: REASONS FOR IRREGULAR ROUTING AND OTHER INFORMATION

UNIVERSAL
Hub
Kearney, NE
Cir. D. 13,160

FEB 11 1997

Universal Press Clipping Bureau

Hub Opinion

Mercy! Mercy! The TRAINS ARE COMING! There could be a positively STRATOSPHERIC count of 9 or even 10 U.P.RR trains running thru Wichita at 30 mph, every day! Please realize that this is less than one train every 2 hours! Wow!!

LETS GET SERIOUS. 9 or 10 TRAINS A DAY ARE A DROP IN A BUCKET. Someone at City Hall has made a mountain out of a molehill by repeatedly droning on about how Wichita will be devastated because of 9 or 10 trains running thru the "Air Capitol" every day. WICHITA WILL NOT BE DEVASTED because of a few trains. There will *not* be one 8th the noise and/or air pollution or traffic congestion as predicted in the scare tactics of County and City leaders. What a relief!

Rail traffic reaction hard to gauge here

Two hundred concerned Wichita, Kan., residents recently gathered for a meeting to discuss a pressing concern in their community. Seems the Union Pacific Railroad had announced its intentions to increase train traffic from four trains per day to 12.

Imagine the inconvenience. And what about the increased safety threat of eight additional trains? Instead of waiting at crossings for four trains, Wichita motorists will be forced to stop and wait for 12 trains per day. Oh my!

WICHITA'S CONCERN over train traffic probably seems overblown to many Kearney area residents. That's because few motorists in this community can conceive of a day when fewer than 110 trains roll through town.

The two-way UP mainline that stretches through Kearney and a dozen other south-central Nebraska communities has been called the busiest rail corridor in the world. The line is so clogged with trains, in fact, that UP is building a third mainline paralleling the other two.

Ironically, even though UP's lines through Kearney carry roughly 10 times the traffic that rolls through Wichita, residents here don't seem to be as anxious about the third mainline and the probability that rail traffic here will climb from 110 trains per day to 160 or more.

INFORMATIONAL sessions have been held to explain the third mainline. At those meetings, UP officials and city of Kearney representatives have explained intentions to build overpasses and to close crossings in town as the third mainline goes active. But the Kearney sessions have drawn smaller crowds than the 12-train session in Wichita. Some Kearney meetings have even been sparsely or poorly attended.

Could it be that Kearneyites are so accustomed to rail traffic that they don't see much to worry about just because another 50 trains per day will be rolling through town? Maybe they feel assured that the mayor and city staff are adequately negotiating with railroad officials on crossing closures and overpass issues.

Whatever the case, the turnout at overpass and crossing closure meetings hasn't been as strong as in Wichita.

THAT COULD CHANGE. Some Kearneyites were aroused several weeks ago by a consultant's computer drawing of an overpass rising from Central Avenue in downtown Kearney. Since that drawing was unveiled, the prospect of an overpass being built in the main business district has garnered a few more people's attention.

The question is, will we see a turnout of 200 people at Kearney's next overpass meeting in a few weeks, or is the issue still not worth the bother?

E.P.A. TRAIN EXPERT SCOFFS AT WICHITA'S CONCERN THAT 5 ADDITIONAL TRAINS WOULD CAUSE BAD AIR POLLUTION HERE.

* * * * * * * * *

How could it be that..those 110 U.P. trains thru Neb. and other states), are able to cross over 100's of railroad crossings at grade, thru several dozen towns without doing as much damage as a mere 5 or 6 additional trains are ignorantly projected to do in just Sedgwick County alone? The UP trains won't become demonic *'attack trains'* upon entering Sedgwick County...paranoia notwithstanding. Nor will the engineer turn on a mystical 'High Carbon Monoxide' framistat to emit only in Sedgwick County. They're just trains..deserving respect..in more ways than one. The 5 million dollars worth of *welded rail* and other track work in past year..in just Sedgwick County alone..has reduced the 'noise' of the trains considerably. Furthermore, there's almost no significant increase in noise going from 10 mph to 30 or 40 mph. Trains move much quieter today than they ever did on old Rock Island..now U.P.RR...tracks since 1887 to last of 1996. In 1947 14 Rock Island trains crossed Central Av. everyday. We're looking at only 9 or 10 trains in the future, on the same..but greatly improved tracks. It doesn't deserve making an absurd and costly *federal* case out of it.

A train 1 1/4 mile long at 30 mph can go over a crossing in 2 min. 30 sec. Thats only 22 min 30 sec. in a 24 hour period for all of the trains. 9 trains at 30 miles will spend less time on crossings than 4 trains moving at 10 miles an hour. That is a blessing. And that is a fact.

The 110 long freight trains daily thru No. Platte, Neb. are 11 times the number of U.P. trains dreaded by Mayor Knight. BN S.Fe runs at least 60 trains across 3 Emporia streets everyday. Those same trains go over dozens of street level crossing in dozens of towns. Fortunately there's no ranting and raving from any of those cities' leaders about how: 1. 'dreary' their town is, 2. how 'noisy' their town is, 3. how they are gasping because of (nonexistent) air pollution caused by trains, 4. and they aren't making a Federal case...both in effect *and* in fact, just because 60 - 110 trains go thru their town. Emporia has 50 times the population and 250 times the industry of Kechi. Knowledgeable people scoff at mayor of Wichita political attempt to be Kechi's saviour with his totally unrealistic demand that ten million $$ be spent in a one-horse-town for an unneeded overpass. Any of the 9 trains would go thru Kechi in 1 min. 53 sec. and 50% of the timenot one soul would be there waiting for a train to cross at street level tracks!

Honorable mayors don't tell the rest of the U.S.A. to go to Hell. There's been no callously unfair demands such as 'Prevent those trains from entering my town. We're privileged. We're ***an island of exception*** and we don't have to put up with trains as other people do. Those trains don't spend $$ here. They haul grain for food, coal for electric power and other commodities but they don't benefit us so those trains can't go thru our town'. No man is an island.

