Final 01/31/06

Canyon Lake Dam Maintenance Project Public Works Department – City of Rapid City Project No. DR04-1433 Bareis Engineering, Inc.

## CONSTRUCT FILTER BERM - IN LIVE STREAM

### SCOPE OF WORK

#### General:

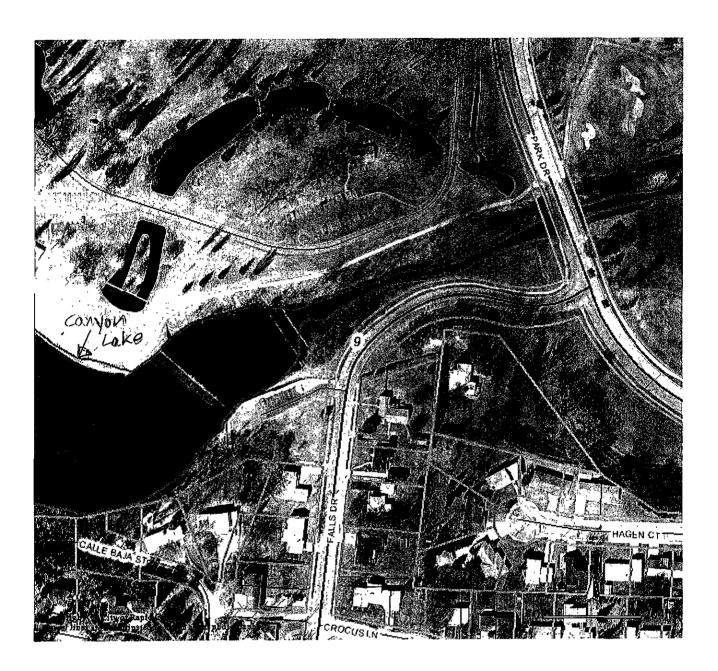
There is one large seep (sand boil) and several smaller ones located in the stilling basin downstream of the Canyon Lake Dam spillway. The large seep is estimated to be producing between 200 and 300 gpm at full lake level (based on a 1986 inspection report). The large seep needs to be covered with coarse rock and riprap to prevent piping of foundation materials from beneath the spillway. Ideally the spillway stilling basin would be dewatered so the seep could be inspected and the work performed in relatively dry conditions. However, because of concerns with transport of sediment into Rapid Creek, the work will be performed "in the wet" as described below. The City has applied for a 404 Nationwide permit from the Corps of Engineers for maintenance activities. Work cannot begin until permit is in place.

To access the work, Contractor will need to construct a ramp into the water from the north bank of the stilling basin to within 20' of the seep (whatever distance that can be reached by excavator or crane). Sandbags will be placed on the spillway crest to divert surface flows to the south side. Contractor will need to install a silt curtain in the stilling pool to control sediment transport. The seep will then be covered with approximately 2' of type 2 foundation material and 2' of Class A riprap. The Engineer will direct placement of the materials.

The work should be done as soon as possible, prior to May 15, 2006.

The work done in accordance with the plan detailed in the construction specifications will adequately protect trout eggs in downstream gravels. The City will measure suspended solids in Rapid Creek downstream of the work during construction. Total suspended solids in the creek (TSS) shall not exceed an average of 30 ppm, with a maximum single reading not to exceed 53 ppm. Contractor shall deploy silt curtains, silt fences, or other methods to contain turbidity while the ramp and filter berm are placed.

Work shall be completed (including final clean-up) within 14 calendar days of Notice-to-Proceed.



## INFORMAL QUOTATIONS

# PROJECT DR04-1433 - CONSTRUCT FILTER BERM IN LIVE STREAM

ITEM		ESTIMATED			
NO.	ITEMS	QUANTITY	UNIT PRICE	EXTENDED PRICE	
1	MOBILIZATION,				
	PER LUMP SUM	LS	\$ 1,200.00	\$ 1,200.00	
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2	PLACE & REMOVE SANDBAGS		_		
	PER LUMP SUM	LS	\$ 750.00	\$ 750.00	
3	PLACE & REMOVE ENVIRONMENTAL CONTROLS				
	PER LUMP SUM	LS	\$ 2,500.00	\$ 7,500.00	
4	PLACE & REMOVE TEMPORARY AC	CESS DAMO			
4	PER LUMP SUM	LS KAWIF	£ 44 ann an	\$ 4000.00	
	PER LUMP SOW	LO	\$ 4,000.00	\$ (,000,00	
5	TRAFFIC CONTROL				
	PER LUMP SUM	LS	\$ 500.00	\$ 500.00	
6	TYPE 2 FOUNDATION MATERIAL				
	PER TON	14 TON	\$ 60.00	\$ 840.00	
	***************************************				
7	CLASS A RIPRAP				
	PER TON	14 TON	\$ 65.00	\$ 910.00	
	DECLARA & DECEED DICTURDED AS	DEAC			
8	RECLAIM & RESEED DISTURBED AF		Ф 7 600 CO	<b>4</b> 7666	
	PER LUMP SUM	LS	\$ 2,000.00	\$ 2,000,00	
9	INCIDENTAL WORK,				
	PER LUMP SUM	LS	\$ 2,750.00	\$ 2,750.00	
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**END ITEMS DR04-1433** 

**TOTAL AMOUNT** 

\$ 15,450.00

### PROJECT DR04-1433 - CONSTRUCT FILTER BERM IN LIVE STREAM

 THIS QUOTATION WAS PREPARED BY:
Quan Construct on Inc
CONTRACTOR WRON UNIVERSAL Prace
Rep & Coly, 52 57707
ADDRESS Mes
SIGNATURE AND TITLE
4-5-06 605-387-65-0
DATE PHONE NO.

### **QUOTATION ACCEPTED BY:**

Dinosere	4/5/06
PROJECT ENGINEER	DATE
DEPARTMENT HEAD	DATE
PURCHASING AGENT	DATE
MAYOR	DATE

## FOR CITY USE ONLY:

FUND NO.	505
DEPT. NO.	891
LINE NO.	4371
COST ESTIM/	ATE