



HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS
ROAD EVALUATION REPORT

PART A: Part A may be completed by the applicant

Applicant Name: LSK-ART LLC APN: 317-182-021

Planning & Building Department Case/File No.: CUP16-745

Road Name: Stapp Road (complete a separate form for each road)

From Road (Cross street): Showers Pass Road

To Road (Cross street): Stapp Road

Length of road segment: 3.2 miles Date Inspected: 8/15/18

Road is maintained by: ☐ County ☒ Other Private
(State, Forest Service, National Park, State Park, BLM, Private, Tribal, etc)

Check one of the following:

Box 1 ☐ The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.

Box 2 ☒ The entire road segment is developed to the equivalent of a road category 4 standard. If checked, then the road is adequate for the proposed use without further review by the applicant.

An equivalent road category 4 standard is defined as a roadway that is generally 20 feet in width, but has pinch points which narrow the road. Pinch points include, but are not limited to, one-lane bridges, trees, large rock outcroppings, culverts, etc. Pinch points must provide visibility where a driver can see oncoming vehicles through the pinch point which allows the oncoming vehicle to stop and wait in a 20 foot wide section of the road for the other vehicle to pass.

Box 3 ☐ The entire road segment is not developed to the equivalent of road category 4 or better. The road may or may not be able to accommodate the proposed use and further evaluation is necessary. Part B is to be completed by a Civil Engineer licensed by the State of California.

The statements in PART A are true and correct and have been made by me after personally inspecting and measuring the road.

Severin Stoyanov
Signature

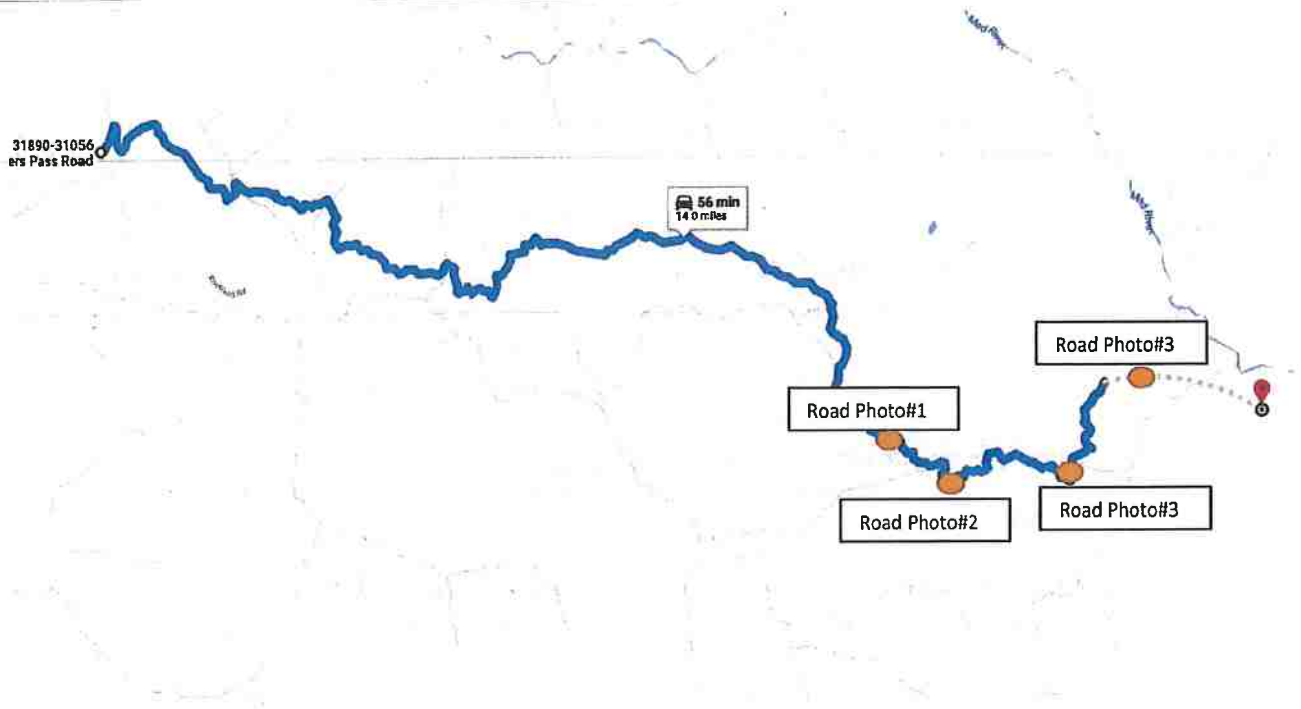
1/8/19
Date

Severin Stoyanov
Name Printed

Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.446.7203.

Road Evaluation for Stapp Road

Apps No. 12556



Road Photo#1



Road Photo#2



Road Photo#3



Road Photo#4



HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS
ROAD EVALUATION REPORT

PART A: Part A may be completed by the applicant

Applicant Name: LSK-ART LLC

APN: 317-182-021

Planning & Building Department Case/File No.: CUP16-745

Road Name: Showers Pass Rd (complete a separate form for each road)

From Road (Cross street): Kneeland Rd

To Road (Cross street): Stapp Rd

Length of road segment: 9.1 miles Date Inspected: 8/15/18

Road is maintained by: ☐ County ☒ Other Private
(State, Forest Service, National Park, State Park, BLM, Private, Tribal, etc)

Check one of the following:

Box 1 ☐ The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.

Box 2 ☒ The entire road segment is developed to the equivalent of a road category 4 standard. If checked, then the road is adequate for the proposed use without further review by the applicant.

An equivalent road category 4 standard is defined as a roadway that is generally 20 feet in width, but has pinch points which narrow the road. Pinch points include, but are not limited to, one-lane bridges, trees, large rock outcroppings, culverts, etc. Pinch points must provide visibility where a driver can see oncoming vehicles through the pinch point which allows the oncoming vehicle to stop and wait in a 20 foot wide section of the road for the other vehicle to pass.

