

**City of Carson City
Agenda Report**

Date Submitted: March 11, 2014

Agenda Date Requested: March 20, 2014
Time Requested: Consent

To: Mayor and Supervisors

From: Parks and Recreation Department – Open Space Division

Subject Title: **For Possible Action:** to follow the recommendation of the Open Space Advisory Committee to approve the Revised Draft Maintenance and Erosion Control Plan for the unpaved portion of Ash Canyon Road.

Staff Summary: On January 16, 2014, Mayor Crowell instructed for staff and the Open Space Advisory Committee to review and respond to comments by Mr. Maurice White regarding the Draft Maintenance and Erosion Control Plan for the unpaved portion of Ash Canyon Road. Staff met with Mr. White on January 22, 2014, at which time most of his concerns were addressed. Subsequently, revisions to the plan were considered and discussed with Mr. White and the Committee on February 24, 2014. After considerable discussion, the Committee moved to recommend to the Board of Supervisors to approve the Revised Draft Maintenance and Erosion Control Plan for the unpaved section of Ash Canyon Road (Exhibit A). This plan provides for erosion control measures and for the installation of best management practices and signage. The plan was written by Resource Concepts Incorporated (RCI). A grant managed by the State of Nevada Division of Environmental Protection for \$10,000 will be used to pay for the management plan and installation of best management practices features on Ash Canyon Road.

Type of Action Requested: (check one)

☐ Resolution ☐ Ordinance
☒ Formal Action/Motion ☐ Other (Specify)

Does This Action Require A Business Impact Statement: ☐ Yes ☒ No

Recommended Board Action: I move to follow the recommendation of the Open Space Advisory Committee to approve the Revised Draft Maintenance and Erosion Control Plan for the unpaved portion of Ash Canyon Road.

Explanation for Recommended Board Action: Staff and the Open Space Advisory Committee have discussed with Mr. White and found resolutions to most of his concerns expressed in a letter submitted to the Board of Supervisors attached as Exhibit B. The grant being managed by the State of Nevada Division of Environmental Protection is for a total of \$10,000. As a match, Carson City contributed \$11,000 used to pay a private contractor for the maintenance of the road. In addition to the attached written plan, the grant deliverables include the installation of best management practices features to reinforce at least five of the water dips, to provide markers of mileage on the road edge, to close and re-vegetate certain areas that have been disturbed due to unauthorized motorized use, and the creation of parking spaces near the access point into the Ash Canyon Trail. The contractor, Horizon Construction, as part of road maintenance began the process of widening the road and out-sloping the road toward the canyon as opposed to the inside. One item that will be completed once snow is melted from the road is for the installation of a sign providing general information.

As expressed to staff, Mr. White's main concerns include, his belief that there must be more careful consideration by staff and the Open Space Advisory Committee before any existing road is closed. Mr. White also expressed that the plan appears to be "arbitrary."

The plan mentions four road spur closures after very careful consideration. The plan is not arbitrary, and the development of the draft has been the subject of expertise from the Nevada Department of Environmental Protection grant administrations and a private contractor experienced in the management of resources.

At the Board of Supervisors meeting of January 16th, Supervisor McKenna asked for staff to provide information as to the percentage of the cost to close the road spurs in comparison to the overall project. The estimated cost of closing the road spurs is \$4,410; which equals 21% of the total project cost of \$21,000.

For the next year, 2015, the staff has obtained approval for a similar grant for \$10,000. The anticipated project is to rock line and to berm a ditch to alleviate erosion in an area of road located after the water tanks. The rock lining is one of the proposed maintenance improvements recommended by the draft maintenance plan.

Applicable Statute, Code, Policy, Rule or Regulation:

Chapter 13.06 of the Carson City Municipal Code
Uniform Pathways Master Plan

Fiscal Impact: Approximately \$21,000 was spent and \$10,000 to be reimbursed by the grant.

Explanation of Impact: N/A

Funding Source: Open Space maintenance account.

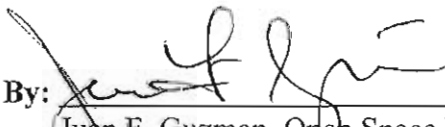
Alternatives: 1) Not to approve the maintenance plan; or,
2) To request amendments to the plan.

Supporting Material:

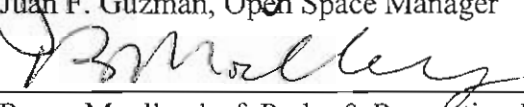
Exhibit A: Revised Draft of the Ash Canyon Maintenance and Erosion Control Plan.

Exhibit B: Letter by Mr. Maurice White, dated January 16, 2013

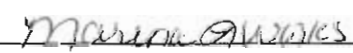
Exhibit C: Map of the Uniform Pathways Master Plan

Prepared By: 
Juan F. Guzman, Open Space Manager

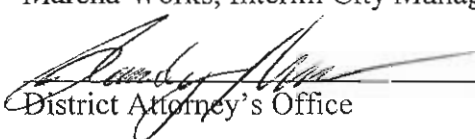
Date: 3/6/14

Reviewed By: 
Roger Moellendorf, Parks & Recreation Director

Date: 3/10/14


Marena Works, Interim City Manager

Date: 3/11/14


District Attorney's Office

Date: 3/11/14

Will Phillips
Finance Department

Date: 3, 11, 14

Board Action Taken:

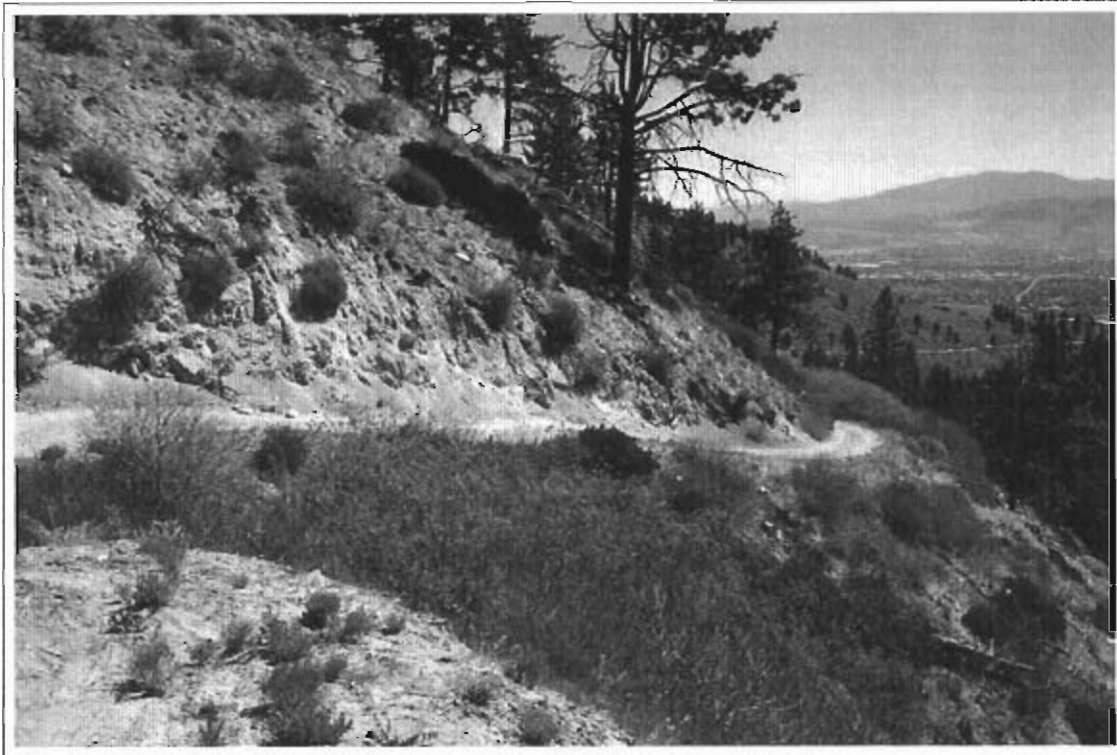
Motion: _____ 1: _____ Aye/Nay

2: _____

(Vote Recorded By)

Ash Canyon Maintenance & Erosion Control Plan

January 2014
Revised



Prepared for:

Carson City Parks and Recreation Department
3303 Butti Way, Bldg. 9
Carson City, NV 89706

Prepared by:



Resource Concepts, Inc.
340 N. Minnesota Street
Carson City, NV 89703-4152

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Prepared by:

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340 N. Minnesota Street
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Note: this is a living document and should be modified as needed

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1.0 Background, Purpose, and Need

Ash Canyon is located in the Carson Range immediately west of Carson City, Nevada. The Ash Canyon watershed is comprised of steep gradients and highly erodible granitic soils. Ash Canyon Creek is an important municipal water source for Carson City, which maintains a diversion structure located at the mouth of the canyon. The diversion structure is vulnerable to sedimentation and damage as a result of stormwater debris. Sediment from the canyon also flows through and deposits in the city stormwater system on its way to the Carson River.

The Ash Canyon Road is open for public use and is the primary access to Hobart Reservoir, a popular alpine fishery. It is a single-lane improved dirt road nearly five miles in length that begins at the western urban interface of Carson City at approximately 4,900 feet in elevation, and terminates at the Sierra Crest at approximately 8,000 feet in elevation. It is the only public vehicular access into the crest of the Sierras between Highway 50 at Spooner Summit and State Route 431 at Mount Rose. The bottom 0.7 miles provides critical access to the Carson City water storage tanks. Beyond this point, ~~the road~~ Ash Canyon Road is primarily used by four-wheel-drive vehicles for recreational access (hiking, mountain biking, horse riding, hunting and ~~off road driving~~ fishing) to lands primarily managed by State Parks, Carson City or the Humboldt-Toiyabe National Forest in addition to some private parcels.

The Carson City Parks and Recreation Department (CCPR) conducts annual road maintenance as funding allows. The City has a 30-foot easement across ~~the private and public lands~~ for the road. EXPAND Regarding Public Lands Bill and easement. Across private lands Carson City holds no easement and maintains customary use of Ash Canyon Road. Ash Canyon Road is specified in the Unified Pathways Master Plan (2007).

In 2012 the City received a "319(h) Grant" specific to Nonpoint Source Stormwater Planning from the Nevada Division of Environmental Protection. The City committed to preparing an Ash Canyon Road Erosion Control Plan and implementation of the plan as funding allows with the proposed project objective to reduce erosion from Ash Canyon Road and thus sediment in Ash Canyon Creek, a municipal water source for Carson City. The purpose of this plan is to achieve this objective, as well as the following four goals:

- Goal 1:** Develop an Ash Canyon Erosion Control Plan to help with consistent, effective and efficient roadway maintenance and erosion and sedimentation monitoring.
- Goal 2:** Improve public education to reduce public impacts to water quality.
- Goal 3:** Identify and implement specific best management practices (BMPs) for Ash Canyon Road to reduce impacts to water quality.
- Goal 4:** Provide a qualitative framework for BMP storm event monitoring in several key areas of Ash Canyon Road to assess project success.

2.0 Overview of the Ash Canyon Maintenance & Erosion Control Plan

This maintenance and erosion control plan outlines the approach for accomplishing the following:

- Improve public education to reduce public impacts to water quality (Section 3.0).
- Identify specific best management practices (BMPs) for Ash Canyon Road to reduce impacts to water quality including
 - > A description of existing BMPs (in Section 4.0)
 - > A description and cost estimate for proposed new BMPs (in Section 5.0) and
 - > A description of annual monitoring and maintenance BMPs (in Section 6.0).

~~oBMPs are consist with the USDA Best Management Practices for Water Quality Management on National Forest System Lands, including:~~

- ~~>A description of existing BMPs (Section 4.0);~~
- ~~>A description and cost estimate for proposed new BMPs (Section 5.0) and~~
- ~~>A description of annual monitoring and maintenance BMPs (Section 6.0).~~

Development of this plan has been iterative and comprehensive. Resource Concepts, Inc. (RCI) developed a Preliminary Draft Ash Canyon Maintenance and Erosion Control Plan based on field reconnaissance of Ash Canyon Road. Fieldwork included touring the road with Carson City Parks and Recreation staff and the contractor who currently conducts the annual maintenance on Ash Canyon Road (Brian Smith, Horizon Construction). Maintenance activities were summarized, trouble areas noted, and potential future projects identified. The BMPs identified in this plan are considered industry standards for maintaining dirt roads in erodible soils.

Once the Preliminary Plan was completed, CCPR personnel completed a review and provided comment. RCI incorporated all CCPR comments, and provided a Draft Ash Canyon Maintenance and Erosion Control Plan for final review. CCPR conducted a final review, including public discussion and inputs it ~~deems~~ deemed necessary.

