

Item # 4-2c

**City of Carson City
Agenda Report**

Date Submitted: January 27, 2009

Agenda Date Requested: February 5, 2009

Time Requested: Consent

To: Mayor and Supervisors

From: Purchasing & Contracts

Subject Title: Action to determine that Contract No. 2006-186 Goni Wash-Letter of Map Revision Project is a contract for professional services and therefore not suitable for public bidding pursuant to NRS 332.115 and to approve Amendment No.1 for Contract No. 2006-186 Goni Wash-Letter of Map Revision Project a request for professional services to be provided by HDR Engineering, Inc., through December 31, 2009, for a not to exceed cost of \$38,610.00 to be funded from the Storm Drain Professional Services Fund as provided in FY 2008/2009. (Sandy Scott)

Staff Summary: HDR Engineering has been under Contract with Carson City to develop a FEMA Letter of Map Revision (LOMR) for Goni Wash. The study will provide a more accurate definition of the floodplain and floodway in Goni Canyon than the existing study that was based on a lesser quality topographic mapping and large cross section spacing. Amendment No. 1 elements will provide Hydrology and Hydraulics for Northwest Tributary; Independent Review of NDOT Structure Hydraulics; Update to Goni HEC-RAS Model; Preparation of LOMR; FEMA and Surveying Coordination; and Project Management and Quality Control.

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 determine that Contract No. 2006-186 Goni Wash-Letter of Map Revision Project is a contract for professional services and therefore not suitable for public bidding pursuant to NRS 332.115 and to approve Amendment No.1 for Contract No. 2006-186 Goni Wash-Letter of Map Revision Project a request for professional services to be provided by HDR Engineering, Inc., through December 31, 2009, for a not to exceed cost of \$38,610.00 to be funded from the Storm Drain Professional Services Fund as provided in FY 2008/2009. (Sandy Scott)

Explanation for Recommended Board Action: Pursuant to NRS 332.115 subsection 1 (b), staff is requesting the Board of Supervisors declare that this contract is not adapted to award by competitive bidding.

NRS 332.115 Contracts not adapted to award by competitive bidding; purchase of equipment by local law enforcement agency, response agency or other local governmental agency; purchase of goods commonly used by hospital.

1. Contracts which by their nature are not adapted to award by competitive bidding, including contracts for:
(b) Professional services;
are not subject to the requirements of this chapter for competitive bidding, as determined by the governing body or its authorized representative.

(Added to NRS by 1975, 1538; A 1987, 296, 1484; 1991, 337, 349, 648, 1934, 1935; 1997, 132; 1999, 889, 1684; 2001, 1317; 2003, 620, 2262; 2005, 226, 2554)

Applicable Statue, Code, Policy, Rule or Regulation: NRS 332.115 subsection 1 (b)

Fiscal Impact: an additional amount of \$36,610.00

Explanation of Impact: Amount of contract amendment

Funding Source: 505-3702-437-0309 Storm Drain Professional Services Fund as provided in FY 2008/2009.

Alternatives: Not approve contract amendment and provide other direction

Supporting Material: Contract Amendment No. 1, Exhibit A and Exhibit B

Prepared By: Sandy Scott, Purchasing & Contracts Coordinator

Reviewed By:

(Andy Burnham)

Date: 1-27-09

(City Manager)

Date: 1-27-09

(District Attorney)

Date: 1-27-09

(Finance Director)

Date: 1-27-09

Board Action Taken:

Motion: _____

1) _____

Aye/Nay

2) _____

(Vote Recorded By)

**CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR
AMENDMENT No. 1
Contract No. 2006-186**

THIS AMENDMENT is made and entered into this 5th day of February, 2009, by and between the City and County of Carson City, a political subdivision of the State of Nevada, hereinafter referred to as the "**CITY**", and HDR Engineering, Inc., hereinafter referred to as the "**CONSULTANT**", and is made to amend the existing contract known as **CONTRACT #2006-186**.

