Hem #7B

Date Submitted: August 24, 2007

Agenda Date Requested: September 6, 2007

Time Requested: 10 Minutes

To: Mayor and Supervisors

From: Public Works

Subject Title: Action to accept Parks and Recreation Department's recommendation on Task 3 and Task 4 of the "Natural Resource Conservation Service Waterfall Fire Rehabilitation Assessment Project" Task 3 and Task 4" **Contract #2006-020** Amendment No. 1 and authorize the Parks and Recreation Department to issue payments to Resource Concepts, Inc., for an Amendment amount of \$125,300.00, from the NRCS Account as provided in FY 2007/2008.

Staff Summary: The City has received a grant through the Nevada Resources and Conservation Service (NRCS) for the assessment and rehabilitation of private and City lands affected by the Waterfall Fire for a not-to-exceed amount of \$309,000. The grant calls for four tasks, with the last two being authorized by this action. These two tasks call for design and construction of rehabilitation measures.

Type of Action Requested: (Check One)		
() Resolution	() Ordinance	
(**) Formal Action/motion	() Other (Specify)	
Does this Action Require a Business Imp	oact Statement: () Y	'es (X) No

Recommended Board Action: I move to accept Parks and Recreation Department's recommendation on Task 3 and Task 4 of the "Natural Resource Conservation Service Waterfall Fire Rehabilitation Assessment Project" **Contract #2006-020** Amendment No. 1 and authorize the Parks and Recreation Department to issue payments to Resource Concepts, Inc., for an amendment amount of \$125,300.00, from the NRCS Account as provided in FY 2007/2008.

Explanation for Recommended Board Action: This is an amendment to a professional services contract. This consultant was selected using the guidelines of NRS as indicated below.

Mayor Teixeira and City Manager Ritter were successful in obtaining this earmark grant through the office of Senator Reid for the rehabilitation of City and private lands affected by the Waterfall Fire. The funding is being disbursed through the NRCS and totals \$309,000. The NRCS staff recommended that emphasis be placed on a plan to coordinate effective treatments. Staff used the RFQ process to obtain the services of a qualified firm to create a comprehensive analysis of the damaged resources on the watershed and to create a plan and design of projects to rehabilitate the watershed.

Applicable Statute, Code, Policy, Rule or Regulation: Architects, Engineers and Surveyors are considered Professional Services contracts pursuant to the requirements of N.R.S., Chapters 332 and 625; therefore, a formal bidding process is not required.

Fiscal Impact: Not to exceed \$125,300.00 for this Amendment No. 1.

(Vote Recorded By)

Explanation of Impact: On September 21, 2006, the original contract was approved by the Board of Supervisors for a not to exceed amount of \$183,700.00, with the inclusion of this Amendment No.1 the revised contract sum is \$309,000.00. If approved the referenced account(s) could be decreased by \$309,000.00.

Funding Source: 254-5047-452-1204 NCRS Grant Account as provided by in FY 2007/2008. Alternatives: Provide Other Direction Pursuant to Board Action. Supporting Material: Agreement & Proposals from Consultant Prepared by: Sandy Scott, Contract Coordinator Date 8 28 107 Reviewed By: Juan Guzman Date 8 / 28 / 07 Reviewed By: 1 Roger Moellendorf, Parks and Réc Date: 8 128 107 Reviewed By: (C/M) Date: 8 128107 Reviewed By: (Finance Dir) Date: 8 / 28/07 Reviewed By: (DA) Melania the katt Date: 9 / 28 P7 Reviewed By: (Public Works) BOARD ACTION: (Aye) Motion :(Nay)

AMENDMENT NO. 1

Contract No. 2006-020

THIS AMENDMENT is made and entered into this _____ day of August, 2007, by and between the City and County of Carson City, of the State of Nevada, hereinafter referred to as the "CITY", and Resource Concepts, Inc., hereinafter referred to as the "CONSULTANT", and is made to amend the existing contract known as "CONTRACT #2006-020", and titled "Natural Resource Conservation Service Waterfall Fire Rehabilitation Assessment Project".