Box 3 ☐ The entire road segment is not developed to the equivalent of road category 4 or better. The road may or may not be able to accommodate the proposed use and further evaluation is necessary. Part B is to be completed by a Civil Engineer licensed by the State of California.

The statements in PART A are true and correct and have been made by me after personally inspecting and measuring the road.

Severin Stoyanov
Signature

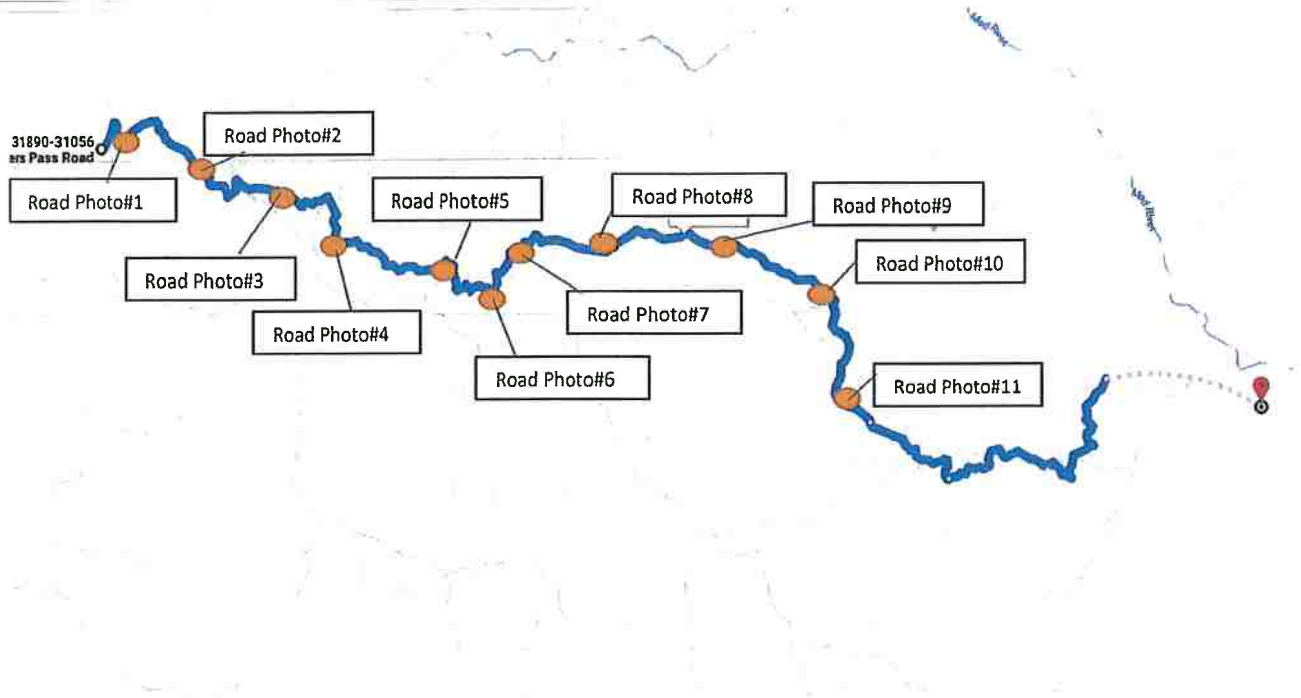
1/8/19
Date

Severin Stoyanov
Name Printed

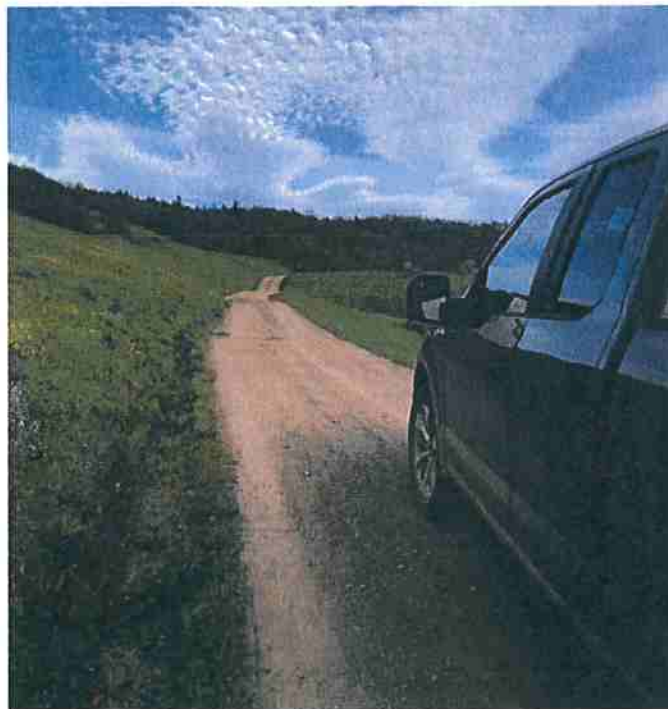
Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.

