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Memorandum Date:	August 9, 2009
Order Date:	August 19, 2009

TO:	Board of County Commissioners
DEPARTMENT:	Management Services
PRESENTED BY:	David Suchart, Director
AGENDA ITEM TITLE:	ORDER/In the Matter of Awarding a Contract for Phase 3 of the Performance Contracting Program to McKinstry Essention, Inc., as the Energy Services Company (ESCO) for the Design and Construction of energy saving projects at the Lane County Adult Corrections Facility to include the Steam Conversion project.

I. MOTION:

Move Approval of Order 09 -8 -19 - \In the Matter of Awarding a Contract for Phase 3 of the Performance Contracting Program to McKinstry Essention, Inc., as the Energy Services Company (ESCO) for the Design and Construction of energy saving projects at the Lane County Adult Corrections Facility to include the Steam Conversion project.

II. AGENDA ITEM SUMMARY:

In April 2008, McKinstry Essention, Inc. (McKinstry), was awarded Phase I of the Performance Contracting Program. Phase I was a Technical Energy Audit (TEA) of the Lane County Adult Corrections facility (LCAC). At the end of that process, and based on decisions by the Eugene Water and Electric Board (EWEB) with regard to steam generation, it was decided to expand the scope to include steam requirements for the Lane County Courthouse and Public Service Building (Courthouse/PSB).

On March 4, 2009, the Board adopted an order to continue to Phase 2, Project Development Plan (PDP). McKinstry has completed the PDP and after review by LCAC staff it was concluded to recommend moving on to Phase 3, Design and Construction.

III. BACKGROUND/IMPLICATIONS OF ACTION:

A. Board Action and Other History

In 2004, at the request of the Jail Commander, Management Services met with corrections facilities staff to discuss various options for upgrading the HVAC systems in the main facility. The estimated cost was thought to be greater than $1 million and, given the nature of a corrections facility, it was considered critical to ensure round the clock operation.

One proposed consideration for financing was the use of energy saving performance contracting. Performance contracting is a method to purchase energy efficient improvements in buildings. There are three features of this methodology that address the need to replace old inefficient equipment in an environment where there is a lack of funds:

1. A single procurement is used to purchase a complete package of services in which one contractor (the ESCO) is accountable for guaranteed maximum pricing, energy savings, and systems performance.

2. Project financing of the entire project costs, which are offset by annual energy savings, so no up front money is needed.

3. An energy savings performance contract is designed to pay for itself.

The concept was brought to the Facilities Committee and approved for a pilot project at LCAC. The project was put on hold during the DOMC remodel. An RFP was developed in late 2007 and sent out for response in January 2008.

In April 2008, the contract was awarded to McKinstry, and the process continued with a Technical Energy Audit.

B. Policy Issues

Performance Contracting has been in use since the 1970s. This method has been utilized by many school districts, local, municipal, and State governments with the need for efficient energy systems and a lack of available capital funds, which has made it both useful and popular. The State of Washington has had an elaborate system for cooperation between the State and local government and schools. The Oregon Department of Energy has recently begun promoting it.

C. Board Goals

Protecting the public's assets by maintaining, replacing, or upgrading the County's investments in systems and capital infrastructure, and identifying ways to improve space and facilities conditions to better serve citizens,

insure the adequate maintenance of existing infrastructure, and provide an environment conducive to high employee productivity, as outlined in the Goals and Strategy B.1.d. of the County's Strategic Plan, will be served by the completion of these projects.

D. Financial and/or Resource Considerations

Given the County's financial condition, utilization of a process that could employ current revenue streams without affecting operations should be given consideration as a method for replacement of aging equipment and to take advantage of newer technologies, such as solar.

The basic premise is that, after completion of Phase 1, which is an audit of current systems, the ESCO will provide an analysis of improvements that will save energy costs. That savings is used to pay for the improvements. It will also be financed in part with incentives from utilities, the Energy Trust of Oregon, and from State of Oregon Business Energy Tax Credits. The ESCO is responsible for documenting both the revenue and expenditure streams and ensuring the payoff, which is generally fifteen to twenty years.

