PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS

3H-2

AGENDA ITEM SUMMARY

Meeting Date: November 16, 2010	[X] Consent [] Ordinance	[] Regular [] Public Hearing
Department: Facilities Development &	& Operations	

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: JOC Work Order No. 10-196 with H.A. Contracting Corp. (R2010-0804) in the amount of \$448,369.90 to provide for the removal and replacement of the existing Heating, Ventilation Air Conditioning (HVAC) system at the Water Utilities Department's Southern Region Water Reclamation Facility (SRWRF).

Summary: The work consists of removal of the existing condenser located on the roof, replacement of the existing multi-zone air handler unit, the installation of a new air cooled chiller and concrete enclosure, all associated piping, ancillary systems, and the installation of a new automated HVAC control system. The Small Business Enterprise (SBE) participation in this work order is 22.45%. When the participation for this work order is added to H.A. Contracting's total participation-to-date, the resulting values are 43.3%. The SBE goals are 15%. The total construction duration is 180 days. All funding for this project is from Water Utilities Department User Fees account. H.A. Contracting Corp. is a Palm Beach County Company. (FD&O Admin) Countywide/District (JM)

Background and Justification: The air conditioning equipment in this building is currently more than 20 years old and is past its useful life. Additionally, the equipment has become increasingly expensive to maintain as parts are no longer readily available. The new equipment will increase efficiency, ease of maintenance, and reduce energy consumption. These activities are scheduled, budgeted maintenance replacement items.

Attachments:

- 1. Map
- 2. Work Order
- 3. Contractor's Proposal
- 4. SBE Estimate Report
- 5. Budget Availability Statement

Recommended by:	Anny Wif	10/19/10
	Department Director	Date
Approved by:	County Administrator	

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2011	2012	2013	2014	2015
Capital Expenditures	\$448,369.90	\$ 0	\$ 0	\$ 0	\$ 0
Operating Costs	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income (County)	0	0	0	0	0
In-Kind Match (County)	0	0	0	0	0
NET FISCAL IMPACT	\$448,369.90	\$0	\$0	\$0	\$0
# Additional FTE Positions (Cumulative)	0	0	0	0	0
Is Item Included in Current	Budget: Yes	<u>X2</u>	<u> </u>	No	·
Budget Account No: 4011-7	21-W006-6545				
Reporting Category					

B.	Recommended	Sources of	Funds/Summary	of Fiscal	Impact
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C.	Departmental	Fiscal	Review:	
	-			

III. REVIEW COMMENTS

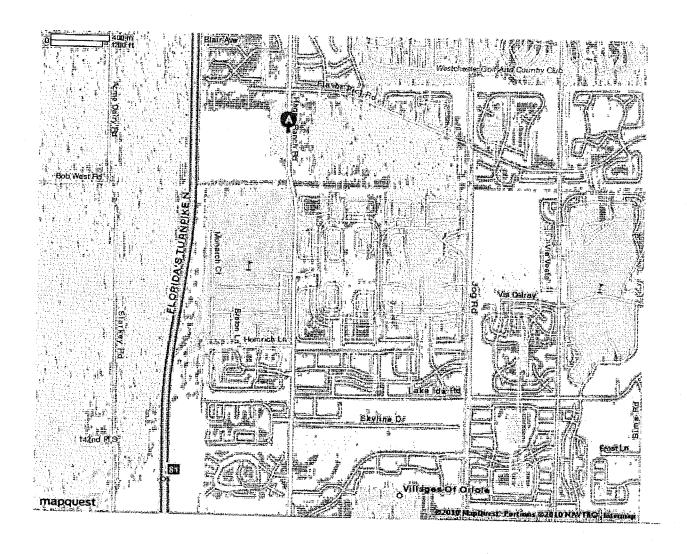
III. REVIEW CON	IMENIS
A. OFMB Fiscal and/or Contract Development	& Control Comments:
OFMB OFMB E	Contract Development & Control 6. Janes 10/29/10
A. Legal Sufficiency:	This item complies with current County policies.
Assistant County Attorney	

A. Other Department Review:

Department Director

This summary is not to be used as a basis for payment.

Palm Beach County Water Utilities Department Southern Region Water Reclamation Facility (SRWRF) 12751 Hagen Ranch Road Boynton Beach, Florida



September 23, 2010	JOC WORK ORDER Job Order Construction Services	
JOC#: 10415	WUD SRWRF - Bldg A - HVAC engineering	CORIDA
Loc #: 663	Water Utiliites Waste Treatment South Regional Plant Pre-treatment & Admin 12751 Hagan Ranch Road, BOYNTON BEACH	

Brief Scope:

Install new 42 ton Chilled water system and multizone AHU

Contractor:

HA Contracting Corp. 9500 NW 12th Street Miami, FL 33172

Contract:

R2010-0804 (0)

AMOUNT:

\$ 448,369.90

Funding:

4011-721-W006-6545

JOC Work Order #:

10-196

KMA:

District: 5

FDO-10JOC

Project Duration:

180 Days

Liquidated damages will apply

Approval Signatures

	Daniel Racette, Project Coordinator	1-30-16
24	Audrey Wolf, Director Facilities Development & Operations	Date AND MANY STATE STA
	Chair	(NOT REQUIRED FOR PROJECTS <\$100,000 OR >\$200,000)
	Contract Review Committee	Date
	Approved as to form and legal sufficiency	
	County Attorney	
	,,	Date
	Board of County Commissioners	Date

Xavier Sansaricq, Project Manager	2	050	9-30-10
HA Contracting Corp.	James	XVOW.	Date

COPY: Project File

JOC Work Order

Page 1 of 1

Procurement & Project Implementation Group 2633 Vista Parkway, West Palm Beach, FL 33411-5607