WITNESSETH:

WHEREAS, the City desires to amend the original contract to include that which is contained herein; and

WHEREAS, said amendment is at the City/Consultant's request, and that significant benefit will be derived by the City from such adjustments; it is

NOW, THEREFORE, mutually agreed by both parties to Amend the original contract to address:

1 SCOPE OF WORK

1.1 See attached proposal from **CONSULTANT** dated August, 2007, and addressed to Mr. Juan Guzman.

2 TIME OF COMPLETION:

- 2.1 CONSULTANT shall complete the Scope of Work on or before August 31, 2008, however, this contract continues as long as funding exists to continue. The contract may be terminated after this date by either party giving five (5) days written notice to terminate the contract.
- 2.2 Section 2.3. is deleted from the original Agreement.

3 COMPENSATION:

3.1 CITY shall pay CONSULTANT compensation based upon time and materials not to exceed a maximum amount of \$125,300.00 for this Amendment No.1. The Original Agreement was issued for \$183,700.00, with the inclusion of this amendment the revised contract sum is \$309,000.00.

IT IS ALSO AGREED, that all unaffected conditions, requirements and restrictions of the Original Contract document remain in full force and effect for the duration of the Contract term.

AMENDMENT NO. 1

Contract No. 2006-020

CITY'S DEPARTMENT

ACKNOWLEDGMENT AND EXECUTION:

CITY'S CONTRACTING AGENT

BY: Sandy Scott, Contract Coordinator	BY: Andrew Burnham
Carson City Public Works	Public Works Director
Contracts Division	Carson City Public Works
3505 Butti Way	Address: 3505 Butti Way
Carson City, Nevada 89701	Carson City, NV 89701 Telephone: 775-887-2355 x1001
Telephone: 775-887-2355 X1101	Telephone, 115-661-2555 X1001
and the second s	(Signature)
(Signature)	(Signature)
DATED this day of, 2007	DATED this day of, 2007
CONSULTANT/CONTRACTOR	
CONSULTANTICONTRACTOR	certify that the funds are available for this project.
BY: John McLain	1 control trick the ratios and a second
B1. COM MicLan	FUNDING SOURCE: 254-5047-452-1204
Title: Principal	
	BUDGET ALLOCATION: \$125,300.00
Firm: Resource Concepts, Inc.	in the state of the
	By: Roger Moellendorf, Parks & Rec. Director
Address: 340 N. Minnesota Street	
Tentenani (1900) de la companya del companya del companya de la co	
City/State: Carson City, Nevada	(Signature)
& Zip Code: 89703	(Olghalare)
a zip code. 03/03	
Telephone: (775) 883-1600	CITY CONTACT PERSON
Total Control of the	
	NAME: Juan Guzman
San	and the first of the second of
(Signature)	PHONE: (775) 887-2262
andra Carlos (1994). The Carlos (1994). The Carlos (1994). The Carlos (1994).	
DATED this day of, 2007	
and the state of t	REVIEWED BY:
	RALL PORTE
	Kim Belt
	Capital Program Manager Carson City Public Works Department
	3505 Butti Way
	Carson City, Nevada 89701
	775-887-2355 x 1016
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	Signature

Waterfall Fire Natural Resource Assessment and Action Plan Tasks 3 and 4 Refined Scope

Task 1, the <u>Watershed Current Condition Assessment</u>, is complete. Task 2, the overall <u>Implementation Plan</u> has been drafted and is in review. The draft assessment and implementation plan includes a Project Prioritization Table (attached) in which all of the projects are ranked by threat and benefit. The project names are the same as those used in the draft assessment report.

Task 3. Plans, Engineering Designs, and Specifications

Priority projects have been selected via a ranking process described in the draft plan and in consideration of current landownership. The engineering design projects were selected for properties currently under the control of Carson City. Several privately owned parcels are very high priority but were not selected for designs in this phase due to the various uncertainties associated with coordination with private landowners. The highest priority parcels were selected to create a cooperative agreement with Carson City because the City and landowners have both stated it would be in their best interest. The cooperative agreement and design projects are described below.