How hypocritcal to drone on about "Union Pacific **arrogance**.." for wanting to run 3..instead of 1..Un. Pac. daily trains on U.P. tracks thru Wichita. *Arrogance* for running U.P. trains on their own U.P. railroad?? Come on, get real! The **arrogance** is that of a man who implies that Wichita is better and more privileged than all the thousands towns/cities in the U.S.A. where trains pass thru. Bob Knight was elected to be Wichita Mayor only, not to be Kechi and Haysville's saviour. Conversely that election didn't give him right of Dictator to demand that bulldozers cut a 11 mile long swath, (avoiding precious Kechi and Haysville of course) in order to permanently disrupt the lives and property of thousands of innocent people, thru-and-on-both sides of Andover, Rose Hill, etc. for the sake of an inconsistent hypocritical agenda. The approval and construction of a gold plated bypass would be one of the worst breaches of human decency ever perpetrated. There should be only fair play in city dealings. Fair play is the opposite of ruthlessly and selfishly bullying selected smaller neighbors. Absolutely nothing has given him the right to demand that not only the U.P.Railroad but also the BN Santa Fe Railway run miles out of their way just because he (acts like he) hates trains! Yes, we know, he denies that he hates trains.

Some of Wichita's mayor publicly stated inconsistent 'wants': a. 'Want Wichita to grow, to become a much bigger city than now..and if people see there are trains in Wichita they will not come here and Wichita will not grow.' He should explain to us how there would be no exhaust from 50,000 additional cars/trucks moving on the streets of his ideally bigger Wichita everyday, altho in the Knight vs U.P. world, a few hundred vehicles waiting 2 to 3 minutes for U.P. trains daily would cause extremely hazardous *air pollution* and horrible *traffic congestion*. We don't have partial *air pollution* now from the approximately 18 daily trains on all tracks in Wichita. How can it then be that 5 additional trains would cause terrible *air pollution*, considering it is not *almost* terrible now?? Wichita's serious problem is landfill/garbage, water and non train traffic. Would an increase of 150,000 new residents solve the dilemma?? Hardly.

Another 'want': 'Want Wichita to be a *single identity city*.."*Air Capitol*" only'. There must not be any trains in Wichita. If you honestly want Wichita to have a *single identity*, then get the grain and oil business out of town along with the trains. *Single identity*? Chicago has always been Railroad Capitol of the World..Chicago's Ohare is world's busiest airport. *Double Identity* city hasn't hampered Chicago's growth one bit. Our mayor should explain why is it that about 250 diesel powered commuter and Amtrak trains STOP in downtown Chicago and about 120 diesel powered freight trains operate thru Chicago daily and create less *air pollution* than only 25 trains could emit thru Knight's seemingly fragile Wichita.

In April I had a lengthy conversation with an EPA train expert stationed in Chgo. His knowledge of U.S. railroad operations is surely 600 times greater than Knight/Cole/Winters/Transportation Ace B.S., et al. He said of himself, "I'm a BAD GUY!" I told him about the Knight-UP controversy. He scoffed at Knight's concerns. I asked how he felt about emissions from the approximately 350 diesel powered trains in Chgo everyday. He looked me straight in the eyes and firmly said: "They DON'T BOTHER ME..what bothers me are the vehicle emissions on Chicago Expressways on my daily commute." He knew of North Platte and wasn't concerned.

No one should be deceived by **flagrantly dishonest** brainwashing words/phrases such as: *"wall of trains"* and drone/whine *"Wichita will be cut in half"*. Only a person who flunked 5th grade math and never recovered would actually believe that. **How in Hades can a train which is slightly less than 1 and 1/4 mile long create a "wall" or "cut Wichita in half" when from 21st Street to Pawnee is 5 miles??** 5 miles is more than 4 times a train length. *"Our quality of life will greatly reduced"* Unjustified paranoia. *".downtown Wichita will be devastated"*. In 1947 80 train movements passed over Central at Steffens Dairy everyday. Downtown Wichita was alive and vibrant then, with several department and other stores, several theatres and restaurants, hotels, etc. All well patronized. Downtown is half empty now. No thinking person can feel that downtown will be devasted because of 20 trains crossing Central at Hiland Dairy when the well populated/visited downtown of 1947 was not *devasted* by 4 times as many trains. There wasn't any air pollution from the mostly steam engines of those trains. Besides, what do trains at Central have to do with people at 3rd, 2nd, 1st, Douglas, William, Waterman Streets? **Absolutely NOTHING!** But the **"NOISE"..!** Lets get real. The Cablevision people in Wichita Union Station **DO NOT HEAR THE TRAINS..NOT THE SANTA FE TRAINS AT 30 - 35 MILES PER HOUR AND NOT THE UNION PACIFIC TRAINS AT 10 TO 30 MILES AN HOUR. OBVIOUSLY AND DEFINITELY THEY DON'T HEAR THE TRAINS IN THE EAGLE BUILDING.**

AGAIN, a train one and a quarter mile long can go over any crossing in 2 min. 30 sec. Thats all it takes! Spread 9 trains out in a 24 hour period..only 22 min. and 30 sec. total..in an entire 24 hour period. That amounts to 23 hours 37 minutes when no U.P. train will be blocking any crossing. Therefore any one who says "Wichita will be cut in half" "din or noise of the trains will be constant" etc. is totally dishonest. We can all have a nice sigh of relief because of it.

CFTW UP & CFT UP CW group. Citizens for Fair Treatment of Wichita by U.P.RR and Citizens for Fair Treatment of the U.P.RR by the City of Wichita.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
NEVADA STATE OFFICE
4600 KIETZKE LANE, SUITE 125C
RENO, NEVADA 89502-5055

July 9, 1997
File No. 1-5-97-I-281

Elaine K. Kaiser, Chief
Section of Environmental Analysis
Surface Transportation Board
1925 K Street, N.W.
Washington, DC 20423-0001

Dear Chief Kaiser:

Subject: Informal Consultation on the Union Pacific/Southern Pacific Railroad Merger

The Fish and Wildlife Service received your June 24, 1997, letter regarding the merger of the Union Pacific (UP) and Southern Pacific (SP) railroads which will approximately double train traffic along the Truckee River and through the cities of Sparks and Reno. Your letter requests our concurrence that the proposed merger will not adversely affect the endangered cui-ui (*Chasmistes cujus*) and threatened Lahontan cutthroat trout (LCT) (*Oncorhynchus clarki henshawi*) which spawn in the Truckee River and reside in Pyramid Lake downstream approximately 15 miles from the closest UP tracks. This material was submitted to us for informal consultation pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act).