9/23/2010

September 23, 2010

Contractors Price Proposal Summary - CSI

Job Order Construction Services

JOC#: 10415

WUD SRWRF - Bldg A - HVAC engineering

Loc #: 663

Water Utiliites Waste Treatment South Regional Plant Pre-treatment & Admin 12751 Hagan Ranch Road, BOYNTON BEACH

Contract Number: Contractor:

R2010-0804 (0)

Proposal Value:

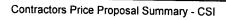
HA Contracting Corp. \$ 448,369.90

Proposal Name:

WUD SRWRF - "A" Building - HVAC Replacement

01 - General Requirements:	\$76,805.18
02 - Site Work:	\$1,637.93
03 - Concrete:	\$19,512.40
04 - Masonry:	\$4,069.16
05 - Metals:	\$25,258.46
07 - Thermal & Moisture Protection:	\$2,741.92
08 - Openings:	\$1,213.70
09 - Finishes:	\$14,508.93
22 - Plumbing:	\$5,748.66
23 - Heating, Ventilating, And Air-Conditioning (HVAC):	\$229,590.51
26 - Electrical:	\$50,997.08
27 - Communications:	\$1,566.40
28 - Electronic Safety And Security:	\$695.32
31 - Earthwork:	\$4,541.04
32 - Exterior Improvements:	\$3,329.96
40 - Process Integration:	\$6,153.25
Proposal Total	\$448,369.90

This proposal total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding of the line totals and sub-totals.



September 21, 2010	Proposal Review - Category Detail Job Order Construction Services	A CHICAGO
JOC#: 10415	WUD SRWRF - Bldg A - HVAC engineering	FZORIDA
Loc #: 663	Water Utiliites Waste Treatment South Regional Plant Pre-treatment & Admin 12751 Hagan Ranch Road, BOYNTON BEACH	
Contract Number:	R2010-0804 (0)	\mathcal{L}
Contractor:	HA Contracting Corp.	N/K
Proposal Value:	\$ 448,369.90	
D	WILD CDWDE "A" Building HVAC Penlacement	(\)



Proposal Name:

WUD SRWRF - "A" Building - HVAC Replacement

Proposal Submitted: 09/21/2010

Line Total Description Modifier UOM Record CSI Number Category - No Category Input \$9,698.96 Reimbursable Fees Reimbursable Fees will be paid to the contractor for 01 22 16 00 0002 EΑ the actual cost of all permits, without mark-up, for which a receipt or bill To present a Project Implementation Groups received. The Adjustment Factor applied to Reimbursable Fees will be 1.0000. The labor cost involved in obtaining all permits is in the KEVIEWED BY: Adjustment Factor. The base cost of the Reimbursable Fee is \$100.00. The quantity used will adjust the base cost to the actual Reimbursable Fee (e.g. quantity of 1.25 = \$125.00 Reimbursable Fee). If there are multiple Reimbursable Fees, each one shall be listed separately with a comment in the "note" block to identify the Reimbursable Fees (e.g. skewalk closure, road cut, building permit, builder's risk insurance, extended warrantee, etc.). A copy of each receipt shall be included with the Proposal. Sign auto Total **Unit Price** Factor Quantity 1.0000 = \$9,698.96 Installation 106.50 91.07 Permit allowance \$14,793.31 HR Insulator Note: Tasks in the CTC include appropriate costs to cover 01 22 20 00 0003 labor. These tasks will be requested specifically by the owner for miscellaneous work not covered in the CTC Quantity Unit Price Factor Total 0.8798 = \$14,793.31 Installation 480.00 35.03 switch over \$338.72 01 22 20 00 0003 For Foreman, Add Factor Total Unit Price Quantity 0.8798 = \$338.72 Installation 220.00 1.75 switch over Electrician Note: Tasks in the CTC include appropriate costs to cover \$7,273.38 01 22 20 00 0010 HR labor. These tasks will be requested specifically by the owner for

miscellaneous work not covered in the CTC.

miscellaneous work not covered in the CTC.

