Agenda #____10____
Commission Meeting Date April 21, 2015
CITY OF GREAT FALLS
COMMISSION AGENDA REPORT

Item:	Repeal of Street Project Bidding Policy
From:	Public Works Department
Initiated By:	Public Works Department
Presented By:	Jim Rearden, Public Works Director
Action Requested:	Repeal Street Project Bidding Policy

Suggested Motion:

1. Commissioner moves:

   "I move the City Commission (repeal/maintain) the Street Project Bidding Policy established in 1999.

2. Mayor calls for a second, discussion, public comment, and calls for the vote.

Staff Recommendation: Staff recommends that the City Commission repeal the Street Project Bidding Policy so that the bidding process for public contracts may be impartial, with equal opportunity given to all those participating in the public bidding, so that the City may procure quality materials and workmanship which are in the City's best interests, financially or otherwise.

Background: On June 3, 1998, a meeting between the City of Great Falls, Montana Contractor's Association representatives and the League of Cities and Towns was held to discuss evaluation of Public Works projects proposed to be done by City personnel. A committee of local contractors and City staff was appointed to "develop a systematic means to compare Capital Projects proposed to be done by the City to a general contractor's bid." After several meetings, the committee drafted a project report and advanced it to the City Commission for approval. On August 17, 1999, the City Commission accepted the project report and authorized the City Manager to issue a policy letter.

The essence of the report stated the following:

1) Capital Projects were defined as any expenditure "that extends the life of the project five years or longer and has a cost greater than the State specified statute bid limit which is currently $25,000" (now $80,000).
2) The 'break point' was determined to be 360 tons, whereas larger projects could be done less expensively by a contractor.

3) It (the agreement) would not, however, restrict the City from doing any project by any means it sees fit, if over-riding public benefit warrants it.

Occasional inquiries from one contractor in the City about compliance with the policy are raised. The City Commission was briefed on the policy at the December 16, 2014 work session.

In the ensuing 16 years since the policy was adopted, factors have changed that make the policy outdated and unduly restrictive:

1) City crews rarely do reconstruction or new construction of roadways. They are restricted to "maintenance activities" which are primarily chip seals or mill and overlays.

2) City crews are much more efficient now with better equipment and experienced, motivated staff.

3) City crews' average production has increased to over 300 tons per day. At this production rate, City crews would need to move every day to a new location, given the Bidding Policy 360 ton "break point".

4) Using city crews to perform only smaller projects is inefficient, is not a good use of public staff and resources, and incurs additional mobilization/demobilization costs of around $500/day.

5) The question of "What constitutes a Capital Project?" is problematic. Is it anything in a specific area, or per day, or on the same street?

6) Historic bid data does not indicate an advantage utilizing the private sector for projects over or under 360 tons:

1) Unit Cost Comparisons for mill and overlay
   a) **City cost** per square yard overlay is **$9.71 / SY.** (2013/14 COSTS)
      - $13,400 per block, approximately 6 blocks for $80,000

   b) Recent **Contracted Projects**:
      1) 2013 9th St. NW – 2004 tons - **$10.60 SY** plus Eng. cost @ $.68/SY
      2) 2012 overlays - 3631 tons **-$11.00 SY** plus Eng. cost @ $.27/SY
      3) 2010 overlays - 696 tons - **$10.90 SY** plus Eng. cost @ $.25/SY

7) Other Montana Cities were queried and none of them have any similar agreements or restrictive limitations.

The bidding process for public contracts should be impartial, with equal opportunity given to all those participating in the public bidding, to avoid corruption, and to procure for the City quality materials and workmanship at the most reasonable cost. Montana law requires that an award of a public contract for construction, repair or public works must be made to the lowest responsible bidder. Mont. Code Ann. § 18-1-102(1)(a). The City has broad discretion in awarding public contracts. By application, it should follow that the City may use its discretion by not awarding to an outside entity when work can be done more cost-effectively "in-house", assuming all other statutory provisions are complied with.