3.0 Public Education Signs to Reduce Impacts to Water Quality

Due to Ash Canyon's proximity to Carson City and its popularity for a multitude of recreational pursuits, Ash Canyon is a popular public use area. While proper use of the watershed and a well-maintained road does not negatively impact the surrounding watershed, improper use can have negative impacts to the road, watershed and municipal water supply for Carson City. As such, it is essential that public users of the Ash Canyon area are well informed regarding responsible uses. Education is also essential to public safety along Ash Canyon Road. Due to its narrow nature, steep topography and lack of daily maintenance and/or snow removal there is an inherent potential for single or multiple vehicle collisions, rollovers or conflicts between recreational users and vehicular traffic.

Improved signage was identified as the primary means of improving public education in regards to the Ash Canyon Road and ~~Watershed~~watershed. Strategically located signage will deliver the targeted messages to the intended audience – the public who use Ash Canyon Road. Some signage, mostly informational in nature, already exists along the Ash Canyon Road. CCPR will maintain or improve existing informational signage (depicted on Maps 1, 2, and 3) that has been installed by local Boy Scout Troops and others as they provide education background on the natural environment and significance of the area.

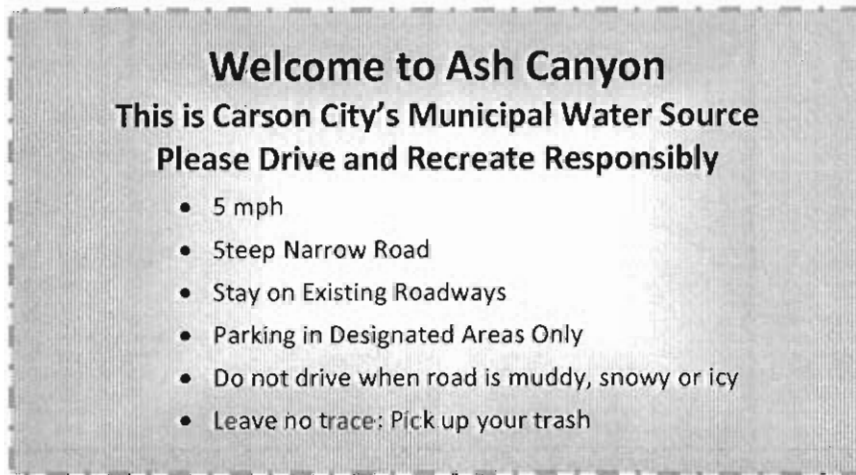
A series of signs specific to the use of Ash Canyon Road will be developed, installed and maintained, as funding is available as described below.

3.1 Mileage Markers

Permanent mile markers will be placed every 0.5 miles in order to aid in public reporting of emergencies / accidents, or maintenance issues. The signs will be installed along Ash Canyon Road at strategic locations as depicted on Maps 1, 2, and 3.

3.2 Welcome and Drive Responsibly Sign

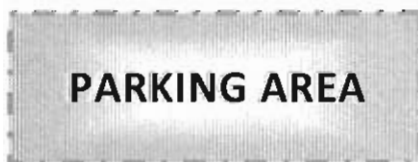
This sign will be posted at the water tank area (MP 0.65) to alert drivers that there are rules to follow and to encourage them to be aware as follows



As funding allows, an informational kiosk may be installed in this vicinity with a shaded relief topographic map of the area including Ash Canyon Road and points of interest. Seasonal information would also be posted.

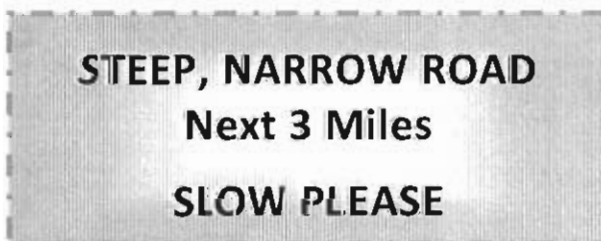
3.3 Parking Area

Parking Area signs will be posted at the areas noted on Maps 1, 2, and 3 as needed near MP 0.6, 1.65, 1.75, 2.55, and 2.95.



3.4 Steep, Narrow Road Next 3 Miles– Slow Please

This sign will be posted above the parking area at MP 1.75



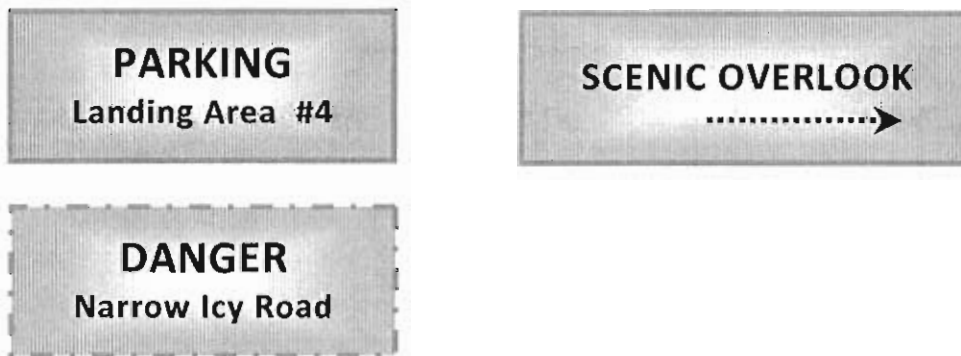
3.5 Landing #3 Parking and High Clearance Vehicles Only

The landing and parking sign will be posted at MP 2.55 and the High Clearance Vehicles Only sign will be posted just above the parking area at MP 2.55



3.6 Landing #4 Parking and Scenic Overlook; Danger Narrow Icy Road

These signs will be posted at the parking area at MP 2.93. A Danger - Narrow Icy ~~road~~ Road sign would be placed just past the landing.



3.7 Carson City Scenic Overlook

A Carson City Scenic Overlook sign would be placed near ~~MP~~ mile 4.9. The extent of this sign (i.e. informational with names of various features) would depend on available funding.

4.0 Description of Existing Best Management Practices

BMPs consist of both the physical construction of features designed to reduce the road's impact to water quality or the implementation of certain maintenance actions or practices. This section documents both types of BMPs focusing on those that already exist.

4.1 Road Surface

The lower portion of Ash Canyon Road from approximately milepost 0.00 to 0.65 has been surfaced with asphalt grindings. A series of water bars direct stormwater flow off of the driving surface.