The basic outline of the phases is as follows:

> Phase 1, Technical Energy Audit – A menu of measures is explored and the County selects measures to pursue to a final project.
>
> Phase 2, Project Development Plan – Develops final guaranteed maximum pricing and savings.
>
> Phase 3, Design and Construction – Project is constructed and commissioned.
>
> Phase 4, Measurement & Verification – Annual savings are verified and the ESCO funds any shortfalls for each year of the contract.

During Phase 4 the ESCO becomes responsible for guaranteeing the savings.

E. Analysis

At the conclusion of the TEA, it was determined that the cost of upgrading the energy systems at LCAC would require $1.7 million in order for the payoff to occur within a 20-year horizon. With the EWEB decision to phase out steam production, the team looked at options to bring the payoff to less than 20 years, and still accomplish the Sheriff's Office goals of ensuring the reliability of the energy systems at LCAC.

Review and refinement during the PDP phase concluded that many of the LCAC energy projects, to include steam conversion (see attachment, Project Development Summary) could be accomplished within the 20 year breakeven period (see attachment, Cash Flow).

It was further concluded that the Courthouse/PSB steam conversion could not be accomplished at this time due to poor usage data. New information after a winter seasonal measurement should provide measureable data. Management Services is working with EWEB to include the project in their financing attempt.

F. Alternatives/Options

1. Continue to Phase 3, Design and Construction, of the Performance Contracting Program to implement recommended energy upgrades to LCAC, as well as the steam conversion project. This project has been included in the financing cap order adopted by the Board on August 5.

2. Stop the Performance Contracting Program at this time. This would leave the County vulnerable to the increased cost of steam once EWEB has phased out its program as well as the ability to take advantage of other cost saving measures.

IV. TIMING/IMPLEMENTATION

Contract with McKinstry and proceed with Phase 3, Design and Construction. At the end of Phase 3, a report back to the B/CC will be prepared.

V. RECOMMENDATION

Implement Option 1 and proceed with Design and Construction.

VI. FOLLOW-UP

Upon adoption by the B/CC, a contract to implement Phase 3, Design and Construction, will be prepared for signature by the County Administrator and McKinstry.

VII. ATTACHMENTS

Board Order
Project Development Summary
Cash Flow Spreadsheet

IN THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

ORDER NO. 09 -08 -19 -) ORDER/IN THE MATTER OF AWARDING A
) CONTRACT FOR PHASE 3 OF THE
) PERFORMANCE CONTRACTING PROGRAM
) TO MCKINSTRY ESSENTION, INC., AS THE
) ENERGY SERVICES COMPANY (ESCO) FOR
) THE DESIGN AND CONSTRUCTION OF
) ENERGY SAVING PROJECTS AT THE LANE
) COUNTY ADULT CORRECTIONS FACILITY TO
) INCLUDE THE STEAM CONVERSION PROJECT.

WHEREAS, Lane County has need for upgrading and replacing its HVAC systems at the Adult Corrections facility, and

WHEREAS the project has complexities due to phasing and maintaining tenant operations, and

WHEREAS, Phases 1 and 2 of the Performance Contracting Program, the Technical Energy Audit (TEA) and the Project Development Plan (PDP) have been completed by McKinstry Essention, Inc. (McKinstry), and

WHEREAS, review and refinement during the PDP phase concluded that many of the Adult Corrections energy projects, including steam conversion, could be accomplished within the 20-year breakeven period, and this project has been included in the financing cap order adopted by the Board on August 5, 2009, and

WHEREAS, Eugene Water and Electric Board (EWEB) has determined it is no longer cost effective to produce and sell steam to its customers, and will phase out of that program, now, therefore,

IT IS HEREBY ORDERED that the firm of McKinstry is hereby awarded the contract for Energy Services Company services for Phase 3, Design and Construction, of the Performance Contracting Program, to include the Steam Conversion Project.

