

**RESOLUTION NO. 1092**

**A RESOLUTION APPROVING THE BID PROCESS; ACCEPTING THE LOWEST RESPONSIBLE BIDDER; VERIFYING CAPITAL OUTLAY FUNDING; DECLARING SURPLUS A 1976 MASSEY-FERGUSON TRACTOR AND A 1987 ROUSSEU M42, DSP FLAIL ARM MOWER; AND AUTHORIZING THE PURCHASE OF A TRACTOR WITH FLAIL HEAD BRUSH CUTTER AND A TRACTOR WITH HARD HOSE TRAVELER IRRIGATION SYSTEM.**

WHEREAS, the City of Wilsonville currently disposes of approximately 1.51 million gallons of treated stabilized biosolids per year; and

WHEREAS, treated biosolids must be land applied in a manner compatible with 40 CFR Part 503.1 - 503.48 and acceptable agricultural practices; and

WHEREAS, the adopted budget for fiscal year 1993-1994 includes funding for the first year of a five year lease/purchase of a tractor and hard hose traveler irrigation system; and

WHEREAS, the City of Wilsonville currently maintains approximately 25.4 lineal miles of arterial street system right-of-way; and

WHEREAS, the City desires to maintain right-of-way vegetation and limit the discharge of pollutants from pesticides in storm water runoff; and

WHEREAS, the City's existing right-of-way mowing equipment comprised of an eighteen year old Massey-Ferguson tractor and a seven year old Rousseu flail arm mower have become obsolete and mechanically unreliable; and

WHEREAS, the adopted budget for fiscal year 1993-1994 includes funding for the first year of a five year lease/purchase of a tractor with flail head brush cutter; and

WHEREAS, the City duly advertised for competitive bids to supply a diesel powered tractor without a cab, a diesel powered tractor with a cab, a tractor mounted flail head brush cutter system, and a tandem axle, hard hose irrigation system; and

WHEREAS, sealed bids were received prior to 2:00 p.m. November 19, 1993 at the Public Works Department Offices, 8455 SW Elligsen Road, Wilsonville, Oregon, 97070; and

WHEREAS, bids were opened individually and separately read aloud after 2:00 p.m. on November 19, 1993; and

WHEREAS, the summary of bids and staff report are marked as "Exhibit A",

attached hereto and incorporated herein; and

WHEREAS, the Public Works Director has reviewed the bids and recommends that a purchase agreement be entered into with Ernst Hardware Co., St. Paul, Oregon; and

WHEREAS, the Finance Director has obtained competitive financing rates for a five year lease/purchase contract and recommends that the City use Bank of America for the equipment acquisition described in this Resolution; and

WHEREAS, the City of Wilsonville desires to complete the financial transaction and equipment lease/purchase in a timely manner.

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

1. The City Council, as Contract Review Board, finds and concludes all bids were duly advertised, received, publicly opened and approved as being completed for consideration for public contracting according to the provision of Oregon Revised Statutes, Chapter 279, Public Bids and Contracting and Wilsonville Code, 2.314, contracts with the City, and the Attorney General's Model Rules which the City has adopted as its contracting rules.

2. The Finance Director and the Public Works Director are authorized to enter into a five year lease/purchase contract with the Bank of America for the purpose of acquiring mechanical equipment from Ernst Hardware Co. of St. Paul, Oregon, for an amount not to exceed \$25,000 per year for five years.

3. The total expenditure of funds for the mechanical equipment acquisition is authorized in the following manner:

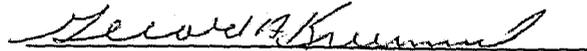
<b>Fund:</b>	<b>#3020 -</b>	<b>Sewer Operating Fund</b>
Line Item No. 3020-1- 6063100		
FY 93-94 Adopted Budget Amount:		\$17,000
<b>Fund:</b>	<b>#3040 -</b>	<b>Road Operating Fund</b>
Line Item No. 3040-1-6063100		
FY 93-94 Adopted Budget Amount:		\$ 8,000
<b>Total Annual Authorization:</b>		<b>\$25,000</b>

4. The following equipment items are to be declared as surplus:

- (1) 1976 Massey-Ferguson Tractor
- (1) 1987 Rousseu M42, DSP Flail Arm Mower

ADOPTED by the City Council of the City of Wilsonville at a regular meeting

thereof the 7th day of March 1994, and filed with the Wilsonville City Recorder this date.

