

# PROJECT COST ESTIMATE SUMMARY

Project Name:	RJC Hot Water Piping	Project No.:	99M089	Date:	13-Jan-09
Requesting Agency:	Facilities Management Division	Estimator:	S. Swinburne		
Implementing Agency:	Facilities Management Division	Checked by:	G. Evans		
Project Scope:	At the RJC, replace the existing failed copper piping connecting to and from the boilers, with new welded black steel piping, including fittings and insulation. FMD has declared this project as an emergency and is proceeding with completion of design documents by Sazan Group and Freeman Fong Architecture and construction by Auburn Mechanical. Costs shown are from project beginning of 10/08 through completion of 1/10.				

ELEMENT - DESCRIPTION	PROJECT COST	TOTAL PROJECT COST
<b>001 - CONSULTANT DESIGN</b>		
Pre-Design Fees	\$14,773	\$14,773
Design Fees	\$260,577	\$260,577
<b>Total 001 - Consultant Design Cost</b>	<b>\$275,350</b>	<b>\$275,350</b>
<b>003 - CONSTRUCTION</b>		
MAX. ALLOWABLE CONST. COST (MACC)	\$2,037,803	\$2,037,803
Sales Tax 9.00% of MACC	\$183,402	\$183,402
Mechanical Permit Fees 1.00% of MACC	\$20,378	\$20,378
Local Grading/Land use Permits		
Land Use State Permits		
Land Use Federal Permits		
Commissioning of MACC		
Moving Cost (\$500-\$1000/person)		
Telephone Cost (\$350/phone)		
Data Communications Costs (\$500/device)		
Relocation/Temporary Construction Cost		
Tenant Relocation Lease Cost		
Security Escort Cost during Construction	\$104,000	\$104,000
DAJD 2,080 Hours		
FMD _____ Hours		
Other capitalized Operating Cost		
Survey		
Asbestos Abatement Cost		
Special Inspection & Testing Fee of MACC		
Printing Cost (Bid Documents)	\$320	\$320
<b>Total 003 - Construction Cost</b>	<b>\$2,345,904</b>	<b>\$2,345,904</b>
<b>004 - EQUIPMENT &amp; FURNISHINGS</b>		
<b>Total 004 - Equipment &amp; Furnish. Cost</b>		
<b>005 - CONTINGENCY</b>		
Project Contingency 10.00% of 001, 003, 004, 007, & 009		
<b>Total 005 - Contingency Cost</b>	<b>\$268,433</b>	<b>\$268,433</b>
<b>007 - COUNTY FORCE DESIGN</b>		
Project Design _____ of 001, 003, 004		
Other		
<b>Total 007 - County Force Design Cost</b>		
<b>009 - COUNTY FORCE ADMINISTRATION</b>		
GGCIP Project Mgmt 415 Hours		
<b>Total 009 - County Force Admin. Cost</b>	<b>\$63,080</b>	<b>\$63,080</b>
<b>006 - ART</b>		
_____ of 001,003,005,007 & 009		
<input type="checkbox"/> Check if project is visible to the public		
<b>010 - ADMINISTRATIVE OH</b>		
3.50% of total project cost	\$103,347	\$103,347
<input checked="" type="checkbox"/> Check if Major Maintenance		
<b>TOTAL PROJECT COST</b>	<b>\$3,056,114</b>	<b>\$3,056,114</b>
Less Existing Funds:	\$70,000	
<b>FUNDS REQUIRED TO COMPLETE PROJECT</b>		<b>\$2,986,114</b>

## CONSULTANT FEE ESTIMATE

Project Name:	RJC Hot Water Piping	MMRF/CIP Number:	99M089
Project Manager:	S. Swinburne	Date:	13-Jan-09
Checked by:	G. Evans		