Road Evaluation for Showers Pass Road

Apps No. 12556



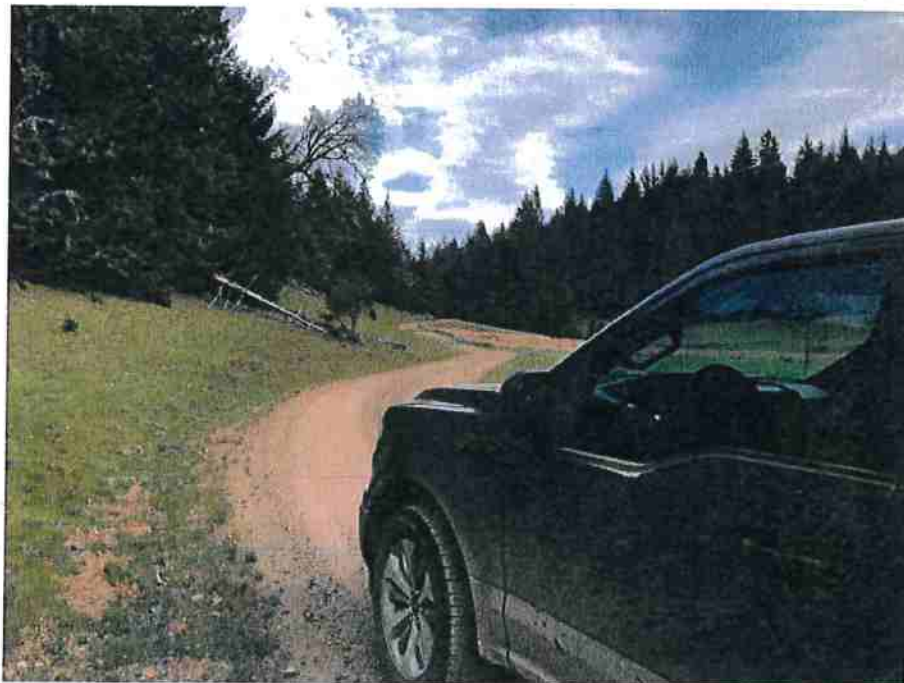
Road Photo#1



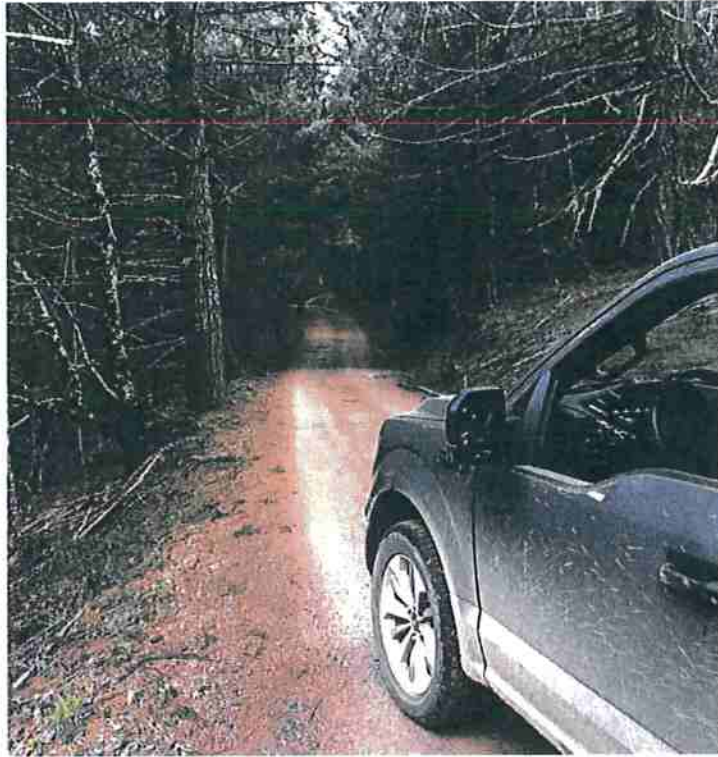
Road Photo#2



Road Photo#3



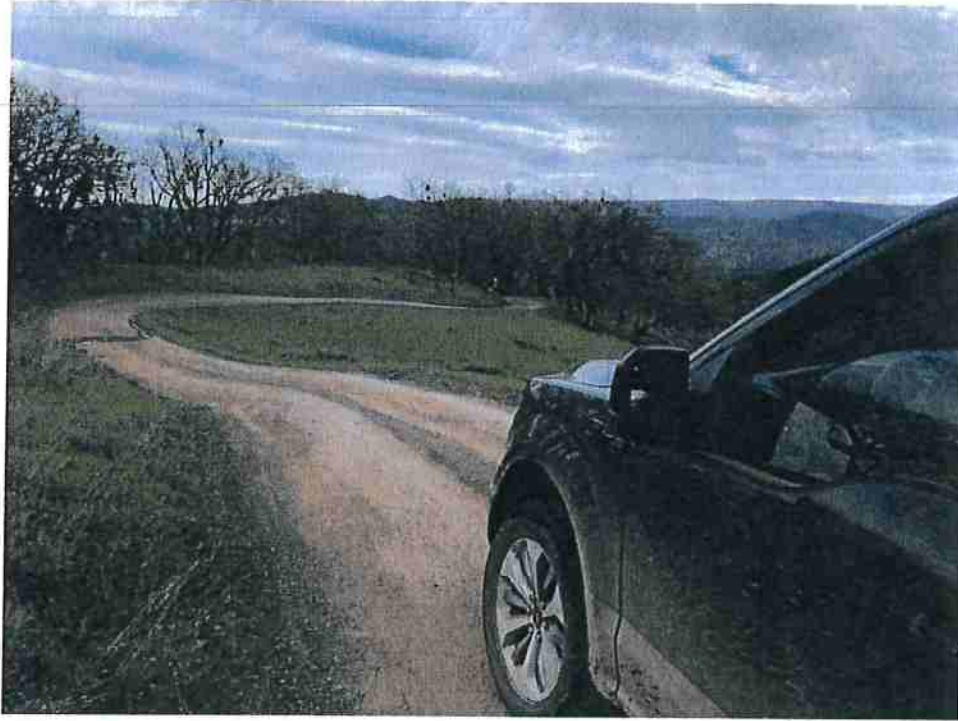
Road Photo#4



Road Photo#5



Road Photo #6



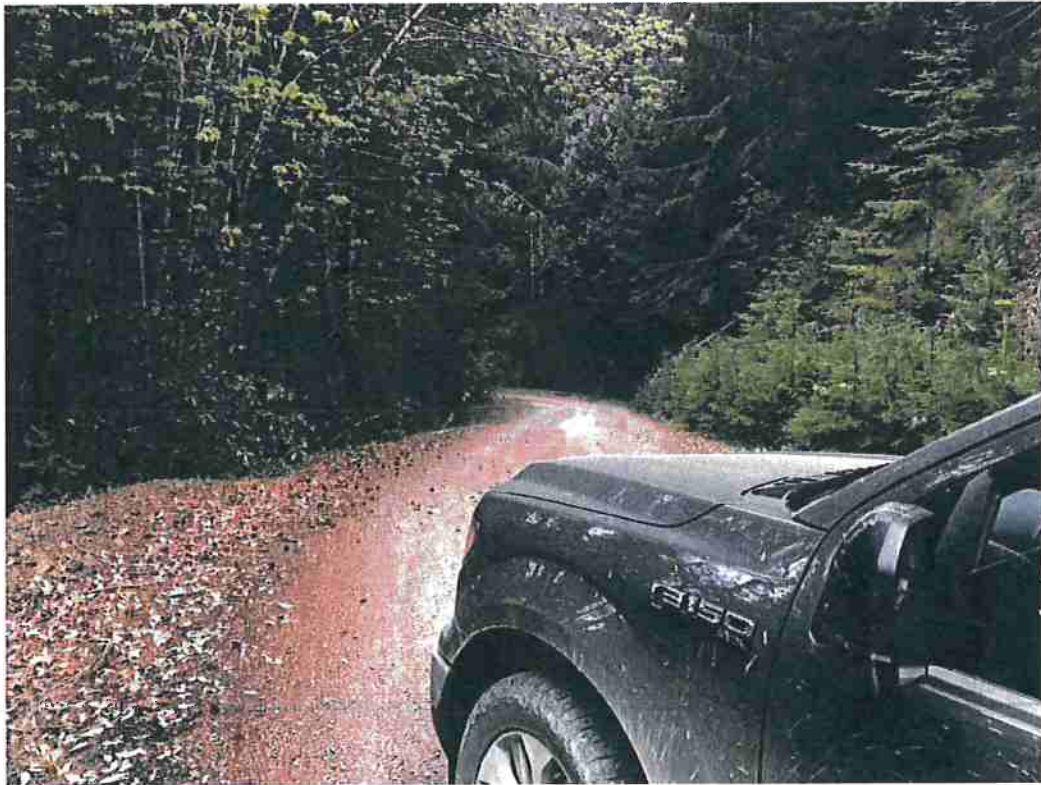
Road Photo#7



Road Photo#8



Road Photo#9



Road Photo#10



Road Photo#11



PART B: Only complete Part B if Box 3 is checked in Part A. Part B is to be completed by a Civil Engineer licensed by the State of California. Complete a separate form for each road.

Road Name: STAPP RD. Date Inspected: 4-23-19 APN: 317-033-006
From Road: SHOWERS PASS RD. (Post Mile 0) Planning & Building
To Road: APN 317-033-006 (Post Mile 7.8+/-) Department Case/File No.: Apps. # 12768

1. What is the Average Daily Traffic (ADT) of the road (including other known cannabis projects)?

Number of other known cannabis projects included in ADT calculations:
(Contact the Planning & Building Department for information on other nearby projects.)

ADT: < 400

Date(s) measured: ESTIMATED ONLY

Method used to measure ADT: ☐ Counters ☒ Estimated using ITE Trip Generation Book

Is the ADT of the road less than 400? ☒ Yes ☐ No

If YES, then the road is considered very low volume and shall comply with the design standards outlined in the American Association of State Highway and Transportation Officials (AASHTO) *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*. Complete sections 2 and 3 below.

If NO, then the road shall be reviewed per the applicable policies for the design of local roads and streets presented in AASHTO *A Policy on Geometric Design of Highways and Streets*, commonly known as the "Green Book". Complete section 3 below.

2. Identify site specific safety problems with the road that include, but are not limited to: (Refer to Chapter 3 in AASHTO *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)* for guidance.)

A. Pattern of curve related crashes.

Check one: ☒ No. ☐ Yes, see attached sheet for Post Mile (PM) locations.

B. Physical evidence of curve problems such as skid marks, scarred trees, or scarred utility poles

Check one: ☒ No. ☐ Yes, see attached sheet for PM locations.

C. Substantial edge rutting or encroachment.