W I T N E S S E T H :

WHEREAS, during the performance of **CONSULTANT'S** duties pursuant to **CONTRACT # 2006-186 Goni Wash-Letter of Map Revision** the **CITY** requested additional tasks of the **CONSULTANT** that were not within the original *Scope of Work* of the **CONTRACT**; and

WHEREAS, the **CITY** and **CONSULTANT** desire to amend **CONTRACT** to provide **CONSULTANT** authorization to perform the additional work and to compensate **CONSULTANT** for the additional work; and

WHEREAS, said amendment is at the request of both the **CITY** and **CONSULTANT**, and that significant benefit will be derived by the **CITY** for said amendment.

NOW, THEREFORE, in consideration of the aforesaid mutual promises herein, **CITY** and **CONSULTANT**, by and through their respective authorized representatives hereby agree to:

- 1 Amend Paragraph 2.1 of **CONTRACT # 2006-186** to provide in its entirety as follows:

This Contract shall be effective from February 5, 2009 subject to Carson City Board of Supervisors' approval (anticipated to be February 5, 2009) to December 31, 2009 unless sooner terminated by either party as specified in **Section 7 Contract Termination**.

- 2 Amend Paragraph 1.1.1 of **CONTRACT # 2006-186** to provide in its entirety as follows:

CONSULTANT shall provide and perform the following services as set forth in Exhibit A to this agreement and Exhibit B to this Amendment to **CONTRACT # 2006-186** attached hereto and incorporated herein by reference for and on behalf of CITY herein referenced as "**Services**."

CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR
AMENDMENT No. 1
Contract No. 2006-186

- 3 Amend Paragraph 3.2 of CONTRACT # 2006-186 to provide in its entirety as follows:

City agrees to pay CONSULTANT the CONTRACT SUM based upon a time and materials for an not to exceed amount of Thirty Eight Thousand Six Hundred Ten Dollars and No Cents (\$38,610.00).

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.

**CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR
AMENDMENT No. 1
Contract No. 2006-186**

ACKNOWLEDGMENT AND EXECUTION:

In witness whereof, the parties hereto have caused this Amendment to be signed and intend to be legally bound thereby.

CARSON CITY

Finance Director
Attn: Sandy Scott, Purchasing &
Contracts Coordinator
201 North Carson Street Suite 3
Carson City, Nevada 89701
Telephone: 775-887-2133 ext. 30137
Fax: 775-887-2107
SScott@ci.carson-city.nv.us

By: 

SANDY SCOTT

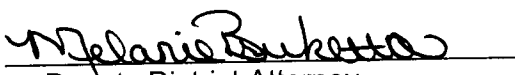
DATED

1/27/09

CITY'S LEGAL COUNSEL

Neil A. Rombardo, District Attorney

I have reviewed this Contract and approve
as to its legal form.

By: 

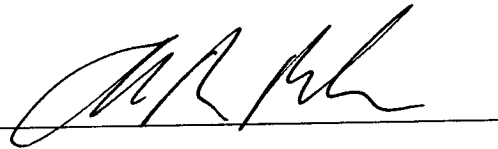
Deputy District Attorney

DATED

1-27-09

CITY'S ORIGINATING DEPARTMENT

BY: Andy Burnham, Director
Carson City Public Works Department
3505 Butti Way
Carson City, NV 89701
Telephone: 775-887-2355 Ext. 1000
Fax: 775-887-2164
ABurnham@ci.carson-city.nv.us

By: 

DATED

1-27-09

**CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR
AMENDMENT No. 1
Contract No. 2006-186**

Lolene Terry, PE deposes and says: That she is the **CONTRACTOR** or authorized agent of the **CONTRACTOR**; that she has read the foregoing Amendment; and that she understands the terms, conditions, and requirements thereof.

CONTRACTOR

BY: Lolene Terry, P.E.

TITLE: Vice President

FIRM: HDR Engineering, Inc.

