

05-0712 Pot holes

Estimated
Maintenance–Signage Needs & Costs

Road #	Maintenance		Regulatory Signs	Warning Signs		Object Markers
	SDC	RBE		Alt. A	Alt. B	
30N16	12	1			6	2
29N22	2					
10(32N10)	3	1	2		12	8
23N09	4	7			16	
32N21						
32N12	1				2	
32N13	6	3				4
16(32N16)	1					
32N24	5				4	6
32N13						
32N17	3				8	2
17(31N17)	20	1	2		30	2
Totals	57	13	4	15	or 78	24
Cost	\$18,500	\$7,700	\$1,000	\$3,750	or \$19,500	\$3,000

$$\$30,200 + \$3750 \text{ or } + \$19,500 = \$33,950 \text{ or } \$49,700$$

SDC & RBE 4 person crew @ \$45.00/Hour + 150 mi/day @ \$0.405 = \$1500/day
 Power pole saw @ \$350.00 & chain saw @ \$300.00 = \$650
 SDC 5 curves/day = 12 days = \$18,000 + 12/17ths (\$650) = \$18,500
 RBE 3 sites/day = 5 days = \$7500 + 5/17 (\$650) = \$7,700

Regulatory & Warning Signs @ \$250 each

Object Markers @ \$125 each

Appendix

A - Glossary

B - Forestwide 2005 Accident History

C - State Laws Preempted

D - Traffic Flow Data by Count Site

E - Roadway Characteristic Notes and Slope Maps by road

F - Shared Use Assessment, Maps and Maintenance and/or Mitigation Tasks by road

G - Recommended MUTCD Signing

H - Study Volunteers

Appendix A – Glossary

Accident History – The Forest has no records of any accidents on the roads in the study. See Appendix B for Forestwide 2005 accident history.

Alignment and Stopping Sight Distance – Two vehicles traveled all of the roads together to determine the distance that one vehicle could see the other on sharper curves. A minimum distance for a given speed was used per FS Handbook. Each tight curve was checked by actual measurement. Most curves had full or nearly full turnout widths constructed in the travel way.

Average Daily Traffic (ADT) – Fundamentals of Traffic Engineering, 6th Edition, University of California and Traffic Surveillance, USFS R5, FSH 7709.41, Aug. 1969 were used to establish the best time to observe and record recreation vehicles. The ADT calculations utilized the process presented in “Guide for Traffic Volume Counting Manual”, 2nd edition Feb. 1965 US Dept. of Commerce (old Bureau of Public Roads–now Federal Highways.)

Average Travel Speed – This was arrived at by prudent drivers using two methods. During the first and second trips along the roads, travel speeds were recorded between stops. On the final pass, to check data at a couple of spots, a GPS, with external antenna, was used to accumulate the average speed along each road. Existing roadway conditions, in summer, 2005, controlled the speed traveled.

California Vehicle Code (CVC)—Following are brief excerpts from the August 2005 on-line code:

Operator License

CVC 12500. (a) A person may not drive a motor vehicle upon a highway, unless the person then holds a valid driver's license under this code.

*CVC 12501. The following persons are not required to obtain a driver's license:
(c) Any person driving or operating an off-highway motor vehicle subject to identification, as defined in Section 38012, while driving or operating such motor vehicle as provided in Section 38025.*

38012 – Motorcycle or motor driven cycle, snowmobile, sand buggy, dune buggy, all-terrain vehicle or Jeep. (green or red sticker)

38025 – to cross a two-lane highway.

- (b) The person is under the direct supervision of an adult who has in their possession an appropriate safety certificate issued by this state, or issued under the authority of another state.*
- (c) The person has in possession an appropriate safety certificate issued by this state or issued under the authority of another state.*

CVC 38504. No person under 14 years of age, on and after January 1, 1990, shall operate an all-terrain vehicle on public lands of this state unless the person satisfies one of the conditions set forth in Section 38503 and, in addition, is accompanied by and under the direct supervision of a parent or guardian or is accompanied by and under the direct supervision of an adult who is authorized by the parent or guardian.

CVC 38505. No person, on and after January 1, 1989, shall operate, ride, or be otherwise propelled on an all-terrain vehicle on public lands unless the person wears a safety helmet meeting requirements established for motorcycles and motorized bicycles, pursuant to Section 27802.

CVC 38506. No operator of an all-terrain vehicle may carry a passenger when operating on public lands.

However, the operator of an all-terrain vehicle, that is designed for operation off of the highway by an operator with no more than one passenger, may carry a passenger when operating on public lands.

Vehicle License

CVC 38012. (a) As used in this division, "off-highway motor vehicle subject to identification" means a motor vehicle subject to the provisions of subdivision (a) of Section 38010.*

(b) As used in this division, "off-highway motor vehicle" includes but is not limited to, the following:

(1) Any motorcycle or motor-driven cycle, except for any motorcycle which is eligible for a special transportation identification device issued pursuant to Section 38088. (Motorcycle used in racing events)

(2) Any snowmobile or other vehicle designed to travel over snow or ice, as defined in Section 557.

(3) Any motor vehicle commonly referred to as a sand buggy, dune buggy, or all-terrain vehicle.

Responsibility of the Forest Supervisor:

1. *Maintain an inventory of road signs and traffic markings.*
2. *Institute procedures to gain compliance with safety standards (sec 41)*

41–Safety Standards—that pertain to NFS roads:

41.1- Standard 9–Identification and Surveillance of Accident Locations.

41.2- Standard 12–Highway Design, Construction and Maintenance.

Applicable sections are:

Section A–Design Standards

Section F–Traffic Regulation and Warning at Construction and Maintenance Sites.

Section G–Railroad Crossings

Section H–Roadway Maintenance, i.e., Maintain commensurate with annual operational maintenance level assigned to the roads.

Section I–Hazard Identification and Correction.

Section J–Highway Features for Accident Prevention and Survivability.

Section K–Post-Crash Program.