Quantity

switch over & roof disconnect

switch over & roof disconnect

switch over & roof disconnect

226.00

For Foreman, Add

Quantity

129.00

Quantity

480.00

Installation

Installation

HR

Installation

0006

Unit Price

Unit Price

Unit Price

37.46

1.83

Sheet Metal Worker Note: Tasks in the CTC include appropriate costs to

cover labor. These tasks will be requested specifically by the owner for

36.58

Factor

0.8798 =

Factor

0.8798 =

Factor

0.8798 =

Proposal Review - Category Detail

01 22 20 00 0010

01 22 20 00 0028

Page 1 of 24 9/21/2010

\$207.69

\$15,819.51

Total

Total

Total

\$15,819.51

\$207.69

\$7,273.38

Job Order Number: 10415

cord	CSI Nu	mbe	er	Modifier U	OM	Description						LI	ne Total
atego	ory - N	lo (Category	Input						استاساوي			
7	01 22	20	00 0028	0006	-	For Foreman,	Add						\$394.85
						Quantity		Unit Price		Factor		Total	
				Insta	llation	240.00	X	1.87	X	0.8798	=	\$394.85	
				switc	h over &	roof disconnect							
8	01 22	20	00 0046		IR	Programming	And Ce	rtification Of Ne	w Devic	es To Existin	g Panels	\$	21,115.20
U	01 22	20	00 00 10	•		Quantity		Unit Price		Factor		Total	
				Insta	allation	200.00	Х	120.00	Х	0.8798	=	\$21,115.20	
				Conf	trois prog	ramming & inter	face						
						1/2 To 5/9 CV	65 UD	, Loader-Backh	oe With	Full-Time O	nerator		\$1,771.37
9	01 22	23	00 0218	V	VK	Quantity	, 65 HF	Unit Price		Factor		Total	
				Insta	allation	1.00	x	2,013.38	x	0.8798	=	\$1,771.37	
													\$2,110.85
10	01 22	23	00 0469		DAY		on Lift N	lechanical Crar	ie, vvitn	Full-Time Of		Total	Ψ2,110.00
				Inch	allation	Quantity		Unit Price	x	0.8798	=	\$2,110.85	
					anation	1.00	X	2,399.24				7-,	6720 OF
11	01 22	23	00 0731	E	ΞA	70 To 100 To	n Lift Mo	ove On/Off Cos	t, Truck		ne	Takal	\$730.85
						Quantity		Unit Price		Factor 0.8798	=	Total \$730.85	
				Inst	allation	1.00	Х	830.70	×	0.8790		\$7.50.05	
12	01 45	5 23	00 0012	i	EA	Proctor Comp	action (5" Standard Mo	ld				\$180.83
						Quantity		Unit Price		Factor		Total	
				Inst	allation	1.00	Х	205.54	Х	0.8798		\$180.83	
13	01 45	5 23	3 00 0013		EA	Density And (Classific	ation Test					\$115.7
						Quantity		Unit Price		Factor		Total	
				Inst	tallation	2.00	Х	65.77	X	0.8798	=	\$115.73	
14	01 4	5 2	3 00 0078		EA	Concrete Slu	mp Tes	t, ASTM C143					\$46.8
1-4	01 4	J 2.	00 0070		- (Quantity		Unit Price		Factor		Total	
				Inst	tallation	2.00	X	26.62	X	0.8798	⇒	\$46.84	
15	01.4	5 2	3 00 0078		EA	Concrete Slu	mo Tes	t, ASTM C143					\$46.8
15	014	J Z	3 00 0070		LA	Quantity		Unit Price		Facto		Total	
				ins	tallation	2.00	x	26.62	х	0.8798	=	\$46.84	
16	01 5	1 1	3 00 0012		EA	Temporary 1	00 A Pa	nelboard Comp	olete Wi	th Up To 24 E	Branch Circ	cuits,	\$755.6
						120/208 V Quantity		Unit Price		Facto		Tota	
				Ins	tallation	1.00	х	858.84	х	0.8798	=	\$755.61	
					MON			To 3' Wide W	ith Refle	ctive Rail Fa	ch Side		\$144.9
17	01 5	5 2	26 00 0028	3	MON	Quantity	aue, or	Unit Price		Facto		Tota	ı
				Ins	stallation	20.00	x	8.24		0.8798		\$144.99)
						noval of equip. (•					
18	01 4	56 :	33 00 000		LF			ence, Plastic M	lesh, 48	" High With F	osts At 8'	On	\$195.3
, 0	٠.,	'				Center				Facto		Tota	1
				I.a.	stallation	Quantity		Unit Price		0.879		\$195.3	
						200.00	X	. 1.11	*	0.073	-	*	
				us	sea tor rei	moval of equip of	iane						

Job Order Number: 10415 Job Order Title: WUD SRWRF - Bldg A - HVAC engineering

e Total	Lill						Description	Modifier UOM		ber	SI Nur	cord (
								nput	ategory li	C	y - N	atego
1,050.53	\$	les delivery of ee.	Note: Includ I disposal f	n Debris" I auling, and	n) "Constructio pick-up cost, ha al.	al cost,	20 CY Dumpst dumpster, rent Non-hazardou	EA	00 0011	19	74	19 (
	Total		Factor		Unit Price		Quantity					
	1,050.53	= \$	0.8798	X	398.02	X	3.00	Installation				
\$13.80				les	ads, First 15 Mi	ved Roa	Hauling On Pa	CYM	00 0022	19	1 74	20
	Total		Factor		Unit Price		Quantity					
	\$13.80	-	0.8798	X	0.56	X	28.00	Installation				
\$59.5		Depth	4" (10 cm)	alls Up To	ed Concrete W	Reinford	Saw Cut Rod	LF	13 0082	19	2 41	21
	Total \$59.54	_	Factor		Unit Price		Quantity	4.4.4.2.				
	309.04		0.8798	X	5.64	X	12.00	Installation				
\$91.6				3"), Add	ass (Depth To	tional P	For Each Add	0065	13 0082	19	2 41	22
	Total	_	Factor		Unit Price		Quantity					
	\$91.64		0.8798	X	2.17	X	48.00	Installation				
\$298.5	Takal	lusively. This	nis task exc other task	rge. Use th	arge Note: For e minimum cha ed in conjunctio	than the	charge is less task should no section.	EA	13 0089	19	2 41	23
	Total \$298.53	=	Factor 0.8798		Unit Price		Quantity	Installation				
****	Ψ230.33			X	339.32	×	1.00	mstallation				
\$220.2	 			(20 cm) C	eter Core In 8"	n) Diam		EA	13 0113	19	2 41	24
	Total \$220.29	=	Factor 0.8798	v	Unit Price		Quantity	Installation				
4000	ΨΖΖΟ.23		·	X	35.77	х	7.00	IIIStaliation				
\$230.8	~			(20 cm) C	eter Core In 8"	n) Diam		EA	13 0114	19	2 41	25
	Total \$230.84	=	Factor 0.8798	x	Unit Price 43.73	x	Quantity 6.00	Installation				
\$298.5		'Minimum irge For Core asks in this	e, use task inimum Cha any other t Concrete F	um charge r. Task "Mi nction with Drilling In	tharge Note: For than the minim ling" exclusively the used in conju- toly to sections ' Brick Or Block	e is less ore Drill d not be not app	drilling charge Charge For C Drilling" shou section. Does	EA	13 0255	19)2 41	26
	Total		Factor	01 111011 0	Unit Price	mig iii	Quantity					
	\$298.53	=	0.8798	X	339.32	X	1.00	Installation				
\$438.					all Cutouts	crete W	8" Thick Con	SF	13 0272	19	02 41	27
	Total		Factor		Unit Price		Quantity					
	\$438.56		0.8798	X	20.77	Х	24.00	Installation				
\$800.		Mortar	s Patching	ementitious	1/4", Epoxy C	1/8" To	Patch Floors	SF	71 0010	30	03 01	28
	Total		Factor		Unit Price		Quantity					
	\$800.62		0.8798	×	9.10	Х	100.00	Installation				
\$384.			vork	ood Formw	Foundation W	ootings	Continuous f	SF	00 0003	13	03 11	29
	Total		Factor		Unit Price		Quantity					
	\$384.07	-	0.8798	X	2.99	Х	146.00	Installation				
\$268.			work	ood Formv	Foundation W	ootings	Continuous	SF	00 0003	13	03 11	30
	Total		Facto		Unit Price		Quantity					
	\$268.32		0.8798	×	2.99	х	102.00	Installation				
\$94				pansion J	Felt Asphalt Ex	molded	1/2" x 4" Pre	LF	00 0012	16	03 1	31
	Total \$94.31		Facto 0.8798		Unit Price		Quantity					
	υσ 4 .υ1		0.8798	×	1.34	X	80.00	Installation				