CARSON CITY BUSINESS LICENSE #: 09-15594

Address: 9805 Double R Boulevard, Ste 101

City: Reno **State:** Nevada **Zip Code:** 89521

Telephone: 775-337-4700/ **Fax #:** 775-337-4774

E-mail Address: Lolene.Terry@hdrinc.com


(Signature of **CONTRACTOR**)

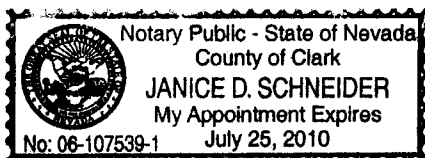
DATED 1-23-09

STATE OF Nevada)
County of Clark) ss

Signed and sworn (or affirmed) before me on this 23 day of January, 2009, by Lolene Terry, PE.


(Signature of Notary)

(Notary Stamp)



CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR
AMENDMENT No. 1
Contract No. 2006-186

Rudy Edgington, PE deposes and says: That he is the **CONTRACTOR** or authorized agent of the **CONTRACTOR**; that he has read the foregoing Amendment; and that he understands the terms, conditions, and requirements thereof.

CONTRACTOR

BY: Rudy Edgington, PE

TITLE: Reno Office Manager

FIRM: HDR Engineering, Inc.

CARSON CITY BUSINESS LICENSE #: ????

Address: 9805 Double R Boulevard, Ste 101

City: Reno **State:** Nevada **Zip Code:** 89521

Telephone: 775-337-4700/ **Fax #:** 775-337-4774

E-mail Address:

(Signature of **CONTRACTOR**)

DATED _____.

STATE OF _____)
County of _____) ss

Signed and sworn (or affirmed) before me on this _____ day of January, 2009, by Rudy Edgington, PE.

(Signature of Notary)

(Notary Stamp)

CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR
AMENDMENT No. 1
Contract No. 2006-186

CONTRACT ACCEPTANCE AND EXECUTION:

The Board of Supervisors for Carson City, Nevada at their publicly noticed meeting of February 5, 2009, approved Amendment No.1 for **CONTRACT No. 2006-186 Goni Wash – Letter of Map Revision**. Further, the Board of Supervisors authorizes the Mayor of Carson City, Nevada to set his hand to this document and record his signature for the execution of this contract in accordance with the action taken.

CARSON CITY, NEVADA

ROBERT L. CROWELL, MAYOR

DATED this 5th day of February, 2009.

ATTEST:

ALAN GLOVER, CLERK-RECORDER

DATED this 5th day of February, 2009

EXHIBIT "2"
EXHIBIT A

SCOPE OF SERVICES – Goni Wash Letter of Map Revision

Project Understanding

The area of Goni Wash in Carson City, Nevada has experienced growth in the form of residential and commercial development. HDR Engineering, Inc. (HDR) proposes to prepare a Letter of Map Revision (LOMR) to the Federal Emergency Management Agency (FEMA) based on better topographic data, and changes in floodplain conditions. This study will provide a more accurate definition of the floodplain and floodway in Goni Canyon than the existing study that was based on lesser quality topographic mapping and large cross section spacing. Storm flows in this floodplain historically were in poorly defined ephemeral channels. Development in the area has channelized some of these flows in improved and unimproved ditches and pipe systems, other storm flows are in the form of sheet flow.

Typically, a detailed study must also include a floodway analysis. Since the existing study contains a floodway analysis, the revised study must also revise this analysis and obtain Carson City support and approval for the revised floodway. The floodway is the portion of the floodplain that must be reserved for the conveyance of the 100-year event (base flood) without causing a rise in water surface elevation of more than one foot. The inclusion of the floodway provides the community official with a regulatory line for use in evaluating encroachments proposed as a part of the future development. The floodway will also be useful for project planning.

It is assumed that the HEC-1 hydrologic modeling prepared as a part of the Carson City Freeway Conditional Letter of Map Revision reviewed and approved by FEMA will be the basis for the hydrologic data to be used in this study. Minor revisions to the hydrology will be necessary to provide peak flow estimates at key locations in the project area not provided in the current hydrologic model.