The current Bidding Policy is not necessarily consistent with these concepts. For example, one aspect of the Bidding Policy indicates under the materials and supplies section that a lower bid price for asphalt may be used by the contractor in a comparison bid with a city bid. This not only skews the actual costs to do a project, but it also provides an advantage to a contractor that is also an asphalt supplier. Non-supplier contractors are not provided the same lower bid price, conceivably eliminating the non-supplier contractors from the competitive bid process.

The Bidding Policy sets forth guidelines to compare work done by the City as General Contractor, versus a private entity. It sets forth specific requirements of the City's evaluation as to whether to perform the work which, are not required under the law. Since the City Commission adopted the Bidding Policy, it requires Commission action to rescind or amend the policy.

Fiscal Impact:
Considering the scope and scale of work performed by street crews, City crews are more efficient when compared to contractors. Street department efficiencies equate to more maintenance work performed for less financial impact to the taxpayer. Additionally, of the street work completed over the past five years, 47% ($12,424,346) of the total street budget was contracted out to private contractors and suppliers.

Retaining the policy puts severe limitations on City crews, affecting the efficiency of their operations. Based on historical data, this would raise the cost of street maintenance efforts reducing the impact of tax payer dollars.

Attachments/Exhibits:

1999 Project Report
August 17, 1999 City Commission Agenda Report

JR

CITY OF GREAT FALLS, MONTANA **AGENDA #**_____

AGENDA REPORT **DATE** August 17, 1999

ITEM: REPORT ON PROJECT EVALUATION

INITIATED BY: JOINT COMMITTEE OF CITY STAFF AND MONTANA CONTRACTORS ASSOCIATION

ACTION REQUESTED: ACCEPT REPORT AND AUTHORIZE CITY MANAGER TO ISSUE POLICY LETTER

PRESENTED BY: JIM REARDEN, PUBLIC WORKS DIRECTOR

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RECOMMENDATION:

The Joint Committee recommends that the City Commission accept its report and authorize the City Manager to issue a policy letter adopting the methodology contained in the report.

MOTION:

"I move that the City Commission accept the report of the Joint Committee appointed to evaluate public work projects and authorize the City Manager to issue a policy letter incorporating the contents of the report."

SYNOPSIS:

On June 3, 1998 a meeting between the City of Great Falls, Montana Contractor's Association and the League of Cities and Towns was held to discuss a cooperative way to evaluate public work projects proposed to be done by City forces. A committee consisting of local contractors and City staff was appointed to develop a systematic means to compare Capital Projects proposed to be done by the City to a general contractor's bid. After several extensive meetings the committee drafted the attached report and is recommending its adoption by the City Commission.

BACKGROUND:

Historically there has been controversy concerning who could do Capital Projects more cost effectively, the public or private sector. The methodology contained in the report provides a means to make that determination on a case by case basis. It would not, however, restrict the City from doing any project by any means it sees fit, if over-riding public benefit warrants it.

To: Mayor Joan Bennett, Commissioners Bill Beecher, Bill Downer, Randy Gray, John Rosenbaum, and City Manager John Lawton

Subject: Project Evaluation

As the result of a meeting between the City of Great Falls, Montana Contractors' Association and the League of Cities and Towns, held to discuss a cooperative way to evaluate public work projects proposed to be done by City forces, a group of local contractors and city staff were requested to develop a model by which Capital projects done by the City could be consistently evaluated in comparison to a general contractors bid.

After extensive meetings, the committee drafted the attached report and recommends that the City Commission adopt the methodology in the report as City policy.

Bob McIntyre
United Materials, Inc.

Bob Livesay
Montana Lines, Inc.

Bob Normensen
Sletten Construction Co.

