

ROC DEIS Comments – Exhibit 2

**TRAFFIC ENGINEERING REPORT
SIERRA NATIONAL FOREST**

**Granite Creek Area
(BL-F)**

**Granite Creek Rd (5S30)
Granite CG Rd (4S60)
Beasore Rd (5S07)
Juniper Rd (5S88)**

Prepared By _____

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Review By _____

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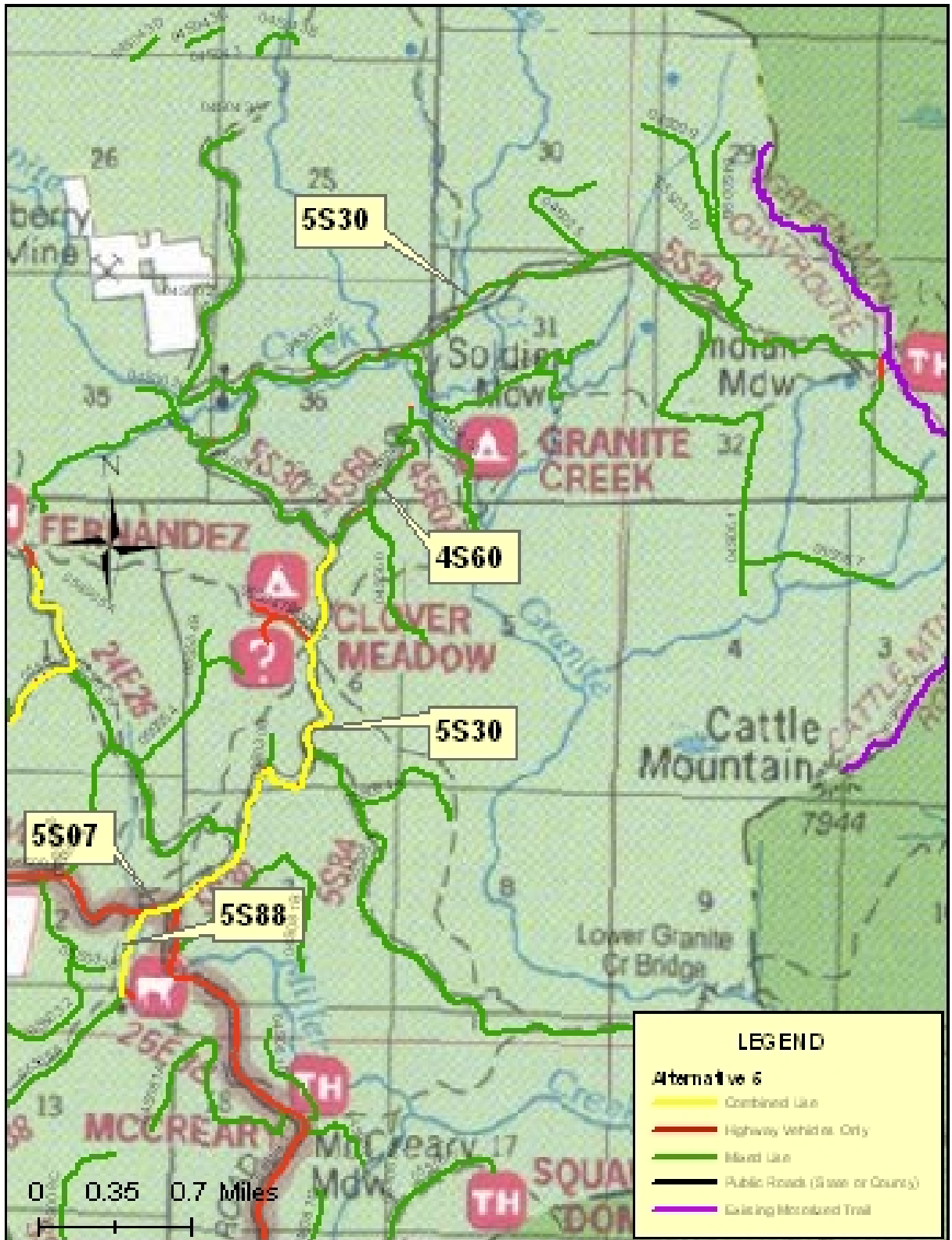
Approved By _____

George Kulick, R5 Director of Engineering

BL-F

Granite Creek Area

BL-F



Current Uses and Travel Access

The Granite Creek Area is currently used for developed and dispersed camping, Wilderness trailhead access, equestrian trailhead and trails, OHV and ATV recreation and general driving for pleasure. The area also provide access to the private Strawberry Mine area which is being subdivided and sold as recreation getaways. There is little timber harvest expected in the foreseeable.