Job Order Number: 10415

ription	
	\$1,339.57
le 40 Reinforcing Steel, Footings And Slabs, #7-Up	Fotal
tuantity Unit Price 7 actor 9 (1987)	
1.10 X 1,504.17 X	\$64.79
xy Coated Straight Dowels, 5/8" x 24" Long, #5 Rebar	Total
Quantity Office 7600 10 0 8798 = \$6	4.79
28.00 × 2.00	\$89.74
5 x #10, 21#/CSF, Welded Wire Reinforcement In Slabs, (W 1.4 x W	
Quantity Unit Price Factor	Total 39.74
300.00 × 0.34 × 0.8798 = \$8	
r Continuous Footings, Crane And Bucket, 3000 PSI Concrete	\$7,134.09
Quantity Unit Price Factor	Total 34.09
66.00 x 122.86 x 0.8798 = \$7,13	
High Early Strength, Type 3 ASTM C150, Add	\$502.28
Quantity Unit Price Factor	Total 02.28
66.00 x 8.65 x 0.8798 = \$50	
ur Grade Beam, Regular, Concrete Pump, 3000 PSI Concrete	\$807.52
Quantity Unit Price Factor	Total
8.00 x 114.73 x 0.8798 = \$8	07.52
r High Early Strength, Type 3 ASTM C150, Add	\$66.02
Quantity Unit Price Factor	Total
8.00 X 9.38 X 0.0750	666.02
ur Slab On Grade, Up To 6", Concrete Pump, 3000 PSI Concrete	\$5,794.01
Quantity Unit Price Factor	Total 794.01
$56.00 \times 117.60 \times 0.8798 = $5,7$	
r High Early Strength, Type 3 ASTM C150, Add	\$462.14
Quantity Unit Price Factor 9.38 x 0.8798 = \$4	Total 462.14
56.00 X 9.38 X 0.0130	
and Mix And Place Concrete Note: For use where conventional	\$1,572.95
uipment access is limited or when directed by the owner. Quantity Unit Price Factor	Total
145.00 x 12.33 x 0.8798 = \$1,	572.95
perimeter of louver	
	\$131.97
oncrete Floor Finishes, Steel Trowel Overstity Unit Price Factor	Total
Quantity 01117 1100	131.97
300.00 ^ 0.00	\$556.2
lorizontal Truss Joint Reinforcing In 8" Wall, Use 6" Wide Truss For 8"	
Vall Quantity Unit Price Factor	Total
20.00 × 31.61 × 0.8798 =	\$556.21
" x 14 Gauge x 5-1/2" Dovetail Anchor	\$5.8
Quantity Unit Price Factor	Total
8.00 x 0.83 x 0.8798 =	\$5.84
Exterior Building Scaffolding, 1 To 5 Story, Tubular Steel, Based On 1	\$1,479.1
Jse/Month Factor	Total
Quantity 0.8798 = \$	1,479.17
14.00 X 120.09 X 0.0100	

Job Order Number: 10415

Job Order Title:

Total	Line						Description	er UOM	Modifi		ber	Nun	I CSI	ecord
									Input	ategory I	Ca	- N	ory	ateg
,491.26	\$1	Init (Sand	Masonry U	Concrete	egular Back-up	1 cm) R	8" x 16" x 8" (2	SF		13 0006	23	22	04	46
	Total		Factor		Unit Price		Aggregate) Quantity							
	\$1,491.26	=	0.8798	Χ .	5.65	x	300.00	Installation						
\$536.68	k	Block (Block	m Or Lintel	Bond Bea	egular Weight	1 cm) F	8" x 16" x 8" (2	LF		13 0061	 23	22	04	47
	Total		Factor				Only)			, , , , , , , , , , , , , , , , , , , ,			٠,	77
	\$536.68	=	0.8798	x	Unit Price 6.10		Quantity	Installation						
\$273.97						X	100.00							
Ψ210.01	Total		Factor	nor Expar		x 10" Lo	5/8" Diameter	EA		00 0132	23	05	05	48
	\$273.97	=	0.8798	X	Unit Price 15.57	V	Quantity	Installation						
\$501.31						X	20.00	motanation						
	Total		Factor			Steel, A	For Stainless		0043	00 0132	23	05	05	49
	\$501.31	=	0.8798	x	Unit Price 28.49	v	Quantity	Installation						
\$412.19						Х	20.00	mstanation						
Ψ412.10	Total		Factor	d Anchor		ong Ch	1/2" x 5-1/2" L	EA		00 0213	23	05	05	50
	\$412.19	=	0.8798	x	Unit Price 9.37	.,	Quantity	Installation						
\$329.05			0.07.00			X	50.00	Installation						
\$329.00	Total			<u> </u>	Masonry Screv	Tapcor	3/16" x 1-1/4"	EA		00 0235	23	05	05	51
	\$329.05	_	Factor 0.8798		Unit Price		Quantity	ltallation						
COC 4 71				X	3.74	X	100.00	Installation						
\$264.7	7-4-1	oit —————		Strength S	g, A325 High	x 2" Lo	5/8" Diameter	EA		00 0270	23	05	05	52
	Total \$264.78	=	Factor		Unit Price		Quantity							
	\$204.70		0.8798	X	6.27	X	48.00	Installation						
\$330.6				Strength S	ng, A325 High	x 4" Lc	5/8" Diameter	EA		00 0271	23	05	05	53
	Total \$330.66		Factor		Unit Price		Quantity							
	\$330.00		0.8798	X	7.83	Х	48.00	Installation						
\$351.5				hreaded F	ainless Steel T	r, 304 S	1/2" Diamete	LF		00 0312	23	05	05	54
	Total		Factor		Unit Price		Quantity							
	\$351.57		0.8798	×	6.66	Х	60.00	Installation						
\$2,039.7		strut Channe	s Steel Uni	, Stainles	ligh, 12 Gauge	(1-5/8"	1-5/8" Wide >	LF		00 0348	23	5 05	0:	55
	Total		Factor		Unit Price		Quantity							
	\$2,039.73		0.8798	×	19.32	Х	120.00	Installation						
\$285.9			nnel	strut Cha	Spring For Un	Nut Witl	1/4-20 Lock	EA		00 0353	23	5 05	0	56
	Total		Factor		Unit Price		Quantity							
	\$285.94		0.8798	X	3.25	X	100.00	Installation						
\$220.8			innel	istrut Cha	Spring For Un	Nut Wit	5/8-11 Lock	EA		00 0356	23	5 05	0	57
	Total		Factor		Unit Price		Quantity						_	0,
	\$220.86	=	0.8798	Х	5.23	X	48.00	Installation						
\$109.				lex Nut	tainless Steel I	er, 304	1/2" Diamete	EA		3 00 0395	22	5 04		 58
	Total		Facto		Unit Price		Quantity					J 0.	·	50
	\$109.10	3 = 	0.8798	x	0.62	x		Installation						
\$19.					eel, Add	nless S	For 316 Stai	8	005	3 00 0395	. 22)5 O		
	Total	or	Facto		Unit Price		Quantity		, 000	. 00 0393	, 23	ال زر	, (59
	\$19.36	3. =	0.8798	X	0.11			Installation						

Job Order Number: 10415

Job Order Title:

Line 1		 				Description	er UOM	Modifie		ber	Num	CSI	ecord
								nput	tegory I	Ca	- No	ory	ateg
\$		asher	eel Flat W)4 Stainless St	neter, 3	1/2" Inside Diar	EA		0 0428	3 (05 2	05	60
Total \$79.18	<u>-</u>	Factor		Unit Price		Quantity							
		0.8798 =	X	0.45	Х	200.00	Installation						
Tatal					ss Stee	For 316 Stainle		0059	00 0428	23 (05 2	05	61
Total \$8.80	=	Factor = 0.8798 =	v	Unit Price		Quantity	la stallation						
\$6,0		0.0730	<u> </u>	0.05	X	200.00	Installation						
Total		Factor	Jp		Fillet W	1/4" Horizontal	LF		00 0139	23	12	05	62
\$6,058.30	=	0.8798 =	x	Unit Price 6.26	x	Quantity	Installation						
\$1,2						1,100.00	nistanation -						
Total		Factor		Unit Price	Steel VV	For Stainless S		8000	00 0139	23	12	05	63
\$1,288.03	=	0.8798	x	1.83	x	Quantity 800.00	Installation						
\$4,								 					
Total		Factor		Unit Price	ingle iro	2" x 2" x 1/4" A	LF		00 0385	23	12	05	64
\$4,124.50	=	0.8798	x	5.86	x	Quantity 800.00	Installation						
\$6,						For 316 Stain	,						
Total		Factor		Unit Price	ess 5161	Quantity		0039	00 0385	23	12	05	65
\$6,234.26	=	0.8798	x	11.81	x	600.00	Installation						
\$		Fiber Core	Rope IPS.	s Bright Wire	6y7 Cla	1/2" Diameter	LF		00 0011	16	15	ΛF	
Total		Factor		Unit Price		Quantity	LI		00 0011	10	10	υɔ	66
\$263.94	=	0.8798	x	1.50	X	200.00	Installation						
						wn	Chiller tie do						
\$		le	Turnbuck	v, Forged Stee	And la	3/4" v 6" law	EA		00.0291	16	15		
Total		Factor		Unit Price	711000	Quantity	·LA		00 0281	10	15	US	67
\$685.26	=	0.8798	x	48.68	X	16.00	Installation						
						wn	chiller tie do						
	olt	ter Eve Bo	Eve Diame	1-1/2" Inside	Throad	3/4" Diameter			00 0005	40			
Total		Factor		Unit Price	Tilleau	Quantity	EA		00 0305	16	15	05	68
\$535.90	=	0.8798	x	38.07	х	16.00	Installation						
							Chiller tie do						
	acks And	or With Tra	" On Cont	44.0 16								<u></u>	
	20K3 ATIG	ei, vviin ira	On Cent	, 14 Gauge, 16	ing Stud	4" Load Bear Runners	SF		00 0016	00	5 41	0	69
Total		Factor		Unit Price		Quantity							
\$680.23		0.8798	X	3.79	Х	204.00	Installation						
			12', Add	Where Height:	lication	For Wall App	,	0167	00 0016	00	5 41	0	70
Total \$161.53		Factor		Unit Price		Quantity							
		0.8798	X	0.90	X	204.00	Installation						
ор	cent Firestop	th Intumeso	Sealed Wi	h 2-1/2" Pipe,	Hole Wi		EA		00 0041	13	7 84	0	71
Total		Factor		Unit Price		Sealant Quantity							
\$68.66	-=	0.8798	х	78.04	x	-	Installation						
		44 8")	(Hilti CP6	top Pipe Collar	ent Fires	8" Intumesco	EA		00 0066	. 13	7 84	, ,	72
Total	Γ	Factor		Unit Price		Quantity				, .	., 0-		1 2
\$252.68		0.8798					Installation						