Jerry Sepich
Park and Recreation Director

Coleen Balzarini
Controller

C. R. Wilson, Public Works Dept.
Operations Supervisor

Martin Basta, Public Works Dept.
Street/Sanitation Supervisor

PURPOSE

As a result of a meeting between the City of Great Falls, Montana Contractor's Association, and League of Cities and Towns held to discuss a cooperative way to evaluate public work projects proposed to be done by City forces, a group of local contractors and city staff were requested to develop a model by which capital projects done by the City could be consistently evaluated in comparison to a general contractor's bid. For the purpose of this effort, capital projects are defined as "Any expenditure for the construction, reconstruction, or improvement of City infrastructure that extends the life of the asset five years or longer, and has a cost greater than the State specified statute bid limit for construction projects which is currently $25,000.00". Occasionally the City may want to act as the general contractor for a capital project. Areas of discussion which are presented in further detail in the rest of this paper included the following:

1. What are the project costs, direct and indirect, that need to be evaluated in the bidding process?
2. Any model established for bidding should be easy to understand and to apply.
3. Are there circumstances that would necessitate the City acting as a general contractor?
4. Conclusion and recommendation.

1. PROJECT COSTS

The group agreed that the format for bid analysis would encompass the following areas:

Labor & Fringes
Equipment (Internal and External)
Materials and Supplies
Subcontractor Costs
Risk
Profit
Overhead

Labor & Fringes: The group agreed that labor costs for contractors, who are required to use the Montana Prevailing Wage, will be different from labor costs used by the City on those projects which are not contracted out. This occurs because the City is not required by law to pay Montanan Prevailing Wage. For this sample bid it was agreed to use a rate of $26.01 per hour for a contractor's paver operator and a rate of $19.27 per hour for the City's paver operator.

Equipment (Internal and External): The Street Department used the Blue Book monthly rate to determine equipment costs. Actual costs may be less since the Blue Book rates are regionally based. The cost basis includes cost of ownership (depreciation, indirect cost [insurance, property taxes, storage, licenses, record keeping cost], cost of facilities, major overhaul and operating costs such as maintenance labor and parts and operating expendables. The contractor's equipment costs were based on their historically developed rates. For this sample bid a rate of $96.00 per hour was used for the contractor's paving machine and a rate of $103.05 per hour was used for the City.

The costs of operating heavy equipment trucks vary depending on the size of the truck that is used by the City and the Contractor. For instance, larger contractor's trucks are capable of hauling 32 tons each. City trucks are only capable of hauling 13.5 to 14 tons in each truck. On larger jobs, there is a cost savings to using larger trucks. Similarly, there is a cost savings favoring the City or smaller contractors on smaller jobs which better accommodate the hauling capacity of the smaller trucks.

Materials and Supplies: The group agreed the costs of materials might vary for the contractor and the City. Currently the City has a contract to purchase asphalt plant mix at a price of $25.20 per ton, and this was the price of material used for the City in the sample bid. A material price of $21.50 per ton was used for the contractor.

Subcontractors: No subcontractors were utilized in any of the sample bids for either the City or the contractor. If subcontractors are required, their cost to the project needs to be entered into the subcontractor column of the project summary sheet.

Risk: The sample bid on the larger paving project used a contingency risk figure of $500.00 for both the City and the contractor. This figure is used to provide an amount in the bid to cover unknown situations or conditions.

Profit: The City does not undertake construction projects for the purpose of operating a construction business. Construction projects are undertaken to provide a needed improvement necessary for the ongoing operation of City services. Therefore, in-house construction projects do not include a profit margin.

National and regional information relating to average gross profit and net earnings from the 1997 Certified Financial Managers Association survey results for Heavy and Highway Contractors indicates average profit margins (as percentage of revenue) are between 1% and 3% nationally and regionally. As a part of this study a profit margin of 5% was used for the contractor bid and 0% was used for the City bid.

Overhead: The group agreed on Contractor and City overhead rates of 15% and 11.5% respectively for the sample bid. It should be noted that actual contractor bid overhead rates from prior projects are consistent with the sample bid overhead rate.

City overhead cost allocation was an area that received a great deal of discussion. Contractors are accustomed to full cost accounting practices, where all costs of an organization are included in determining the costs of production. Therefore, if a particular unit is not producing a product it becomes an indirect cost to be included in the production of other items. Although governmental accounting does not use the same method of accounting for its services, the

following model was developed for evaluating and determining a City department's overhead cost.