The cui-ui was listed as endangered on March 11, 1967, without critical habitat (32 FR 4001). Cui-ui are large (up to 28 inches and 8 pounds), long-lived (40+ years) lake suckers endemic to Pyramid Lake and the Truckee River in Washoe and Storey Counties, Nevada. They are obligatory stream spawners, and each spring mature adults gather in a prespawning aggregate near the mouth of the Truckee River. Typically cui-ui occur in the Truckee River from March through June and may occupy the river at a minimum distance approximately upstream of Numana Dam. The actual spawning migration typically begins in either April or May, depending upon timing of spring runoff, river access, and water temperature, and generally spawning occurs over a 1 to 2-week period. Larval cui-ui can be expected in the river for

approximately 30 days after the adult cui-ui have finished spawning. A more detailed account of the species' life history is provided in the revised Cui-ui Recovery Plan (Service 1992).

LCT are also obligatory stream spawners. Historically, populations of LCT in Pyramid Lake reportedly migrated over 100 miles up the Truckee River and into Lake Tahoe. Spawning generally occurs in riffle areas from April through July, depending on flow, elevation, photoperiod, and water temperature. To date, approximately 30 LCT have been passed upstream of Marble Bluff Dam. However, high water temperatures (above 60° F) in the lower Truckee River may preclude LCT eggs from hatching. LCT mature between 2 and 4 years of age and may live 5 to 9 years. Post-spawning mortality rates as high as 90 percent have been reported for LCT; consecutive year spawning is rare. An excellent account of the species' life history is provided in the Final LCT Recovery Plan (Service 1995).

The Surface Transportation Board's Section of Environmental Analysis maintains that an increase in train traffic will not appreciably increase the likelihood of an accidental hazardous material spill in the Truckee River. In a recent risk assessment conducted for them, it was reported that the risk of river contamination from rail transportation is once every 154.15 years. Additionally, there have been no catastrophic rail spills affecting the Truckee River in over the past 10 years. The only rail spills to require clean-up action were for those that did not result in contamination of the river. Since 1971, only 26 incidents have occurred along the Truckee River in California and Nevada, the most serious of which was a 40 gallon spill of hazardous material of which none entered the river. The information submitted suggests that based on the infrequency of derailments and the geography of the area, it is unlikely that hazardous material would enter the Truckee River from a rail accident.

To further reduce the likelihood of a hazardous material spill affecting the listed species found in the Truckee River, improved train safety actions have been enacted and an emergency response plan has been developed. Track and tank car inspections have been increased and improved. Hazardous material will be hauled in doubled steel drums. All signal crossing devices contain visible instructions designating an 800 number to be called if the device is malfunctioning. Every community that UP/SP operates through has been issued an emergency response number as part of their "Operation Respond" program. UP/SP has reallocated their hazardous material response personnel to those areas most in need. Lastly, UP/SP has begun replacing all rails with head-hardened rail on all mountain curves to further prevent derailments or accidents.

Elaine K. Kaiser, Chief

File No. 1-5-I-281

Based on the information provided in the letter, UP/SP Progress Reports (UP/SP-284, UP/SP-290, UP/SP-300), and the discussions with Harold McNoutly of Section Environmental Analysis, the Service concurs that the increase traffic from the UP/SP merger is not likely to adversely affect cui-ui and LCT as long as the train safety improvements are continued and the emergency response plan is implemented if needed. Therefore, formal consultation pursuant to section 7 of the Act is not required. In the unlikely event of a spill, consultation would be conducted under the emergency provisions for consultation as discussed in 50 CFR § 402.05.

This response constitutes informal consultation under regulations promulgated in 50 CFR § 402, which establish procedures governing interagency consultation under section 7 of the Act. If new biological information becomes available concerning listed or candidate species which may be affected by your activities, your agency should contact the Service regarding consultation.

Please contact Stephanie Byers at (702) 784-5227 if you have any questions or comments.

Sincerely,

Allen R. Forster

for Chester C. Buchanan
Acting State Supervisor

LITERATURE CITED

Fish and Wildlife Service. 1992. Cui-ui (*Chasmistes cujus*) Recovery Plan. Second revision. Portland, Oregon. 47 pp.

Fish and Wildlife Service. 1995. Recovery Plan for the Lahontan Cutthroat Trout (*Oncorhynchus clarki henshawi*) (Salmonidae). Portland, Oregon. 103 pp.

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ENVIRONMENTAL DOCUMENT

July 21, 1997

HAND DELIVERY

Elaine K. Kaiser
Chief, Section of Environmental Analysis
Surface Transportation Board
1925 K Street, N.W.
Mercury Building
Washington, D.C. 20423-0001

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-22-97
DOCUMENT # 7-22-97 5:28:12 pm
FD #32760
RE.15

Re: Finance Docket No. 32760,
Reno Mitigation Study

Dear Ms. Kaiser:

Enclosed for your public records is a copy of a letter from Union Pacific's Vice President - Western Region, Robert F. Starzell, to Reno City Manager Charles McNeely in response to Mr. McNeely's recent and unfounded accusations against Union Pacific and the Surface Transportation Board. As Mr. Starzell indicates, Union Pacific has attempted to play a constructive role in finding ways to address the effects of the UP/SP merger in the Reno area, and it remains willing to meet with all interested parties that might join in a meaningful dialog.

Union Pacific took the first concrete steps toward financing a depressed trainway, devoted significant resources toward educating public officials about the trainway and met with commercial interests in the City of Reno to encourage participation in the project. Union Pacific made the only concrete offer to contribute to the project. That generous $35 million offer remains on the table, at least for now, even though City representatives walked out of negotiations after Union Pacific declined to capitulate to their unqualified demands for $100 million. The City's recent actions, including its role in restricting legislation that might have generated funds for the trainway, have dashed hopes of cooperative funding for the trainway.

As Mr. Starzell explains, Union Pacific has not yet met with downtown businesses regarding alternatives to the trainway, much less attempted to "buy off downtown business" as Mr. McNeely has alleged, but the railroad would welcome constructive dialog with those interests and others. Indeed, the railroad has reached out in an attempt to start such a dialog. It is abundantly clear that the City is determined to block that dialog and to suppress discussion of any alternative other than a depressed

trainway at railroad expense, as confirmed by City representatives' acknowledgement in a recent SEA Reno Mitigation Task Force meeting that they are under instructions to criticize options other than the trainway. It is increasingly clear that the City's inflexible litigation positions have been and remain the primary impediment to cooperation and progress.