Job Order Number: 10415

Record	CSI N	lum	ber		Modifier UOM	Description						li	ne Total
Categ	ory -	No	C C	ategory	Input							,	
73	07 84	4 4	13	00 0015	CLF	1" x 1" Joint, 1	ntumes	cent Firestop S	ealant				\$2,420.58
						Quantity		Unit Price		Factor		Total	
					Installation	2.00	Х	1,375.64	х	0.8798	= 	\$2,420.58	
74	08 9	1 .	19	00 0003	SF	Fixed Orname	ntal Lou	ver, >10 SF Ind	cluding F	Frame, Painte	d Steel		\$1,213.70
						Quantity		Unit Price		Factor		Total	
					Installation	32.00	X	43.11	Х	0.8798	=	\$1,213.70	
					2 louvers								
75	09 0	1 :	20	00 0013	SF	Cut And Patcl	Hole T	o Match Existin	g, To 10) SF			\$2,828.91
, 0		•				Quantity		Unit Price		Factor		Total	
					Installation	460.00	X	6.99	X	0.8798	=	\$2,828.91	
76	09 2	3	13	00 0006	LF	Corner Bead,	Vinyl						\$137.78
. 0						Quantity		Unit Price		Factor		Total	
					Installation	108.00	x	1.45	X	0.8798	=	\$137.78	
77	09 2	Δ.	23	00 0002	SF	Three Coat T	oweled	Stucco, Scratc	h/Brown	/Finish Note: I	Excludes lath		\$4,060.28
• •	00 2					and felt. Inter		terior, one side.				Total	
					Installation	Quantity		Unit Price	x	Factor 0.8798	=	\$4,060.28	
						1,300.00	х	3.55				V 1,0001	0200 14
78	09 2	28	13	00 0003	SF	1/2" Cementii	ious Ba	icker Units For I	nstallati			Takal	\$366.14
					l-stallation	Quantity		Unit Price		Factor 0.8798	=	Total \$366.14	
					Installation	204.00	X	2.04	X			Ψ300.14	
79	09 9	91	13	00 0338	LF	Paint Conduit	, Steel	Pipe 2" To 3-1/2	2" Diame		t Paint		\$294.73
						Quantity		Unit Price		Factor	_	Total \$294.73	
					Installation	500.00	X	0.67	Х	0.8798		\$294.73	
80	09 9	91	13	00 0340	LF	Paint Steel P	ipes 6"	To 8" Diameter,	One Co	oat Paint			\$163.64
						Quantity		Unit Price		Factor	_	Total \$163.64	
					Installation	200.00	X	0.93	X	0.8798		\$103.04	
81	09	91	13	00 0343	LF	Paint Condui	t, Steel	Pipe 2" To 3-1/2	2" Diam		ts		\$585.07
						Quantity		Unit Price		Factor		Total	
					Installation	500.00	Х	1.33	X	0.8798		\$585.07	
82	09	91	13	00 0345	LF		ipes 6"	To 8" Diameter	, Two C				\$318.49
						Quantity		Unit Price		Factor	=	Total \$318.49	
					Installation	200.00	X	1.81	X	0.8798		\$\$10.48	
83	09	91	23	00 0058	SF	Paint Interior	Plaste	r/Drywall, 1 Coa	t Primer	, Brush			\$554.27
						Quantity		Unit Price		Factor		Tota	
					Installation	1,800.00	Х	0.35	Х	0.8798		\$554.27	
84	09	91	23	00 0060	SF	Paint Interio	Plaste	r/Drywall, 2 Coa	ts Paint				\$1,061.04
						Quantity		Unit Price		Factor		Tota	
					Installation	1,800.00	Х	0.67	Х	0.8798		\$1,061.04	·
85	09	91	23	3 00 0082	SF	Paint Interio	r Galvaı	nized Surfaces,	One Co	at Primer, Bru	sh/Roller Wo		\$1,309.14
						Quantity		Unit Price		Factor		Tota	
					Installation	4,800.00	X	0.31	X	0.8798		\$1,309.14	
86	09	91	23	3 00 0084	s SF	Paint Interio	r Galva	nized Surfaces,	Two Co				\$2,829.4
						Quantity		Unit Price		Factor		Tota	
					Installation	4,800.00	x	0.67	Х	0.8798	=	\$2,829.4	4