  
GERALD A. KRUMMEL, Mayor

ATTEST:

  
VERA A. ROJAS, CMC/AE, City Recorder

SUMMARY of Votes:

Mayor Krummel	<u>AYE</u>
Councilor Benson	<u>AYE</u>
Councilor Hawkins	<u>AYE</u>
Councilor Lehan	<u>AYE</u>
Councilor Sempert	<u>AYE</u>

**"EXHIBIT A"**

**PUBLIC WORKS DEPARTMENT  
MECHANICAL EQUIPMENT ACQUISITION**

**STEVE STARNER  
PUBLIC WORKS DIRECTOR**

**Abstract:** Biosolids generated from the treatment of wastewater represent substantial and important byproducts of the total process. Currently, the Wilsonville treatment process generates approximately 1.51 million gallons of sludge per year. The biologically stable sludge is applied in liquid form (2.1 per cent solids) to agricultural land through the use of a big-gun sprinkler irrigation system. In order to continue the field application of biosolids in an economical and environmentally beneficial manner, the acquisition of a tractor and trailer mounted hard hose irrigation system is recommended.

The Wilsonville Public Works Operations Division maintains 25.4 lineal miles of vegetation associated with the unimproved roadside areas of the arterial street system. Maintenance crews make limited use of pre- and post-emergent herbicides such as Roundup and Casoron to control vegetation growth. However, in an effort to minimize the contamination of storm water, the primary method for controlling vegetation along drainage ways and right-of-ways is accomplished solely by mechanical means through the use of a tractor mounted flail arm mower. Mechanical repair frequency and lack of part availability has reduced the reliability of City's current flail mower system to an unacceptable level and the acquisition of a new replacement is recommended.

**Recommendation:**

Authorize staff to proceed with the acquisition of mechanical equipment as outlined by Resolution No. CB-R-784-94.

**Introduction:**

**I. Biosolids Disposal**

As originally designed in 1972, the Wilsonville Wastewater Treatment Plant had a hydraulic capacity of 0.25 million gallons per day (MGD) and was provided with three lagoons for the purpose of dewatering and storing biologically stabilized sludge or biosolids. All biosolids generated by the activated sludge treatment process were stored on the treatment plant site. Routine plant operations did not include provisions for the off-site transport or disposal of biosolids. The average production rate for biosolids was 300,000 gallons per year which occupied an area of approximately 1,000 cubic feet in a dewatered or dried state.

In 1978, the treatment plant capacity was increased to 0.5 MGD and biosolids handling capabilities were expanded to include off-site disposal. The City purchased a 2,500 gallon tank truck which was capable of land applying liquid sludge through a valve and splash plate at the rear of the vehicle. During the winter season, wet weather prevented the tanker truck from safely obtaining access to disposal sites and the liquid sludge was stored in lagoons at the treatment plant site.

In 1982, the treatment plant was expanded to a design capacity of 2.25 MGD. The biosolids handling capacity was also improved by increasing the aerobic digestion volume by 60 per cent, acquiring a 4,000 gallon tanker truck and acquiring a trailer mounted pump with big-gun sprinkler. The portable irrigation system allows for field application of liquid sludge without a seasonal limit.

The application of biosolids to farm lands and pasture land is designed to meet beneficial use rates as a fertilizer and soil conditioner. Biosolids contain significant quantities of organic and inorganic nutrients for all forms of vegetation. However, similar to the application of any fertilizer, the product must be applied evenly for maximum effectiveness. As the production rate of biosolids increases at the treatment plant, the method used for uniform field distribution must be improved as well.