Also enclosed is a copy of a recent editorial by the Daily Sparks Tribune, which might not have come to your attention. The editorial, titled "Stop Blaming the Railroad," emphasizes that Reno spread casino and hotel development across the Southern Pacific tracks, while failing to engage in the planning and mitigation activities that cities such as Sparks responsibly conducted. (Please be assured that Union Pacific did not contact the Tribune or solicit this editorial.)

Sincerely,

Mike Hemmer

J. Michael Hemmer,
Attorney for Union Pacific Railroad Company

Enclosures
cc: Mr. Lamboley

ENVIRONMENTAL DOCUMENT

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-16-97
DOCUMENT # 7-22-97 4:16:17pm
SD# 32760
RL.02

10 July, 1997

Elaine K. Kaiser, Chief
Reno Rail Study Project
Section of Environmental Analysis
Surface Transportation Board
1925 Street NW
5th Floor
Washington, DC 20423

Dear Ms. Kaiser:

I was in attendance at your 9 July, 1997 hearing at the Reno City Hall regarding the Reno rail problem, and mitigation study. I have two points to address, and am also enclosing a copy of the paper I submitted to the STB in response to your hearing held 13 February, 1997.

Point one: I was very impressed at your professional manner and the way you conducted the hearing, particularly in light of the manner in which the city mamager, elected officials and paid consultants of the city conducted themselves. I am sure you are subjected to a considerable amount of this treatment, and in my opinion it is entirely uncalled for. There are a large number of citizens living in the Reno-Sparks area who agree with me, and we extend our apologizes to you.

Point two: I noted during that hearing that the 1980 bond issue for the proposed depressed trainway was soundly defeated because it was on the ballot with a bond issue to build a new county-wide detention facility. As I recall the trainway issue did not even have the support of the Reno City Manager and Council. And winning candidates for elected Reno city officials based their campaign upon defeating the trainway issue.

Again, I realize this is your job, but your professionalism in carrying it out is much appreciated by me.

Sincerely,

Larry Kirk

Larry Kirk
2630 Appollo Way
Reno, NV 89503
(702) 747-4823

Attachment
CENTRAL ADMINISTRATIVE UNIT
REC'D 7-16-97
DOCUMENT # 7-22-97 4:16:17 pm
FD #32760
RL.02

ENVIRONMENTAL DOCUMENT

Statement submitted to the Surface Transportation Board on 20 February, 1997, as a follow-up to the statement submitted on 13 February, 1997

1. The positive effects of the UP/SP merger to the Reno-Sparks area of northern Nevada are now appearing in the daily operation of the railroad. Daily activity in the intermodal yard in Sparks is increasing, daily carloadings are increasing, and one of the true tests of the positive effect of the merger is the ability of the railroad to survive the January 1977 storms by use of alternate lines now available. The shippers I have talked to are unanimous in their praise of the UP/SP to maintain nearly normal scheduling.

2. The various actions of the City of Reno in regard to the Reno Rail Corridor are driven by the now divided downtown red line hotel and gaming interests. The red line was expanded in 1975 to the north side of the rail corridor. That has created an "Historic" gaming district on the south side of the tracks that is not doing well financially. And a "Modern" gaming district on the north side of the rail corridor, that is doing well financially because of two factors. (1.) The modern district has all new buildings, and (2.) it is immediately accessible to motorists turning off of I-80. Both the expansion of the red line district, and the present rather unpredictable actions of the Reno City Government are driven by intense pressure from the hotel and gaming district. The hotel and gaming interests are concerned about the division of the gaming district by the rail corridor, added to their very real fear that the other gaming interest areas in the state, namely Las Vegas, are appreciably lowering the Reno market share of available gaming customers and dollars. They are right, but they have only themselves to blame for it. If they had supported the initiative brought forward in 1980, instead of a no comment position they adopted this problem would have been solved. The initiative I refer to was orchestrated by then Reno Mayor Sam Dibitano, and a community wide commission. The intent was to create a depressed trainway from Keystone Avenue to Morrill Street, and I am sure your office has the details of that proposal. I was a member of that commission, representing the University of Nevada at Reno.

3. Since the Union Pacific has committed $35 Million Dollars, plus design and engineering expertise to the creation of a depressed trainway, I respectfully suggest that your finding should be that the Union Pacific and the City of Reno secure the remainder of the financing, design and construct a depressed trainway. The sooner this problem is solved, the sooner the City of Reno, and the Union Pacific can work together for the mutual benefit of the entire Truckee Meadows area.

Larry Kirk
(retired faculty-University of Nevada)
2630 Apollo Way
Reno, NV 89503
(702) 747-4823

THE CITY OF WICHITA

ENVIRONMENTAL DOCUMENT

OFFICE OF THE MAYOR
CITY HALL — FIRST FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4331

CENTRAL ADMINISTRATIVE UNIT
REC'D: 7-16-97
DOCUMENT # 7-24-97 1:04:34pm
FD #32760 WE.15

July 8, 1997

Mr. Michael J. Dalton
Wichita Study Director
Surface Transportation Board
Room 258
1925 K Street, N.W.
Washington, D.C. 20423

Dear Mr. Dalton:

Several questions have arisen over the past several months during the Surface Transportation Board's Mitigation Study in Wichita-Sedgwick County. Some of these questions originated this past week during the seventh meeting of the Wichita Mitigation Committee and the following meeting of Governor Graves' Task Force on Railroads.

We would like your response to these questions/comments as soon as possible.

1) The original merger application described an increase of approximately ten trains a day for the Lost Springs to Wichita segment and an increase of approximately seven trains a day for the Wichita to Chickasha segment, projections that Wichita/Sedgwick viewed as conservative at best. In their rebuttal statement, the UP spoke of "some 16 trains per day." But several months into the Mitigation Study, the UP announced that it had "revised" its projections downward to an increase of approximately five trains per day.

We are convinced that the lower projection is entirely based upon: (a) the UP's knowledge that the STB would revisit Order No. 44 and require the UP to pay for the 100% of base-line mitigation costs; and (b) the UP's review of analyses based on its original train count projections.

