



**REPORT TO THE JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, MARCH 5, 2013**

SUBJECT AWARD OF TENDER FOR SUPPLY OF VEHICLE (BACK HOE)

ISSUE

Replacement of the back hoe, Unit FBH006, included in the Vehicle and Equipment Replacement Capital Budget for 2013.

BACKGROUND

This vehicle forms part of the asset base of the Capital Regional District (CRD) and is assigned to Juan de Fuca Water Distribution service, within the Integrated Water Services (IWS) department. An analysis has been completed for this unit that considered the Go Green requirements, the vehicle replacement cycle, total kilometers / hours, age, and forecasted repairs. The analysis is attached (refer to Attachment 1).

Replacement of FBH006 was included in the Fleet budget in 2013, funded from equipment replacement funds. A tender for a back hoe to replace Unit FBH006 was prepared and advertised on the CRD web site, as well as hand delivered to interested parties. Three tenders were received, and are summarized as follows:

Vehicle	Supplier	Make & Model	Total Tendered Amount	DELIVERY, days
FBH006	Parker Pacific	2013 CASE 590 SN	\$109,465.58	84
	BRANDT	2013 John Deere 410K	\$119,880.00	56
	FINNING	2013 Caterpillar 430 F	\$137,970.00	42

Given the CRD goal of being carbon neutral, each vehicle replacement request is reviewed from the perspective of right sizing the vehicle for the intended use and the carbon foot print of alternatives. Vehicles in this class, heavy equipment, are not tested for Green House Gas (GHG) emissions by government agencies therefore; comparisons are based on manufacturer's claims and anecdotal evidence. In this case, all manufacturers have made significant improvements in engine emissions over the past ten years and this vehicle includes a Tier 4 interim compliant engine. This gives the CRD the opportunity to reduce GHG emission through the use of current engine technology.

ALTERNATIVES

Alternative 1 – That the Juan de Fuca Water Distribution Commission award the tender to replace Unit FBH006 to Inland Kenworth Parker Pacific in the amount of \$109,465.58 (plus tax) and remarket the existing back hoe, Unit FBH006, through BC Auction for an expected return of about \$30,000.

Alternative 2 – That the Juan de Fuca Water Distribution Commission direct staff to retain and maintain the current unit.

IMPLICATIONS

Alternative 1 – The lowest bid was from Inland Kenworth Parker Pacific for a Case 590SN machine that met the tender specifications with an 84 day delivery time.

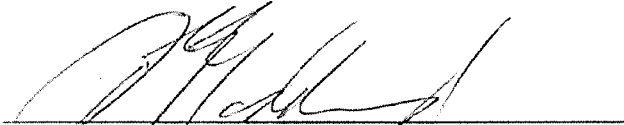
Alternative 2 – If this vehicle is not replaced, the costs associated with the operation and maintenance of the vehicle will continue to increase the life cycle cost per hour. The increased down time resulting from higher maintenance needs will jeopardize the ability of the CRD to meet operational needs.

CONCLUSION

The lowest bid from Inland Kenworth Parker Pacific met the tender specifications.

RECOMMENDATION

That the Juan de Fuca Water Distribution Commission award the tender to replace Unit FBH006 to Inland Kenworth Parker Pacific in the amount of \$109,465.58 and remarket the existing unit through BC Auction.



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DG:mm
Attachment



Ted Robbins, B.Sc., C.Tech.
Acting General Manager, Integrated Water Services
Concurrence

Replacement analysis for Vehicle FBH006 Purchased in 2004

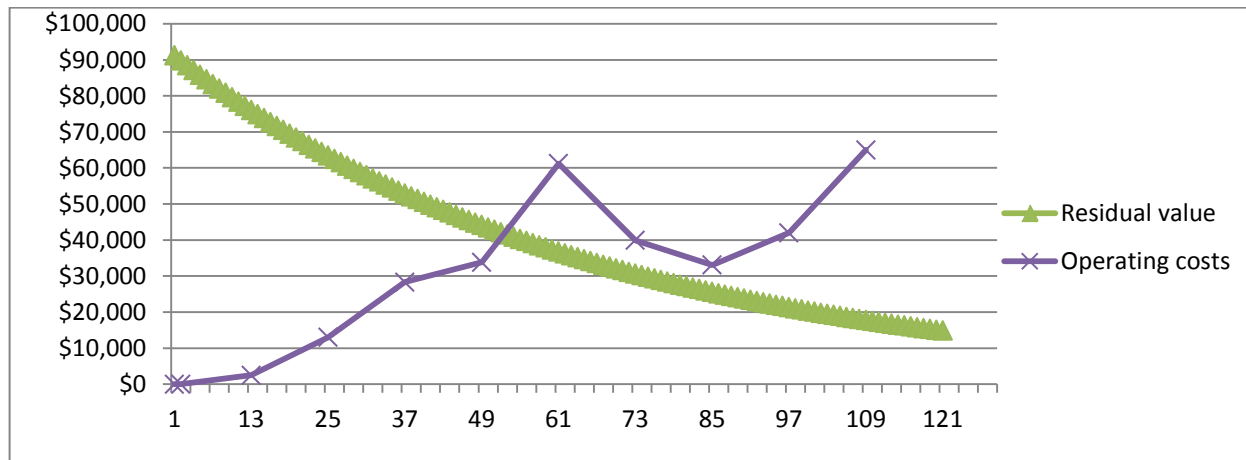
This back hoe is used by Integrated Water Services in the Juan de Fuca Water Distribution system, primarily for water main repair and replacement projects. Throughout the year, under all weather conditions, the unit is required to be available to excavate and load material for removal through the western communities of the CRD. The unit is operated in the urban area and in the public eye. The hour meter on this vehicle exceeds 9,000 hours which is equivalent to 450,000 km on the engine. The operating costs in 2012 were \$65,000.

Environmental Considerations

The present 2004 Diesel powered back hoe would be replaced by a tier 4 interim compliant diesel engine machine with improved engine technology which has better fuel economy and reduced CO2 output. There is no hybrid vehicle available in this class suitable to this type of duty.

Vehicle replacement cycle is based on data up to the end of December 2012:

The vehicle replacement graph reflects the optimal replacement cycle. Where the two lines cross indicates the optimal replacement point, the lowest life cycle cost per hour.



From the above graph it can be seen that the optimal replacement point for this vehicle was around 54 months in the lifecycle. We are well past that point and the lifecycle cost per hour continues to rise.