



County of San Mateo

Job Order Contracting Mandatory Pre-bid Conference

General Construction JOC 1910, 1911, 1912, 1913 & 1914

HVAC Mechanical JOC 1915, 1916 & 1917

Roofing JOC 1918 & 1919

Flooring JOC 1920 & 1921

Plumbing JOC 1922 & 1923

November 26, 2018



Pre-Bid Conference Agenda



Part I: Job Order Contracting

- JOC Overview
- JOC Contract Documents
- Understanding the Construction Task Catalog® (CTC)
- JOC Process
- JOC Program Benefits

Part II: Bid Factors & Considerations

- Solicitation Details
- Calculating the Bid
- Bid Considerations & Review
- Contractor Adjustment Factors
- Risk of Low Adjustment Factors

Job Order Contracting



Definition

- Fixed Priced, Indefinite Quantity, Competitively Bid Contract
- Enable contractors to complete a substantial number of individual projects with a **single bid**
- Tasks based on competitively-bid, **preset prices**

Value

- Saves time and money
- Provides transparency and auditability

Umbrella Contract



Part 1 Bidding the Umbrella Job Order Contract

Owner
Advertises
Job Order
Contract



Contractors
Submit
Bids



Owner
Awards
Umbrella
Job Order
Contract

Part 2 Procuring Individual Projects From Owner

Owner
Project A

Subcontracting
Opportunities

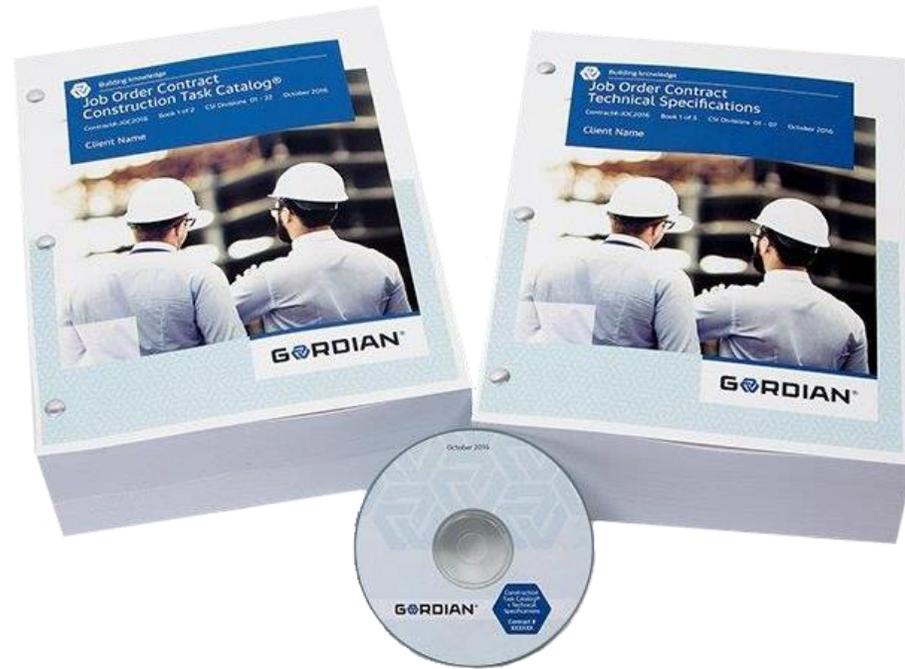
Owner
Project B

Subcontracting
Opportunities

Owner
Project C

Subcontracting
Opportunities

Contract Documents



- Front end documents
- Construction Task Catalog®
- Technical Specifications

Front End Documents



- Notice to Contractors
- Instructions to Bidders
- Proposal – Bid Forms
- Division I – General Requirements
- Forms
- General and Supplementary Conditions

COUNTY OF SAN MATEO

STATE OF CALIFORNIA

PROJECT MANUAL

And

CONTRACT DOCUMENTS

For

JOB ORDER CONTRACT
FOR
GENERAL CONSTRUCTION

Project No. JOC-1910
Project No. JOC-1911
Project No. JOC-1912
Project No. JOC-1913
Project No. JOC-1914

APPROVED: November 2018

Department of Public Works
County of San Mateo
555 County Center, 5th Floor
Redwood City, California 94063-1665