We are perplexed that an agency of the federal government would simply accept the UP's revision and not provide analyses based on UP's original projections. We request that future versions of the Wichita/Sedgwick study contain analyses based on both the UP's original figures and its revisions. At the least, these figures will demonstrate the significance of the UP's revisions and of the study team's acceptance of those revisions.

We also request that you in[illegible] he study teams's rationale for its acceptance of the UP's outcome-driven revis[illegible] A[illegible]ere any precedents that you can cite for the granting discretion to an applicant t[illegible]duce its merger application projections in this manner?

While we are troubled by the study team's unquestioning acceptance of the UP's revised train counts, we wish to emphasize that we are not at all convinced that the UP was entirely forthcoming even in its original projections for train counts for Wichita and Sedgwick County. Our research of the demand for Powder River Basin coal has convinced us that, solely as a result of the merger, Wichita and Sedgwick County will, sooner rather than later, be a "conveyor belt" for, among other things, Wyoming coal destined for Texas, Oklahoma, and perhaps the Southeast United States. We believe that railroad economics, principally transit time considerations, dictate that result and that both the current (and original) UP projections of trains through Wichita are greatly understated.

2) In light of prior ICC/STB environmental impact statements, which contained analyses of traffic growth over periods much longer than five years, we also are dismayed that the study team is looking no further than five years! We would like your rationale for that approach. Is it within the STB's powers to limit UP through trains for more than five years? Would you make that recommendation to the STB?

3) Our review of the information you have provided to date has been hampered by a lack of underlying data and the formulae used to reach certain results. We would like future studies to include all such data and formulae. We are particularly interested in whether you are assuming that all trains, not just through trains, can be speeded up to 30 mph.

4) The concept of more than doubling the present speed of UP trains to 30 mph, coincidentally, the maximum speed that UP says that it will operate until it secures two-way end of train devices, was not discussed with Wichita/Sedgwick prior to our last meeting. Since this speed increase previously has not been proposed by UP, we would like all information provided by UP to the study team on this issue. Frankly, we are amazed that this increase in speed, which was not part of UP's original Kansas City bypass proposal, now appears as part of a mitigation cost bypass proposal.

5) While we recognize that you cannot speak for the Board, we request that the study team propose that the UP be restricted to an increase of two trains per day (over the 1994 traffic levels) until all mitigation projects have been implemented. If it is not your intention to do so, we would like to know why.

6) We request that the study team gather information as to whether the NS/CSX/Conrail transaction, which proposes increased use of the Kansas City gateway, will result in any increase in UP or BN/SF movements through Wichita/Sedgwick County. Especially, in light of the study team's willingness to accept UP's mid-stream revision of its traffic counts, we see no reason to ignore NS's promise to expand traffic through Kansas City.

7) If the study team includes increased train speed as part of its mitigation package, what monitoring provision will it recommend? More specifically, would UP be required to provided data showing its train speed at various locations in Wichita/Sedgwick? If not, why not? If so, for how long? Would UP be required to provide this information to us? And, what steps would the STB be able to take if UP is unable to maintain this 30 mph standard?

8) We understand that you will honor our request and examine a few more alternative solutions beyond the three that you disclosed at the last week's Mitigation Committee Meeting, i.e., with three separations, four separations, or more. Given that the increase in train speed is by no means a certainty in our minds, we would also like to see what mitigation would be required if the UP cannot achieve or maintain 30 mph through the entirety of Wichita and Sedgwick County.

9) If you find it impossible or impractical to fully mitigate a particular problem, such as air quality or crossing safety, will you be able to require "trade-offs" such as is commonly done between industries in non-attainment regions nationally. Could you, for instance, require more participation in separations as a replacement for not being able to fully address air quality?

10) At last week's Mitigation Committee Meeting, you stated that your final recommendations would not include estimated costs of mitigation. That was a surprise to us, and it is not consistent with your statements five or six months ago. We request that you provide the estimated costs of mitigation so that comparisons can be made to the costs of a Wichita bypass. As you know, this has been our intent since March, when the bypass study was agreed to by Governor Graves, UP Chairman Dick Davidson, and ourselves. Our Bypass Consultants are making good progress and should have their cost estimates refined by late August 1997.

11) Finally, we remain interested in any quantified or quantifiable standards the study team proposes to use to measure the significance of various railroad merger impacts on Wichita and Sedgwick County. Stated another way, once the study team reaches quantifications of air quality, noise, safety, traffic delay, etc., impacts, by what measures will the team determine whether these impacts require mitigation

Mike, we appreciate your attention to these matters, and again, request a timely response, preferably before the next scheduled Mitigation Committee Meeting on July 30, 1997.

Sincerely,

Mayor Bob Knight

Sedgwick County Chairman Tom Winters

Copies to: Governor Bill Graves
Lt. Governor Gary Sherrer
Congressman Todd Tiahrt
Senator Pat Roberts
Senator Sam Brownback
City Manager Chris Cherches
County Manager Bill Buchanan
Steve Kalish, Attorney for Wichita-Sedgwick County
Elaine K. Kaiser, Chief, Section of Envorinmental Analysis
Mike Hemmer, Attorney for the Union Pacific Railroad

STBEDFD 32760 7-15-98 K

ENVIRONMENTAL DOCUMENT

FD 32760

United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
Pacific Great Basin Support Office
600 Harrison Street, Suite 600
San Francisco, California 94107-1372

IN REPLY REFER TO:

H40(PGSO-PC)

July 10, 1998

Ms. Elaine K. Kaiser
Chief, Section of Environmental Analysis
Surface Transportation Board
Washington, DC 20423

Re: Historic American Engineering Record documentation of Southern Pacific Railroad Shasta Route (California and Oregon Railroad), from Roseville to Black Butte, California

Dear Ms. Kaiser:

The National Park Service acknowledges the receipt of and accepts the Historic American Engineering Record (HAER) documentation for the Southern Pacific Shasta Route and Bridge Nos. 210.52, 301.85, 310.58, and 324.99. This documentation meets the Historic American Engineering Record standards and complies with the agreement between the Surface Transportation Board and the California State Historic Preservation Officer requiring completion of Historic American Engineering Record documentation.

The completed documentation will be transmitted to the Prints and Photographs Division of the Library of Congress. The records are in the public domain and will be accessible through the Library. A copy of the documentation will be provided to the State Historic Preservation Officer.