The Granite Creek area is the highest point on the Sierra Vista National Scenic Byway. The Minarets Road (4S81) from North Fork is double lane paved its junction with the Beasore Road (5S07). The Beasore Road itself is a double lane smooth graded road which the Forest and the community expect to have paved eventually.

1. Rationale for Proposed Changes

All the main roads in the Granite Creek Area are maintained and operated for passenger cars. If a combination for combined-use and mixed use could be designated, the area would connect the Cattle Mtn and Green Mtn OHV Routes to approximately 60 miles of mixed-use roads in the Jackass Mdw and Graveyard Mdw.

2. Recommendations

If it is desired to maximize ATV access in the Granite Creek and Jackass Meadow areas, it is recommended that the following acceptable traffic designations be implemented:

Granite Creek Road	5S30	0.00 – 2.20	Combined Use
Granite Creek Road	5S30	2.20 – 6.75	Mixed Use
Granite CG Road	4S60	0.00 – 1.00	Mixed Use
Beasore Road	5S07	30.3 – 30.5	Combined Use
Juniper Road	5S88	0.00 – 0.40	Combined Use

This would allow licensed ATV users full access to and between the Cattle Mtn and Green Mtn OHV Routes, Granite Creek, and Jackass Meadow areas. It would allow unlicensed ATV use between Granite Ck Campground and the Cattle Mtn and Green Mtn OHV Routes. The integrity of the Sierra Vista Scenic Byway would be intact and remain safe. However, the road up to Mammoth TH would quickly deteriorate for high clearance and not be accessible to Wilderness users in normal highway vehicles.

All combined-use recommendations, singularly and in combination, fall within CVC 38026.

Traffic Analysis

Granite Creek Road, Seg I

A. Current Situation

Road Number	5S30 05S030
Road Name	Granite Creek Rd
Termini	5S07 to 4S60
Beginning Mile Post	0.00
Ending Mile Post	2.20
Length	2.2 miles
Surface	Aggregate
Roadside Condition	Well brushed
Intersections and Approaches	None hidden
Width	2 Lanes 1-2 lanes depending upon segment
Other Roadway Factors	None
Traffic Service Level	A – Uninterrupted Flow C – flow interrupted, use limited
Seasonal Average Daily Traffic	25 vpd
Objective Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Operational Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Subject to HSA	Yes
Is Mixed Use Currently Allowed ?	No
History of Highway and ATV Crashes ?	None
Road Jurisdiction	Forest Service
Other Road Agreements	None
Maintenance Responsibility	Forest Service

B. Analysis of Proposed Operational Traffic Rules

	Proposed Traffic Rules					
	Highway Vehicles Only		Combined Use		Mixed Use	
1. Highway Drivers	Licensed		Licensed		Licensed	
2. ATV Operators	Licensed		Licensed		State certified	
3. Crash History	None		None		None	
4. Expected Traffic Volume (SADT)	Highway	25	Highway	25	Highway	
	ATVs	n/a	ATVs	10	ATVs	
5. Prevailing Speed (85 th Percentile)	Highway	10	Highway	10	Highway	
	ATVs	n/a	ATVs	<5	ATVs	
6a. Stopping Distance (PEIV=3.5)	Highway	45	Highway	45	Highway	
	ATVs	n/a	ATVs	13	ATVs	
6b. Total Stopping Distance			58			
6c. Sight Distance			>100 ft			
6d. Sight Distance Adequate (?)	OK		OK		N/A	
10. Necessary Minimization Measure(s)	Continue ML 3		Continue ML 3, Sign for Combined Use			
11. Crash Probability	Low		Low			
12. Crash Severity	Low		Low			
Recommendations	Acceptable		Acceptable		Not Considered	

C. Analysis Summary

This road segment is wide well brushed passenger car road with good separation. The risk of collisions is low and the severity would be low. It is over two hours from the nearest public road, so most people are accustomed to slow traffic. This road segment will be safe as either for highway vehicles only or combined use. Mixed use is not recommended because of the need for general passenger car access from the Scenic Byway to the Clover Mdw Area, and the fact that this section of roads is a very well kept ML3 and it would take a lot of work to reduce it to a ML2.