Construction Task Catalog®



- Catalog of Pre-Priced Construction Tasks
- Based on Local Labor, Material & Equipment Costs
- Unit prices are for Direct Cost of Construction only
- CTC has been updated to ensure latest pricing
- The tasks represent the “Scope of Work” for the contract
- Items that list manufacturer and model number are to specify quality and must be used as equal instead of Non-Prepriced items



Construction Task Catalog®



Exterior Improvements	32	32
Bases, Ballasts, And Paving	32 10	
Unit Paving	32 14	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 16		Curbs, Gutters, Sidewalks, And Driveways <small>(32 10)</small>		
32 16 13		Curbs And Gutters <small>(32 16)</small>		
		<small>Note: Includes transitions. Demolition Includes two saw cuts (each end) of curbs and gutters for lengths up to 100'. See CSI section 02 41 19 13-00-8 for additional saw cuts within the 100'.</small>		
32 16 13 13		Cast-In-Place Concrete Curbs And Gutters <small>(32 16 13)</small>		
		<small>Note: Includes concrete, forms, rebar, chairs (where necessary), expansion joints, finish and curing.</small>		
32 16 13 13-0001		Concrete Curb, Cast In Place <small>(32 16 13 13)</small>		
		<small>Note: Includes delivered concrete, forms, rebar, chairs (where necessary), expansion joints, finish and curing.</small>		
32 16 13 13-0002	LF	6" X 12" Cast In Place Concrete Curb	7.18	3.23
		<i>For Up To 20, Add</i>	4.03	
		<i>For >20 To 50, Add</i>	2.27	
		<i>For >50 To 100, Add</i>	0.88	
		<i>For >500 To 1,000, Deduct</i>	-0.88	
		<i>For >1,000, Deduct</i>	-1.50	
32 16 13 13-0003	LF	6" X 12" Cast In Place Concrete Curb - Radius	8.18	3.72
		<i>For Up To 20, Add</i>	4.63	
		<i>For >20 To 50, Add</i>	2.61	
		<i>For >50 To 100, Add</i>	1.01	
		<i>For >500 To 1,000, Deduct</i>	-1.01	
		<i>For >1,000, Deduct</i>	-1.72	

CSI
MasterFormat

Full description
of task

Price includes labor,
material + equipment
for your location

Demolition
price

Section +
task notes

Modifiers for
variations or quantity
discounts

Understanding the Construction Task Catalog®



- Contractor should review “Using the Construction Task Catalog®”
 - The Unit Prices Include:
 - Labor, Equipment & Material
 - Complete and In-place Construction
 - The Adjustment Factors Include:
 - Overhead, Profit, **Subs Overhead and Profit**, Taxes, Fringe Benefits, Financing, Business Risk, 1%CLF
 - Construction Related Costs:
 - **Project Management, All Project Meetings** (Joint Scope, Proposal Review, etc), Permit Services, Submittal Preparation, Incidental A&E, Vehicles, Temporary Utilities, Excess Waste, Daily & Final Clean-up, Etc.
 - General Interpretations

GORDIAN®

Using The Construction Task Catalog®

About the CTC:

- ❑ This Construction Task Catalog® (CTC) was developed and customized by The Gordian Group, Inc. specifically for **Owner**, priced locally using current labor, material and equipment costs, and published in Month 2017.
- ❑ The Gordian Group, Inc. licenses the use of this CTC and other proprietary information and software for the sole purpose of providing Job Order Contracting services to **Owner**. Use of this CTC and other proprietary information and software for any other purpose, or for any other entity, is expressly prohibited without the express written consent of The Gordian Group, Inc.

MasterFormat™

- ❑ The tasks in this Construction Task Catalog are organized using CSI's *MasterFormat*.

CSI
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The Unit Prices Include:

LABOR COSTS:

- ❑ Labor costs include direct labor through the working foreperson level at straight-time prevailing wage rates including fringe benefits and an allowance for Social Security, Medicare taxes, worker's compensation, unemployment insurance, and employee benefits.
- ❑ Labor costs include unloading equipment, materials, and tools, and transporting the same up or down 2 1/2 stories and 125' to reach the project site; layout; measuring and cutting to fit; performing the task; disposal of excess material, and time for lunch and breaks.