These records will be a valuable addition to the documentation of America's engineering and industrial heritage.

Sincerely,

David W. Look

David W. Look
Team Leader, Cultural Resources

cc:
HABS/HAER, WASO
SHPO, CA
Advisory Council
Richard Starzak, Myra L. Frank & Associates, Inc., 811 W. 7th Street, Suite 800, Los Angeles, CA 90017
John Snyder, P.S. Preservation Services, P.O. Box 191275, Sacramento, CA 95819

Washoe County
Department of
Community
Development
1001 E. Ninth St., Bldg A
Post Office Box 11130
Reno, NV 89520-0027
Tel: 702-328-3600
Fax: 702-328-3648

July 8, 1997

Elaine K. Kaiser, Chief
Harold McNulty, Reno Co-Study Director
Section of Environmental Analysis
Surface Transportation Board
1925 K Street NW
5th Floor
Washington, DC 20423

ENVIRONMENTAL DOCUMENT

Subject: Recommended Mitigation Measures

Dear Ms. Kaiser and Mr. McNulty:

In your letter of July 2, 1997 to Charles McNeely, City Manager for the City of Reno, you stated that the Reno Mitigation Study Task Force would not meet in August as your section will be finalizing the Preliminary Mitigation Plan. Your section will issue the plan in September and the process will then move into a formal public review phase. As a member of the study task force, I have waited for the appropriate task force meeting to raise issues of concern to Washoe County as a whole and it appears as if opportunities to discuss these issues in a task force meeting will be slim (particularly since I will be unable to attend the task force meeting on July 9, 1997).

The following comments are mitigation measures which I believe should be considered as part of a larger mitigation plan for Washoe County (to include the Cities of Reno and Sparks). The comments are segregated by the appropriate categories for evaluation (provided to task force members during the meeting on June 11, 1997). These mitigation measures have appeared in a letter to you dated April 30, 1996 and were reiterated in a memorandum to the Reno Mitigation Study Task Force dated January 21, 1997.

Pedestrian Safety and/or **Emergency Vehicle Access** and/or **Train/Vehicle Accidents**

1. Evaluate existing railroad crossings (public and private) in Washoe County and repair those crossing which do not meet appropriate Federal or State regulations. Southern Pacific Railroad repaired the railroad crossing at Woodland Avenue prior to the merger and a similar effort should be provided for all crossings in Washoe County.

2. Inform residents and business owners of the emergency access road which provides secondary access should Woodland Avenue be blocked at the railroad crossing. Information should include agencies to contact should an emergency arise which would cause the need for secondary emergency access.

3. Provide emergency access to residents in the Stag Lane, Del Curto Lane, and Canal Road areas. There should be, at a minimum, discussion between railroad officials, the Public Service Commission, and appropriate County staff as to measures to be taken to provide emergency access and/or evacuation should the railroad crossings at those locations be blocked.

4. Provide a system which alerts emergency responder dispatch centers as to when trains are on the tracks. This system should be able to divide the Donner Pass corridor through

John B. Hester, AICP
Director

Jess S. Traver, P.E.
County Building
Official

COMMUNITY
DEVELOPMENT

Washoe County into discrete segments so that dispatchers can keep track of the progress of a train. Such a system would alert emergency responders when a crossing will be blocked so they can plan alternate routes.

Derailments/Spills/Water Quality

5. Develop a plan to respond to hazardous material spills and/or accidents in or near Gerlach, Nevada (Feather River route). The plan should identify the equipment needed for minimum response and the location of this equipment, the agency(s) (both public and private) charged with responding to an incident, and response times to an incident.

6. Develop a plan to address the impact of spills and leaks of hazardous/toxic material along the railroad tracks. The plan should provide mitigation measures to minimize the migration of leaks and spills into the ground water supply and/or into surface drainage facilities which eventually empty into the Truckee River. The plan should also address the need for structures similar to catch basins (which are required for parking lots) for the railroad tracks and railroad yards.

7. Control the speed of trains in the Truckee Canyon (Wadsworth to Verdi) adjacent to municipal water intakes on the Truckee River. Develop a plan to address train derailment and/or hazardous/toxic material spills which endanger either ground water or Truckee River water supplies. Situate appropriate emergency response and spill containment equipment in the Truckee Meadows region.

I would appreciate a written response to each of these items either separately or within the Preliminary Mitigation Plan. I also request that this letter be made part of the public record. If you have any questions, please do not hesitate to call me at (702) 328-3623.

Sincerely,

Bob Webb

Bob Webb
Community Coordinator

CRW:bw

cc: Grant Sims, Chair, Washoe County Board of County Commissioners
John MacIntyre, County Manager
John Hester, Director
Reno Mitigation Study Task Force members

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Section of Environmental Analysis

7-11-97 2:23:11pm
RE.03
FD#32760

July 2, 1997

Mr. Charles McNeely
City Manager
City of Reno
P.O. Box 1900
Reno, NV 89505

ENVIRONMENTAL DOCUMENT

RE: Response to Letters Received in May and June 1997 from the City of Reno Regarding Reno Mitigation Study in the UP/SP Merger Case.

Dear Mr. McNeely:

The purpose of this letter is to respond to various letters you and other City of Reno representatives sent to the Section of Environmental Analysis (SEA) in May and June. The letters address a variety of topics related to the ongoing Reno mitigation study. They include requests for study data, definitions, methodologies, and mitigation options. They also request that certain information be placed on task force agendas and seek an extension of the study schedule.

At the outset, I want to thank you for your continued input into the study. In particular, the information you provided on Washoe County and Reno population estimates was quite useful. All of the letters have been placed in the public record. They will be reviewed and considered by SEA as we continue our work on the Reno mitigation study.

The specific information on study data, definitions, methodologies, and mitigation options that the City has requested will be addressed in the Preliminary Mitigation Plan, which is currently being prepared. That plan, which is scheduled to be issued in September, will contain SEA's preliminary position on methodologies, study data, mitigation, etc.

After the Preliminary Mitigation Plan is issued, the City and the public will have the opportunity to review and comment on the information contained in this document. There will also be a public meeting after the Preliminary Mitigation Plan is issued. In addition, the public will have a further opportunity for comment after the Final Mitigation Plan is issued. The Final Mitigation Plan will contain SEA's further analysis and will address the comments on the Preliminary Mitigation Plan. Then the Surface Transportation Board (Board) will consider all public comments, including those of the City and the Task Force, as well as SEA's recommendations in issuing its decision imposing final mitigation for Reno. This mitigation will

be in addition to those mitigation measures that already have been imposed in Decision No. 44, issued August 12, 1996.