The balance of Ash Canyon Road consists of a native soil surface, primarily decomposed granite (DG). The DG is highly erodible and subject to rilling particularly on steep slopes.

4.2 Rolling Dips and Dip Outlets

A series of rolling dips and water bars direct stormwater flow off of the driving surface along the length of Ash Canyon Road the road as illustrated in Photo 1.



Photo 1. Rolling dips are noted by arrows near MP-mile 2.2.

4.2.1 Rock Outlet

Water is conveyed from the rolling dips off of the edge of the roadway. In some places, the water is conveyed into BMPs consisting of either rock-lined drainages, or galvanized steel chutes as illustrated in Photos 2 and 3.



Photo 2. View of rock lined drainage near mileMP 1.2.

4.2.2 Galvanized Shoot

Galvanized steel chutes are in place in some areas where road shoulders are extremely steep and stormwater is concentrated down highly erodible, unvegetated soils. The chutes appear to be accomplishing their intended purpose of conveying stormwater away from the driving surface in a manner that does not result in down slope rilling and erosion.

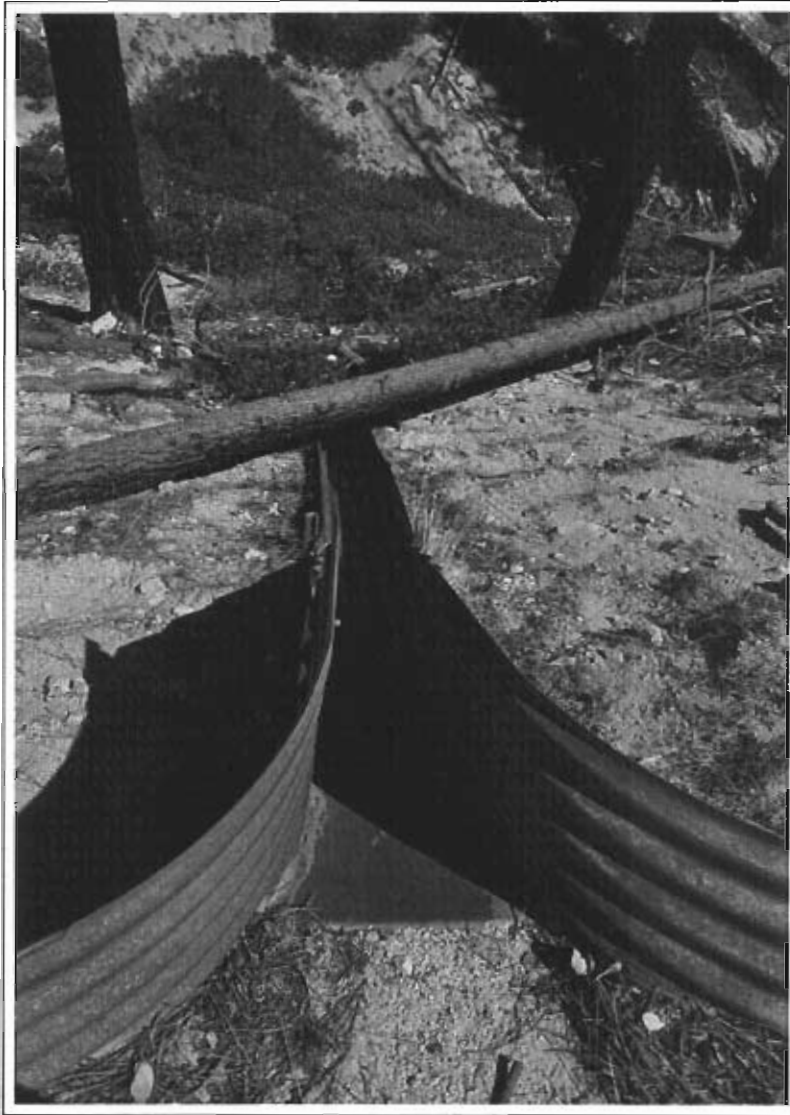


Photo 3. View down galvanized steel chute near mileMP 3.4.

4.3 — ~~Closed Roads~~ 4.3 Closed Areas

There are several two-track road spurs originating from the main Ash Canyon Road. Carson City closed four-wheel-drive vehicle access to two of these spurs in the summer of 2013. These spurs were closed because they were eroding sediment into Ash Canyon Creek, the spurs were no longer needed for their intended purpose and Carson City does not have the funds for maintaining the steep eroding surfaces. Access has been limited to several auxiliary dirt roads originating from the main Ash Canyon Road. This has been accomplished through a series of signs and / or placement of large obstructions (dirt berms, boulders and/or logs) as illustrated by Photo 4 and 5.



Photo 4. ~~NDOW Road Spur~~ closure with boulders near ~~mile~~MP 1.1. This steep 540 foot long two-track spur terminated at Ash Canyon Creek and was the source of sediment in the water system. The spur had previously been used by NDOW to stock the creek with fish.



Photo 5. Spur #1 closure with log, and sign near mile 1.52. This spur was created by
~~NDOW~~ during the Waterfall Fire Restoration and has been reclaimed.
NOF



Photo 65. Road Spur #2 closure with log, berm, and boulders near mile MP 1.65. This
spur terminated approximately 1200 feet into the forest near a spring.

4.4 Parking Areas

Several parking and pullout areas are located along the length of the road Ash Canyon Road. These have been placed primarily to take advantage of natural wide spots or old helicopter landings. Some of the landings have been covered with wood chips in the past in an effort to prevent erosion across the otherwise unimproved DG surfaces.



Photo 76. Parking area at Landing #4 with wood chips.

5.0 Description of Proposed New BMPs

The Ash Canyon watershed is extremely steep, the majority of the area has greater than 50% slopes (RCI, 2007). The soils have high erosion potential (NRCS, 2006). Due to the steep and the highly erosive nature of the Ash Canyon watershed ~~and the highly erosive DG soils that make up the majority of the road surface, pullout areas and parking areas,~~ additional BMPs are warranted to protect Carson City's municipal water supply and infrastructure.

The following recommendations should be implemented in a systematic fashion as funding becomes available.

The primary goals for each of the listed projects are to reduce erosion and sedimentation that may affect Ash Canyon Creek and Carson City's Municipal water supply and to improve the durability and reduce annual maintenance costs for Ash Canyon Road.

The following recommendations have been categorized by type, and a full list of all improvements, and a cost estimate is summarized at the end of this section.