Check one: ☒ No. ☐ Yes, see attached sheet for PM locations.

D. History of complaints from residents or law enforcement.

Check one: ☒ No. ☐ Yes (☐ check if written documentation is attached)

E. Measured or known speed substantially higher than the design speed of the road (20+ MPH higher)

Check one: ☒ No. ☐ Yes.

F. Need for turn-outs.

Check one: ☐ No. ☒ Yes, see attached sheet for PM locations.

3. Conclusions/Recommendations per AASHTO. Check one:

☐ The roadway can accommodate the cumulative increased traffic from this project and all known cannabis projects identified above.

☒ The roadway can accommodate the cumulative increased traffic from this project and all known cannabis projects identified above, if the recommendations on the attached report are done. (☐ check if a Neighborhood Traffic Management Plan is also required and is attached.)

☐ The roadway cannot accommodate increased traffic from the proposed use. It is not possible to address increased traffic.

A map showing the location and limits of the road being evaluated in PART B is attached. The statements in PART B are true and correct and have been made by me after personally evaluating the road.

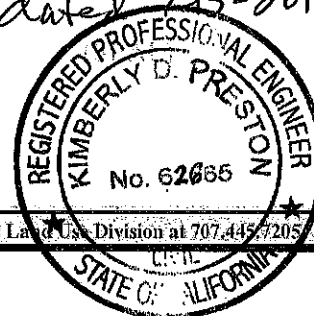
Kimberly D. Preston

Signature of Civil Engineer

5-18-2021

Date

See Road Evaluation dated 7-15-2019



Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.



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**ROAD EVALUATION REPORT for
STAPP & SHOWER'S PASS ROAD
BRIDGVILLE, CALIFORNIA
APN 317-033-006**

Prepared for:
Aleks Aleksandrov
Otto Farms, LLC

Prepared by:
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402 E Street
Eureka, CA 95501
(707) 443-8651

July 15, 2019
(Job. No. 16-1924)


Stephen G. Nesvold, P.E.
R.C.E. 25681



Introduction:

The subjects of this road evaluation are Shower's Pass and Stapp Road, located between Bridgeville and Kneeland in Eastern Humboldt County, CA. Evaluation of the access roads leading to APN 317-033-006 was conducted on April 23rd, 2019 by Stephen G. Nesvold, P.E. and Ben Voelz, Engineering Technician, of Omsberg & Preston. This evaluation was undertaken to determine if the road network used to access the project site meets the intent of the County's Road Category 4 standards.