Traffic Analysis

Granite CG Road

A. Current Situation

Road Number	4S60 04S060
Road Name	Granite CG Road
Termini	5S30
Beginning Mile Post	0.00
Ending Mile Post	1.00
Length	1.00 miles
Surface	Aggregate
Roadside Condition	Moderate brushing
Intersections and Approaches	None hidden
Width	18 ft 1 lane
Other Roadway Factors	None
Traffic Service Level	B – Uninterrupted Flow D – slow flow, may be blocked
Seasonal Average Daily Traffic	5 vpd
Objective Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Operational Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Subject to HSA	Yes
Is Mixed Use Currently Allowed ?	No
History of Highway and ATV Crashes ?	None
Road Jurisdiction	Forest Service
Other Road Agreements	None
Maintenance Responsibility	Forest Service

B. Analysis of Proposed Operational Traffic Rules

	Proposed Traffic Rules					
	Highway Vehicles Only		Combined Use		Mixed Use	
1. Highway Drivers	Licensed		Licensed		Licensed	
2. ATV Operators	Licensed		Licensed		State certified	
3. Crash History	None		None		None	
4. Expected Traffic Volume (SADT)	Highway	10	Highway		Highway	10
	ATVs	n/a	ATVs		ATVs	15
5. Prevailing Speed (85 th Percentile)	Highway	5	Highway		Highway	5
	ATVs	n/a	ATVs		ATVs	5
6a. Stopping Distance	Highway	20	Highway		Highway	20
	ATVs	n/a	ATVs		ATVs	28
6b. Total Stopping Distance					48	
6c. Sight Distance					>75	
6d. Sight Distance Adequate (?)	OK		N/A		OK	
10. Necessary Minimization Measure(s)	Continue ML 3				Let deteriorate to a ML2	
11. Crash Probability	None				Low	
12. Crash Severity	None				Moderate	
Recommendations	Acceptable		Not Considered		Acceptable	

C. Analysis Summary

If this road remains for highway vehicles only, horse trailer and campers could get to Granite CG; however, all ATV use would be cut off from the Granite Creek Rd.

If 4S60 becomes a mixed-use road, ATV use would happen from the Granite CG. This could conflict with horse users in the campground. Though unlicensed ATV operators would be able to use this road, they would only be able to get to Mammoth TH if that road also becomes mixed-use. However, licensed ATV users could get to both the Jackass Mdw and Mammoth TH areas.

The Granite CG Road would not be a good candidate as combined-use since it would violate the three mile guideline in the CVC.

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Traffic Analysis

Beasore Road

A. Current Situation

Road Number	5S07 05S070 05S007
Road Name	Beasore Road
Termini	5S30 to 5S88
Beginning Mile Post	30.3
Ending Mile Post	30.5
Length	0.2 miles
Surface	Aggregate
Roadside Condition	Well brushed
Intersections and Approaches	None hidden
Width	2 Lanes 1 lane 1 lane
Other Roadway Factors	None
Traffic Service Level	A – Uninterrupted Flow D – slow flow, may be blocked C – flow interrupted, use limited
Seasonal Average Daily Traffic	35 vpd
Objective Maintenance Level	3 – Passenger Cars, slow and rough ML 2 ML 4
Operational Maintenance Level	3 – Passenger Cars, slow and rough ML 2 ML 3
Subject to HSA	Yes
Is Mixed Use Currently Allowed ?	No
History of Highway and ATV Crashes ?	None
Road Jurisdiction	Forest Service
Other Road Agreements	None
Maintenance Responsibility	Forest Service

B. Analysis of Proposed Operational Traffic Rules

	Proposed Traffic Rules					
	Highway Vehicles Only		Combined Use		Mixed Use	
1. Highway Drivers	Licensed		Licensed		Licensed	
2. ATV Operators	Licensed		Licensed		State certified	
3. Crash History	None		None		None	
4. Expected Traffic Volume (SADT)	Highway	35	Highway	35	Highway	
	ATVs	n/a	ATVs	10	ATVs	
5. Prevailing Speed (85 th Percentile)	Highway	15	Highway	15	Highway	
	ATVs	n/a	ATVs	<5	ATVs	
6a. Stopping Distance	Highway	74	Highway	74	Highway	
	ATVs	n/a	ATVs	13	ATVs	
6b. Total Stopping Distance			87			
6c. Sight Distance			>200 ft			
6d. Sight Distance Adequate (?)	OK		OK		N/A	
10. Necessary Minimization Measure(s)	Continue ML 3		Continue ML 3, Sign for Combined Use			
11. Crash Probability	Low		Low			
12. Crash Severity	Low		Low			
Recommendations	Acceptable		Acceptable		Not Considered	

C. Analysis Summary

The Beasore Road at this point could remain for highway vehicles only and it would keep licensed ATV users from getting between the Granite Creek area and the Jackass Meadow area. These areas contain approximately 60 miles of mixed-use roads.

Converting this piece of the Scenic Byway to a combined-use road would maintain its use to the passenger car travelers and allow licensed ATV use between the Granite Creek and Jackass Meadows areas.

It would not be advisable to make this section a mixed-use road since it would eventually stop Scenic Byway traffic.