General Administrative Overhead

In order to determine General Administrative Overhead costs, divisions in the General Fund were classified as Administrative (see list for details) or Operations Units. Budgets of the Administration Units (divisions) were allocated among the Operations units such as Police, Fire, Street, Water, Sanitary Sewer, etc. This cost allocation was based on the number of employees in each of the Operation Units.

General Fund Divisions considered to be Administrative

City Commission
Neighborhood Council
City Manager
City Clerk
City Attorney
Legal Services
Human Resources Administration
Personnel Recruitment
Internal Service Charge for Support Services (Portion)

Indirect Operating Overhead

A review of the Operation Units budgeted expenses were broken out into direct and indirect costs. Indirect costs included Department Head, Division Manager, and office staff salaries, general office supplies, building maintenance, building utilities, internal service charges. Equipment replacement reserves were also included when the operating division is actually accumulating replacement reserves for equipment that is general in nature.

NOTE: The City does not routinely set aside reserves for facility replacement. Facility replacement might be financed through a number of different methods. Some of the more

common methods are debt issuance. federal grant funding or fee increases. Replacement of public facilities is often the direct costs of future construction projects. We therefore do not include a portion of the cost of replacing those facilities into our overhead costs.

Overhead Rates based on the parameters noted above resulted in an overhead rate of 11.46% for the Street Department projects and 11.62% for the Golf Course irrigation project - there are different costs for an internally executed project compared to an external (contract management) project.

2. BIDDING FORM AND FORMAT.

The sample bid forms are shown as an attachment to this report. The production rates utilized in this sample were agreed upon based on the historical production capability of both the City and the contractor.

Any future bids for any type of capital project should include the same general format of a worksheet for each item of work showing quantities, production rates, labor rates, equipment rates. and material prices. Using this data. a unit price should be established for each item of work on the project.

These individual worksheets for each item should then be summarized on a project summary sheet to determine the total cost of the project. This summary sheet will include markups for overhead. special contingencies and project mobilization costs as shown in the example.

3. CITY AS GENERAL CONTRACTOR

There are projects that the City can do at less cost than a contractor because of economies of scale or different labor rates.

Example 1: The City Street Department is responsible for city streets. Staff must have the capability to mobilize to make repairs. respond to emergencies. and perform small volume-

paving or patching projects. The equipment necessary to maintain this preparedness is available at times to also do street overlaying projects. A portion of this study was to analyze the economic viability of the City doing these type of projects.

Two street paving projects were evaluated by the group based on the agreed upon parameters. The general contractor was the lowest bidder on the larger paving project (2,100 tons of plant mix) while the City was lowest on the smaller paving project (174 tons). The results of the bids as prepared by the committee are as follows:

Bid differences:

1. Standard overlay - ±2,100 tons

Private bid - $75,973.00

City bid - 88,368.00

$12,395 difference - 16.3%

2. Small paving - 174 tons

Private bid - $ 7,515.00

City bid - 7,188.00

$ 327.00 difference - 4.5%

Using these figures as a basis, it was further calculated that the point where the contractor's bid and the City's bid would be identical in total cost would be on a project containing 360 tons of plant mix. Or stated differently, on projects of 360 tons or less there would be an economic advantage to utilize City forces. On projects over 360 tons. there would be an economic advantage to utilize the private sector.

4. CONCLUSION AND RECOMMENDATION:

The main consideration in determining how any capital project is to be done should be the cost of that project to the taxpayer. Other factors such as quality of workmanship and response time

should also be evaluated in any final decision as to how a specific project should be handled. It was agreed that the general practice has been that the City did not want to compete with the private sector on any major items of work or capital improvements.

If the City wishes for any special reason to do a capital project the City Department desiring to do the work should prepare a bid in the same manner and format as presented in this report. That bid should then be submitted to the City manager and City Commission for review and comparison with an engineer's estimate (not divulged to the bidding Department until after their bid is submitted). If the engineer's estimate is prepared internally, it should be done independent from the City bid process. The engineer's estimate should reflect what the City's cost would be from the private sector based on historical data for similar work.

