

August 11, 2008

Mr. Ronald Damele Director Public Works P.O. Box 714 Eureka, Nevada 89316

Re: Eureka County Waste Water Treatment Facility -

**Proposal for Design Services** 

Dear Mr. Damele,

Lumos and Associates, Inc. is pleased to provide you with this proposal for professional and related services for the expansion of the Eureka Waste Water Treatment Facility.

## PROJECT UNDERSTANDING:

In 1996, a Wastewater Facility Plan was developed to address the expansion needs for the Eureka County WWTF. Subsequent to this plan the WWTF was expanded to its current configuration consisting of two (2) facultative ponds and two (2) evaporation/infiltration ponds. According to the NDEP Quarterly Reports, Eureka County has begun to exceed their maximum allowable daily discharge thus necessitating the expansion of this facility.

It is expected that the expansion will include the construction of two (2) new facultative ponds and two (2) new evaporation/infiltration ponds to work in parallel with the existing ponds. A new 12-inch outfall sewer main will be constructed to tie into proposed offsite improvements leading to the WWTF as well as a new metering system to replace the exiting, failing system. The project will also include a three (3) acre lay down yard located on the southeast corner of the property.

Pursuant to our understanding of the project, we have prepared the following scope of work.

# **Scope of Work:**

# Task 1 – Base Mapping

Lumos and Associates, Inc. will prepare a base map WWTF site which will include the existing ponds, pipe network, structures, access roads, outfalls, sampling locations, etc. The map will include topography at one (1) foot contour intervals and will include existing boundary information. The base map will include adequate detail to prepare

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the engineering plans for the WWTF expansion as well as a Record of Survey for the facility site.

# Task 2 – Record of Survey

Lumos and Associates, Inc. will perform the necessary field surveying, drafting and computation to prepare and record a Record of Survey map for the WWTF site. The survey will be compiled and recorded in Eureka County in accordance with NRS 625.340 requirements. Property corners that are not found during the field survey will be reestablished per the Record of Survey.

# Task 3 - Geotechnical Borings

Lumos and Associates, Inc. herein proposes to provide sampling of each exploration, classify the encountered soils in accordance with the Unified Soil Classification System (USCS), and log the soil types encountered within the boring. It is assumed that 10 borings will be required and that each would be to a depth of 30 feet. Additionally, we propose to develop a report that will discuss the geologic setting, seismic considerations, exploration and site conditions and to present the bore log information. This task will specifically include the following services:

Field Investigation will include:

- USA Dig Clearance
- Location of Exploration Boreholes
- Logging of all Soil Profiles Based on USCS
- Water Table Measurement, if encountered

Report, Recommendations, and Conclusions:

- Exploration Logs
- Soil Types and Classification
- Geotechnical Discussion
- Grading Recommendations
- Construction Procedures
- Groundwater Level, if encountered

The cost breakdown between treatment faculty and lay down yard is \$25,000 and \$6,000 respectively.

## Task 4 - WWTF Expansion Design

Lumos and Associates, Inc. will prepare 100% complete plans and specifications for the proposed project in a three (3) step process, conceptual design (30% plans), preliminary design (60% plans) and, final design (100% plans). We anticipate that the design package will include the following:

Cover sheet, index sheet and legend sheet.

- Grading and Utility sheets for each pond.
- Plan and profile sheets.
- Approximately four (4) detail sheets.
- Construction contract documents.
- Technical Specifications.
- Estimate of probable construction cost.
- NDEP Report of Design.

The design will be completed in the following phases.

# Conceptual Design (30% complete plans)

The grading, utility and plan and profile sheets will include a proposed pond improvements, horizontal and vertical alignment of the effluent sewer lines, and proposed typical details. 30% design plans will not include construction callouts and non-typical details but will generally depict the proposed WWTF expansion.

Upon completion of the preliminary plans, Lumos will provide the county with five (5) sets of plans and will conduct one (1) on-site visit to review the plan and specifications with the public works director and/or the project manager for the purpose of collection comments and solidify the pond design and sewer line vertical and horizontal alignment.