EQUIPMENT COSTS:

- ❑ Equipment costs include all equipment required to accomplish the task.
- ❑ Mobilization is included for all equipment except large equipment (e.g. cranes, bulldozers, excavators, backhoes, bobcats etc.), which exclude mobilization.
- ❑ Equipment costs include all operating expenses such as fuel, electricity, lubricants, etc.

MATERIAL COSTS:

- ❑ Material costs include the cost of the material, delivery, and all incidentals and accessories integral to the installation.
- ❑ Material costs include manufacturer's and/or fabricator's shop drawings.
- ❑ Material costs for roofing, drywall, VCT, carpet, wall covering, ceiling tile, pipe, conduit, concrete, etc. include an allowance for waste. This list is not intended to be all inclusive, but descriptive of the types of construction materials that are typically sold in standard lengths, sizes and weights.
- ❑ Material costs for imported materials (e.g. aggregate, sand, soil, etc.) include delivery up to 15 miles from the closest approved source.

The Adjustment Factors Include:

The Adjustment Factors include the following costs, unless specifically excluded by the terms of the Contract Documents:

BUSINESS COSTS:

- ❑ Office overhead, including, but not limited to, office space, office equipment, office and management personnel, office supplies, and employee transportation.
- ❑ Insurance and bonding
- ❑ Profit.

Month 2017
Owner

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Understanding the Construction Task Catalog®



Include All Appropriate Tasks:

32 16 23 00-0002	4" Cast In Place Concrete Sidewalk	SF	\$5.06	400	\$2,024.00	
	For Quantities 100 to 500, Add	SF	\$2.04	400	\$816.00	
32 11 16 00-0015	4" Crushed Aggregate Base	SF	\$0.63	400	\$252.00	
	For Quantities Under 1000	SF	\$0.18	400	\$72.00	
01 71 13 00-0003	Mobilize Backhoe	EA	\$402.63	1	\$402.63	
31 23 16 36-0006	Excavation by Backhoe	CY	\$3.75	11	\$41.25	
	For Quantities Under 20 CY, Add	CY	\$3.75	11	\$41.25	
31 23 16 36-0028	Loading Excess Materials	CY	\$3.42	13.75	\$47.03	
	For Quantities Under 20 CY, Add	CY	\$3.42	13.75	\$47.03	
01 74 19 00-0029	Hauling to Dump Site	CYM	\$0.51	207	\$105.57	
01 74 19 00-0021	Landfill Dump Fee	CY	\$15.14	13.75	\$208.18	\$4,056.93
						/400
						\$10.14

Compare these prices

* Sample only



Non Pre-Priced (NPP) Tasks

- Contractor **must have permission from the County of San Mateo to use a Non Pre-priced Task** prior to submission:

- Three (3) Quotes on vendors' or subcontractors' letterhead
- Justification for less than three (3) Quotes

- Contractor is paid the amount in the following formula:

Total Cost for self-performed work = (A+B+C) x Appropriate Adjustment Factor or 1.15 (Whichever is less and Only if A & B cannot be priced out of the CTC)

A=The number of hours for each labor classification and hourly rates

B=direct material costs (supported by three independent quotes for all materials)

C=direct equipment costs (supported by official posted state rental rates other than small tools)

- If the Work is to be subcontracted, the Contractor must submit three independent bids from Subcontractors.
- The final price submitted for Non Pre-priced Tasks which are performed by a subcontractor is according to the following formula:

Total cost of Non Pre-priced Task = D x Appropriate Adjustment Factor or 1.15 (whichever is less)

D=subcontractor costs (supported by quotes)

Technical Specifications



- Specifies Quality of Materials and Workmanship
- Corresponds with Tasks in the Construction Task Catalog[®]



The Process



Project Identified



NTP Issued
Construction Starts

PM and Contractor walks the site and scope development.