IT IS FURTHER ORDERED that the County Administrator is delegated authority to execute such a contract.

Dated this 19th day of August, 2009.

Peter Sorenson, Chair
Board of County Commissioners

APPROVED AS TO FORM
Date 8/11/09 Lane County
OFFICE OF LEGAL COUNSEL

August 3rd, 2009

Lane County
Facilities Planning, Custodial Services
Charnelton Place
151 West Seventh Ave, Suite 580
Eugene, Oregon 97401

Attention: Mr. David Suchart, Facilities Planning / CIP

Regarding: **ESPC Project Development Plan Summary**
PDP Amendment: Phase I - Adult Corrections Facility

Dear David:

McKinstry is pleased to present the following amendment concerning the self-funding steam conversion and energy efficiency projects at the Adult Corrections Facility only and also including amended scope documents per the County's direction.

The goal of this Energy Savings Performance Contract (ESPC) was to accomplish a conversion from Eugene Water and Electric Board (EWEB) steam to alternative heating sources in a self-funding manner. This goal has been accomplished as outlined in this amendment and the attached financial analysis. Further project details, including detailed scopes, etc., are available in the previously submitted, complete Project Development Plan (PDP) document dated 06/29/09.

The Courthouse and Public Service facilities are not included as a part of Phase I. Recently, EWEB discovered a metering issue related to their steam supply system, causing the meter to underestimate the quantity of steam utilized in these facilities. This issue has been in existence for years, and EWEB has just recently corrected this issue. Because of this, the County and McKinstry agree the facility should be operated through next winter under the existing steam service in order to confirm the heating loads of the facility during higher heating months and ensure that the proposed design will be of proper capacity. We anticipate that a final solution will be developed by February of 2010.

Financial Summary of Project Development Plan (PDP) Options

This section provides financial analyses for **Phase I - Adult Corrections Facility,** which includes the steam plant conversion and energy efficiency measures at the Adult Corrections Facility but does not include any measures at the Courthouse/PSB Facilities.

Please see the project financial cash flow model (Attachment C) for financial details. The project is self-funded over a period of 20 years utilizing bond funding, guaranteed energy savings, Energy Trust of Oregon incentives, and Business Energy Tax Credits. $500,000 of the County's Energy Efficiency Conservation Block Grant (EECBG) funds, for which McKinstry assisted the County in applying for, are also utilized to offset the initial capital costs of the project.

A preliminary budgeted 20 year bond rate provided by the Seattle Northwest on 06/22/09 resulted in an interest rate of 5.97% with a 1.00% risk factor, which is very high. A rate of 5.97% - 1.00% = 4.97% was utilized for the purposes of the cash flow analysis.

Further efficiencies in project costs, and/or utility incentives may be uncovered during the Design and Construction Phase. All construction savings revert to the County under the Energy Savings Performance Contracting (ESPC) process.

The following table summarizes our financial findings for Phase I:

ID	Facility Improvement Measure	Project Budget	Project 1st Year Energy Savings	Utility and Tax Incentives
1.05-LCJ	Convert from Central Utility Steam to Onsite Condensing Boiler System	$2,813,577	$144,674	$68,797
3.01-LCJ	Variable Frequency Drive on Main Dual Duct Fans	$94,272	$9,071	$39,819
8.01-LCJ	Premium Efficiency Motors	$143,085	$3,316	$5,900
9.01-LCJ	Lighting Retrofit	$102,985	$6,911	$26,756
25.09-LCJ	HVAC System Retro-Commissioning	$41,962	$4,480	$2,888
TOTALS		**$3,195,881**	**$168,452***	**$144,160****

** Savings are guaranteed under the Energy Saving Contracting Process*
*** Final incentives will vary depending on final findings by the EWEB, Energy Trust of Oregon, and ODOE.*

Environmental Summary

The energy savings produced will directly reduce the amount of natural gas utilized and power produced by the utility companies. To compute the environmental impact, McKinstry utilizes factors from the Leonardo Academy's cleanerandgreener.org website, which provides fossil fuel generation emission rates on a per State basis.