	Consultant Fee Subtotals	Consultant Fee Totals
<b><u>Pre-Design Fees</u></b>		
Sazan Group: Heating Piping Assessment Report	<input type="checkbox"/>	\$13,730
Wood Harbinger, Inc.: Peer Review of Sazan's Heating Piping Assessment Report		\$1,043
<b>Total Pre-Design Fees:</b>		<b>\$14,773</b>

### **Design Fees**

#### **Basic Services:**

Freeman Fong Architecture / Sazan Group:

Design Development Phase	\$34,841	
Subtotal, Freeman Fong Arch. / Sazan Group		\$34,841

Sazan Group:

As-Built Drawings Phase	\$17,730	
Construction Documents Phase	\$52,743	
Contractor Price Negotiations Phase	\$7,434	
Construction Administration Phase	\$142,075	
Record Drawings Phase	\$5,274	
Subtotal, Sazan Group		\$225,256

#### **Reimbursable Expenses:**

Automobile Mileage	\$480	
Subtotal, Reimbursable Expenses		\$480

**Total Design Fees: \$260,577**

**Total Consultant Fee Estimate \$275,350**

**DETAILED CONSTRUCTION COST**

Project Name: RJC Hot Water Piping	Project No.: 99M089	Date: 13-Jan-09
Estimator: Sazan Group, Inc.		

Item No.	Item Description	Unit	Unit Cost	Qty.	Total Cost
	Construction cost estimate is by Sazan Group, Inc. and is based upon construction market trends for similar commercial water pipe replacement projects:				
1	Remove and replace existing soldered copper hot water piping and insulation with new welded black steel piping, including new fittings and insulation - between boilers and water heaters (costs include General Contractor's 15% Overhead and 15% Profit)	LS	611,403	1	\$611,403
2	Remove and replace existing soldered copper hot water piping and insulation with new welded black steel piping, including new fittings and insulation, between boilers and air handling units (costs include General Contractor's 15% Overhead and 15% Profit)	LS	427,747	1	\$427,747
3	Remove and replace existing soldered copper hot water piping and insulation with new welded black steel piping, including new fittings and insulation - between boilers and variable air volume boxes and fan coil units (costs include General Contractor's 15% Overhead and 15% Profit)	LS	165,076	1	\$165,076
4	Remove and replace existing soldered copper hot water piping and insulation with new welded black steel piping, including new fittings and insulation - piping mains to and from boiler (costs include General Contractor's 15% Overhead and 15% Profit)	LS	220,020	1	\$220,020
5	Subtotal, Construction Cost including Overhead and Profit				\$1,424,246
6	General Conditions:				
	A. Maintain clean site	LS	31,200	1	\$31,200
	B. Site project engineer, expeditor	LS	93,600	1	\$93,600
	C. Project Manager and Superintendent	LS	117,000	1	\$117,000
	D. Trailer, tools, lifts, etc.	LS	71,212	1	\$71,212
7	Subtotal, General Conditions				\$313,012
8	Bond	LS	34,745	1	\$34,745
9	Subtotal, Construction Costs				\$1,772,003
10	Design Contingency (15%)				\$265,800
<b>MAXIMUM ALLOWABLE CONSTRUCTION COST (MACC):</b>					<b>\$2,037,803</b>

**PROJECT SCHEDULE FORM**

Project: RJC Hot Water Piping

Date: 13-Jan-09

Proj. Mgr.: S. Swinburne

Key: CS Pre-Design CD Construction Documents  
 SD Schematic Design P Permits  
 DD Design Develop. CPN Contractor Price Negotiations  
 ENV Environment. Review C Construction  
 WPS Water Pipe Study CO Closeout

	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	
										WPS	WPS	WPS	
										20	20	25	65
Jan-09	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	
DD/CD	CD	CD	CD	CD/CPN	C	C	C	C	C	CO	CO	CO	
30	25	35	40	40	40	40	30	30	40	20	10	5	345
Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Yr. Total	
CO													5

**Total Project Manager Hours**

**415**