Develop a Cooperative Agreement for Operation and Maintenance of the Ash Canyon and Kings Canyon Drainages (Project AZ8)

RCI will assist Carson City and the Joost and Anderson Ranches in development of a Cooperative Agreement for operations and maintenance. The Ash and Kings drainages flow across both City and ranch property prior to discharge into the City storm drains. With the property configuration, it is not clear-cut regarding maintenance responsibilities. Over the years City personnel and ranch managers have changed and with that change the "handshake" agreements so common in the ranching community have been forgotten. A written agreement will provide the guidance for "who will do what" during on-going routine maintenance, larger maintenance projects, as well as emergency situations. Routine maintenance includes drainage cleaning by removing sediment, vegetative debris, debris dams, and fallen trees as well as cleaning the diversion screens. Major maintenance includes channel and pipe reparation, willow cutting and removal.

The juxtaposition of the ranches provides a buffer from floods and excessive sediment deposition for the City storm drains. The process of diverting and spreading the water on the ranches provides three primary benefits to the City:

- The water spreading during high flows reduces flooding velocities and quantities downstream;
- The routine water diversions recharges the groundwater; and
- The vast majority of the sediment drops out on the irrigated fields and ditches.

This project is the highest priority for the watershed. The water channels are in need of maintenance now, prior to our fall and winter rains.

Flood and Sediment Attenuation Designs for Carson City Land (Projects KC1 and KNK1)

Project KC1: Design and Build a Flood and Sediment Attenuation Area on City Property below the Water Treatment Plant

A large undeveloped Carson City property parcel is situated in an ideal area to help attenuate floodwaters and sediment. The Taylor, Slide, Premier, North Kings and Kings drainages all converge on this parcel near the water treatment plant. The land is situated immediately upstream from several large housing developments that have experienced problems with flooding and sediment deposition during past events.

RCI will design the floodplain area for flood and sediment attenuation. The design will include several types of facilities including:

 Re-contouring the parcel to provide a broad flood plain with spreader dikes to allow water to spread and infiltrate into the alluvial fan. These will be low berms which when

vegetated will blend in with the surrounding landscape.

- One or several sediment basins.
 The number and size will depend on the results of hydraulic analyses and the specific objectives of Carson City.
- Protective levees around flood prone residential areas may be designed depending on the results of the hydraulic analyses.
- Reconfiguration or re-routing flood channels.
- All design will include limiting disturbance to naturally establishing vegetation.
- A revegetation plan will be included to stabilize and revegetate all disturbed areas to minimize erosion and noxious weed establishment.



The designs will strive to include multiple objectives of the City and incorporate public input on the design. Multiple uses could include outdoor recreation, agricultural practices, fire and fuels management, and preservation of view corridors and open space.

Project KNK1: Reconfigure Water Treatment Plant Access Road and Design and Build a Flood and Sediment Attenuation Area on City Property

This large undeveloped parcel is owned by Carson City and is adjacent to KC1 described above. This area will be designed for flood and sediment attenuation in concert with KC1. The design will include:

 Re-design of the water treatment plant access road on a raised roadbed. The raised road will maintain access to the plant during flood events and serve a dual purpose to

- help check flood flows. A series of culverts and water control structures will be designed to pass low flows and regulate flood flows.
- A series of spreader dikes (similar to KC1 berms) will be designed to spread water, reduce flow velocities, encourage infiltration, and aid in removal of sediment and debris from floodwaters. Final design will be dependent on the results of detailed survey work and hydrological analyses.
- All design will include limiting disturbance to naturally establishing vegetation.
- A revegetation plan will be included to stabilize and revegetate all disturbed areas to minimize erosion and noxious weed establishment.

RCI will follow a step-wise procedure for completing designs for projects KC1 and KNK1 as follows:

Site-Specific Surveys

The project area will be surveyed to refine the existing one-foot contours and locate key areas such as irrigation ditches, diversions and culverts. Where appropriate, the survey will be tied into existing surveys to expand the survey base to the extent practicable.

Hydraulic Analyses

The hydraulic analyses and flood-frequency values derived from previous work will be verified. RCI may also use various hydraulic modeling software, such as the US Army Corps of Engineers (ACOE) HEC-RAS program, as may be needed for the design.

Wetland Delineation

A wetland delineation will be conducted of the project area and submitted to the ACOE for verification. The results of the delineation may modify the project design and will be used to obtain a Section 404 permit from the ACOE and 401 water quality certification from the Nevada Division of Environmental Protection.