It is assumed that the following information will be provided to HDR for use in the analysis and documentation to FEMA, and that data will be adequate for the purposes of this study:

- Topographic mapping prepared by Tri-State Surveying of the upper portion of the Goni Creek Floodplain
- Certification prepared by Tri-State that the mapping was prepared under the direction of a PLS, statement of horizontal and vertical datums and projections used and mapping accuracy standards used.
- Topographic mapping prepared by Nevada Aerial Mapping for the lower portion of the study area in the vicinity of the Carson City Freeway.
- Plans and reports for the existing drainage facilities in the study area.
- Topographic surveys of the pipe invert elevations, pipe sizes and any other supplemental surveying needed.
- Plans for Carson City Freeway improvements prepared on behalf of, or by, NDOT for the Carson City Freeway facilities.
- Community Acknowledgement Form signed by Carson City and letter by Carson City stating support for the revised floodway.

EXHIBIT "2"

- Proof of public notification of the change in the floodplain and floodway using a form acceptable to FEMA.
- LOMR review fees are assumed to be paid by the client or Carson City.

It is also assumed that only the 100-year return period will need to be analyzed, consistent with the downstream Conditional Letter of Map Revision for the Carson City Freeway.

Scope of Work

In order to complete the analysis for submittal to FEMA, HDR will complete the following tasks:

Task 1 – Project Administration Research and Data Collection

This task will include project administrative tasks and data collection needed to obtain the data that is anticipated to be needed to perform the scope of services described. This task also includes preparation of base mapping materials from the various sources of data described above. HDR will also coordinate with the client, Carson City, NDOT and FEMA to obtain existing data including:

- FEMA effective hydrologic and hydraulic models to determine applicability of their calculated 100-YR flows
- Topographic data recently prepared by NAM and TriState Surveying

Task 2 – Replication of FEMA Effective Hydrologic and Hydraulic Models

FEMA requires that existing hydrologic (HEC-1) and hydraulic models (HEC-2 to be converted to HEC-RAS) be replicated to verify that the effective models being revised accurately reflect the data contained on the Flood Insurance Rate Maps and Flood Insurance Study published for the community of Carson City.

Task 3 – Revised Effective Hydrologic Models

The hydrologic models prepared for the Carson City Freeway Conditional Letter of Map Revision will be revised to provide additional concentration points at key locations in the project area. It is anticipated that a maximum of three subbasins will require revision to support the study. The methods of analysis used in the previous study will be used in this study also.

Task 4 – Preparation of Revised Hydraulic Model

The base mapping prepared in ArcGIS in Task 1 will be used with the Corps of Engineers GEO-RAS extension to pre-process hydraulic model data from the topographic data provided. The modeling for the project will be performed with the latest release of the Corps of Engineers program HEC-RAS and the resulting floodplains, floodway and water surface profile will be post-processed with GEO-RAS to produce the LOMR Work Map.

EXHIBIT "2"

Task 5 - Preparation of LOMR Documentation

HDR will prepare the documentation that is commonly submitted to FEMA for a study of this type. The LOMR documentation will consist of a report describing the methods of analysis and results, Work Map, CD containing electronic files of the mapping and hydrologic/hydraulic data, and FEMA MT-2 forms.

Task 6 - Coordination with Carson City

Once Task 5 is completed, HDR will schedule a meeting with the client and Carson City to review the findings of the analysis and supporting documentation and review the requirements for public notification and completion of the FEMA certification forms. HDR will also be available to address questions and comments by Carson City regarding the analyses. It is anticipated that a maximum of two meetings will be required to accomplish this task.

Task 7 - Submittal of LOMR Package to FEMA and FEMA Coordination

HDR will compile the data needed from Carson City, review fees and LOMR Documentation and ship the completed package to FEMA. Coordination with FEMA is assumed to only consist of the standard handling of anticipated correspondence and addressing clarification questions. Should additional data or analysis revisions be necessary to address comments by FEMA, such efforts are not anticipated in this scope of services. Should this occur, HDR will estimate the scope of work and fees associated with the additional work required to respond to FEMA's request and contact the client for further direction.