On average, one car produces 15,000 pounds of CO2 annually and one acre of trees absorbs 7,333 pounds of CO2 annually. By implementing the steam plant conversion projects, CO2 emissions will be reduced by 742,627 pounds annually, which is equivalent to removing 50 cars from the road or planting 100 acres of trees. This project will also reduce NOx emissions by 951 lbs. and CO2 emissions by 4 lbs. - both of these pollutants contribute to wet and dry acid precipitation in addition to smog.

Conclusion & Next Steps

This amendment summarizes the second phase of the project, the Project Development Plan, which provides a guaranteed maximum price and guaranteed minimum savings for all projects to be implemented.

In the next phase, the Design and Construction Phase, McKinstry will construct the project utilizing an integrated, fully open book, design/build approach. During this phase, any construction cost savings and contingency savings resulting will revert to Lane County. Following this phase, the Measurement and Verification process will document the energy savings and provide full disclosure to the County. If McKinstry does not achieve the savings in our contract, we will issue the County a check for the differential between the actual and the guaranteed savings for every year of the contract.

Once again, we are honored to serve the County, and please contact Chris Bristow with any questions you may have at (503) 576-0624.

Sincerely,

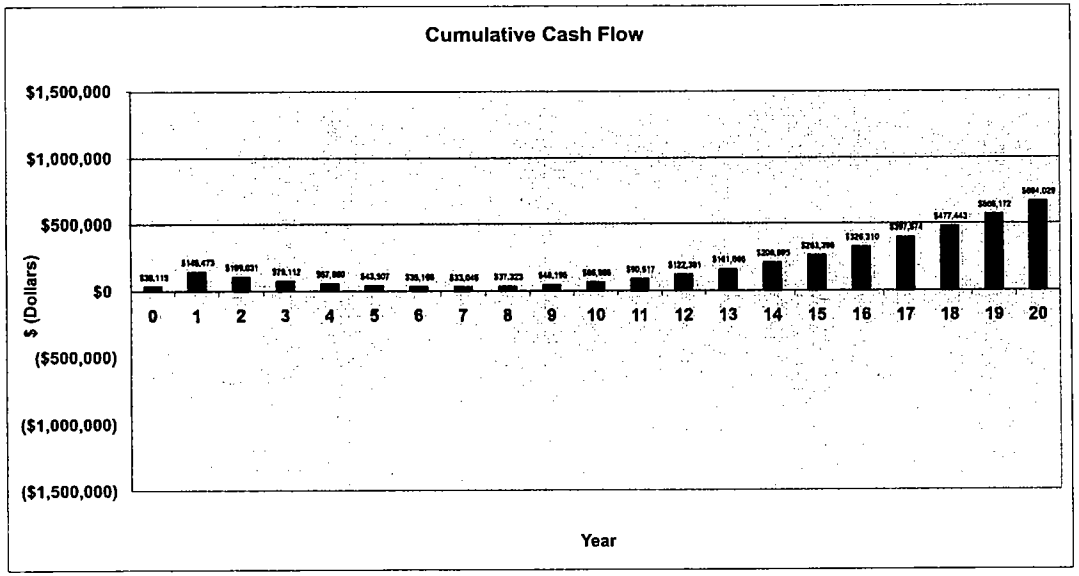
Christopher Bristow

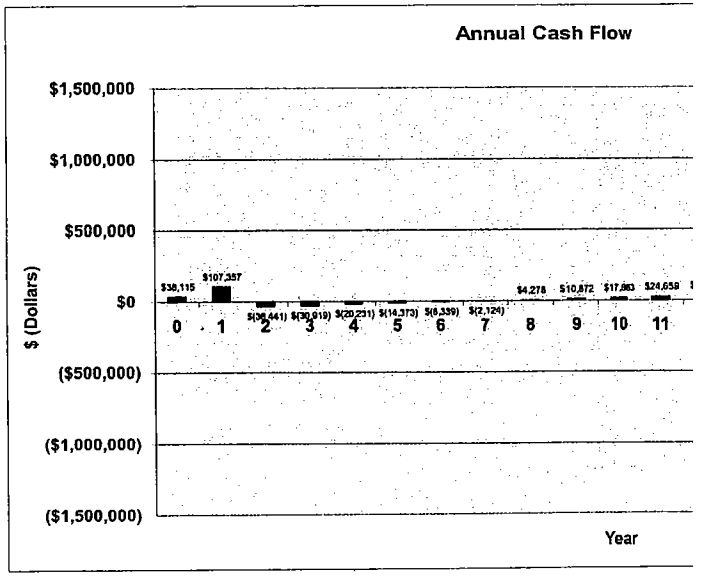
Chris Bristow, P.E., CEM
Account Manager

Attachment A: Phase I Table 4.1 - Budget Summary
Attachment B: Phase I Table 4.2 - FIM Matrix
Attachment C: Phase I Table 4.3 - Cash Flow Analysis

TABLE 4.3 - PROJECT CASH FLOW - PHASE I ADULT CORRECTIONS FACILITY