PM issues Initial Scope & RFP

Build price proposal from CTC.
Submit Subcontractor List

Proposal Accuracy & Completeness

- Appropriate line items
- Quantities correct

Typical time: 3-5 weeks

eGordian Software



Internet Based Software Provided with Contract

- eGordian® Software Expedites the Job Order Process
 - Price Proposals
 - Subcontractor Lists
 - Tracking Dates
 - Required Job Order Forms
- Training provided

The screenshot shows the eGordian software interface. The top navigation bar includes 'eGordian' logo, 'Apps', 'Tools', 'estQC', 'Videos', and 'Help'. Below the navigation bar, there are two main panels. The left panel is titled 'Job Orders' and contains a table with columns: Project Number, Job Order Number, Title, and Project Status. The right panel is titled 'Price Proposal List (Data)' and contains a table with columns: Project Number, Job Order Number, Name, and Total \$.



1% Contractor License Fee

- Access to eGordian[®], Construction Task Catalog[®], other proprietary materials
 - Paperless
 - Efficient
 - Tasks and prices input directly... no fishing through old files and estimating books for costs
- JOC process training
- eGordian[®] software training
- Included in the Contractor's Adjustment Factor
 - Consider with the Bid as an Overhead cost
 - 1% of Job Order Price

JOC Program Benefits



Contractors	County
<ul style="list-style-type: none"> • Good work is rewarded with more work 	<ul style="list-style-type: none"> • A Fixed Priced, Fast Track Procurement Process
<ul style="list-style-type: none"> - Profit is a function of volume 	<ul style="list-style-type: none"> • Job Orders are Lump Sum
<ul style="list-style-type: none"> - Volume is driven by performance 	<ul style="list-style-type: none"> • The Ability to Accomplish a Substantial Number of Individual Projects with a Single Competitively Bid Contract
<ul style="list-style-type: none"> - JOC provides a steady flow of work 	<ul style="list-style-type: none"> • On-Call Contractors Ready to Perform a Series of Projects at
<ul style="list-style-type: none"> - Do not have to chase the next project 	<ul style="list-style-type: none"> • Contractor Has A Continuing Financial Incentive To Provide
<ul style="list-style-type: none"> • Long-term relationship with County 	<ul style="list-style-type: none"> - Responsive Services
<ul style="list-style-type: none"> - Good work is rewarded with more work 	<ul style="list-style-type: none"> - Accurate Proposals
<ul style="list-style-type: none"> - Develop partnership with County 	<ul style="list-style-type: none"> - Quality Work on Time
<ul style="list-style-type: none"> • Reduced Risk 	<ul style="list-style-type: none"> - Timely Close Out
<ul style="list-style-type: none"> - Payment for every element of work performed 	<ul style="list-style-type: none"> • Future Job Orders Tied to Contractor Performance
<ul style="list-style-type: none"> - Ability to provide input during scope development 	<ul style="list-style-type: none"> - No Obligation To Award Specific Projects
	<ul style="list-style-type: none"> - County can Use All Other Methods For Accomplishing Projects



Part II: Bid Factors & Consideration



Solicitation Details



Contract	Contract license required	Minimum Contract Value	Maximum Contract Value	Contract Term	Initial Payment & Performance Bonding (Each)
JOC-1910, 1911, 1912, 1913, 1914	B - General Building	\$0	\$5,000,000	1 Year	\$1,000,000
JOC-1915, 1916, 1917	C-20 – Mechanical Works	\$0	\$5,000,000	1 Year	\$1,000,000
JOC-1918, 1919	C-39 – Roofing	\$0	\$1,000,000	1 Year	\$250,000
JOC-1920, 1921	C-15 – Flooring	\$0	\$1,000,000	1 Year	\$250,000
JOC-1922, 1923	C-36 – Plumbing	\$0	\$1,000,000	1 Year	\$250,000



Payment and Performance Bonds will be increased to not less than 100% of the Max Contract Value if Collective Job Orders exceed \$1,000,000

Bid Factors



- **Must Bid Six (6) Adjustment Factors**

- Normal Working Hours; Shift Work 6:00 AM to 6:00 PM Monday-Friday;
- Other than Normal Working Hours; after Hours Monday-Friday; All Day Saturday, Sunday and Holidays

- **Same Adjustment Factors Apply to All Tasks in the CTC**

- Adjustment Factors Must Include All Indirect Costs and Profit
- Adjustment Factors Fixed for the Duration of Contract Term