In conducting the mitigation study for Reno, SEA appreciates the participation of the Reno Task Force, which has been meeting monthly since it was established in January of 1997. As you know, the Task Force was formed as an advisory body. It has served as a forum to exchange information and ideas, to facilitate the distribution of information and data to appropriate agencies and interested parties, and to offer comments on the study process and potential mitigation options.

The Task Force members have put considerable time into the process and have fulfilled the role that SEA envisioned in the preparation phase of the Preliminary Mitigation Plan for Reno. The task force includes broad views including city, county, regional, and state agencies, business and downtown representatives, and residential, environmental, Native American, warehousing and distribution, state economic, and railroad interests. While there are diverse opinions amongst the task force members, the input we have received has helped to define the issues to be considered in the mitigation plan.

In the City's letters, certain items have been requested to be placed on future Task Force agendas. We will take those requests under advisement, but note that a number of these items have already been discussed at prior Task Force meetings. These include definition of baseline conditions, Tier 2 (negotiated) mitigation options, train traffic projections, pre- and post-merger vehicle delay and vehicular/train accident data, noise impacts and methodology, and air quality issues in Truckee Meadows.

In terms of future Task Force meetings, the next meeting is scheduled for July 9, 1997. We will shortly provide you with an agenda for that meeting. In August, SEA will not be able to conduct a Task Force meeting, as we will be finalizing the Preliminary Mitigation Plan. We are now moving into a formal public review phase. Therefore, in September SEA plans to hold both a Task Force meeting and a public meeting on the Preliminary Mitigation Plan. We look forward to the participation of the Task Force members at both of these meetings.

As previously discussed, the current mitigation study schedule anticipates release of the Preliminary Mitigation Plan in September. Because of the Board's requirement to complete the study and issue a final decision within an 18-month time frame, it is not feasible for SEA staff to extend the study period, as suggested by the City. The public review period for the Preliminary Mitigation Plan will be 30 days, and, as noted, there will be an additional opportunity for public comment on the Final Mitigation Plan after it is released.

Finally it should be pointed out that the regulations cited in your June 20, 1997 letter on noise (40 CFR Part 201) are not the Board's regulations. The Board's environmental regulations are set out at 49 CFR Part 1105.

In conclusion, I'd like to reaffirm that the issues raised by the City as well as other interested parties, which have not been specifically addressed at Task Force meetings or in SEA correspondence, will be considered by SEA in preparing the Preliminary Mitigation Plan. Also, the mitigation study is an ongoing process whereby the Task Force and the public will have ample opportunity to participate.

I thank you for your continued interest in the study.

Sincerely yours,

Elaine K. Kaiser
Chief
Section of Environmental Analysis

cc: Jeff Griffin, Mayor
Pierre Hascheff, Council Member At-Large
Tom Herndon, Council Member Ward 1
Candice Pearce, Council Member Ward 2
Bill Newberg, Council Member Ward 3
Judy Pruett, Council Member Ward 4
Dave Aiazzi, Council Member Ward 5
Senator Harry Reid
Senator Richard Bryan
Congressman Jim Gibbons
Congressman John Ensign
Merri Belaustegui-Traficanti, Deputy City Attorney
Mark A. Demuth, MADCON Consultation Services
Reno Mitigation Study Task Force
Winn Frank
Kay Wilson
Dave Mansen

WICHITA — SEDGWICK COUNTY

W SC

METROPOLITAN AREA PLANNING DEPARTMENT

CITY HALL — TENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1688
(316) 268-4421
FAX (316) 268-4390

7-8-97 4:00:34 pm
WE.15
W.
FD#32760

June 19, 1997

Mike Dalton
Team Leader for Wichita Study
Section of Environmental Analysis
Surface Transportation Board
1925 K Street NW
Washington, DC 20423

ENVIRONMENTAL DOCUMENT

Dear Mr. Dalton:

I want to ask you to provide a formal public hearing for comment on the draft mitigation study, which you have told me could be ready for distribution by August 1, 1997. I think the proper timing for the hearing should be approximately three weeks after you have distributed your document, so that there is ample time locally to read and understand your findings.

If you agree to do this we will need to pick an appropriate meeting place, and time, as soon as it is possible to do so.

On a related matter, I would like to know how many copies of the draft mitigation report you are planning to produce, and the distribution list for that document. I will want several extra copies for my own use and distribution, perhaps as many as thirty.

Thank you for your consideration of my requests.

Sincerely,

W. L. Stockwell

Willard L. Stockwell
Chief Planner

c: Phil Braum
Marvin Krout

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

7-11-97 2:44:22 pm
RE.03
FD#32760

Section of Environmental Analysis

July 2, 1997

Mr. Charles McNeely
City Manager
City of Reno
P.O. Box 1900
Reno, NV 89505

ENVIRONMENTAL DOCUMENT

RE: Response to Your June 20, 1997 Letter Regarding the Third-Party Contractors in Finance Docket No. 32760 (the UP/SP merger)

Dear Mr. McNeely,

This letter responds to your letter of June 20, 1997, resubmitting and supplementing a request for certain information involving the third-party contractors engaged to work on the ongoing Reno environmental mitigation study in Finance Docket No. 32760 (the UP/SP merger). As you note in your letter, the City of Reno made a request for similar information in November 1996. By letter dated January 11, 1997, I responded to that request.

I believe that it is unnecessary and inappropriate to reassess the qualifications of the third-party contractors and sub-contractors at this point. More than five months have passed since my January letter. If you were dissatisfied with the information in that letter, or had some specific basis to challenge the contractors' qualifications, or show that there was, or could be, a conflict of interest, I would have expected you to raise any such concerns at that time.