5.1 Additional Rolling Dips

In areas where annual monitoring reveals rilling of the driving surface, construct additional rolling dips. Rolling dips should be spaced based on slope and surface type, per the following table (Kelly and Sherar, 2003).

Table 1. Recommended Maximum Distance Between Rolling Dip or Culvert Cross-Drains

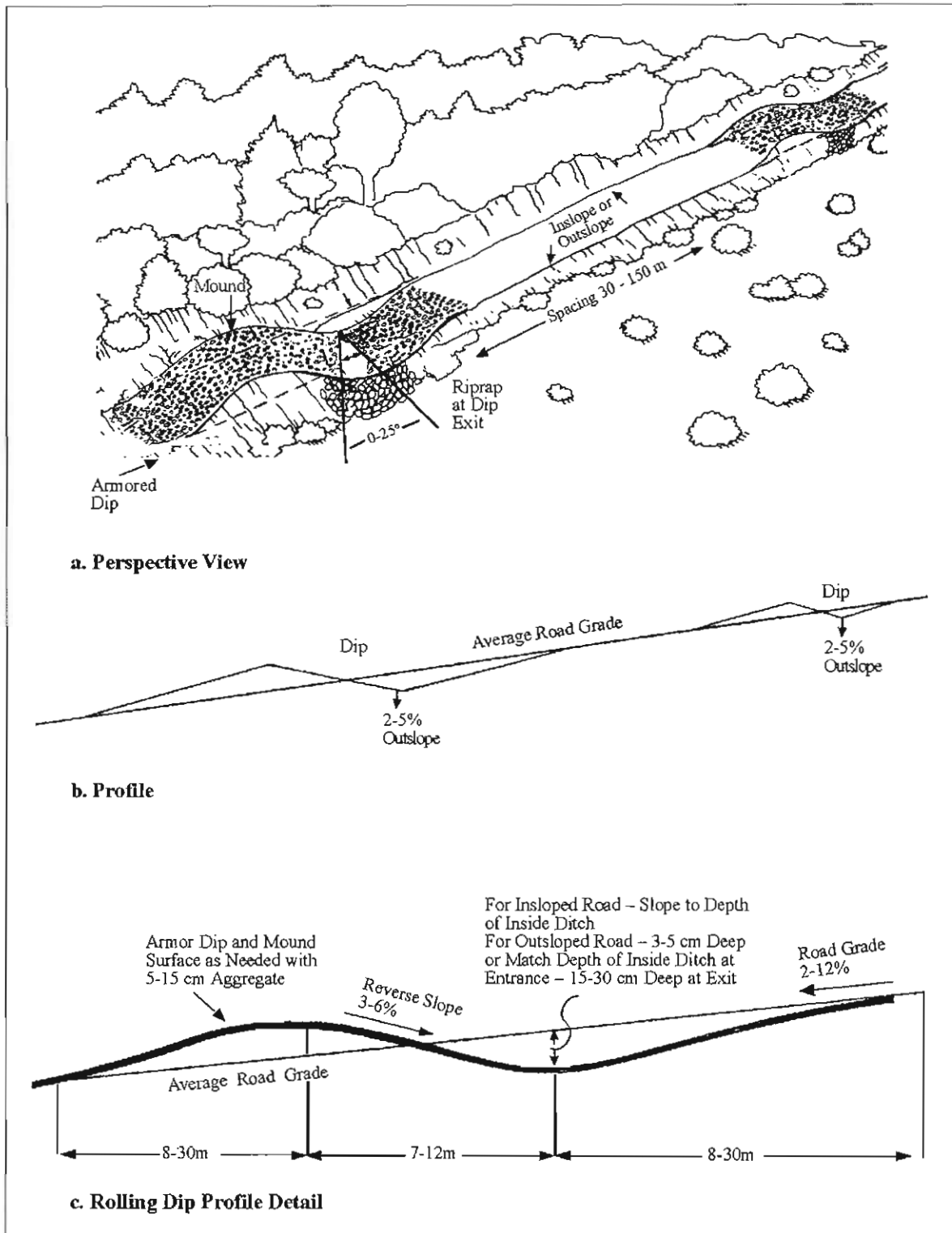
Road Grade %	Maximum Spacing in Low to non-Erosive Soils (meters and feet)	Maximum Spacing in Erosive Soils (meters and feet)
0-3	120m 394 ft	75m 246 ft
4-6	90m 295 ft	50m 164 ft
7-9	75m 246 ft	40m 131 ft
10-12	60m 197 ft	35m 115 ft
12+	50m 164 ft	30m 98 ft

Low Erosion Soils = Course Rocky Soils, Gravel, and Some Clay

High Erosion Soils = Fine, Friable Soils, Silt, Fine Sands

Rolling dips should be designed and maintained with the dimensions and parameters shown in the following figure (Kelly and Sherar, 2003)

Figure 1. Rolling Dip Detail



Kelly and Sherar, 2003

5.2 Armor Rolling Dips and Ditches and Drain Outlets

There are a significant number of rolling dips and culverts already located along Ash Canyon Road. There are fewer ditches and those that are in place appear to have been subject to erosion during storm events. Since funding isn't available to armor all of the rolling dips and drain outlets, prioritization of such improvements will be based on monitoring as follows:

- In areas where monitoring reveals chronic issues with rilling and erosion, culvert and/or drain outlets and drain ditches will be rock armored with riprap placed over geotextile.
- Rolling dips that are subject to chronic erosion or damage will be surfaced with rock aggregate as noted in the above figure (Kelly and Sherar, 2003).