Line	REVENUE / EXPENSE	TOTAL	0 09-10	1 10-11	2 11-12	3 12-13	4 13-14	5 14-15	6 15-16	7 16-17	8 17-18	9 18-19	10 19-20	11 20-21	12 21-22	13 22-23	14 23-24	15 24-25	16 25-26
	REVENUE																		
1	Bond Financing @ 4.97% (= GMP - EECBG)	$ 2,692,620	$ 2,692,620																
2	Capital Budget - NONE UTILIZED	$ -	$ -																
3	BETC Estimate	$ 48,077		$ 48,077															
4	EWEB & ETO Incentives	$ 96,083		$ 96,083															
5	EECBG Stimulus Funding	$ 500,000	$ 500,000																
6	Guaranteed Savings (3% Escalation)	$ 4,845,401	$ 43,376	$ 178,711	$ 184,072	$ 189,594	$ 195,282	$ 201,140	$ 207,175	$ 213,390	$ 219,792	$ 226,385	$ 233,177	$ 240,172	$ 247,377	$ 254,799	$ 262,443	$ 270,316	$ 278,425
	EXPENSE																		
7	Guaranteed Maximum Price (GMP)	$ (3,192,620)	$ (3,192,620)																
8	BETC Application Fee (ODOE) & BOLI Fees		$ (3,261)																
9	BETC CPA Letter Fee - Budget		$ (2,000)																
10	Bond Payments (11/10 = 1st Payment)	$ (4,310,271)		$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (215,514)
11	ESPC M&V Fees (3 yrs - Year 1 included in GMP)	$ (10,000)			$ (5,000)	$ (5,000)													
12	GRAND TOTAL	$ 669,290	$ 38,115	$ 107,357	$ (36,441)	$ (30,919)	$ (20,231)	$ (14,373)	$ (8,339)	$ (2,124)	$ 4,278	$ 10,872	$ 17,663	$ 24,659	$ 31,864	$ 39,285	$ 46,929	$ 54,802	$ 62,912
13	CUMULATIVE TOTAL		$ 38,115	$ 145,473	$ 109,031	$ 78,112	$ 57,880	$ 43,507	$ 35,168	$ 33,045	$ 37,323	$ 48,195	$ 65,858	$ 90,517	$ 122,381	$ 161,666	$ 208,595	$ 263,398	$ 326,310





7-27	18 27-28	19 28-29	20 29-30	NPV
				REVENUE
				$ 2,692,620
				$ -
				$ 46,677
				$ 93,284
				$ 500,000
16,778	$ 295,382	$ 304,243	$ 313,370	$ 3,513,488
				EXPENSE
				$ (3,192,620)
15,514)	$ (215,514)	$ (215,514)	$ (215,514)	$ (3,206,297)
				$ (9,567)
1,265	$ 79,868	$ 88,730	$ 97,857	$ 437,584
7,574	$ 477,443	$ 566,172	$ 664,029