- **Lowest Adjustment Factor From a Responsive, Responsible Bidder Wins!**

1

GENERAL FACILITIES -
NORMAL WORKING HOURS

2

GENERAL FACILITIES -
OTHER THAN NORMAL
WORKING HOURS

3

DETENTION FACILITIES -
NORMAL WORKING HOURS

4

DETENTION FACILITIES -
OTHER THAN NORMAL
WORKING HOURS

5

OSHDP FACILITIES -
NORMAL WORKING HOURS

6

OSHDP FACILITIES -
OTHER THAN NORMAL
WORKING HOURS

Method to Calculate Adjustment Factors



- **Use Historical Project Data**
 1. Choose projects that you have already completed and know what they cost you to complete the job.
 2. Add in your overhead, profit, insurance etc.
 3. Build the project from CTC
 4. Compare the two numbers to determine your adjustment factor

Sample Project: Detailed Scope of Work



- Interior Renovation

- Doors and Hardware
 - Replace 12 interior doors, hinges and hardware
 - Doors shall be 3x7, solid core wood doors
 - Grade 2 locksets with knobs
 - Replace 2 push bar exist devices and door closers on exit doors
- Interior Lighting
 - Replace all lay-in troffer fixtures on first and second floors. 48 in total
 - Replace 4 exit fixtures
 - Replace 12 industrial fixtures in shop area
- Plumbing Fixtures
 - Replace 8 bathroom sinks, 8 faucets, and 8 toilets in men's and women's bathroom in admin building and shop area
 - Replace 4 water fountains
- Replace Boiler
 - Demo existing boiler and as much piping and venting to accommodate new boiler. Install a new 1028 mbh oil fired cast iron boiler. No access for packaged boiler. Must field assemble sections. Provide new piping as required.
- Normal Working Hours Apply

Sample Price: CTC vs. Quote



Direct Cost of Work from CTC

- Replace Boiler \$ 33,055.73
- Doors/Hardware \$ 8,282.09
- Lighting \$ 13,119.77
- Plumbing \$ 11,886.53

TOTAL = \$ 66,344.12

Direct Cost of Work from Quotes or Estimates

- Replace Boiler \$ 34,500.00
- Doors/Hardware \$ 7,250.00
- Lighting \$ 12,750.00
- Plumbing \$ 10,500.00

TOTAL = \$ 65,000.00



Sample Price: Putting it all together

• A.	Direct Cost of Work from Quotes	\$65,000.00
• B.	Overhead 10%*	<u>\$ 6,500.00</u>
• C.	Subtotal (Cost & O/H)	\$71,500.00
• D.	Profit 10%*	<u>\$ 7,150.00</u>
• E.	Subtotal (Cost & O/H & Profit)	\$78,650.00
• F.	Price From CTC	\$66,344.12
•	Adjustment Factor (= E / F) = 1.1855	

*Sample Only. Contractor to determine O/H & Profit.

Prepare this calculation for more than one sample project.



Contractor Adjustment Factor

Importance of Adjustment Factors:

- Determines Lowest Bidder AND
- Used to Price Individual Job Orders
- Price Proposal Total Becomes the Lump Sum* Job Order Amount

$$\begin{array}{r} \text{Unit Price} \quad \times \quad \text{Quantity} \quad \times \quad \text{Adjustment Factor} \quad = \quad \text{Total for Task} \\ + \\ \text{Unit Price} \quad \times \quad \text{Quantity} \quad \times \quad \text{Adjustment Factor} \quad = \quad \text{Total for Task} \\ + \\ \text{Unit Price} \quad \times \quad \text{Quantity} \quad \times \quad \text{Adjustment Factor} \quad = \quad \text{Total for Task} \\ \hline \text{Total Job Order Price} \end{array}$$

*Except when there are differing site conditions or changes in scope.