Budget Estimate

Based on the scope above, our budget estimate is presented below, which will not be exceeded without the owner's authorization. Items 6 and 7 in the estimate are for coordination with Carson City and FEMA which is uncertain. Coordination costs will be monitored separately from Tasks 1 through 5.

Task	Hours	Budget Estimate
1. Project Admin, Research, Base Mapping	64 hours	\$6,300
2. Replication of Effective Models	46 hours	\$4,800
3. Revised Hydrologic Model	42 hours	\$4,800
4. Revised Hydraulic Model	80 hours	\$8,500
5. LOMR Documentation	100 hours	\$9,700
6. Coordination with Carson City	24 hours	\$3,200
7. Coordination with FEMA	64 hours	\$7,800
Total:	420 hours	\$45,100

Schedule

We propose to begin work immediately upon receipt of a signed authorization to begin work. We anticipate that this work will require approximately 4 weeks to complete Tasks 1 through 5 after all required data has been obtained from other sources. The schedule for the remaining tasks will be dependant on the actions of others. HDR will strive to expedite the schedule when possible.

EXHIBIT "2"

SECTION V. PERIOD OF SERVICE

Upon receipt of written authorization to proceed, ENGINEER shall perform the services within the time period(s) described in Exhibit A.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

Pacific Rim Asset Group
"OWNER"
BY: [Signature]
NAME: LEWIS PIERCE
TITLE: PROJECT MANAGER
ADDRESS: 1148 CORAL WAY
CARSON CITY, NV 89703

HDR ENGINEERING, INC.
"ENGINEER"

BY: [Signature]
NAME: Lolene Terry, P.E.
TITLE: Vice President
ADDRESS: 770 E. Warm Springs Road,
Suite #360
Las Vegas, NV 89119

EXHIBIT "2"

**SHORT FORM AGREEMENT BETWEEN OWNER AND HDR ENGINEERING,
INC. FOR PROFESSIONAL SERVICES**

THIS AGREEMENT is made as of this 16th day of August, 2006, between Pacific Rim Asset Group ("OWNER") a Nevada ~~corporation~~ ^{corporation}, with principal address at 1198 Coral Way, Carson City, NV 89703, and HDR ENGINEERING, INC., ("ENGINEER") a Nebraska corporation, with principal offices at 8404 Indian Hills Drive, Omaha, Nebraska, 68114 for services in connection with the project known as Goni Wash Letter of Map Revision ("Project");

WHEREAS, OWNER desires to engage ENGINEER to provide professional engineering, consulting and related services ("Services") in connection with the Project; and

WHEREAS, ENGINEER desires to render these Services as described in SECTION I, Scope of Services.

NOW, THEREFORE, OWNER and ENGINEER in consideration of the mutual covenants contained herein, agree as follows:

SECTION I. SCOPE OF SERVICES

ENGINEER will provide Services for the Project, which consist of the Scope of Services as outlined on the attached Exhibit A.

SECTION II. TERMS AND CONDITIONS OF ENGINEERING SERVICES

The "HDR Engineering, Inc. Terms and Conditions for Professional Services," which are attached hereto in Exhibit B, are incorporated into this Agreement by this reference as if fully set forth herein.

SECTION III. RESPONSIBILITIES OF OWNER

The OWNER shall provide the information set forth in paragraph 4 of the attached "Exhibit A, Scope of Services."

SECTION IV. COMPENSATION

Compensation for ENGINEER'S services under this Agreement shall be on the basis of cost plus fixed fee with a budget estimate of \$45,100 which will not be exceeded without the OWNER'S authorization. ENGINEER'S fixed fee will be Five Thousand Dollars (\$5,000). Cost shall be an amount equal to salary cost times a factor of 2.75. Reimbursable expenses incurred in connection with such services shall be in addition to ENGINEER'S compensation.

EXHIBIT "2"

Compensation terms are defined as follows:

Direct Labor Cost shall mean salaries and wages, (basic and overtime) paid to all personnel engaged directly on the Project.