41.3- Standard 13–Traffic Engineering Services

41.4- Standard 14–Pedestrian Safety

Probability Factors* – Probability deals with forecasting the effect of factors present in any situation and the likelihood of a crash resulting from exposure to those factors. Factors that may effect the probability of crashes include:

Operator Considerations

State Licensing

Age

Training

Time of Day

Season of Use

Crash History

Traffic Volume and Type

Speed

Surface Type

Intersections

Other Roadway Factors

Severity Factors* – Severity relates to the probable result of a crash and can range from minor property damage to critical injury or fatality. Factors that may affect the severity of crashes include:

Appendix B

Forest wide 2005 Accident (Crash) History

Note—none of these reported accidents on the Lassen NF contained in the Province Safety Officer's file, involve roads studied in this report. However, they are presented here to understand the type of accident that occurs:

<u>Date</u>	<u>Vehicle</u>	<u>Driver Age</u>	<u>Location</u>	<u>Accident</u>	<u>Cause</u>
4/19/05	Sedan	26	18Rd HCRD	Ran off road	Unknown
5/26/05	ATV (Quad)	88	29N46 ALRD	Ran off road	Unknown
5/29/05	ATV (Quad)	17	27N46 ALRD	Hit parked quad	Unsafe Speed
7/3/05	ATV (Quad)	14	Borrow Pit HCRD	Jumping bank	Unsafe Speed
7/13/05	Pickup	24	27N65 ALRD	Ran off road	Unsafe Turn
7/18/05	Motorcycle	44	28N06 ALRD	Ran up bank	Unsafe Turn
7/24/05	ATV (Quad)	40	Non-System Trail ELRD	Hit rock	Unsafe Speed

Only one of these accidents (5/29/05) involved another vehicle, which was part of the operator's group. And none of the accident reports noted problems with the roadway characteristics.

Appendix C

State Laws Preempted

On August 30, 2005, OGC attorney Ellen Hornstein, wrote in part *“The issue is whether the Forest Service has the authority to preempt state traffic laws in designating National Forest System roads for motor vehicle use. The answer is yes”*. Later she adds *“Thus, under the new rule, state traffic laws that conflict with designations of NFS roads for motor vehicle use will not apply to those roads”*. And, finally, she states *“Motorized mixed use may be legal or illegal under state law. Even if motorized mixed use is legal under state law and preemption of state law is not necessary to allow the use, the FS needs to assess whether the use is appropriate from an engineering and safety standpoint before designating an NFS road for that use.”*

The above statements confirm what the CHP’s Acting Deputy Commissioner’s April 7, 2005, meant with the statement: *“In response, if these roads are open to passenger vehicle use and not specifically posted authorizing OHV use, they would not be legal roadways for OHVs.”* However, per OGC, *“If motorized mixed use is allowed on an NFS road, state and local law enforcement officers will not be able to cite those using motor vehicles on that road in violation of state law because state law will not apply.”*

Appendix D

Traffic Flow Data by Count Site with Maps and Photos

Following are the coding instructions, form and the results of the daily observations at each of the count sites. Included are location maps and site photos used to orient the observers and to record sites for future use.

Share-the-Dream Trail
Traffic Flow Data
Team Instructions
6/4/05

Why

The Share-the-Dream Trail is being dedicated in September of 2005 for use by street legal vehicles. The Recreation Outdoor Coalition (ROC) wants the trail to also be available to non-street legal vehicles.

The US Forest Service has criteria that must be followed in making a decision to allow sharing the road or mixing street legal with non-street legal vehicles. The Lassen National Forest has indicated that if a formal engineering study indicates acceptable risks of mixing the use on certain roads, then the Forest will allow that use.

ROC has embarked on performing the study for the Lassen.

Engineering Study

The study process being utilized involves four major steps”

1. Traffic Flow Data
2. Roadway Characteristics
3. Data evaluation and summarization
4. Accident Risk Analysis and Recommendations

The study assumes that all vehicles and operators are legally licensed and equipped to safely operate.

Step 1 involves observing all traffic passing a given point during a specific time frame to provide a statistical sample of what traffic is using the system.

Step 2 involves recording the surface type, travel way width, shoulder or clear area width for accident avoidance maneuvers, the average travel speed (basic speed), stopping sight distance at curves, roadside hazards and adjacent down hill slopes to assess physical conditions.

Step 3 involves calculating the average daily traffic, the percentage of traffic by vehicle class, the number of people per vehicle and a cataloging of physical conditions that fall below an acceptable minimum.

And step 4 takes the data obtained and using sound judgement, assigning a risk or potential for an accident and assessment of the severity of an accident, and recommendations.

Coding Instructions

Traffic Flow Data Form

The study team member or recorder is to note who he/she is in the "collected by" space, the date of the count and the weather conditions in the provided space.

Record weather as clear, partly cloudy, cloudy, rain and temperature as cool, warm, hot.

Vehicles are classified as follows:

<u>Vehicle Class</u>	<u>Characteristics</u>	<u>Record</u>
1	Street Legal** 2WD or 4WD** Motorcycles**	Passenger Car SUV, including Jeeps Pickup Motorcycle
2 OHV	Non-street Legal <50" wide 2 wheels/tires 3 or more wheels/tires 2WD or 4WD (Dirt bikes, quads or ATVs)	Dirt Bike Quad
3 OHV	Non-street Legal >50" wide 4 or more wheels/tires 2WD or 4WD (“Jeeps” or dune buggies)	

For example, a state licensed highway motorcycle with a white metal plate on the rear fender is to be coded in the Class 1 block.

Record vehicle Class 1 traffic as either passenger car, sport utility vehicle, pickup or motorcycle. See Traffic Flow Data Form.