The agriculture industry currently uses the trailer mounted hard hose traveler irrigation system for regular crop watering and field application of dairy waste.

## II. Right-of-Way Maintenance

The roadside is as much a part of the roadway as the base, drainage system, guardrail, etc. Roadside vegetation control prevents erosion of roadway shoulders and slopes, encourages desirable turf to assist drainage, controls the spread of noxious weeds, and improves the esthetic appearance of the roadway. The goal of the roadside vegetation management program is to maintain turf height to a maximum of 12 inches and to keep clear zones and ditches free of larger woody vegetation.

Herbicide spraying to suppress or eliminate vegetation may be applied at an average annual cost of \$20.00 per mile of roadway, or 18 per cent of the cost of mechanical vegetation control. The City typically uses herbicides for spot control in front of guardrails, median barriers, raised islands, and cracks/crevices. However, herbicide applications are difficult to quantify in relation to impacts to the non-target environment. All City pesticide applicators must be State licensed applicators. Licensing includes regular training and testing to keep certification current.

The City's arterial roadways are mowed two to five times per year depending on the type of road and its location. Woody vegetation must be removed from traffic sight distance zones on an annual basis. These maintenance activities are typically accomplished with a tractor mounted flail mower and one operator.

The City of Wilsonville obtained a tractor mounted flail mower and initiated a regular vegetation control program in 1985. The equipment obtained by the City was already several years old and during the 1992 and 1993 growing seasons, equipment failures prevented maintenance crews from achieving maintenance standards for maximum turf height. Lack of part availability contributed to long equipment repair delays.

### Process

Mechanical equipment specifications based on performance objectives, delivery schedule, operator training, parts availability, safety standards, DEQ standards and DOT regulations have been developed. The request for sealed bids for the mechanical equipment specified was advertised on November 5 and November 8, 1993 in the Daily Journal of Commerce and advertised on November 10, 1993 in the Wilsonville Spokesman and Canby Herald. Bids were opened on November 19, 1993 and may be summarized as follows:

Apparent Low Bid:	Ernst Hardware Co. \$105,146.0
2nd Bid:	Fisher Implement \$106,691.00
3rd Bid:	Salsberg Equipment Co. Bid disqualified for not providing a response to specifications for delivery schedule, training, parts, safety and DOT regulations.

The Ernst Hardware bid also includes a \$8,000 trade-in allowance for the City's 1976 Massey-Ferguson tractor and 1987 Rousseu M42 DSP Flail Arm Mower, bringing the total mechanical equipment cost to \$94,146.00.

Finance Director, Tom Jowaiszas, obtained competitive lease/purchase financing arrangements which may be summarized as follows:

	<u>Rate</u>	<u>Annual Payment</u>	<u>Other Fees</u>
Bank of America	4.95%	\$21,350	\$200
Bank of Oregon	5.087%	\$21,403	-
Northwest Muri, Ltd.	5.58%	\$21,594	-
Key Bank	5.12%	\$21,416	-

**Conclusion:**

Based on competitive mechanical equipment bids and competitive financing rates, the City may acquire new equipment within the established budget amount.

**Acknowledgments:**

Chuck Edwards, Operator II, for assisting with the assembly of equipment specifications and operating and maintaining sludge disposal equipment in a reliable and efficient manner.

Dave McKay, Fleet Services Supervisor, for assembling equipment specifications and answering equipment vendor questions.

Tom Jowaiszas, Finance Director, for contacting lending institutions in a dogged pursuit of the best equipment financing package.

Joyce Swearingen, Public Works Secretary, for preparing bid packets, coordinating the advertisements for bids, assisting with bid opening and still being willing to work overtime in the preparation of this report.

**Bibliography:**

1. "Biosolids Management Yearly Status Report," February 1994, Chuck Edwards, Operator II.
2. "Operation and Maintenance Manual - Wastewater Treatment Plant", September 1981, Ch2M Hill.
3. "Public Works Journal", March 1993, Scott Wheeler, Roadside Operations Specialists.

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