Background:

Shower's Pass Road (County road #6GOW) is a publicly maintained dirt/gravel road that has been evaluated by Humboldt County Public Works and meets the requirements for Road Category 4 Standards for Cannabis Projects from the Kneeland Road turnoff to Shower's Pass mile post (MP) 4.0. Stapp Road (County road #7H010) is a county-maintained road from the intersection of Shower's Pass road to the private gate 3.1 miles past the intersection. The remainder of Stapp road is a gated, private access dirt/gravel road that provides access to many parcels in the areas surrounding the Mad River north of Bridgeville. This report focuses on the un-evaluated 4.4-mile portion of Shower's Pass Road (from MP 4.0 to Stapp Road intersection (MP 8.4)), the 3.1-mile stretch of County maintained Stapp Road and the 5-mile private portion of Stapp Road to the project site, for a total road evaluation length of 12.5 miles. An aerial photo of the road evaluation route can be seen in Figure 1.



Figure 1: Route Map showing the road network used to access the project site. "4-Mile Post" is the 4-mile marker from the start of Shower's Pass Road.

Findings:

Estimated Adjusted Daily Traffic (ADT)

No traffic counts or estimates were made for the ADT across Shower's Pass and Stapp Road. Traffic was very light on April 23rd, 2019, the day the road evaluation was carried out. We estimate the ADT as being less than 400 vehicles per day for the majority of the roads being evaluated.

Sight Distance

At MP 4.9 on Shower's Pass road, a curve has poor sight distance and has recommended improvements. Otherwise, narrow spots have adequate turnout-options and/or sight distance and meet the intent of Road Category 4 standards. Other minor problem areas are identified in the "Supporting Information" section of the report.

Road Drainage

Shower's Pass Road: Severe erosion with steep travel ways was observed from MP 7.5-8.3. See recommendation table for possible improvements.

Stapp Road (Public): Drainage issues observed at MP 2.5 and 2.7, possible rolling dip installation needed. Further drainage maintenance by the county is needed at MP 1.8 and 2.3.

Stapp Road (Private): Drainage issues observed at MP 2.5, see recommendation section for improvements.

Assessment of culverts is not part of this report.

Recommendations:

The following table (Table 2) contains recommendations for improvements at specific MP markers. Shower's Pass Road runs from MP markers 4.0 – 8.4, the public portion of Stapp road runs from MP markers 0.0 – 3.0, and the gated portion of Stapp Road runs from MP markers 0.0 – 5.0.

Sight Distance

We recommend a turnout be constructed at MP 4.9 on Shower's Pass Road due to inadequate sight distance around the curve. This improvement would be appropriate for a single applicant to be responsible for.

Road Drainage/Realignment

Shower's Pass Recommendations: The portion of Shower's Pass road from MP 7.5-8.4 is severely eroded through insufficient drainage pathways. In our judgment this portion of Shower's Pass Road is the highest priority for repairs, through drainage grading, rocking & construction of 2-3 turnouts. This would be a large undertaking that should not be shouldered by a single applicant if there are other residents/applicants using this road for access to their parcels.

Stapp Road – Public Recommendations: Severe ponding in the roadways was observed at MP 1.8 within the county-maintained portion of Stapp road. Ponding alleviation is recommended to avoid any further road degradation. Severe potholes were also observed at MP 2.3 and 2.5.

Stapp Road – Private Recommendations: A rolling dip that drains to the right is proposed at MP 2.5 to aid in erosion control. Additionally, the private section of Stapp Road from MP 4.1-4.3 is not suitable for 2-wheel drive passenger vehicles (too steep) without costly realignment requiring new easements. It is recommended that only cultivation and drying is allowed on site to minimize use on this portion of Stapp Road. The road is currently adequate for these purposes.

Finally, we recommend a Road Maintenance Association (RMA) be formed between the client and other cannabis permit applicants or residents to address the recommendations outlined in this report. The following table (Table 1) is a list of cannabis application numbers for parcels that have pending cannabis applications with the county that also access their parcels from Stapp Road. This information was gathered from Humboldt County's Accela online database.

Table 1: A list of pending cannabis applicants that access their parcels from Stapp Road.

Cannabis APPs #	APN	Applicant
12556	317-182-021	LSK Art, LLC
12967	221-131-016	Cannabusiness Law, Inc.
11099	317-033-008	Macras Land Co. Inc.
11989	317-182-020	Edward Cox (Individual)
10854	317-182-019	Edward Cox (Individual)
11636	317-182-013	Michael McBeth (Individual)

Conclusion:

The road network leading to the subject parcel (APN 317-033-006) will meet Road Category 4, provided that the indicated recommendations are carried out by the client, additional parties that use the roads for access, and/or Humboldt County Public Works. Some improvement recommendations for this project would be costly and should not be shouldered by a single applicant. An alternative way to distribute the costs of construction could be splitting the cost with additional applicants, only doing a portion of this improvement or doing a cooperative project with County Public Works. If you have any questions or comments, please don't hesitate to contact our office.