** State licensed with metal plates for use on “highways”.

Traffic Flow Data

Count Station #

BCDT-3B Traffic Study

Study Segment # _____ GPS Coord.: Lat _____ Lon _____ Field Data Collected by _____

Location Narrative _____ Date and Weather _____

Forest CASSEN Road No _____ Normal Season Use Period _____ to _____

Milepost	Vehicle Classification						Total Traffic Numeric
	1 Street-legal			2 OHV		3 OHV	
	Passenger Car	SUV	Pickup	Motorcycle	Dirt Bike		
7AM - 11 AM							
11 AM - 3 PM							
3 PM - 7 PM							
Total Count for Day							
% Traffic by Class							

People per Vehicle (any class)					
1	2	3	4	5	6 or more

Site Photo

Summary—Traffic Observations
June–August 2005 Station Summaries

Street Legal					Non-Street Legal		Total
Sta	Car	SUV	PU	Motorcycle	Dirt Bike	Quad	
1	6	6	10		3	28	53
3	11	35	75	2		6	129
4	11	36	63		8	15	133
5	9	27	34		2	8	80
*8	14	67	92		16	20	209
9	4	17	14			7	42
10	8	16	39	2		21	86
11	21	18	67			6	112
12	2	13	31			8	54
Totals	86	235	425	4	29	119	898
%	10%	26%	47%	0%	3%	14%	100%
%	83%				17%		100%

Station	June, July, August ADT	Average Per Road	People per Vehicle
1	5.48		1.62
3	18.00	10 (32N10) 16.14	1.85
4	19.24		1.79
5	11.19		1.54
*8	26.76		32N12 32N13 16.17
9	5.57		1.44
10	13.90		1.49
11	13.95		1.85
12	7.86		1.57
Total	110.87		14.71
Average	12.32		1.63

* See note on Station 8 ADT-2005 Form
BCDT-3B LNF

Summary—Time of Day
Number of Vehicles

Time	Passenger <i>Car</i>	SUV	Pickup	Motor- cycle	Dirt Bike	Quad	Total
7AM-11AM	12	54	107	0	8	35	216
11AM-3PM	42	114	206	4	12	52	430
3PM-7PM	32	67	112	0	9	32	252
Total	86	235	425	4	29	119	898

% of Total

7AM-11AM	1%	6%	12%	0%	1%	4%	24%
11AM-3PM	5%	13%	23%	0%	1%	6%	48%
3PM-7PM	4%	7%	12%	0%	1%	4%	28%
Total	10%	26%	47%	0%	3%	14%	100%

Station Labor Day Weekend (9/4/2005)

1	1	1	5			22	29
3	3	16	27	1		12	59
4	1	12	11	1	2	16	43
5	3	4	9		4	14	34
8	4	5	21		11	10	51
9	1	4	5		12	34	56
10	1	2	8				11
11	9	11	20			3	43
12			13	1		2	16
Total	23	55	119	3	29	113	342
%	7%	16%	35%	1%	8%	33%	100%

Other Travelers Recorded—Summer 2005

Count Station	FS Vehicle	Park Service	Horseback Riders	Hikers	Class C Motorhomes	Bicycle	Mule Drawn Wagons
1	2	1				1	
3	8				1		
4	24			8	1	2	
5	4					2	
8			4		4		
9	6		7				2
10	3						
11	2						
12	2	1					
Totals	51	2	11	8	6	5	2

ADT — 2005

29N22
Road Number 30N14
Count Station 1

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen ger <i>Car</i>	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun						1		1
6/15 Wed			1					1
7/3 Sun	6	5	7		3	24		45
7/20 Wed		1						1
8/7 Sun			2			2		4
8/17 Wed						1		1
Total	6	6	10		3	28		53
% by class	42%				58%			100%

9/4 Sun	1	1	5			22		29
% by class	24%				76%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	1	1	1.50
July	1	45 (7/3)	2.10
August	1	4	1.25
Total	3	50	4.85
Average	÷3= 1.00	÷3= 16.67	÷3= 1.62

ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

$$ADT = \frac{5(1.00) + 2(16.67)}{7} = \underline{\underline{5.48}}$$

STATION 1

To SR 89+36

BONNIE

Rock Pit

30W^{1/2}C
downhill DHV trail

To 17 Rd.



STATION # 1



ADT — 2005

Road Number 10(32 N10)
 Count Station 3

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen- ger Car	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun		8	4					12
6/15 Wed		1	5					6
7/3 Sun	5	8	38	2		2		55
7/20 Wed	5	3	9			2		19
8/7 Sun		10	10			2		22
8/17 Wed	1	5	9					15
Total	11	35	75	2		6		129
% by class	95%				5%			100%

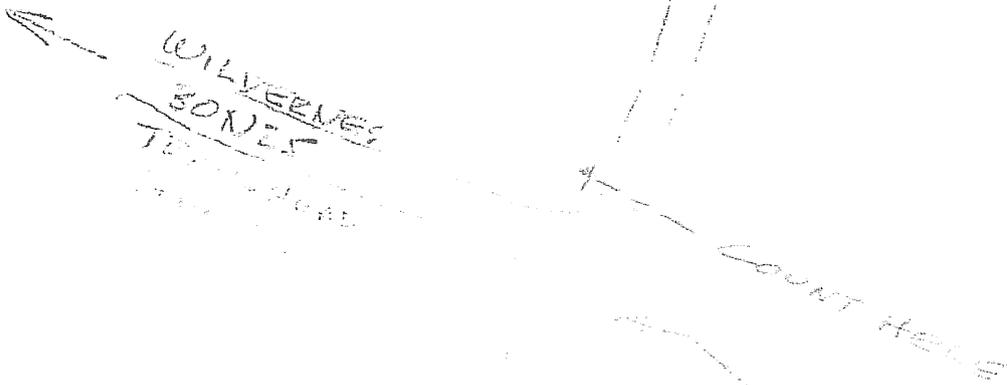
9/4 Sun	3	16	27	1		12		59
% by class	80%				20%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	6	12	1.59
July	19	55 (7/3)	1.87
August	15	22	2.08
Total	40	89	5.54
Average	÷3= 13.33	÷3= 29.67	÷3= 1.85

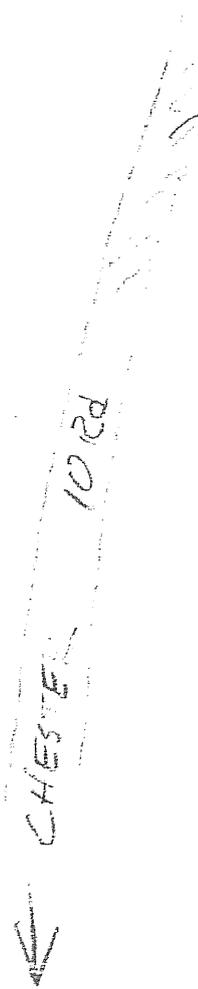
$$\text{ADT} = \frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$$

$$\text{ADT} = \frac{5(13.33) + 2(29.67)}{7} = \underline{\underline{18.00}}$$

STATION 3



Paved Rd ends @ intersection



STATION # 3



ADT — 2005

Road Number 10 (32 N 1st)
 Count Station 4

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen ger Car	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun		1	2					3
6/15 Wed		2	3					5
7/3 Sun	5	10	26		4	4		49
7/20 Wed	2	7	20			2		31
8/7 Sun	3	12	7		4	9		35
8/17 Wed	1	4	5					10
Total	11	36	63		8	15		133
% by class	83%				17%			100%