These prices estimates (City bid and engineer's estimate) should then be used along with other pertinent factors in making the final decision as to how the particular project should be done.

A public notice of the date of any presentation to the City Commission should be issued by the City. The intent of this notice is to allow outside input into the final decision as to how the project is done.

PROJECT - Privatization bid - United Materials
DATE - 7/15/98

PATCH 174.0 TONS

MEASURE CALCULATIONS :

length	250.0 ft.		
width	26.0 ft.		
ave.depth	4.0 inches		
sq.yd. area	722 s.y.	6500 s.f.	
c.y. volume	79.0 c.y.		
tonnage	174.0 tons @	2.20 tons/c.y.	

summary

hrly prod. (bid item units)		hours	
pave	105 /hr.	1.66	hrs.
finish	/hr.	2.34	hrs.
total hours -		4.00	hrs.
		0.50	day

44 t/hr actual production
348.25 t/day

number	Equipment descip.	hours	total labor	total equip	Dav.Bac.	equip hourly rate
0.40	pickup	4.0	0	16	0.00	10.00
1.00	pave van	4.0	0	40	0.00	10.00
0.00	small tools	0.0	0	0	0.00	5.00
1.00	950 loader	4.0	104	212	26.01	53.00
1.00	Steel vibratory	4.0	104	112	26.01	28.00
0.00	Rubber compactor	0.0	0	0	26.01	28.00
1.00	PF180 paver-driver	4.0	104	384	26.01	96.00
1.00	PF180 paver-screed	4.0	104	0	26.01	
0.20	distributor-oper.	4.0	19	0	23.35	
0.20	distributor-driver	4.0	0	24	0.00	30.00
2.00	transfer truck	4.0	203	240	25.35	30.00
0.00	water tk	0.0	0	0	25.35	30.00
1.80	gen. laborer	4.0	157	0	21.87	
1.00	raker	4.0	87	0	21.87	
			882	1,027	HOURLY COST	$477.65
		unit	5.07	5.90		

			total cost (equipment and labor)	.....	1,909		
					10.97		

MATERIALS & MISC.

	174	tons	plant mix	21.50	$21.50	tons
0.15 gal/s.y.	108	gal	tack	0.37	$0.60	gal
			total materials ...	21.87		

$32.85 total cost

SUMMARY

PATCH 174 TONS

	LABOR UNIT	LABOR TOTAL	QUIPMENT UNIT	QUIPMENT TOTAL	ATERIALS UNIT	ATERIALS TOTAL	UNIT COST	TOTAL COST
	5.07	882	5.90	1,027	21.87	3,806	32.85	5,715
722 s.y.								
	1.22		1.42		5.27		7.91	5,715

PROJECT : Privatization bid - United Materials
DATE : 7/15/98

	ITEM		QUANTITY	LABOR UNIT	LABOR TOTAL	EQUIPMENT UNIT	EQUIPMENT TOTAL	INTERNAL MATERIALS UNIT	INTERNAL MATERIALS TOTAL	OUTSIDE MATERIALS UNIT	OUTSIDE MATERIALS TOTAL	SUBS UNIT	SUBS TOTAL
1	Patch	s.y.	722.0	1.22	880.84	1.42	1025.24	5.27	3804.94	0.00	0.00	0.00	0.00
2				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					880.84		1025.24		3804.94		0.00		0.00

PROJECT : Privatization bid - United Materials
DATE : 7/15/98

OWNER
ENGINEER
PRIME CONTR.
COMPLETION TIME days
LIQUID. DAMAGES per day
DBE-required 0.00 0.0%
DBE - actual 0.00 0.0%

LABOR	746	9.9%
FRINGES	384	5.1%
EQUIP.	1,275	17.0%
INT.MATL.	3,805	50.6%
O.S.MATL.	0	0.0%
SUBS	0	0.0%
OVERHEAD	745	9.9%
ADMINIS.	186	2.5%
BOND	62	0.8%
PROFIT	311	4.1%
	7,516	