5.3 Armor Pullouts, Parking Areas and Landings

Nearly all of the existing pullouts, parking areas and landings are surfaced with native DG soils. These relatively large areas are compacted, have little to no vegetation and are vulnerable to sheet flow and transport of fine sediment. Armoring would reduce erosion and provide a more stable surface during wet or windy weather conditions. The following actions are options to consider:

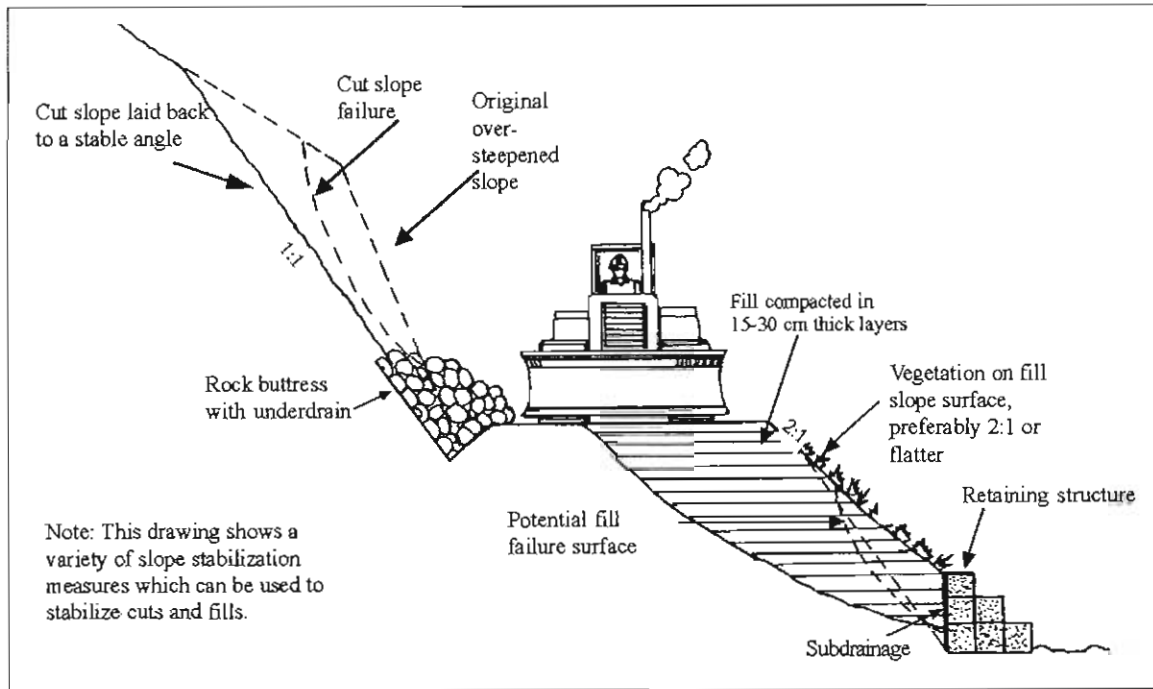
- Armoring on an annual basis with a decomposable mulch (i.e. wood chips) is an option, but it is costly and somewhat awkward for public users.
- A more permanent improvement using six inches of gravel armoring placed over geotextile would be more user-friendly and durable.
- Obstructions (large boulders, logs and berms) should be strategically placed around the perimeter of parking areas to prevent erosion of steep areas and pioneering of new trails.

5.4 Cut slope stabilization

There are several steep cut slopes located along Ash Canyon Road. Most consist of granite bedrock covered with loose DG, resulting in slumping of loosed DG onto the driving surface during storm events. This also results in some degree of sedimentation into the adjacent creeks. Standard stabilization options, such as revegetation or geotextile, are limited due to the presence of bedrock, which hinders the ability to stake down geotextiles or to establish vegetation.

An improvement option is to key in boulders at the toe of the slope and construct a rock buttress, as shown in the below figure. This may not be feasible for all cut slopes depending on the depth to bedrock and width of the driving surface (Kelly and Sherar, 2003). Figure 2 illustrates this method.

Figure 2. Slope Stabilization Detail with Rock Buttress



Kelly and Sherar, 2003 :

5.5 Reclaim Closed Roads Disturbed Areas

Several roads originating from Ash Canyon Road have been closed as they are no longer needed or were never authorized. Due to compaction, these roads have not revegetated and are prone to erosion. Carson City intends to reclaim disturbed areas that are an erosion and sedimentation risk.

The best means of road reclamation to reclaim disturbed areas is to:

- Rip the soil to a depth of 6", seed and rake or drag the soils to incorporate the seed into the loosened soils.
- For newly disturbed areas pioneered roads and trails with minimal use, ripping may not be needed and seeding and raking may be sufficient.
- Use certified weed free seed.
- All equipment must be thoroughly clean and free from weeds or seeds prior to use in the area.

5.6 ~~Place Obstructions Across Pioneered Roads and Trails to Protect Resources, and Around Parking Areas and Landings~~

The placement of natural obstructions such as rocks and logs has proven effective in Ash Canyon at eliminating travel across closed ~~or unauthorized roads and trails~~ areas. The most effective means of ~~blocking roads and trails~~ protecting areas permanently is to key in rocks and boulders so they cannot be pushed or pulled out of the way as illustrated in Photos 4 and 5. Carson City may also use wooden fences and signs to deter illegal off-road driving. Landing #4 is currently in need of such barriers as illustrated by Photo 7.



Photo 87. View from hill above parking area at Landing #4. Note OHV use in foreground. Vehicle barriers and signage should be installed to inform the users that this area is restricted to foot traffic only.

5.7 Proposed BMP Summary

Table 2 represents the projects identified by RCI and CCPR during a field review of Ash Canyon Road completed during the summer of 2013. Cost estimates are based on previous similar projects.

Table 2. Ash Canyon Road - Proposed Improvement Project Summary

Mile Post	Project Description	Quantity	Unit	Unit Price	Estimated Cost
0.45	Rock line cut slope and roadside ditch on either side of existing 24" culvert, and mark either end of culvert with post or sign.	350	LF	\$50	\$17,500
0.6	Add parking area sign	1	ea	\$100	\$100
0.65	Add welcome and drive responsibly sign	1	ea	\$300	\$300
0.70	Rock buttress at toe of cut slope.	125	LF	\$100	\$12,500
1.08	Reclaim and revegetate old NDOW roads.	5,500	Sq Ft	\$1.50	\$8,250
1.08	Alternatively - Reconstruct road as a trail, block vehicle access, and add new sign for non-motorized access only.	2,750	Sq Ft	\$1.50	\$4,125
1.51	Reclaim and revegetate old roads and block vehicle access (complete).	2,000	Sq Ft	\$1.50	\$3,000
1.63	Grade the start of existing roads to allow 2 perpendicular parking spaces (complete). Block access to existing old roads, and construct berm to prevent sheet flow across parking area (complete) and reclaim and revegetate old road compacted areas. Armor existing parking area with 6" minimum depth gravel over geotextile.	NA 8,000 1,000	NA Sq Ft Sq Ft	NA \$1.50 \$1.50	\$1,200 \$12,000 \$1,500
1.75	Widen and grade new parking area for public parking at new trailhead (complete). Relocate existing "boy scout" sign (complete). Add new parking sign and trailhead sign. Add Steep Narrow Road Sign Armor parking area with 6" minimum depth gravel over geotextile.	NA 2 1 5,600	NA Ea ea Sq Ft	NA \$100 \$100 \$1.50	\$1,200 \$200 \$100 \$8,400
1.78	Rock line existing raw drainage between road and new trail. Install water bar	1	LF/ea	\$100	\$100
1.80-1.90	Rock buttress at toe of cut slope.	100	LF	\$100	\$10,000
1.95	Grade out existing berm along road edge and create pull-out area (complete). Armor new pull-out area with 6" minimum depth gravel over geotextile.	600	Sq Ft	\$1.50	\$900
2.07	Hand treat and seed eroded gully banks (complete)	NA	NA	NA	NA
2.08	Gravel 20 LF of existing road.	300	Sq Ft	\$1.50	\$450
2.10	Rock buttress at toe of cut slope.	110	LF	\$100	\$11,000
2.12	Armor existing pull-out area with 6" minimum depth gravel over geotextile.	450	Sq Ft	\$1.50	\$675
2.44	Armor existing pull-out area with 6" minimum depth gravel over geotextile.	600	Sq Ft	\$1.50	\$900