9/4 Sun	1	12	11	1	2	16		43
% by class	58%				42%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	5	3	1.90
July	31	49 (7/3)	1.80
August	10	35	1.68
Total	46	87	5.38
Average	÷3= 15.33	÷3= 29.00	÷3= 1.79

ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

ADT = $\frac{5(15.33) + 2(29.00)}{7} = \underline{\underline{19.24}}$

Shotoven Lake

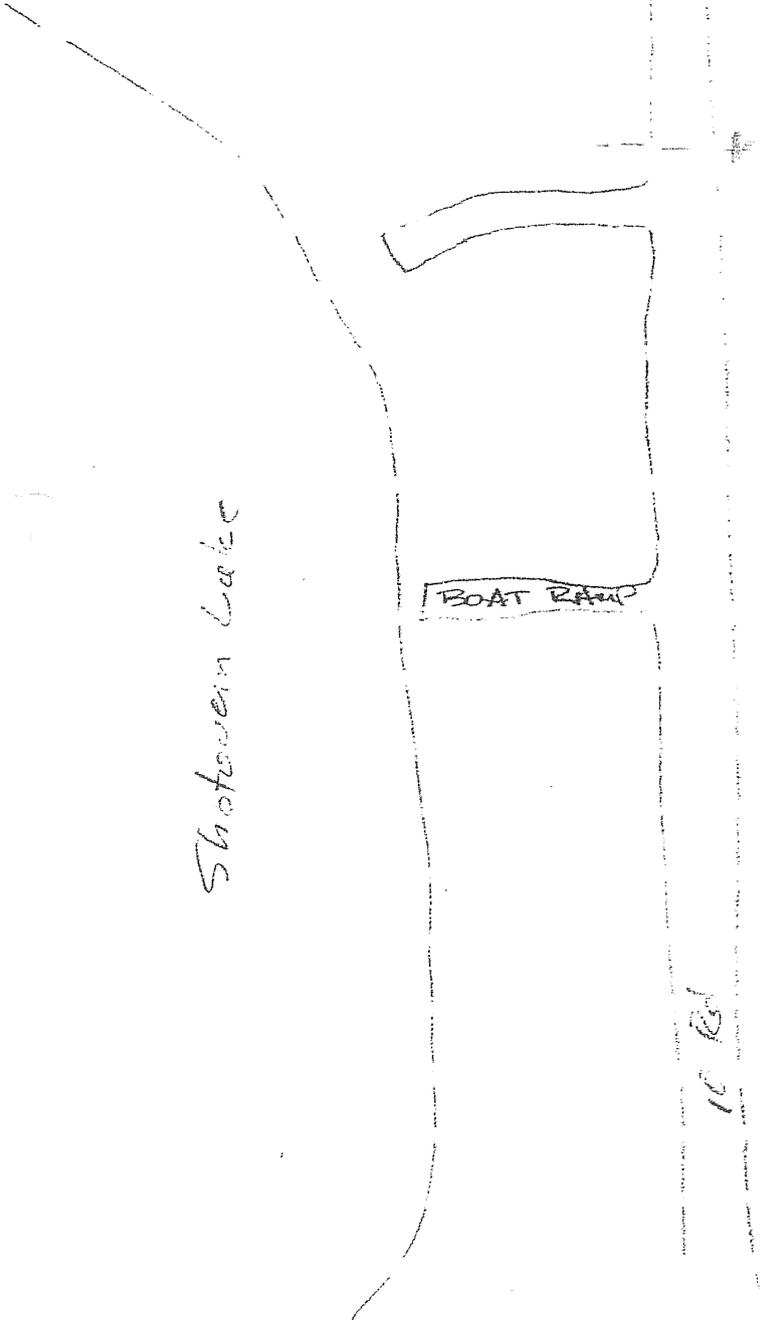
BOAT RAMP

STORMY CANYON

10 Rd

COUNT HERE

STATION 4



STATION # 4





STATION # 4

ADT — 2005

Road Number 10 (32 N 10)
 Count Station 5

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen ger Car	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun		5	8					13
6/15 Wed	1	4	3					8
7/3 Sun	3	8	12		2	4		29
7/20 Wed		4	3			4		11
8/7 Sun	5	4	4					13
8/17 Wed		2	4					6
Total	9	27	34		2	8		80
% by class	87%				13%			100%