Reimbursable Expense shall mean the actual expenses incurred directly or indirectly in connection with the Project for transportation travel, subconsultants, subcontractors, computer usage, telephone, telex, shipping and express, and other incurred expense. ENGINEER will add ten percent (10%) to invoices received by ENGINEER from subconsultants and subcontractors to cover supervision, administrative, and insurance expenses.

Cost-Plus-Fixed Fee shall mean Cost plus a Fixed Fee.

Cost, as used in "Cost-Plus-Fixed Fee," shall mean Direct Labor Cost plus Overhead Costs, plus Reimbursable Expense.

Overhead Costs, as used in "Cost-Plus-Fixed Fee," shall mean indirect costs which include payroll and administrative expenses. For this Agreement, overhead costs shall be one hundred seventy five percent (175%) of Direct Labor Cost.

Fixed Fee shall mean a fixed amount of fee that is added to the Cost in a Cost-Plus-Fixed Fee basis of payment. The sum of Cost and Fixed Fee shall be the compensation for the Scope of Services. The Costs may vary, but the Fixed Fee shall remain the same provided the Scope of Services does not change.



ONE COMPANY | *Many Solutions*

Exhibit B

November 18, 2008

Robert D. Fellows, PE
Floodplain and NPDES Manager
Carson City Public Works Department
3505 Butti Way
Carson City, NV 89701-3498

Re: Goni Wash Letter of Map Revision

Dear Mr. Fellows:

I am forwarding our proposal to cover the issues you have previously discussed with Dan Lahde. This contract amendment will allow us to complete our work on this LOMR.

Please feel free to call me at 337-4704 or Dan at 337-4724 if you have any questions.

Sincerely,

Ruedy Edgington, PE
Reno Office Manager

HDR Engineering, Inc.

9805 Double R Boulevard
Suite 101
Reno, NV 89521-5917

Phone: (775) 337-4700
Fax: (775) 337-4774
www.hdrinc.com

Attachment A**Goni Wash Letter of Map Revision
Amendment 1****Project Understanding and History**

HDR Engineering, Inc. was under contract with Carson City to develop a FEMA Letter of Map Revision (LOMR) for Goni Wash in northern Carson City. This project originally was conceived in July 2006 and was originally contracted with Pacific Rim Asset Group (PRAG), that contract is no longer valid. As part of that contract, HDR began collecting data and performed preliminary analyses in efforts to complete the LOMR. In 2007, HDR was asked to cease work until a contract vehicle could be established with Carson City as the sole client.

In June 2007, the contract with Carson City was put in place and HDR re-initiated work on this project. Due to new data and new tasks, a contract amendment is necessary to complete the project. The following describes tasks that are necessary to complete the LOMR.

Within the time elapsed, new topographic data has become available. HDR has re-created the models already developed with this new topographic data. The City has requested in addition, that a new section of the stream system be modeled in the northwest portion of the study area, this will require a new hydrologic and hydraulic analysis, and an approximate Zone A analysis of the new reach. The new hydrologic analysis, undertaken prior to this amendment revealed that the NRCS has re-interpreted and changed their soils data, therefore HEC-1 models have changed significantly from the original Carson City Freeway CLOMR models and HDR has recalculated parameters in these models. This revised HEC-1 model will be completed under this amendment.

The original PRAG and Carson City scopes assumed NDOT would provide hydraulic calculations for the new structure at Carson City Freeway. These calculations will yield a downstream boundary condition for the Goni Wash LOMR hydraulic model. NDOT has provided the revised HEC-RAS model, revised design plans and hydraulic report. In order for FEMA to accept this LOMR, they will require that NDOT's hydraulic model is independently reviewed and included in the stamped LOMR.

Portions of Goni Wash flood flows are collected in an urban drainage system. HDR has identified the locations of these culverts and it is assumed that Tri-State Surveying will perform the survey under a separate contract with Carson City.