Ash Canyon Maintenance & Erosion Control Plan

2.54	Add rock check dams (3) in existing gully.		ea		
2.55	Armor existing landing #3 area with 6" minimum depth gravel over geotextile. Add parking sign, Scenic Over Look Sign and Danger Icy Road sign	10,000 3	Sq Ft ea	\$1.50 \$100	\$15,000 \$300
2.94	Armor existing landing #4 area with 6" minimum depth gravel over geotextile. Place signs and barriers across illegal trespass.	4,550 40	Sq Ft LF	\$1.50 \$50	\$6,825 \$200

6.0 Monitoring and Maintenance BMPs

Ash Canyon Road will be inspected under the following conditions:

- Annually in the spring when snow and weather conditions allow for full access and a dry driving surface.
- After large rainfall events (i.e. 25-year events or greater) as road and weather conditions allow.
- Photographs will be taken of the problem areas. The locations will be noted on the detailed maps or with GPS coordinates.

The following actions will be implemented annually as funding allows:

- Any rilling, erosion, loose rock or slumping soils in or around the driving surface, and pullouts / parking areas will be noted.
- All loose soils that have slumped onto the road surface over the winter months will be removed and used to re-enforce existing water bars.
- Any loose rock will be removed from the driving surface and only sections of rough road are graded.
- Any observed erosion will be addressed, typically by placing erosion wattles, gravel rolls or rock.
- If deadfalls or new vegetation growth have crowded the driving surface, particularly at the upper elevations, it will be removed or trimmed back to allow proper vehicle clearance.
- If any new pioneered routes are observed, obstructions will be placed to discourage the expansion of new unauthorized roads and trails.
- All culverts and galvanized slope drains will be inspected, and any obstructions removed and damage repaired.

This plan and maps will be updated as needed.

7.0 References

Kelly, G. and James Sherar, 2003. *Low-Volume Roads Engineering Best Management Practices Field Guide*.
USDAFS/USAID

Natural Resources Conservation Service 2006. Soil Survey Geographic (SSURGO) database for Carson
City Area, Nevada nv629 Online Linkage: URL:<http://www.ftw.nrcs.usda.gov/ssur_data.html>

RCI, 2007. Carson City Municipal Watershed Assessment & Recommendations Following the Waterfall
Fire, prepared for Carson City Parks and Recreation Department.

Maps

Map 1 Ash Canyon Road Milepost 0.0 to 1.4

Map 2 Ash Canyon Road Milepost 1.4 to 3.4

Map 3 Ash Canyon Road Milepost 3.4 to 5.0

This maintenance plan is not based in fact. It proposes to continue starrs headlong rush to close established and useful roads within all of Carson City.

This document contains no discussion of historical use. It does refer to unauthorized motorized use. It is unconscionable to make this assumption without investigating the actual purpose of these roads. Were are the facts that these roads are unauthorized or unneeded.

This document claims to protect the Ash Canyon Watershed. Yet I find no discussion of actual problems being reported. Are there any studies from the water department that confirms these so called unauthorized roads are creating a problem. How much erosion are these roads contributing to the Ash Canyon Watershed ? What is the ratio of road caused erosion to natural erosion ? Would a simple silt fence satisfy staffs concerns ?

The nature of nature is to erode.

To justify these road closures you must quantify the adverse affects of these roads.

Page 3. Para 3. Sentence 2 of the plan reads in part "...a well-maintained road does not negatively impact the surrounding watershed..." I see no discussion that proper maintenance is or is not practical for these unauthorized roads. Would properly maintaining these roads protect the watershed ? Why is there no consideration for my culture, my heritage ? As a life long resident of Carson City I have no memory of not using these roads. I suggest Mr. Mayor you could say the same thing. Likewise I have no memory of any public discussion that these roads are a menace to the Ash Canyon Watershed.

While you are considering this document that proposes road closures this body has approved and participated in the construction of a new bicycle / walking trail from Ash Canyon to Kings Canyon. The culture of walking and bicycling is encouraged while my culture and heritage is being cast aside without credible facts. I object strenuously to the effort of creating a narrow and exclusive use of public lands.

The use of Best Management Practices are in fact the accepted methodology of creating this sort of work plan. This plan must be backed up with facts. I find no facts included. As stated on page 2. Paragraph 1 and 2, information gathering consisted of "field reconnaissance", "touring the road" and "comments from staff". As I see no discussion here regarding the collection of quantifiable facts I assert no facts were collected. Why are we applying USDA criteria on lands that do not belong to the USDA ? Why is there no mention of the Americans with Disabilities Act ? This is a public facility with substantial upgrades being recommended. Are ADA accommodations required at this point ? The closure of these roads will in fact stop the enjoyment of this facility by the disabled and families with small children. Why would you do this ?

Page 2. Paragraph 2. Sentence 3 claims to have included public discussion. With the exception of an Open Space Advisory Committee meeting held on December 16, 2013 I know of no other public discussion prior to today. No discussion of public input is included in the plan. Why hasn't the motorized public been engaged ?

Goal #4 states, "Provide a framework for BMP storm event monitoring in several key areas of Ash Canyon Road to assess project success". Throughout this document I find no discussion regarding data collection that would assist in monitoring conditions in the Ash Canyon Watershed. I find no data baseline that would indicate actual knowledge of current or past conditions. I suggest this plan was created on opinion not facts. Opinion is not a credible basis to recommend any work, let alone the closure of areas that are accessed by the public in general. I do not find in this plan a framework for "BMP storm event monitoring".