Traffic Analysis

Juniper Road

A. Current Situation

Road Number	5S88 05S088
Road Name	Juniper Rd
Termini	5S07 to Miller Pack Station
Beginning Mile Post	0.00
Ending Mile Post	0.40
Length	0.40 miles
Surface	Aggregate Native material
Roadside Condition	Well brushed
Intersections and Approaches	None hidden
Width	18 feet 1 lane
Other Roadway Factors	None
Traffic Service Level	B – Uninterrupted Flow C-flow interrupted, use limited
Seasonal Average Daily Traffic	10 vpd
Objective Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Operational Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Subject to HSA	Yes
Is Mixed Use Currently Allowed ?	No
History of Highway and ATV Crashes ?	None
Road Jurisdiction	Forest Service
Other Road Agreements	None
Maintenance Responsibility	Forest Service

B. Analysis of Proposed Operational Traffic Rules

	Proposed Traffic Rules					
	Highway Vehicles Only		Combined Use		Mixed Use	
1. Highway Drivers	Licensed		Licensed		Licensed	
2. ATV Operators	Licensed		Licensed		State certified	
3. Crash History	None		None		None	
4. Expected Traffic Volume (SADT)	Highway	10	Highway	10	Highway	
	ATVs	n/a	ATVs	10	ATVs	
5. Prevailing Speed (85 th Percentile)	Highway	10	Highway	10	Highway	
	ATVs	n/a	ATVs	<5	ATVs	
6a. Stopping Distance (PEIV=3.5)	Highway	45	Highway	45	Highway	
	ATVs	n/a	ATVs	13	ATVs	
6b. Total Stopping Distance			58			
6c. Sight Distance			>100 ft			
6d. Sight Distance Adequate (?)	OK		OK		N/A	
10. Necessary Minimization Measure(s)	Continue ML 3		Continue ML 3, Sign for Combined Use Maintain Brushing			
11. Crash Probability	None		Low			
12. Crash Severity	None		Moderate			
Recommendations	Acceptable		Acceptable		Not Considered	

C. Analysis Summary

This road segment is currently for highway vehicles only in order to service the Miller Pack Station.

If this is converted to a combined-use road both licensed ATV uses and pack station visitors could use the road simultaneously.

The Juniper Road should not become a mixed-use road because of the need for passenger car access to Miller Pack Station.

Traffic Analysis

Granite Creek Road, Seg II

A. Current Situation

Road Number	5S30 05S030
Road Name	Granite Creek Rd
Termini	4S60 to Mammoth TH
Beginning Mile Post	2.20
Ending Mile Post	6.75
Length	4.55 miles
Surface	Aggregate
Roadside Condition	Well brushed
Intersections and Approaches	None hidden
Width	15 Lanes 1-2 lanes depending on segment
Other Roadway Factors	None
Traffic Service Level	C – Uninterrupted Flow C
Seasonal Average Daily Traffic	15 vpd
Objective Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Operational Maintenance Level	3 – Passenger Cars, slow and rough ML 3
Subject to HSA	Yes
Is Mixed Use Currently Allowed ?	No
History of Highway and ATV Crashes ?	None
Road Jurisdiction	Forest Service
Other Road Agreements	None
Maintenance Responsibility	Forest Service

B. Analysis of Proposed Operational Traffic Rules

	Proposed Traffic Rules					
	Highway Vehicles Only		Combined Use		Mixed Use	
1. Highway Drivers	Licensed		Licensed		Licensed	
2. ATV Operators	Licensed		Licensed		State certified	
3. Crash History	None		None		None	
4. Expected Traffic Volume (SADT)	Highway		Highway		Highway	15
	ATVs		ATVs		ATVs	
5. Prevailing Speed (85 th Percentile)	Highway		Highway		Highway	5
	ATVs		ATVs		ATVs	<5
6a. Stopping Distance (PEIV=3.5)	Highway		Highway		Highway	20
	ATVs		ATVs		ATVs	28
6b. Total Stopping Distance					48	
6c. Sight Distance	>100 ft				>100 ft	
6d. Sight Distance Adequate (?)	OK		N/A		OK	
10. Necessary Minimization Measure(s)	Continue ML 3				Let deteriorate to ML2	
11. Crash Probability					Low	
12. Crash Severity					Low	
Recommendations	Acceptable		Not Considered		Acceptable	

C. Analysis Summary

This road up to the Mammoth TH is currently for highway vehicles only. However, this designation keeps ATV users from going onto the Cattle Mtn and Green Mtn OHV Routes.

If the road is converted to mixed-use ATV users could get to Mammoth TH and beyond. But since the access is somewhat restricted, unlicensed ATV users would have to start from