In any event, you have failed to show a need to revisit the general issues you raise. We are already 2/3 of the way through with the further mitigation study that the Surface Transportation Board (Board) has ordered for Reno, and SEA's analysis is nearing completion. SEA intends to issue its Preliminary Mitigation Plan for Reno in September. Following public comment, SEA's Final Mitigation Plan will be issued and put out for public comment. The Board's decision imposing final mitigation conditions (in addition to those mitigation measures that have already been imposed in Decision No. 44, issued August 12, 1996) is scheduled to be issued in February 1998. It is very important that the mitigation study be completed on time because the traffic cap imposed in Decision No. 44 for Reno will expire, by its terms, at the end of the 18-month mitigation study period.

In these circumstances, I must decline your request for further information on the third-party contractors and subcontractors involved in the mitigation study. As you requested, your letter and my response are being placed in the public record.

Sincerely yours,

Elaine K. Kaiser

Elaine K. Kaiser
Chief
Section of Environmental Analysis

cc: Jeff Griffin, Mayor
Pierre Hascheff, Council Member At-Large
Tom Herndon, Council Member Ward 1
Candice Pearce, Council Member Ward 2
Bill Newberg, Council Member Ward 3
Judy Pruett, Council Member Ward 4
Dave Aiazzi, Council Member Ward 5
Senator Harry Reid
Senator Richard Bryan
Congressman Jim Gibbons
Congressman John Ensign
Merri Belaustegui-Traficanti, Deputy City Attorney
Mark A. Demuth, MADCON Consultation Services
J. Michael Hemmer, Union Pacific

6095 STONECREEK DR
RENO, NV 89511
JUNE 2, 1997

ENVIRONMENTAL DOCUMENT

6-27-97 10:16:47 am
RL.02
FD#32760

CHIEF, S.E.A.
STB
WASHINGTON, D.C. 20510

DEAR ELAINE R. KAISER

REF: LETTER TO EDITOR, RENO G.J.

WEBSTER DEFINES MITIGATION THUSLY: (1) TO CAUSE TO BECOME LESS HARSH OR HOSTILE, (2) TO MAKE LESS SEVERE OR PAINFUL.

DON'T YOU THINK THAT A MERGER GOOD FOR UNION PACIFIC SHOULD NOT BE BAD FOR RENO?

WOULD YOU PLEASE ADVISE IF TRENCHES COMPARABLE TO THE PROPOSED RENO TRENCH EXIST ELSE WHERE.

I RECENTLY LEARNED THAT ENTRY AND EXIT TRENCHES SERVICE A SEATTLE TUNNEL. I ALSO LEARNED THAT THE IMPACT OF THESE TRENCHES HAS BEEN SEVERELY ADVERSE.

I WOULD URGE YOU TO RECOMMEND THAT ALL TRENCHES BE DESIGNED WITH COVERING STRUCTURES TO ELIMINATE, NOT MITIGATE, ADVERSE IMPACT ON NEARBY NEIGHBORHOODS

ON THE PERSONAL SIDE: I AM A 78 YR OLD RETIRED ENGINEER WITH A B.S. IN MINING AND METALLURGY. MY CONCERN IN THIS MATTER IS FOR FUTURE RENO GENERATIONS.

YOURS TRULY,

MORTON SSAR

ENCL: COPY OF LETTERS TO RENO G.J.

Letters to the editor

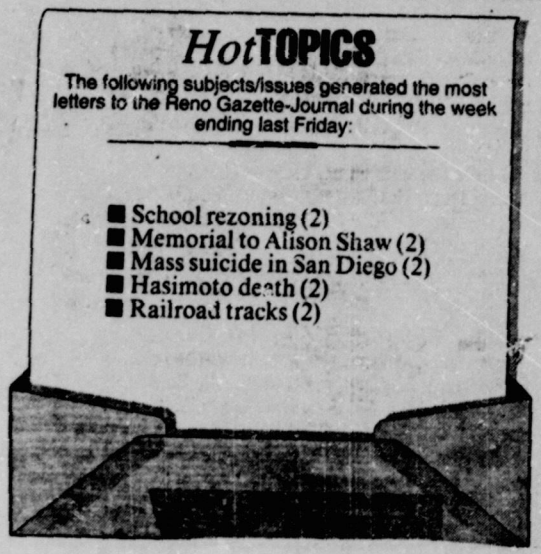
B[illegible]ditional mailed letters, the Reno Gazette-Journal accepts letters by fax and E-mail. Limit letters to 180 words and include your name, address and daytime phone on all letters. Writers are limited to one letter every two months.

- **Fax:** (702) 788-6458.
- **Letter:** P.O. Box 22000, Reno, NV 89520
- **E-mail:** rgjmail@nevadanet.com
- **News e-mail:** newsroom@nevadanet.com

HotTOPICS

The following subjects/issues generated the most letters to the Reno Gazette-Journal during the week ending last Friday:

- School rezoning (2)
- Memorial to Alison Shaw (2)
- Mass suicide in San Diego (2)
- Hasimoto death (2)
- Railroad tracks (2)



Railroad merger

Study findings preliminary

I am writing to clarify information presented in your March 20 article, "Study: Underpasses not feasible." The Surface Transportation Board's Section of Environmental Analysis (SEA) is currently in the preliminary stages of its Reno Mitigation Study and has not yet reached any final conclusions. Specifically, neither the board nor SEA has made any determination regarding the feasibility of underpasses or overpasses as possible mitigation options for the city of Reno. The SEA study team is in the process of conducting engineering and environmental analyses of the mitigation options. The board will determine what measures are appropriate for further mitigating environmental impacts associated with merger-related increased train traffic on existing UP right-of-way in Reno. After the SEA study team has reviewed and assessed public comment and completed the Reno Mitigation Study, SEA will make a final recommendation to the board. The board will consider SEA's recommendation and the public comments in making its decision. SEA expects to complete the study in the winter of this year, and until that time study findings are preliminary and intended to encourage public dialogue. Throughout the Reno Mitigation Study SEA welcomes public participation and comment.

Elaine K. Kaiser, *Washington, D.C.* (20510?)
Chief, Section of Environmental Analysis
Surface Transportation Board 20423

Subject: The proposed railroad trench through Reno.

How can Mayor Griffin reconcile an unattractive nuisance (the Griffin/McNeely ditch) with his vision for an attractive redeveloped downtown Reno? I would like to suggest that (1) the trench be covered through the heart of downtown Reno and (2) that the entire railroad right-of-way through Reno be transferred to the city of Reno so that the existing wasteland can be developed into an environmentally attractive and productive beltway.

Morton Spar, *Reno*