Paragraph 1. Sentence 3 of the "Explanation for Recommended Board Action" for this agenda item states that road closures are required. Under who's authority are these road closures required ? I suggest the sole authority to require anything in Open Space is held by Q18.

Speaking of authority, this agenda item was produced by Mr. Guzman, the Open Space manager. It was previously presented to the Open Space Advisory Committee by Mr. Guzman with a recommendation to send this item to this body. Today Mr. Guzman has presented this item. I wonder why ? As I have researched the property ownership of the Ash Canyon Road there is but one possible Open Space property within the stated project. Other government agencies and private ownership are as follows, from the lowest elevation to the highest.

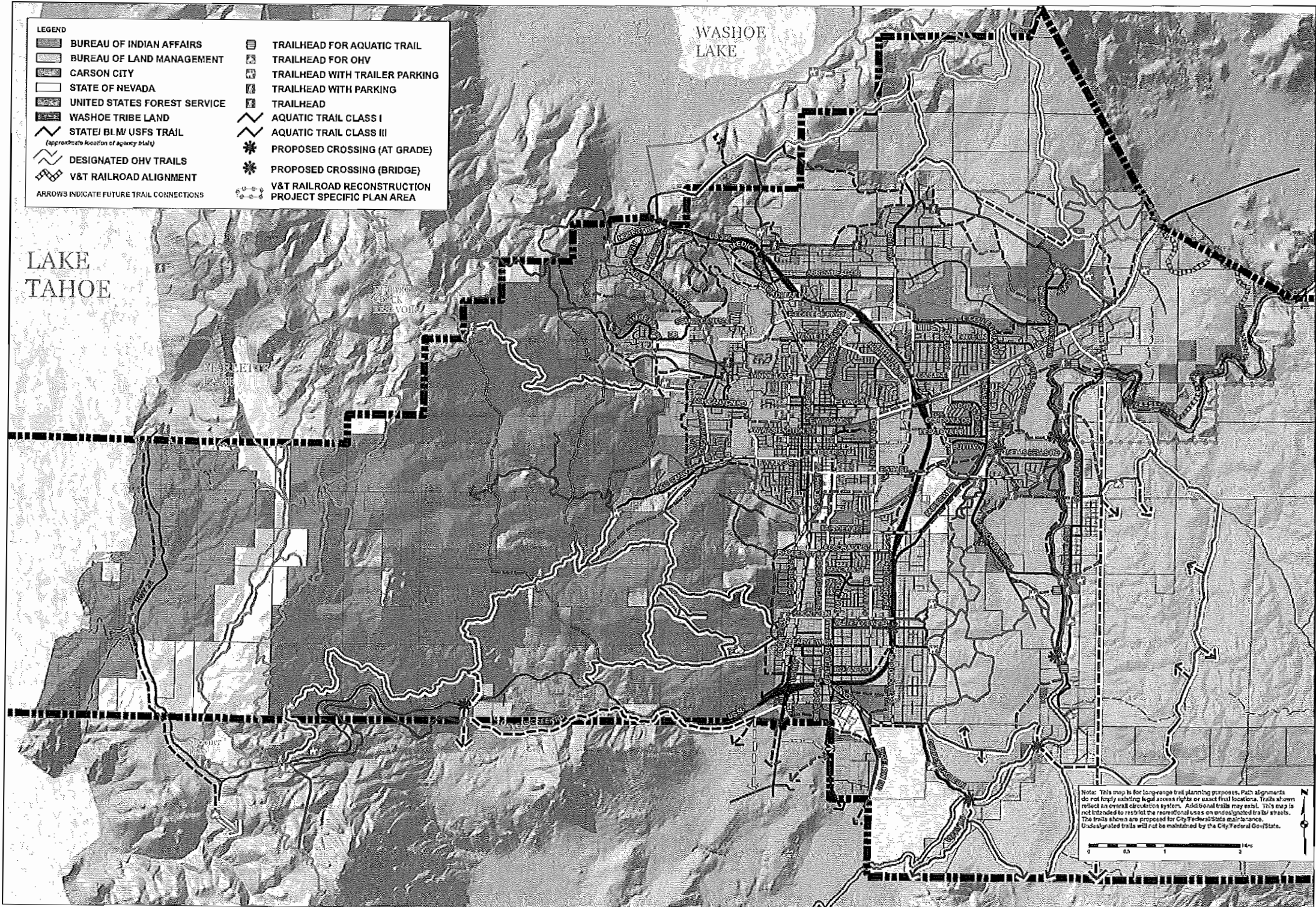
Carson City
State of Nevada
Carson City Utilities
State of Nevada
Carson Lodge #1
Carson City Utilities
State of Nevada
USA
SCAC Ilc. & Marshall
State of Nevada

Are we spending Open Space money and staff time on properties not within the purview of Open Space ?

Why are we here today ? The last sentence of the "Explanation for Recommended Board Action" states, "The contractor also started widening the road and out-sloping the road toward the canyon as opposed to the inside." Am I to conclude that work has begun before this body has approved the plan? Have we put the cart before the horse ? Should we even hitch the horse and the cart together ?

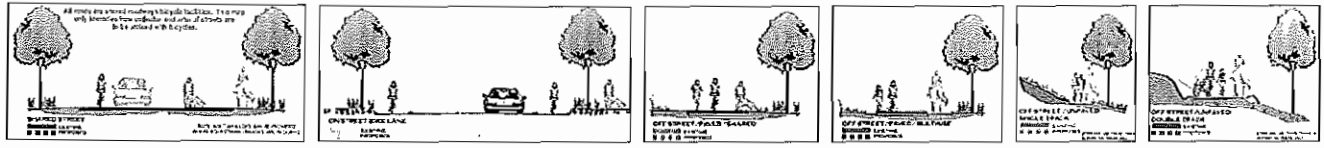
I assert this plan will not serve the general public as the citizens of this community voted for in Q18. I ask that this BoS suspend this work plan until we have reasonable answers to the questions I have raised today.

Maurice White
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**UNIFIED PATHWAYS
MASTER PLAN**

CARSON CITY,
NEVADA



Adopted - April 6, 2006
Revised - March 15, 2007 Incorporation
of Carson River Aquatic Trail.