Amendment 1 to the original scope of services provided to Carson City includes the following elements listed below, this list summarizes the tasks to complete the LOMR from this date forward:

Scope of Work**Task 1 – Hydrology and Hydraulics for Northwest Tributary**

Carson City wishes to re-map the Zone A in the Northwest tributary of Goni Wash. For hydrology, HDR has developed an HEC-1 model using the same techniques, methods, and rainfall as the *Carson City Freeway Conditional Letter of Map Revision*. After a preliminary analysis, HDR has found that NRCS has changed their soil interpretations since the time of the *Carson City Freeway CLOMR*. To confirm all hydrologic model parameters are consistent throughout the hydrologic model, curve numbers have been re-calculated for the entire model, and the model has been re-built using concentration points of interest for this LOMR. This HEC-1 model will be reviewed for



completeness and accuracy under this amendment. The hydraulic model of the northwest tributary has been partially completed by HDR under the previous contract. In order to modify the location of the existing Zone A, the cross sections of the current model will be extended and re-imported into HEC-RAS. This tributary will then be added to the Goni Wash HEC-RAS model.

Task 2 – Independent Review of NDOT Structure Hydraulics

The downstream boundary condition of the LOMR model is determined by the 100-YR water surface elevation at the Carson City Freeway inlet structure. NDOT plans, a HEC-RAS model, and hydraulic report are available for this revised inlet. Flows used in the revised NDOT hydraulic model are taken from the *Carson City Freeway CLOMR*, although, since that report was published, new soils data has become available. The new soils data has caused a change in HEC-1 flow estimates. The *Carson City Freeway CLOMR* flows are larger than the flows calculated with new soils data. This task will independently review the revised NDOT model, and if it is acceptable, use revised NDOT water surface elevations at the Carson City Freeway inlet as a downstream boundary condition for the Goni Wash LOMR HEC-RAS model. This boundary condition will yield a conservative water surface elevation at the downstream end of the Goni Wash LOMR HEC-RAS model.

Task 3 – Updates to Goni HEC-RAS Model

The current HEC-RAS model does not include the entire area covered by the Shaheen CLOMR. Model cross sections will be extended to cover this area and water surface elevation estimates will be updated. The current model does not include any culverts. Once these are surveyed by Tri-State, HDR will add the culverts into the hydraulic model. Per direction of Carson City, a floodway will not be modeled under this contract.

Task 4 – Prepare Letter of Map Revision

A FEMA Letter of Map Revision typically includes a hydrology and hydraulics report detailing specific methods, constraints, results, figures, tables and all supporting data. HDR will author this letter and gather all necessary information. MT-2 forms will be completed for community official signature. Scaleable workmaps and an amended FIRM will be produced for FEMA's review. A floodway map will not be produced for this contract.

Task 5 – FEMA and Surveying Coordination

During the LOMR process, coordination with FEMA's map revision contractor is necessary to answer questions and clear up any technical issues they may have. This process can be lengthy, possibly going through several rounds of the review/re-submit process. This task also includes one day of coordination with Tri-State Surveying to assure quality survey data products.

Task 6 – Project Management and Quality Control

This task covers administrative duties including invoicing, budget control, file management, and any meetings between HDR and stakeholders involved in this project. HDR has its own quality control procedures that will be followed for this project, this will involve senior technical staff reviewing results throughout the life of the project.



Project Budget

GONI WASH COST TO COMPLETE LOMR

TASK	FEE
1. H&H Analysis for NW Tributary	\$7,800
2. Independent Review NDOT Structure Hydraulics	\$4,160
3. Updates to HEC-RAS Model	\$6,500
4. Prepare Letter of Map Revision	\$11,700
5. FEMA and Surveying Coordination	\$5,200
6. Project Management and Quality Control	\$3,250
	\$38,610

Amendment Schedule

HDR has developed this contract amendment by request of the Carson City, and will bill the City on a time and materials basis. The initial LOMR submittal will require 10 calendar weeks to complete after receipt of the Notice To Proceed and all necessary data. Coordination with FEMA after the initial LOMR submittal may extend into August 2009.