MOBILIZAT
SURVEYIN
TESTING
FIELD OVE
CONTINGE

OVRHEAD
ADMIN.
BOND
PROFIT

PROJECT - Privatization bid - United Materials
DATE - 7/15/98

PAVE 2094.0 TONS

MEASURE CALCULATIONS :

length	4200.0 ft.		
width	36.0 ft.		
ave.depth	2.0 inches		
sq.yd. area	16,800 s.y.	151200 s.f.	
c.y. volume	952.0 c.y.		
tonnage	2094.0 tons @	2.20 tons/c.y.	

summary

hrly.prod. (bid item units)		hours	
pave	105 /hr.	19.94	hrs.
finish	/hr.	0.00	hrs.
total hours -		19.94	hrs.
		2.49	day

105 t/hr actual production
840.00 t/day

number	Equipment descip.	hours	total labor	total equip	Dav.Bac.	equip hourly rate
0.40	pickup	19.9	0	80	0.00	10.00
1.00	pave van	19.9	0	199	0.00	10.00
0.00	small tools	0.0	0	0	0.00	5.00
1.00	950 loader	19.9	519	1,057	26.01	53.00
1.00	Steel vibratory	19.9	519	558	26.01	28.00
0.00	Rubber compactor	0.0	0	0	26.01	28.00
1.00	PF180 paver-driver	19.9	519	1,915	26.01	96.00
1.00	PF180 paver-screed	19.9	519	0	26.01	
0.20	distributor-oper.	19.9	93	0	23.35	
0.20	distributor-driver	19.9	0	120	0.00	30.00
7.00	transfer truck	19.9	3,539	4,188	25.35	30.00
0.00	water tk.	0.0	0	0	25.35	30.00
1.80	gen. laborer	19.9	785	0	21.87	
1.00	raker	19.9	436	0	21.87	
			6,928	8,117	HOURLY COST	$754.40
		unit	3.31	3.88		

total cost (equipment and labor) 15,045
7.18

MATERIALS & MISC.

	2094 tons	plant mix	21.50	$21.50 tons	
0.15 gal/s.y.	2520 gal	tack	0.72	$0.60 gal	
		total materials ...	22.22		

$29.41 total cost

SUMMARY

PAVE 2094 TONS

	LABOR UNIT	LABOR TOTAL	EQUIPMENT UNIT	EQUIPMENT TOTAL	MATERIALS UNIT	MATERIALS TOTAL	UNIT COST	TOTAL COST
	3.31	6,928	3.88	8,117	22.22	46,533	29.41	61,578
16,800 s.y.	0.41		0.48		2.77		3.67	61,578

PROJECT : Privatization bid - United Materials
DATE : 7/15/98

	ITEM		QUANTITY	LABOR UNIT	LABOR TOTAL	EQUIPMENT UNIT	EQUIPMENT TOTAL	INTERNAL MATERIALS UNIT	INTERNAL MATERIALS TOTAL	OUTSIDE MATERIALS UNIT	OUTSIDE MATERIALS TOTAL	SUBS UNIT	SUBS TOTAL
1	Pave	s.y.	16,800.0	0.41	6888.00	0.48	8064.00	2.77	46536.00	0.00	0.00	0.00	0.0
2				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
3				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
4				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
5				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
6				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
7				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
8				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
9				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
10				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
11				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
12				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
					6888.00		8064.00		46536.00		0.00		0.0

PROJECT : Privatization bid - United Materials
DATE : 7/15/98

OWNER
ENGINEER
PRIME CONTR.
COMPLETION TIME days
LIQUID. DAMAGES per day
DBE-required 0.00 0.0%
DBE - actual 0.00 0.0%