Table 2: A table containing road evaluation data and recommendations for improvements

Mile Marker (Road Specific)	Continuous Mile Marker (From 4mi Post)	Travel Way (ft)	Site Visit Notes	Recommmendations	Priority
4.0	0.0	15	Start of Road Eval., 4-Mile post on Shower's Pass Road. Could use rocked turnout in this area	Install RH turnout	Low
4.2	0.2	-	Turn off to Fort Baker Ranch		
4.3	0.3	-	Rock query		
4.5	0.5	18	GSD		
4.9	0.9	-	Curve w/ inadequate S.D., shave off curve - Pictures	Remove material from RH cut-bank for better sight distance. Deposit material on roadway & cover with gravel	Med
5.0	1.0	16	GSD		
5.5	1.5	18	wet area, 2ft L & 3ft R shoulder		
6.0	2.0	20	5 ft L shoulder, one lane bridge over creek		
6.5	2.5	19	2 ft L shoulder		
7.0	3.0	16	GSD		
7.5	3.5	16	GSD, with turnout	Severe erosion from MP 3.5-4.2, recommend regrading lead-off ditches and constructing a RH Turnout	High
7.7	3.7	-	Erosion - pictures		
8.0	4.0	18	1 ft shoulder both sides.		
8.2	4.2	-	Start of down grade (\pm 500 ft), needs grading for out-bound traffic		
0.0	4.4	-	Turn out, Start of public Stapp Rd.		
0.1	4.5	17	GSD		
0.6	5.0	20	3 ft shoulder both sides		
1.1	5.5	23	3 ft L shoulder, GSD		
1.6	6.0	17	2ft R shoulder, GSD		
1.9	6.3	-	water holes	County drainage maintainance needed + RH Turnout	Med
2.1	6.5		Culvert too short		
2.1	6.5	13	2ft L shoulder		
2.4	6.8	-	Drainage problems -see pictures, O.K. site distance	County drainage maintainance needed	Med
2.6	7.0	14	GSD, Rough due to drainage issues, needs more x-slope & rolling dips	Insall Rolling dip and rocked drainage outlet	Med
2.8	7.2	-	sever erosion/drainage causing rough road - see pictures	Insall Rolling dip and rocked drainage outlet	Med
0.0	7.5	15	GSD, end of couty road maintained road (Still Stapp Rd.)		
0.5	8.0	22	3ft shoulder both sides		
1.0	8.5	19	6ft R shoulder, GSD		
1.5	9.0	18	3ft L shoulder, GSD		
2.0	9.5	12	GSD		
2.5	10.0	13	Rolling dip + turn out	Install Rolling Dip and RH Turnout	Med
2.8	10.3	-	major creek crossing		
3.1	10.6	19	GSD + Turn out		
3.5	11.0	20	GSD		
4.1	11.6	18	Steep Grade (18-24%), 4WD necessary for access		
4.3	11.8	18	Steep Grade (18-24%), 4WD necessary for access		
4.4	11.9	-	Another cannabis farm		
4.6	12.1	15	GSD		
5.0	12.5	-	Ending point - Aleksandrov Farm		

Key: L-Left; R-Right; GSD-Good Sight Distance; RS-Right Side (Looking to project site); (E)-Existing

Road Evaluation – Supporting Information (Imagery)

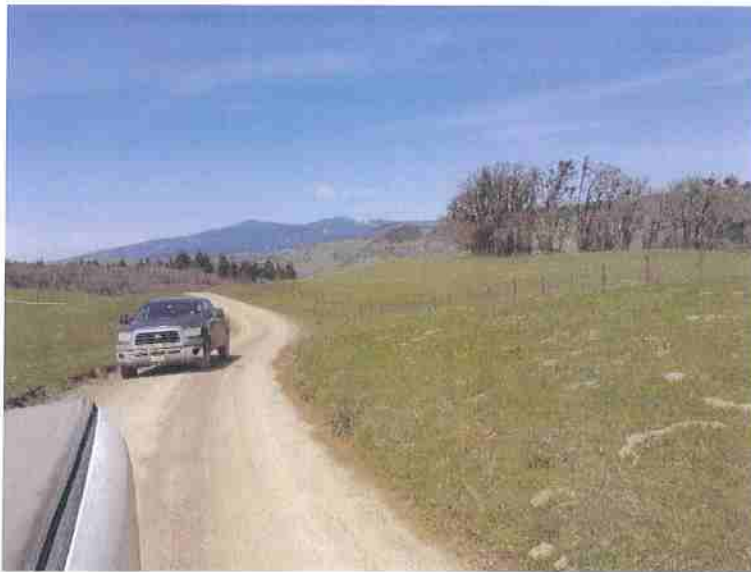
Shower's Pass & Stapp Road

April 23rd, 2019

Steven Nesvold, P.E. and Ben Voelz

Mile 4.0 (4-mile Marker on Shower's Pass Road): 0+15+0=15ft wide road prism; Good visibility and sight distance. Recommend a constructing a rocked turnout in this area.

Forward



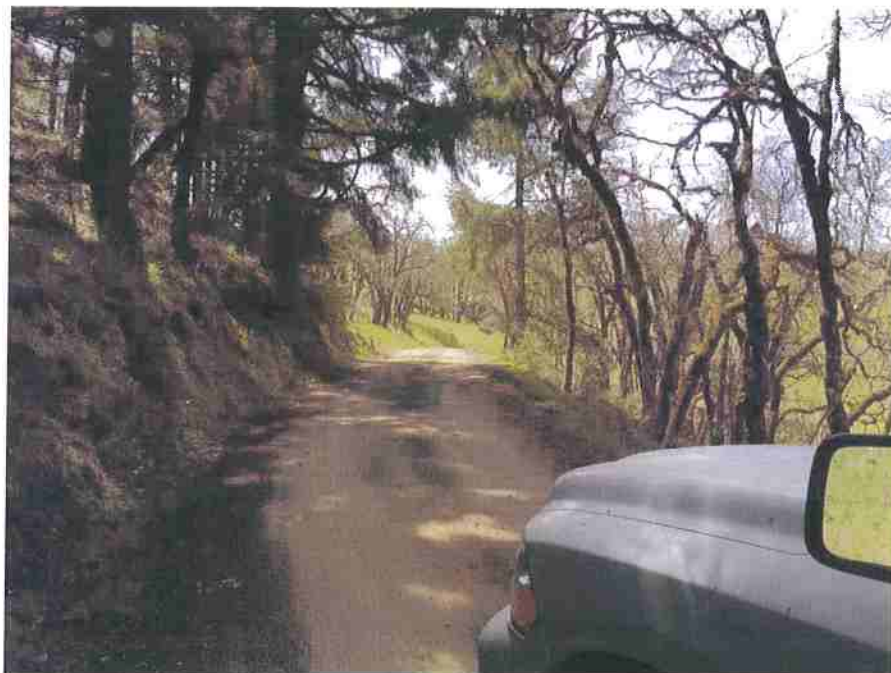
Backward



Mile 4.5 (Shower's Pass Road): 0+18+0=18ft wide road prism; Good visibility and sight distance.
Forward



Backward



Mile 4.9 (Shower's Pass Road): $0+16+2=18$ ft wide road prism; curve with inadequate site distance and visibility, recommend "shaving" off rounded corner on left side of top photo for better visibility.