Cultural Resource Survey

A cultural resource survey will be conducted of the project area. The results of the survey may modify the project design and will be used to obtain a Section 106 permit from the State Historic Preservation Office.

Soils

The soils within the project area will be examined for drainage, infiltration capacity, and chemistry. This information will be used to develop a plant and seed mix for the project area and predict infiltration rates during large flow events.

Preliminary Design

Preliminary designs will be developed and presented to Carson City for review and consideration. The design drawings will be of sufficient detail to provide the City with a clear idea of what is proposed. RCI recommends that the design be reviewed by representatives for Open Space, Stormwater control, and utilities.

50 Percent Design

The 50 percent design will include a draft plan set, planning level costs and quantities. The goal of the 50 percent design is to receive a "Proceed with Approval" from Carson City.

90 Percent Complete Design Plan

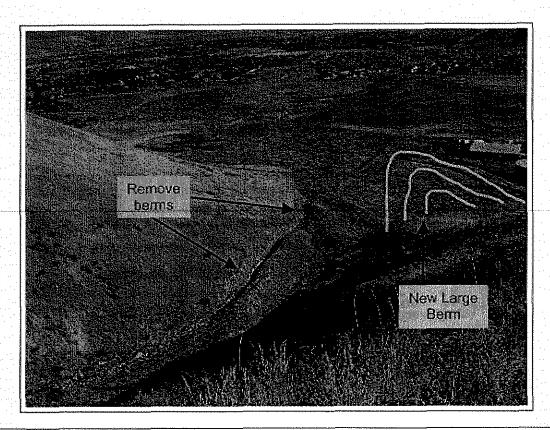
Incorporating comments received at the 50 percent design level, RCI will complete a 90 percent design. The 90 percent design will include a complete plan set for final review by Carson City to ensure all comments and issues were properly and adequately addressed. The 90 percent plan will be useful to the City in obtaining construction funding.

Preliminary Designs for Flood and Sediment Attenuation on Carson City Land (Projects TSP1, 2, 4)

Project TSP1: Reconfigure protective structures at the mouth of Taylor Canyon

RCI will prepare preliminary designs for a re-configuration of the series of protective / directional levees constructed at the mouth of Taylor Canyon in order to dissipate flows and enhance protection of the water plant as follows and depicted in Photo 6-TSP1. This includes:

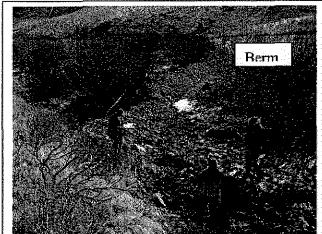
- Removal of the small, unarmored levees and replacement with a larger structure that
 is set back from the throat of the canyon mouth. The new structure would originate at
 the bull-nose shaped ridge at the south edge of the mouth of the canyon and run north
 towards the corner of the existing fence around the treatment plant. The layout will
 provide much broader access to the floodplain while increasing water treatment plant
 protection.
- A hydraulic study will be performed for the Taylor Canyon watershed and incorporated into designs to spread flood flows onto the floodplain to maximize sediment deposition and groundwater infiltration and minimize erosion.



Project TSP2: Reconfigure mouth of Slide Canyon, develop spring on alluvial fan and enhance protective levees above City water treatment plant.

RCI will prepare preliminary designs for a re-configuration of the mouth of Slide Canyon to include the following:

- Remove the existing small gravel berm at the mouth of the canyon so that flood flows spread across the alluvial fan to maximize sediment deposition and groundwater infiltration and minimize erosion.
- The lower spur dikes will be enhanced to allow maximum protection against large flow events.
- The City has indicated that it intends to use the water rights it has for the spring at the mouth of the canyon.
 Provisions will be made for controlled access to the spring area for future development.

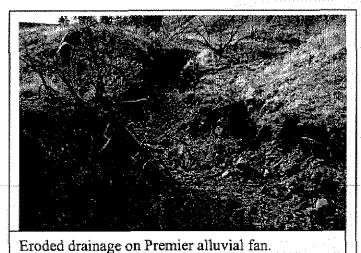


Project TSP4: Stabilize/Restore alluvial fan and channels.

There are several headcuts in the channels on the Premier Canyon alluvial fan on Carson City property. The headcuts are anticipated to move upstream further destabilizing the alluvial fan.