LABOR	4,676	6.4%
FRINGES	2,511	3.3%
EQUIP.	8,564	11.3%
INT.MATL.	46,536	61.3%
O.S.MATL.	0	0.0%
SUBS	300	0.4%
OVERHEAD	7,535	9.9%
ADMINIS.	1,884	2.5%
BOND	628	0.8%
PROFIT	3,103	4.1%
	75,936	

MOBILIZAT
SURVEYIN
TESTING
FIELD OVE
CONTINGE

OVRHEAD
ADMIN.
BOND
PROFIT

PROJECT - Privatization bid - City
DATE - 7/15/98

PATCH 174.0 TONS

MEASURE CALCULATIONS :

length	250.0	ft.		
width	26.0	ft.		
ave.depth	4.0	inches		
sq.yd. area	722	s.y.	6500	s.f.
c.y. volume	79.0	c.y.		
tonnage	174.0	tons @	2.20	tons/c.y.

summary

hrly prod. (bid item units)		hours	
pave	50 /hr.	3.48	hrs.
finish	/hr.	0.52	hrs.
total hours -		4.00	hrs.
		0.50	day

44 t/hr actual production
348.00 t/day

number	Equipment descip.	hours	total labor	total equip	labor	equip hourly rate
0.40	pickup	4.0	0	8	0.00	5.25
0.00	pave van	0.0	0	0	0.00	10.00
0.00	small tools	0.0	0	0	0.00	6.00
0.00	950 loader	0.0	0	0	19.27	44.84
1.00	Steel vibratory	4.0	77	84	19.27	20.98
0.00	Rubber compactor	0.0	0	0	19.27	23.01
1.00	PF180 paver-driver	4.0	77	412	19.27	103.05
1.00	PF180 paver-screed	4.0	77	0	19.27	
0.20	distributor-oper.	4.0	14	0	17.97	
0.20	distributor-driver	4.0	0	25	0.00	31.54
3.00	dump trucks	4.0	216	378	17.97	31.54
0.00	water tk.	0.0	0	0	17.97	31.54
1.80	gen. laborer	4.0	130	0	18.11	
0.00	raker	0.0	0	0	18.11	
			592	908	HOURLY COST	$374.85
		unit	3.40	5.22		

			total cost (equipment and labor)	.....	1,500		
					8.62		

MATERIALS & MISC.

	174 tons	plant mix	25.20		$25.20 tons	
0.15 gal/s.y.	108 gal	tack	0.37		$0.60 gal	
		total materials ...		25.57		
						$34.19 total cost

SUMMARY

PATCH 174 TONS

	LABOR UNIT	LABOR TOTAL	EQUIPMENT UNIT	EQUIPMENT TOTAL	MATERIALS UNIT	MATERIALS TOTAL	UNIT COST	TOTAL COST
	3.40	592	5.22	908	25.57	4,450	34.19	5,950
722 s.y.	0.82		1.26		6.16		8.24	5,950

PROJECT : Privatization bid - City
DATE : 7/15/98

	ITEM		QUANTITY	LABOR UNIT	LABOR TOTAL	EQUIPMENT UNIT	EQUIPMENT TOTAL	INTERNAL MATERIALS UNIT	INTERNAL MATERIALS TOTAL	OUTSIDE MATERIALS UNIT	OUTSIDE MATERIALS TOTAL	SUBS UNIT
1	Patch	s.y.	722.0	0.82	592.04	1.26	909.72	0.00	0.00	6.16	4447.52	0.00
2				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					592.04		909.72		0.00		4447.52	

PROJECT : Privatization bid - City
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OWNER			
ENGINEER			
PRIME CONTR.			
COMPLETION TIME		days	
LIQUID. DAMAGES		per day	
DBE-required	0.00	0.0%	
DBE - actual	0.00	0.0%	

LABOR	556	7.7%
FRINGES	286	4.0%
EQUIP.	1,160	16.1%
INT.MATL.	0	0.0%
O.S.MATL.	4,448	61.8%
SUBS	0	0.0%
OVERHEAD	739	10.3%
ADMINIS.	0	0.0%
BOND	0	0.0%
PROFIT	3	0.0%
	7,191	