Job Order Number: 10415 Job Order Title: WUD S

1/3	ry -	Nο	$\overline{}$										
87 2		.10	C	ategory	Input								
	22 11	1 1	6 (00 0185	LF	3/4" Inside Diar	neter (19 mm) Copper	Pipe/T	ubing Type L			\$371.72
						Quantity		Unit Price		Factor		Total	
					Installation	130.00	X	3.25	Х	0.8798		\$371.72	
88 2	22 1	1 1	6	00 0186	LF	1" Inside Diame	eter (2	5 mm) Copper P	ipe/Tub	oing Type L		\$	\$1,113.83
						Quantity		Unit Price		Factor		Total	
					Installation	300.00	Χ	4.22	X	0.8798	=	\$1,113.83	
89 2	22 1	1 1	6	00 0210	EA	1" 90 Degree E	lbow,	Copper					\$461.24
						Quantity		Unit Price		Factor		Total	
					Installation	25.00	X	20.97	Х	0.8798	=	\$461.24	
90	22 1	1 1	6	00 0243	EA	3/4" Copper Te	e - Str	aight Sweat					\$43.85
						Quantity		Unit Price		Factor		Total	
					Installation	2.00	x	24.92	X	0.8798	=	\$43.85	
91	22 1	1 1	16	00 0270	EA	1" Straight Cop	pper Co	pupling					\$137.88
31	22 1	•		00 0210		Quantity		Unit Price		Factor		Total	
					Installation	8.00	x	19.59	X	0.8798	=	\$137.88	
92	22 1	1 .	16	00 0298	EA	3/4" Copper Ad	danter	Male					\$40.78
92	22 1	•	10	00 0230	LA	Quantity		Unit Price		Factor		Total	
					Installation	3.00	х	15.45	x	0.8798	=	\$40.78	
	22.4		1.0	00.0000	EA	3/4" Copper A		Male					\$40.78
93	22 1	1	סו	00 0298	EA	Quantity	uapter	Unit Price		Factor		Total	
					Installation	3.00	x	15.45	x	0.8798	=	\$40.78	
			1.0	00 0299	EA	1" Copper Ada	nter N	//ale					\$440.25
94	22	1 1	10	00 0299	LA	Quantity	apici, i	Unit Price		Factor		Total	
					Installation	24.00	х	20.85	x	0.8798	=	\$440.25	
		1.4	4.0	00 0000				Eomolo					\$190.65
95	22	11	10	00 0308	EA	1" Copper Ada	apter, r	Unit Price		Factor		Total	
					Installation	10.00	x	21.67	x	0.8798	=	\$190.65	
													\$228.78
96	22	11	16	00 0308	EA	1" Copper Ada	apter, i	-emale Unit Price		Factor		Total	Ψ220.70
					Installation	Quantity 12.00	x	21.67	х	0.8798	=	\$228.78	
													\$208.83
97	22	11	16	00 0317	EA		union, a	Straight, Copper Unit Price	10 00	Factor		Total	Ψ200.00
					Installation	Quantity 12.00	x	19.78	х	0.8798		\$208.83	
											, <u>.</u>		\$155.59
98	22	11	16	00 0351	EA	Quantity	are 3/4	1" (19 mm) Pipe Unit Price		Factor		Total	\$100.00
					Installation	45.00	x	3.93	x	0.8798		\$155.59	
													\$381.96
99	22	11	16	00 0352	EA	· · · · · · · · · · · · · · · · · · ·	are 1"	(25 mm) Pipe Unit Price		Factor		Total	
					Installation	Quantity 98.00	x	4.43	х	0.8798		\$381.96	
										 			\$86.8
100	22	11	19	00 0075	EA	•	n Pres	sure Type Vacu	um Bre	aker Facto		Total	
					Installation	Quantity 1.00	х	Unit Price 98.75	×	0.8798		\$86.88	

Job Order Number: 10415 Job Order Title: WUD S WUD SRWRF - Bldg A - HVAC engineering

e Total	Lin						Description	Modifier UOM		ıber	31 Nur	cord (
			والمتحجور					nput	ategory li	C C	y - N	tego
\$300.84		er Turn	Nith Quarte	Assembly \	sure Zone	educed	1" Threaded Re	EA	00 0225	19 (11	01
	Total		Factor		r series) nit Price	ts 009M	Shut-offs (Watt					
	\$300.84	:	0.8798 =	x	341.94	x	Quantity 1.00	Installation				
				,	541.54	^		Back Flow pre				
C40.61		405"						· · · · · · · · · · · · · · · · · · ·				
\$18.63	Total	s, 125#	rewed End Factor	ve With Sc		ronze G	3/4" Faucet, Br	EA	00 0409	19	2 11	02
	\$18.63	=	0.8798 =	x	Init Price 21.17	x	Quantity 1.00	Installation				
1,252.83	\$			ank			80 Gallon Galv	EA	13 0002	22	. 40	
	Total		Factor		Init Price	/aiiizeu		EA	13 0002	23	2 12	03
	\$1,252.83	=	0.8798 =	x	1,423.99	x	Quantity	Installation				
			0.0.00	^	1,423.33	^	1.00	Exp. tank				
								Ехр. гапк				
\$273.3		lini Vent	in Vent, M	tomatic Dra	Or PVC Au	And 2" A	1-1/4", 1-1/2" /	EA	36 0002	19	2 13	104
	Total		Factor		Jnit Price		Quantity					
	\$273.34		0.8798	х	77.67	Х	4.00	Installation				
\$377.4			r Pipe	3" Diamete	, 2-1/2" To	lush/Tes	Disinfection/FI	LF	00 0073	20	3 01	105
	Total		Factor		Jnit Price		Quantity					
	\$377.43		0.8798	Х	1.43	Х	300.00	Installation				
\$156.4				er Pipe	, 6" Diamet	lush/Tes	Disinfection/FI	LF	00 0075	20	3 01	106
	Total		Factor		Jnit Price		Quantity					
	\$156.43	=	0.8798	x	2.54	x	70.00	Installation				
\$327.1			el	ainless Ste	IPT, 304 St	" Long.	Thermowell, 8	EA	00 0022	19	3 05	107
	Total		Factor		Jnit Price	Long,	Quantity	L/ (00 0022	13	5 05	101
	\$327.14	=	0.8798	x	92.96	X	4.00	Installation				
\$175.1		0-100 PSI	60 PSI Or	el Case 0-	Gauge Ste	ial Pres	4" Diameter D	EA	00 0026	19	3 05	108
	Total		Factor		Unit Price		Quantity		00 0020		.0 00	,00
	\$175.12	=	0.8798	x	39.81	Х	5.00	Installation				
\$45.4				hread	Male Pipe T	Cock 1	Brass Gauge	EA	00 0041	19	3 05	109
	Total	-	Factor		Unit Price		Quantity	2, (00 0041		.0 00	703
	\$45.44	=	0.8798	x	10.33	x	5.00	Installation				
\$49.8		···		H - N-	"	Siphon	Pigtail, Steam	EA	00 0042	19	23 05	110
	Total		Factor		Unit Price		Quantity	<u>-</u>	00 0042	13	.5 05	110
	\$49.88	=	0.8798	X	11.34	Х	5.00	Installation				
\$851.3							Thread-O-Let	EA	00 0045	10	22 06	111
	Total		Factor		Unit Price	1, 1/4 31	Quantity	EA	00 0045	19	23 05	111
	\$851.36	=	0.8798	x	34.56	x	28.00	Installation				
\$256.3		Or	re Gauge	hle Pressi			Pete's Plug (\	EA	00.0050	10	22 06	440
			;	ic Systems	cing Hydror	r) For Ba	Thermometer	EA	00 0050	19	23 05	112
	Total	_	Factor		Unit Price		Quantity					
	\$256.34	=	0.8798	×	36.42	X	8.00	Installation				
\$716.				ded, 800#	steel, Threa	4" Forg	Ball Valve, 1/	EA	00 0054	19	23 05	113
	Total		Factor		Unit Price		Quantity					
	\$716.76	= 	0.8798	×	45.26	X	18.00	Installation				
\$968.				Brass	, Threaded	ri Flowm	2 1/2" Ventur	EA	00 0083	19	23 05	114
	Total		Factor		Unit Price		Quantity					
	\$968.48	=	0.8798	Х	275.20	x	4.00	Installation				