RCI will prepare preliminary designs for the Premier Canyon alluvial fan to include the following actions:

> Stabilize/restore the down-cut eroding channels using natural stream design techniques with rock and vegetation. If funding allows, hydraulic analyses will be used to ensure proper design. The adjacent upland



offers a good source for rock close to the stream stabilization site.

1. Timeline

The Resource Concepts Team has compiled a proposed timeline.

Project AZ8: Operation and Maintenance Plan	
Draft Plan	September 15
Final Plan	October 1
Projects KC1 and KNK1	
Preliminary Design	September 28
50% Design	October 31
90 % Design	November 30
Projects TSP 1, 2, and 4	
Preliminary Design	November 30

Task 4. Continued Implementation of Land Practices within the limits of Grant Funding

RCI has been involved in the implementation of several different land practices in the Waterfall fire affected area over the last several years. Some of the land practices that have occurred include post-fire revegetation treatments, tree planting, shrub seeding, sheep and goat grazing for fuel reduction and noxious weed management, and weed spraying.

Deliverable/Outcome: RCI specialists and engineers will be available to continue coordinating these efforts and providing technical assistance, within the limits of grant funding.

Task 3 and 4 Cost Estimate: \$142,000

This is the same cost estimate that was provided in the original scope of work.

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Project A1: Reconfigure A50 Carryon Multicipal Ward System Carrance	Project C5: Fall Hagard Trees stake as LBBs and Install Warning Signs.	Project C6: Install Checks and Localized Toe Stabilization	Project C1: Retrofit Culverts Under Driveway Approaches Comos Canyon Kosan	FIGURE CA. NAME OF THE PROPERTY OF THE PROPERT	Person Ca. Persone Friging Sandhay Barriers and Stabilize Down Cut Channel.		Project AZ5: Flood Response Plan	Project C3: Retrofit Culverts and Drainage Intake Along Combs Canyon Road.	Project C2: Retrofit Culverts and Drainage Intake Lakeview Road	Project AZ4: Long-term Noxious Weed Monitoring and Eradication Plan	Project AZ7: Shrub and Pine Plantings	Project V2: Fall hazard trees near the dirt access road, stake as LEBs and post warning signs.	Project KNK2: Analyze Dramage in Stream Charnels and Along Kings Canyon Road	Project V4: Stabilize Air Release Boxes				Project V5: Maintenance and Operational Plan for the Vicee Pit and Infiltration Gallery	Project TSP6: Coordinate Fremier Mine Site Stabilization	Project KC2: Flood / Sediment Attenuation along Kings Canyon drainage through the urban area	Project A6: Empey Property. Flood and Sediment Attenuation Area.	Project A.Z.2: Road and Drainage Management Plan		1: Reconfigure	Project A4: Leid Property, Flood and Sediment Attenuation Area	Project KNK1: Reconfigure Water Treatment Plant Access Road; Flood and Sediment Attenuation	Project TSP4: Restore alluvial fan and channels in Premier drainage.	Project TSP3: Pederson Property. Design and Build a Flood and Sediment Attenuation Area.	Project A5: Adams Property. Flood and Sediment Attenuation Area.	Project AZ6: City Ordinances for building in the wildland-urban interface	Project TSP5: Secure 2 5-acre parcels; reconfigure drainageFlood and Sediment Attenuation Area.	Project KAVC2 Joost: Secure Property. Flood and Sediment Attenuation Areas.	Project KAC2 Goni: Secure Property. Flood and Sediment Attenuation Areas.	Project KAVC1 Anderson: Secure Property. Flood and Sediment Attenuation Areas.	Project KAC1 Anderson: Secure Property. Flood and Sediment Attenuation Areas.	Project KC1: Flood and Sediment Attenuation below the Water Treatment Plant	Project A3: Joost Property. Flood and Sediment Attenuation Area.	Project AZ8: Operation and Maintenance Plan for the Ash Canyon and Kings Canyon Drainages	
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21 Project AZ3: Long-term Monitoring Plan for Key Areas of Concern

Notes: Threats and benefits are relative to a "No Project" scenario. Threats: 1 is a low threat and/or pertains
Benefits: 1 is a low benefit and/or pertains to a small area; and 5 is a high benefit and/or pertains to a large ar