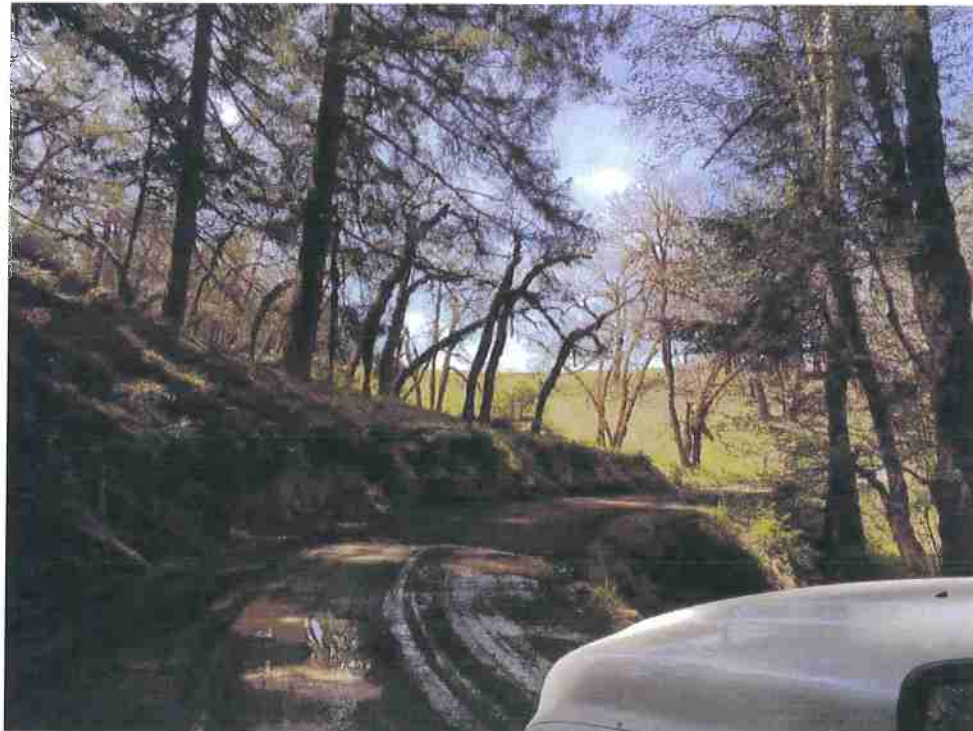
Forward



Mile 5.0 (Shower's Pass Road): $0+16+0=16\text{ft}$ wide road prism; Good visibility and sight distance.
Forward



Backward



Mile 5.5 (Shower's Pass Road): $2+13+3=18$ ft wide road prism; Good visibility and sight distance; wet area, consider installing drainage features.

Forward



Backward



Mile 6.0 (Shower's Pass Road): $5+15+0=20\text{ft}$ wide road prism; Good visibility and sight distance, one lane bridge with turnouts on both sides of the bridge.

Forward



Backward



Mile 6.5 (Shower's Pass Road): $2+17+0=19\text{ft}$ wide road prism; Good visibility and sight distance;
Turnouts forward and backward.
Forward



Backward



Mile 7.0 (Shower's Pass Road): $0+16+0=16\text{ft}$ wide road prism; Good visibility and sight distance; Turnouts forward and backward.

Forward



Backward



Mile 7.5 (Shower's Pass Road): 0+16+0=16ft wide road prism; Start of severe roadway erosion, continues until Stapp Road turnoff. Adequate visibility and sight distance.

Forward



Backward



Mile 7.7 (Shower's Pass Road): 0+16+0=16ft wide road prism; Continuation of severe roadway erosion, continues until Stapp Road turnoff. Adequate visibility and sight distance.

Backward



Mile 8.0 (Shower's Pass Road): $1+16+1=18$ ft wide road prism; Good visibility and sight distance; turnouts backwards and forwards.

Forward



Backward



Mile 0.0 (Stapp Road): 0+17+1=17ft wide road prism; Shower's Pass Road Intersection at Shower's Pass MP 8.4; Good visibility and sight distance; 0.1 miles from turnout
Forward



Backward



Mile 0.5 (Stapp Road): $3+20+3=26$ ft wide road prism; Adequate visibility and sight distance; wide enough for two lane traffic

Forward



Backward



Mile 1.0 (Stapp Road): 3+23+0=26ft wide road prism; Good visibility and site distance; Large turn-outs forward and backward.

Forward



Backward



Mile 1.5 (Stapp Road): 0+17+2=19ft wide road prism; Adequate sight distance and visibility;
Turnouts forward and backward.