Upon concurrence of the proposed WWTF expansion and project scope, Lumos will proceed to 60% design.

## Deliverables will include:

- 5 sets of 30% plans and contract documents for review.
- Initial construction cost estimate.

# Preliminary Design (60% complete plans)

The grading, utility and plan and profile sheets will include a proposed pond improvements, horizontal and vertical alignment of the effluent sewer lines, and proposed typical details. 60% design plans will not include construction callouts and non-typical details.

Upon completion of the preliminary plans, Lumos will provide the county with five (5) sets of plans and construction documents and will conduct one (1) on-site visit to review the plan and specifications with the public works director and/or the Project Manager for the purpose of collection comments and solidify the pond design and sewer line vertical and horizontal alignment.

Upon concurrence of the proposed WWTF expansion and project scope, Lumos will proceed to final design.

#### Deliverables will include:

- 5 sets of 60% plans and contract documents for review.
- Revised construction cost estimate.

# Final Design (100% complete plans)

Lumos and Associates, Inc. will prepare a full project design set of plans and specifications complete with all construction callouts, typical and non-typical details complete for review by Eureka County.

## Deliverables will include:

- 5 sets of 100% plans and contract documents for review.
- Revised construction cost estimate.
- Upon incorporation of Eureka County comments 10 complete sets will be provided to the county.

# Task 5 — Agency Coordination, Permit Application, and Address Agency Comments

This task will include the processing of the civil improvement plans, agency requested revisions, and obtaining necessary approvals. This task will also include the preparation and submittal of a revision to the existing NDEP discharge permit. This task will be billed on a time and materials basis because we cannot predict the time required to permit the project. The cost indicated below is an estimate.

## Task 6 - Bid Assistance

This work will include advertising and bidding the project in accordance with the NRS (Nevada Revised Statutes). We anticipate charging plan holders for the construction documents to cover reproduction costs. The cost for advertising will be through Task 7, Reimbursables.

## Task 7 – Reimbursables

All plan and report reproduction costs will be billed on a time and materials basis in accordance with our current fee schedule. The cost indicated below is an estimate.

## Task 8 – Design Lay down Yard

This work will include designing a Lay down yard on the southeast corner of the property. The lay down yard will be approximately three (3) acres in size and will include an access road as well as a drainage crossing. We expect that the access road and lay down yard will have a gravel surface. This design will be incorporated into the overall plan set for the wastewater treatment Facility. The Lay down yard will not include utilities, or special drainage considerations.

# Task 9 - Meetings

This task will be utilized to attend meetings other than those meetings identified in the specific tasks listed above. This task will be utilized as requested by Eureka County.

#### Fees:

Lumos and Associates, Inc. will perform the work for the following proposed costs:

Task 1 – Base Mapping	\$	13,000	
Task 2 – Record of Survey	\$	10,000	
Task 3 – Geotechnical Borings	\$	31,000	
Task 4 – WWTF Expansion Design	\$	43,500	
Task 5 – Agency Coordination Permit Comments	\$	7,000	
Task 6 – Bid Assistance	\$	11,000	
Task 7 – Reimbursables	\$	8,000	
Task 8 – Design Lay down Yard	\$	11,000	
Task 9 – Meetings	<u>\$</u>	<u>T&amp;M</u>	
Total:	\$	134,500	+ T&M

This proposal does not include provisions for a Storm Water Pollution Prevention Plan (SWPPP). Lumos and Associates, Inc. will be happy to amend this proposal as necessary to include these services.

All work will be conducted under our current County Engineer general contract and will include a 7.5% mark up on all sub consultants.

Work outside the established Scope of Work can be performed on a time and materials basis in accordance with our current agreement. This proposal is valid for ninety (90) days from the date of this letter. Please contact me after reviewing this proposal so we can discuss a schedule.

If you have any questions, please do not hesitate to contact me at (775) 883-7077.

Sincerely,

Thomas Young, P.E.

Location Principal – Carson City

Lumos and Associates, Inc.

cc: Steve Moon, P.E., Fallon Location Principal, Lumos and Associates, Inc.