PROJECT - Privatization bid - City
DATE - 7/15/98

PAVE 2094.0 TONS

MEASURE CALCULATIONS :

length	4200.0	ft.
width	36.0	ft.
ave depth	2.0	inches

sq.yd. area	16,800	s.y.	151200	s.f.
c.y. volume	952.0	c.y.		
tonnage	2094.0	tons @	2.20	tons/c.y.

summary

hrly prod. (bid item units)			hours	
pave	45	/hr.	46.53	hrs.
finish		/hr.	0.00	hrs.
total hours -			46.53	hrs.
			5.82	day

45	t/hr actual production
360.00	t/day

number	Equipment descip.	hours	total labor	total equip	labor	equip hourly rate
0.40	pickup	46.5	0	98	0.00	5.25
0.00	pave van	0.0	0	0	0.00	10.00
0.00	small tools	0.0	0	0	0.00	5.00
0.00	950 loader	0.0	0	0	19.27	44.84
1.00	Steel vibratory	46.5	897	976	19.27	20.98
1.00	Rubber compactor	46.5	897	1,071	19.27	23.01
1.00	PF180 paver-driver	46.5	897	4,795	19.27	103.05
1.00	PF180 paver-screed	46.5	897	0	19.27	
0.20	distributor-oper.	46.5	167	0	17.97	
0.20	distributor-driver	46.5	0	293	0.00	31.54
5.00	dump trucks	46.5	4,181	7,337	17.97	31.54
0.00	water tk.	0.0	0	0	17.97	31.54
1.80	gen. laborer	46.5	1,517	0	18.11	
0.00	raker	0.0	0	0	18.11	
			9,452	14,571	HOURLY COST	$516.25
		unit	4.51	6.96		

			total cost (equipment and labor)		24,023				
					11.47				
MATERIALS & MISC.									
		2094	tons	plant mix	25.20		$25.20	tons	
0.15	gal/s.y.	2520	gal	tack	0.72		$0.60	gal	
				total materials....		25.92			
								$37.39	total cost

SUMMARY

PAVE 2094 TONS

	LABOR UNIT	LABOR TOTAL	EQUIPMENT UNIT	EQUIPMENT TOTAL	MATERIALS UNIT	MATERIALS TOTAL	UNIT COST	TOTAL COST
	4.51	9,452	6.96	14,571	25.92	54,281	37.39	78,303
16,800 s.y.	0.56		0.87		3.23		4.66	78,303

PROJECT: Privatization bid - City
DATE: 7/15/98

	ITEM		QUANTITY	LABOR UNIT	LABOR TOTAL	EQUIPMENT UNIT	EQUIPMENT TOTAL	INTERNAL MATERIALS UNIT	INTERNAL MATERIALS TOTAL	OUTSIDE MATERIALS UNIT	OUTSIDE MATERIALS TOTAL	SUBS UNIT	SUBS TOTAL
1	Pave	s.y.	16,800.0	0.56	9408.00	0.87	14616.00	0.00	0.00	3.23	54264.00	0.00	0.
2				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
3				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
4				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
5				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
6				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
7				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
8				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
9				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
10				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
11				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
12				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
					9408.00		14616.00		0.00		54264.00		0

PROJECT: Privatization bid - City
DATE: 7/15/98

OWNER
ENGINEER
PRIME CONTR.
COMPLETION TIME days
LIQUID. DAMAGES per day
DBE-required 0.00 0.0%
DBE - actual 0.00 0.0%

LABOR	6,539	7.4%	MOBILIZ
FRINGES	3,368	3.8%	SURVEYI
EQUIP.	15,116	17.1%	TESTING
INT.MATL.	0	0.0%	FIELD O
O.S.MATL.	54,264	61.4%	CONTING
SUBS	0	0.0%	
OVERHEAD	9,086	10.3%	OVRHEA
ADMINIS.	0	0.0%	ADMIN.
BOND	0	0.0%	BOND
PROFIT	(5)	-0.0%	PROFIT
	88,368		