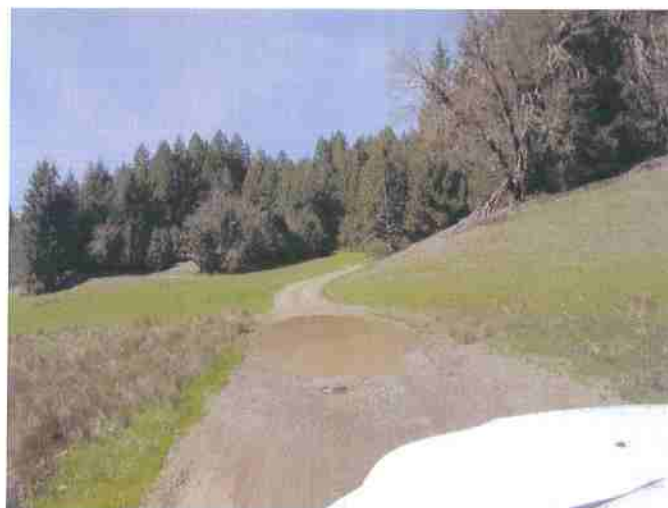
Forward



Backward



Mile 1.8 (Stapp Road): 2+13+0=15ft wide road prism; Severe ponding in the roadway, propose
rocked culvert to alleviate drainage problem. Good visibility and sight distance; Turnouts needed.
Backward



Mile 2.0 (Stapp Road): 2+13+0=15ft wide road prism; Adequate visibility and O.K. sight distance;
No turnouts & culvert too short.

Forward



Backward



Mile 2.3 (Stapp Road): 0+16+3=19ft wide road prism; Adequate visibility and sight distance;
Drainage issues causing severe pot-holes.

Forward



Mile 2.5 (Stapp Road): $0+14+0=14\text{ft}$ wide road prism; Good visibility and sight distance; Turnouts needed; Rough road due to drainage issues, needs more cross-slope.

Forward



Backward



Mile 2.7 (Stapp Road): 0+14+0=14ft wide road prism; Good visibility and sight distance; Turnouts needed; Rough road due to drainage issues, needs more cross-slope.

Forward

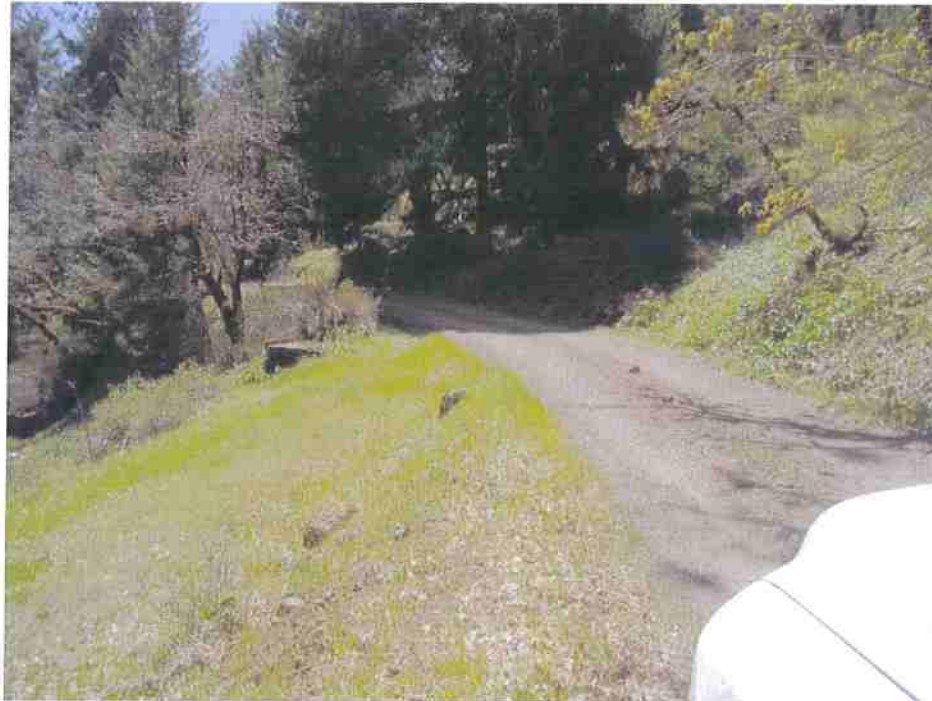


Mile 0.0 (Stapp Road – Private): 0+15+0=15ft wide road prism; Good visibility and sight distance; Turnouts forward and backward; Location of locked private gate on Stapp Road.

Forward



Backward



Mile 0.5 (Stapp Road – Private): $3+16+3=22$ ft wide road prism; Good visibility and sight distance; Turnouts forward and backward.

Forward



Backward



Mile 1.0 (Stapp Road – Private): $0+13+6=19$ ft wide road prism; Good visibility and sight distance; Turnouts backwards and forwards.

Forward



Backward



Mile 1.5 (Stapp Road – Private): $0+15+3=18$ ft wide road prism; Good visibility and sight distance; Turnout forwards.

Forward



Backward



Mile 2.0 (Stapp Road — Private): $0+13+6=19$ ft wide road prism; Good visibility and sight distance; Turnouts backwards and forwards.

Forward



Backward



Mile 2.5 (Stapp Road – Private): $2+13+2=17$ ft wide road prism; Adequate visibility and sight distance; Turnout right; Needs rolling dip.

Forward



Backward



Mile 2.8 (Stapp Road – Private): 0+18+0=18ft wide road prism; Major stream crossing (Showers Creek), adequate site distance. See CDFW LSAA Notification No. 1600-2017-0444-R1 for crossing rights, Issued 03/13/18.

Forward



Backward



Mile 3.0 (Stapp Road — Private): $0+19+0=19\text{ft}$ wide road prism; Good visibility and sight distance; Turnout left hand side.

Forward



Backward



Mile 3.5 (Stapp Road — Private): 0+20+0=20ft wide road prism; Good visibility and sight distance;
Large turnout & intersection.

Forward



Backward



Mile 4.1 (Stapp Road – Private): 0+18+0=18ft wide road prism; Good visibility and sight distance; Steep Grade (8-24% Slope), 4WD necessary at all times.

Forward



Backward



Mile 4.3 (Stapp Road – Private) 0+18+0=18ft wide road prism; Good visibility and sight distance;
Steep Grade (8-24% Slope), 4WD necessary at all times

Forward



Backward



Mile 4.6 (Stapp Road – Private) $1+15+2=18$ ft wide road prism; Good visibility and sight distance; Turnouts forward and backward.

Forward



Backward



Mile 5.0 (Stapp Road — Private) 0+18+0=18ft road prism; Entrance to project site, good visibility and sight distance. (No pictures taken)