Bid Considerations



Contractors Should Expect To:

- Prepare Incidental Drawings or Sketches for Some Projects
 - Justify Quantity Calculations
 - Explain Detail of Work
- Prepare Proposals for Some Projects That Might be Canceled
- Margins on CTC Tasks Vary
- Some Projects are More Profitable than Others
- Maintain a Fully Functioning Local Office
- Hold Required Licenses
- 1% of each Job Order as a Contractor License Fee for eGordian®



Other Considerations

- Differing Site Conditions or Changes in Scope
 - Priced from Construction Task Catalog[®]
 - Supplemental Task Order
 - No Negotiated Change Orders
- Filings and Permits
 - Fees paid for all Permits reimbursed 100% - No Markup
- Liquidated Damages
 - On a Job Order by Job Order Basis
 - Typical range is, but not limited to, \$300 - \$1,000 per day
- Bid Security: \$25,000



Risks of Low Adjustment Factor

- Leads to Arguments in Proposal Review
 - Unsupportable Tasks
 - Exaggerated Quantities
- Leads to Delays in Job Order Development
 - Takes Longer to Review Proposals
- Creates an Adversarial Relationship
 - Reduced Volume of Work
 - Will Shorten Contract
 - Lost Profitability
- No Second Chance to Improve your Margin



Review of Key Points

- Know the General Guidelines – Using the Construction Task Catalog®
 - Analyze Unit Prices
 - Understand what is included in your adjustment factors
- Performance Based Contract
 - Contractor Performance Drives Volume
 - Accurate Proposals
 - Safe and Clean Project Sites
 - High Quality Construction
- Speed to Construction
 - Responsive Service
 - On-Time Completion
 - On Time Close Out

Bids



- Each bid must be submitted on the proposal bid forms provided in the Contract Documents.
- Each bid must be accompanied by security in the form of a bid bond issued by a corporate surety, a cashier's check payable to the County of San Mateo for an amount not less than \$25,000.
- Contractor shall not assign this Agreement or any portion of it to a third party to provide services required by Contractor under this Agreement without the prior written consent of the County, the Director of Public Works or his designee. Any such assignment or subcontract without County's prior written consent shall give County the right to automatically and immediately terminate this Agreement without penalty or advance notice.

Filling Out the Bid Form



2. **BID SCHEDULE:**

General Facilities Normal Working Hours: Work performed during Normal Working Hours, in General Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor of:

1 . 1 8 5 5 ONE POINT ONE SIX FOUR NINE

General Facilities Other than Normal Working Hours*: Work performed during Other Than Normal Working Hours, in General Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor of:

1 . 2 3 0 0 ONE POINT TWO THREE ZERO ZERO

Detention Facilities Normal Working Hours:** Work performed during Normal Working Hours, in Detention Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor of:

1 . 2 4 0 0 ONE POINT TWO FOUR ZERO ZERO

Detention Facilities Other than Normal Working Hours*: Work performed during Other Than Normal Working Hours, in Detention Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor of:

1 . 3 1 5 0 ONE POINT THREE ONE FIVE ZERO

OSHPD Facilities Normal Working Hours:** Work performed during Normal Working Hours, in OSHPD Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor of:

1 . 2 8 0 0 ONE POINT TWO EIGHT ZERO ZERO

OSHPD Facilities Other than Normal Working Hours*: Work performed during Other Than Normal Working Hours, in OSHPD Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor of:

1 . 3 5 0 0 ONE POINT THREE FIVE ZERO ZERO

Filling Out the Bid Form



Line 1.	General Facilities Normal Working Hours	1. 1.1855
Line 2.	Multiply Line 1 by 40%	2. 0.4742
Line 3.	General Facilities Other than Normal	3. 1.2300
Line 4.	Multiply Line 3 by 10%	4. 0.1230
Line 5.	Detention Facilities Normal Working Hours	5. 1.2400
Line 6.	Multiply Line 5 by 15%	6. 0.1860
Line 7.	Detention Facilities Other Than Normal	7. 1.3150
Line 8.	Multiply Line 7 by 10%	8. 0.1315
Line 9.	OSHPD Facilities Normal Working Hours	9. 1.2800
Line 10.	Multiply Line 9 by 15%	10. 0.1920
Line 11.	OSHPD Facilities Other Than Normal	11. 1.3500
Line 12.	Multiply Line 11 by 10%	12. 0.1350
Line 13.	Add Lines 2, 4, 6, 8, 10 & 12 (This is the Award Criteria Figure)	ACF = 1.2417

Questions?



- Make Sure you Signed the Pre-bid Sign-In Sheet
- Any questions regarding the Contract Documents may be submitted by email to *Rana Naser* at rnaser@smcgov.org. All bid questions are preferred in writing no later than five (5) business days prior to the bid date.

Bids Due: December 12, 2018 at 2:30pm