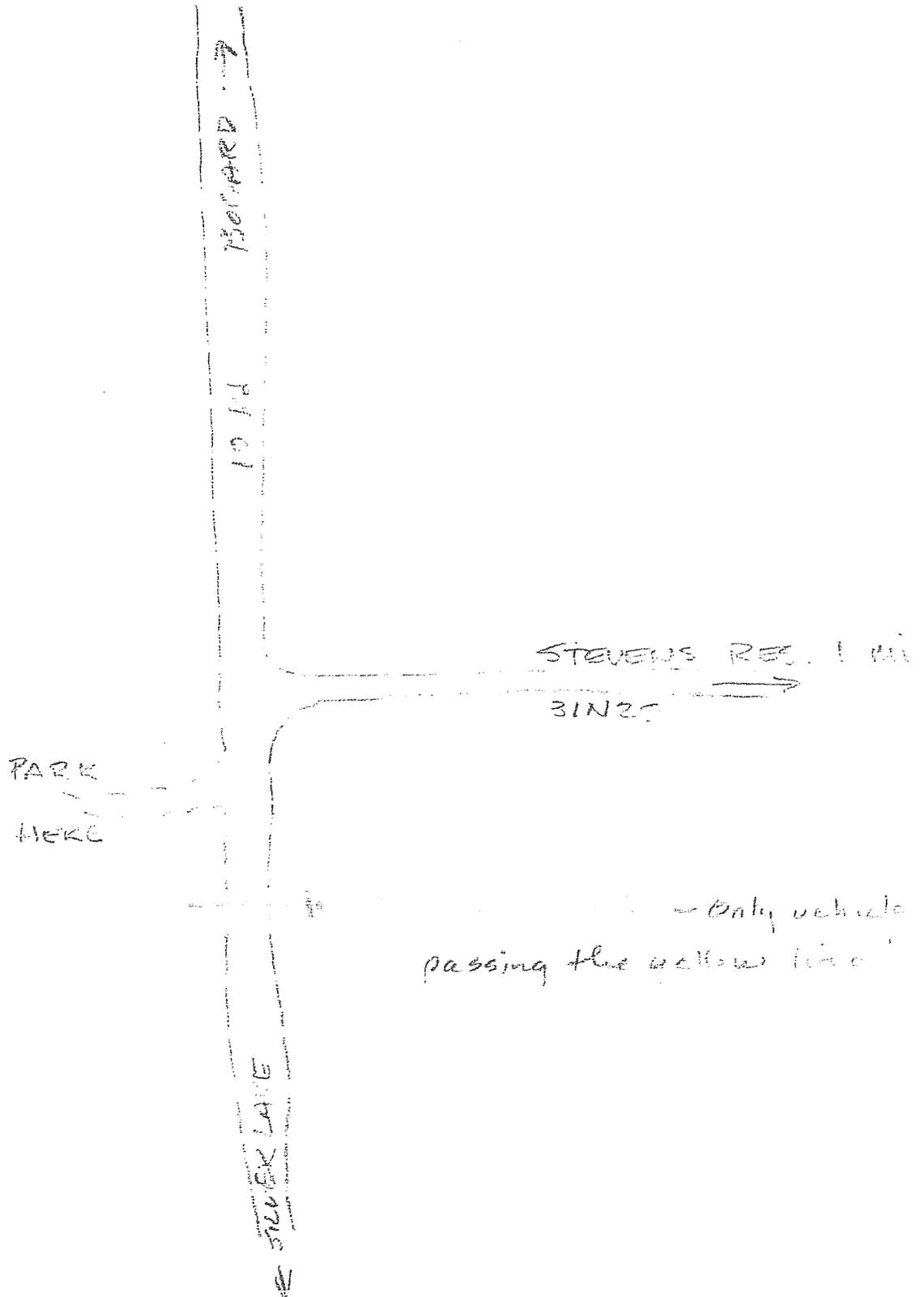
9/4 Sun	3	4	9		4	14		34
% by class	47%				53%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	8	13	1.20
July	11	29 (7/3)	1.21
August	6	13	2.21
Total	25	55	4.62
Average	÷3= 8.33	÷3= 18.33	÷3= 1.54

ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

$$ADT = \frac{5(8.33) + 2(18.33)}{7} = \underline{\underline{11.19}}$$

STATION 3



STATION # 5



*

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passenger Car	SUV	PU	Motor-cycle	Dirt Bike	Quad		
6/5 Sun	2	18	11 (3)**					34
6/15 Wed		7	9			3		19
7/3 Sun	10	25	23		15	15		88
7/20 Wed	1	5	8		1			15
8/7 Sun	1	7	28 (1)**			2		39
8/17 Wed		5	9					14
Total	14	67	92		16	20		209
% by class	83%				17%			100%

9/4 Sun	4	5	21		11	10		51
% by class	59%				41%			100%

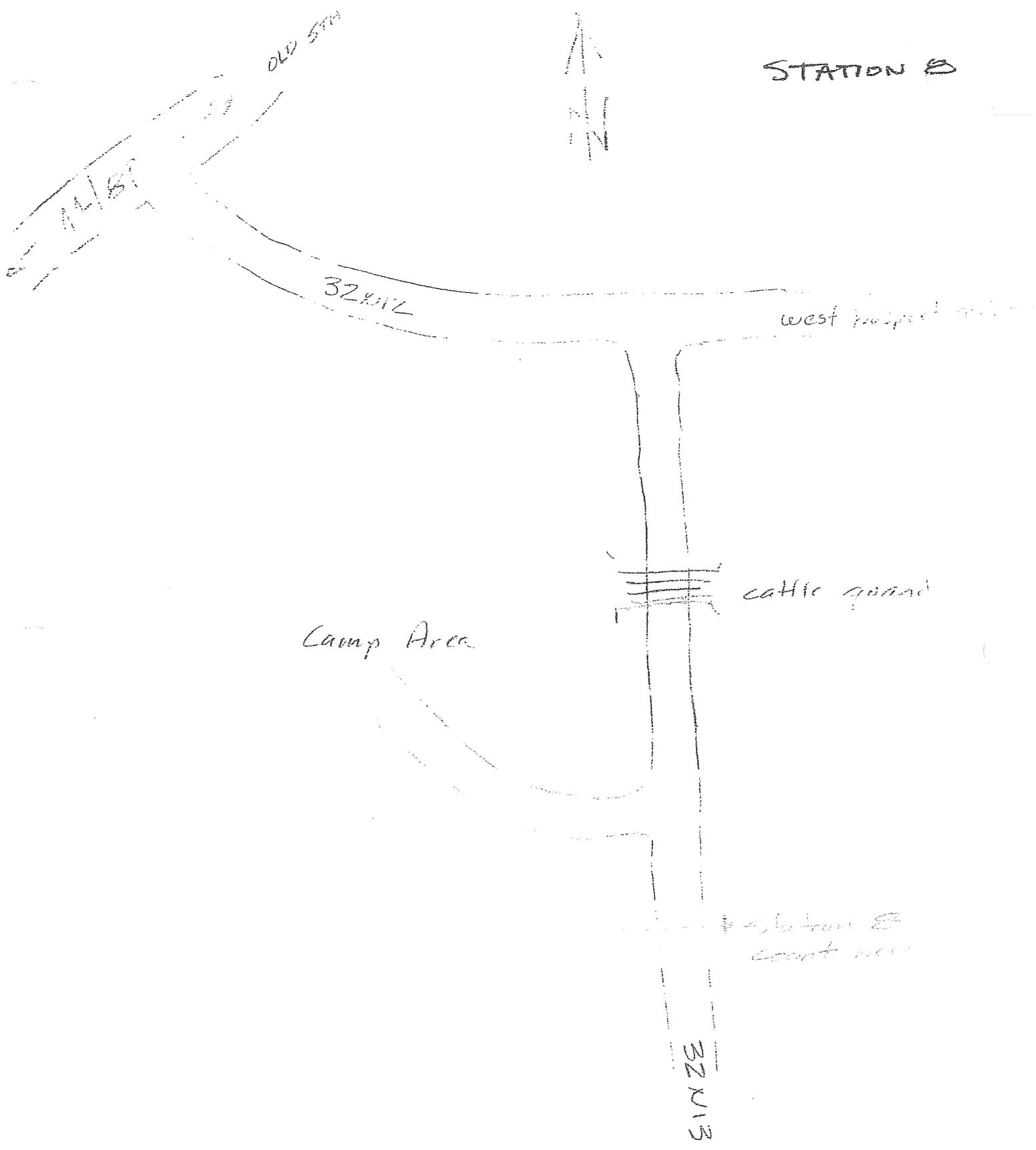
Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	19	34	1.58
July	15	88 (7/3)	1.69
August	14	39	1.54
Total	48.00	161.00	4.81
Average	÷3= 16.00	÷3= 53.67	÷3= 1.60

ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

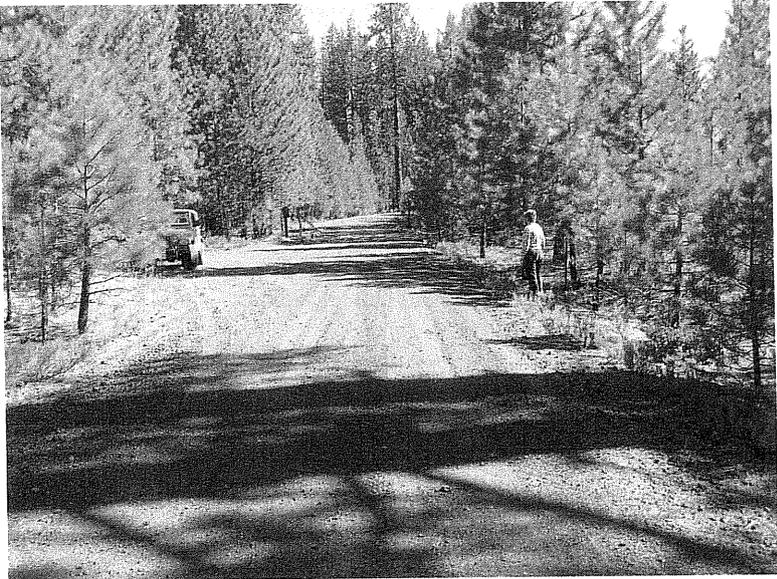
**
Class C Motorhome

ADT = $\frac{5(16.00) + 2(53.67)}{7} = \underline{\underline{26.76}}$

* Poor choice of site! Dispersed camping area access on each side of site. Private land camping area 1/2 mile south. Road is signed w/ vehicle and 2 route markers!



STATION # 8



ADT — 2005

Road Number 32N13
 Count Station 9

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen ger <i>Car</i>	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun		4	3					7
6/15 Wed	2	2	3					7
7/3 Sun	1	6	6			7		20
7/20 Wed								0
8/7 Sun		2	2					4
8/17 Wed	1	3						4
Total	4	17	14			7		42
% by class	83%				17%			100%

9/4 Sun	1	4	5		12	34		56
% by class	18%				82%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	7	7	2.36
July	0	20 (7/3)	0.83
August	4	4	1.13
Total	11	31	4.32
Average	÷3= 3.67	÷3= 10.33	÷3= 1.44

ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

ADT = $\frac{5(3.67) + 2(10.33)}{7} = \underline{\underline{5.57}}$

ASH PAD
SNOWMOBILE
PARK

OLD STATION

STATION 9

44/81

32/113

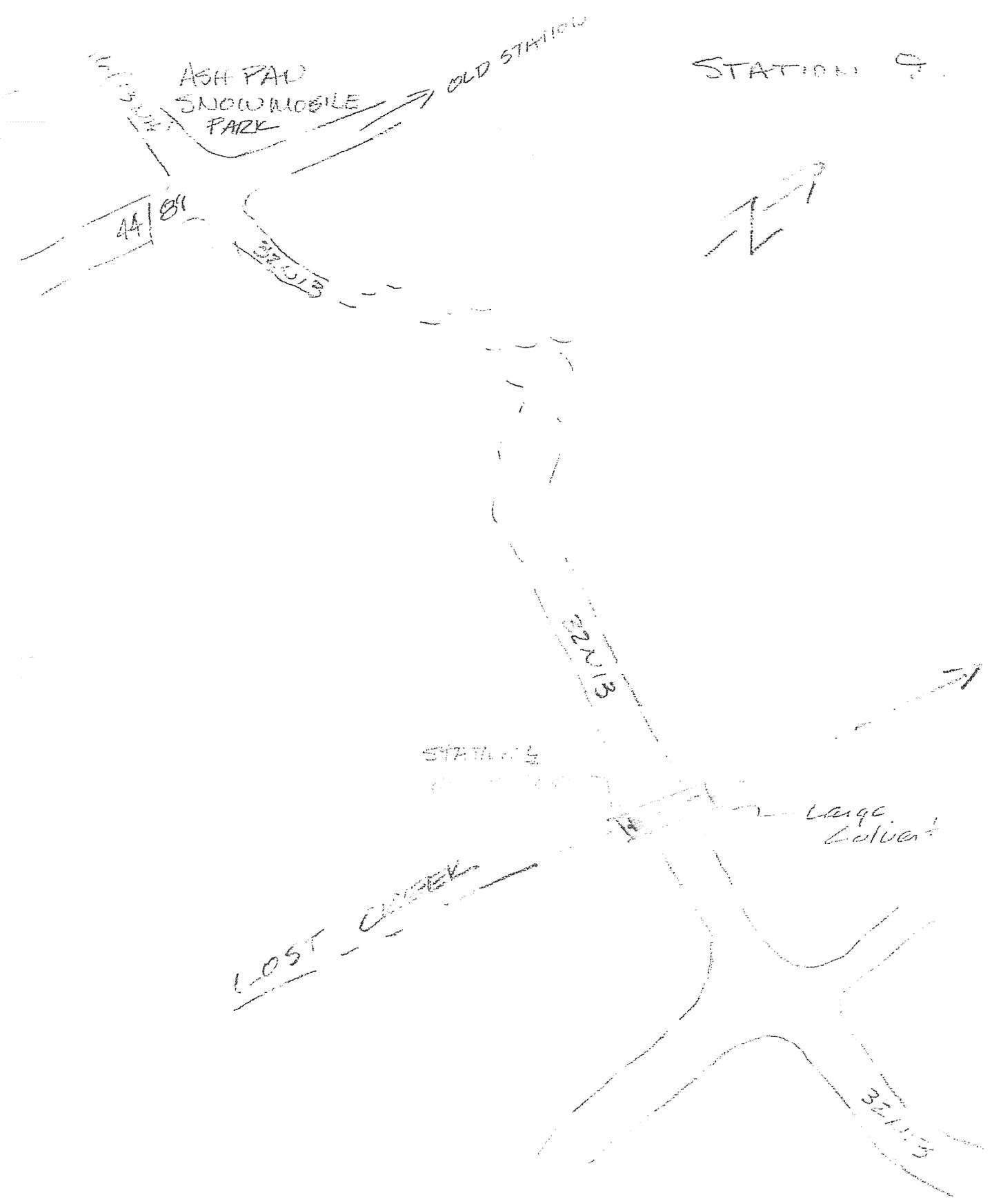
32/113

STATION 4

Large
Colvent

LOST CREEK

32/113



STATION # 9



ADT — 2005

Road Number 33 N16 (16)
 Count Station 10

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen ger Car	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun	3	2	6			4		15
6/15 Wed	1	5	5			6		17
7/3 Sun	3	7	6	2		7		25
7/20 Wed			15					15
8/7 Sun	1	2	3					6
8/17 Wed			4			4		8
Total	8	16	39	2		21		86
% by class	76%				24%			100%

9/4 Sun	1	2	8					11
% by class	100%				0%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	17	15	1.40
July	15	25 (?/3)	1.72
August	8	6	1.36
Total	40	46	4.48
Average	÷3= 13.33	÷3= 15.33	÷3= 1.49

ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

$$ADT = \frac{5(13.33) + 2(15.33)}{7} = \underline{\underline{13.90}}$$

STATION ID



STATION ID
AA/B9
→ OLD STATION

FISH HAN
SANDWICHES
PARK

16 (33/16)

ABOUT 4 KILOS

STATION ID
COUNT 1006

GOMYBEN...

32024

BIS LIXE

110 (33/16)





STATION # 10



ADT — 2005

Road Number 32017
 Count Station 11

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen ger <i>Car</i>	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun	2		4					6
6/15 Wed			5			1		6
7/3 Sun	15	5	32			5		57
7/20 Wed		4	1					5
8/7 Sun	4	4	18					26
8/17 Wed		5	7					12
Total	21	18	67			6		112
% by class	95%				5%			100%

9/4 Sun	9	11	20			3		43
% by class	93%				7%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	6	6	1.67
July	5	57 (7/3)	1.73
August	12	26	2.16
Total	23	89	5.56
Average	÷3= 7.67	÷3= 29.67	÷3= 1.85

ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

ADT = $\frac{5(7.67) + 2(29.67)}{7} = \underline{\underline{13.95}}$

STATION 11



No. 1000
32N13
A. 1000

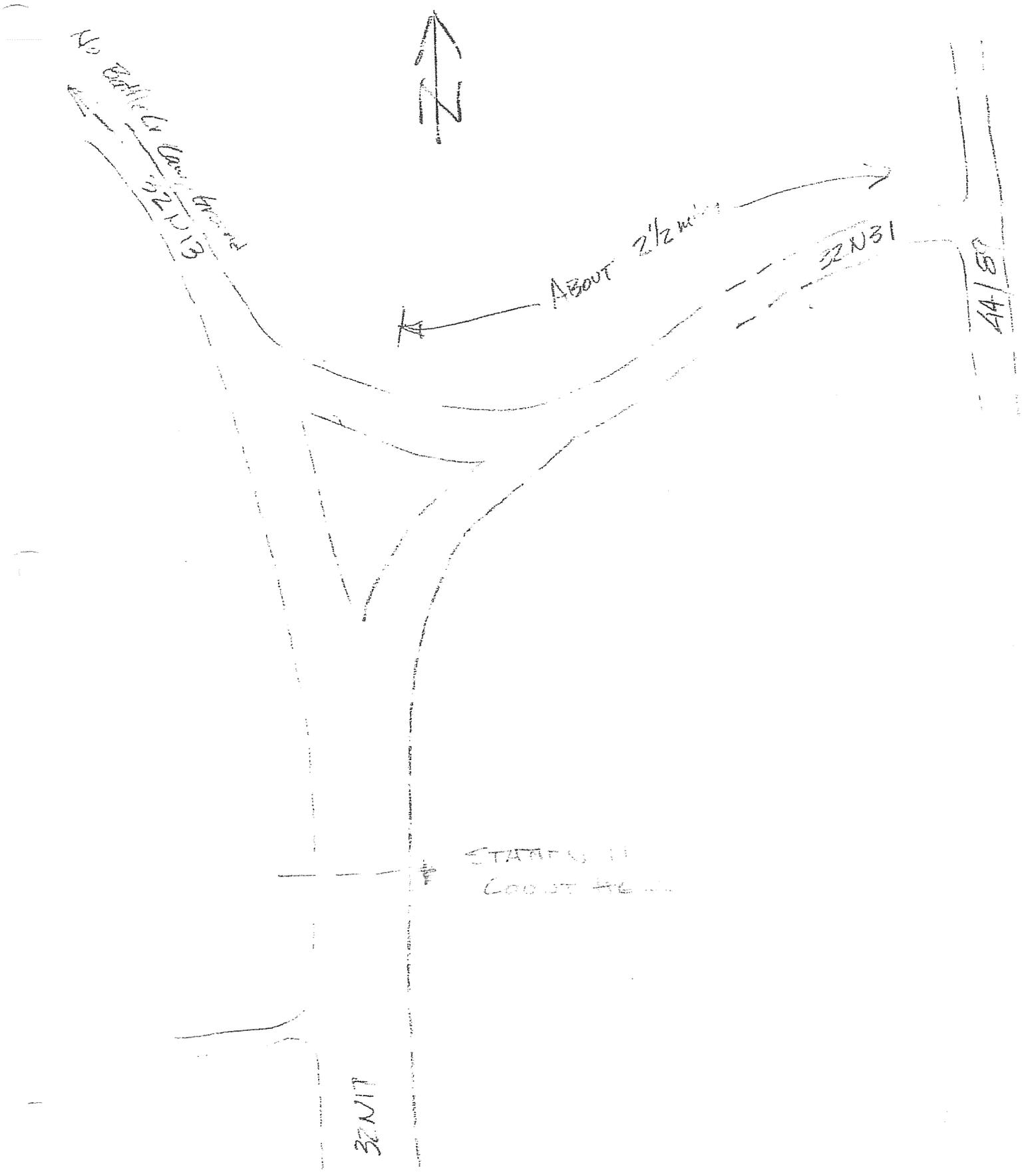
ABOUT 2 1/2 miles

32N31

44/50

STATION 11
CROSSING

32N17



STATION # 11



ADT — 2005

Road Number 17 (31N17)
 Count Station 12

Observed Vehicles

Date/Day	Class 1 (street legal)				Class 2 (OHV)		Class 3 OHV Other	Total
	Passen ger Car	SUV	PU	Motor- cycle	Dirt Bike	Quad		
6/5 Sun	1	3	3					7
6/15 Wed			4					4
7/3 Sun	1	3	10					14
7/20 Wed		5	2					7
8/7 Sun		2	6			6		14
8/17 Wed			6			2		8
Total	2	13	31			8		54
% by class	85%				15%			100%

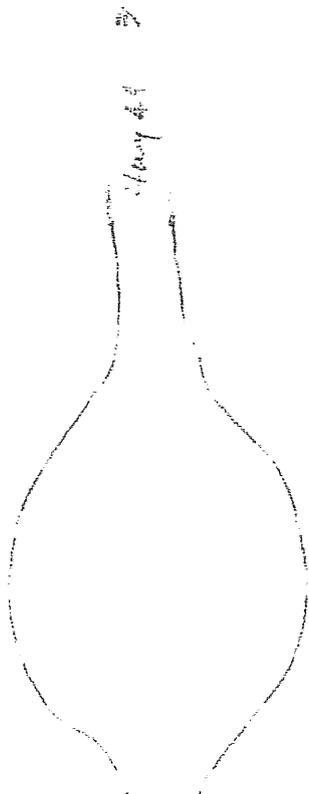
9/4 Sun			13	1		2		16
% by class	87%				13%			100%

Observed Vehicles	Weekday (Wed)	Weekend (Sun)	People/Vehicle
June	4	7	1.18
July	7	14 (7/3)	2.07
August	8	14	1.45
Total	19	35	4.70
Average	÷3= 6.33	÷3= 11.67	÷3= 1.57

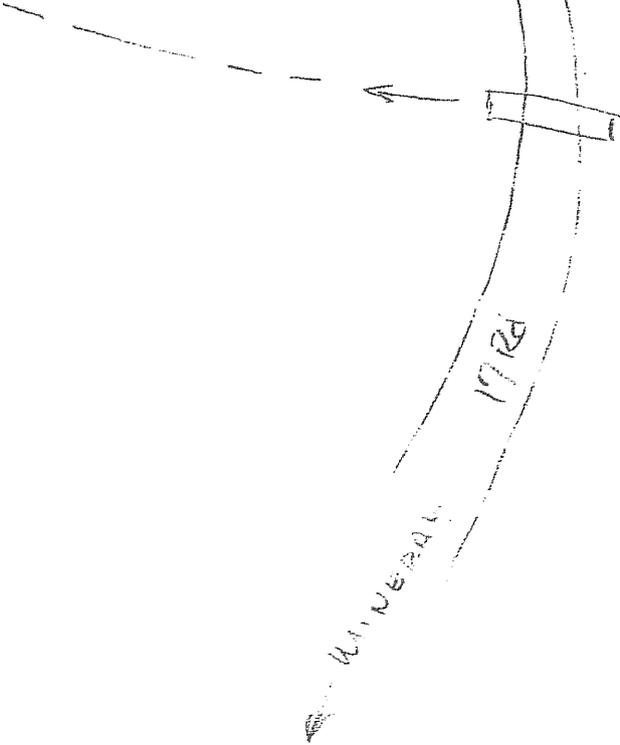
ADT = $\frac{5 \text{ Ave Weekdays} + 2 \text{ Ave Weekend}}{7}$

ADT = $\frac{5(6.33) + 2(11.67)}{7} = \underline{\underline{7.86}}$

STATION 12



Heart Lake Trout
Natural Rec Trail



50 FT Digger Co.

STATION # 12



**Traffic Survey
USFS 17 Road
Between SR 36 and SR 44
West side of Lassen Volcanic National Park (Between Mineral and
Viola or Manzanita Lake)**

Background

Two separate traffic surveys were conducted during the summer of 2005. There are some differences between the survey results that we are trying to understand.

Information Request

Do you or any of your employees commute on the 17 Road? Yes No

If yes—how many days per week? _____

If yes---what time(s) of the day?_____

If yes---Is this all season?_____

Signed _____ Individual or Agency Representative

Agency _____

Date _____

Thank you

Recreation Outdoor Coalition (ROC)

Barbara Tatman

From: smilligan4732 [smilligan4732@sbcglobal.net]
Sent: Thursday, February 23, 2006 9:00 AM
To: Dick Tatman
Subject: commuter traffic

Dick,
Do you ned the forms physically filled out?

When Nancy took the forms around and talked to the people they all said they did not have ANYONE who commuted on the 17-Road. I can take them back by this week-end and have them fill them out if you feel a filled out form would be better.

She said she hit the Mineral Gas Mart (MGM), the Post Office, and the park. Did not go to the Lassen Mineral Lodge but I KNOW they have no one who commutes.

What do you think?

Thanks.

Syl

*I think we need something from the Park in writing.
They are the usas that I believe we keep hearing about.*

Appendix E

Roadway Characteristic Notes and Slope Maps by Road

Following are the coding instructions and resulting notes for each road concerning the conditions found in June 2005. Also, slope maps using LNF's digital terrain data showing a 200 foot wide corridor along each road.