Job Order Number: 10415

Record	I CSI Nu	mbe	r .	Modifie	er UOM	Description						LII	ne Total
Categ	ory - N	lo C	ategory	Input									
115	23 05	23	00 0073		EA .	3/4" Ball Valve	, Brass I	Body, Threade	d Or Swe	ated, 125#,	Regular Po	rt	\$222.94
						Quantity		Unit Price		Factor	.,	Total	
					Installation	10.00	X	25.34	x	0.8798	<u> </u>	\$222.94	
116	23 05	23	00 0074		EA	1" Ball Valve,	Brass Bo	ody, Threaded	Or Sweat	ed, 125#, R	egular Port		\$112.65
						Quantity		Unit Price		Factor		Total	
					Installation	4.00	X	32.01	Х	0.8798	=	\$112.65	
117	23 05	29	00 0009		ΕA	6" Steel Clevis	Hanger	Type 1					\$610.93
						Quantity		Unit Price		Factor		Total	
					Installation	40.00	X	17.36	x	0.8798	=	\$610.93	
118	23 05	29	00 0009	0505	···	For Work In R	estricted	Working Space	ce, Add				\$176.84
						Quantity		Unit Price		Factor		Total	
					Installation	50.00	X	4.02	X	0.8798	=	\$176.84	
119	23 05	29	00 0010		EA	8" Steel Clevis	Hange	r Type 1					\$162.80
	20 00		35 55 10		*	Quantity		Unit Price		Factor		Total	
					Installation	8.00	X	23,13	x	0.8798	=	\$162.80	
120	23.05	29	00 0010	0505		For Work In B	estricted	d Working Spa	ce. Add				\$106.21
120	23 03	23	00 0010	0303		Quantity		Unit Price		Factor		Total	
					Installation	24.00	X	5.03	x	0.8798	=	\$106.21	
121	22.06	20	00 0129		EA	Un to 24" High	n Δdinet	able Pipe Stan	d With Sa	addle For 6"	Pipe		\$1,597.44
121	23 03	29	00 0129		LA	Quantity	- Aujusti	Unit Price		Factor		Total	
					Installation	8.00	х	226.96	x	0.8798	=	\$1,597.44	
122	22 05	20	00 0246		EA	1/2" - 13, Car	hon Stee	al Hey Nut			· · · · · · · · · · · · · · · · · · ·		\$59.83
122	23 03	23	00 0240		LA	Quantity		Unit Price		Factor		Total	
					Installation	200.00	x	0.34	x	0.8798	m	\$59.83	
123	23 05	20	00 0246	0095		For Galvanize	hhA he						\$5.28
125	25 00	23	00 0240	0033		Quantity		Unit Price		Factor		Total	
					Installation	200.00	x	0.03	x	0.8798	=	\$5.28	
124	23 06	20	00 0246	0505		-1,,	Pestricte	d Working Spa	ce Add				\$12.32
124	25 00	23	00 0240	0303		Quantity		Unit Price		Factor		Total	
					Installation	200.00	х	0.07	×	0.8798		\$12.32	
125	23 04	. 20	00 0246		EA	1/2" - 13, Cai	thon Ste	el Hey Nut					\$29.9
123	25 0	, 23	00 0240		LA	Quantity		Unit Price		Factor	•	Total	<u>-</u>
					Installation	100.00	x	0.34	×	0.8798		\$29.91	
126	22 0	- 20	9 00 0246	0095		For Galvaniz	ed Add						\$2.6
126	23 0:) 2:	9 00 0246	0093		Quantity		Unit Price		Factor		Total	
					Installation	100.00	x	0.03	x	0.8798		\$2.64	
	22.0		0.00005		EA			39 (For 1-1/2"	Insulatio	n)			\$380.5
127	23 0) Z	9 00 0395		EA	Quantity	ile, Type	Unit Price	1.1001010	Facto	<u> </u>	Total	
					Installation	24.00	x	18.02	x	0.8798		\$380.50	
	22.2	E ^	0 00 0407					For Pipe Inclu				lamp	\$3,943.7
128	23 0	o 2	9 00 0467		EA	Quantity	SCHINIA	Unit Price		Facto		Total	
					Installation	68.00	x	65.92	x	0.8798		\$3,943.76	
			0. 00.0070					bbed Neopren		n Pad			\$66.1
129	23.0	5 4	8 00 0040		EA	4" x 4", 3/8" Quantity	HICK RI	Unit Price		Facto	r	Total	
					Installation	16.00	x	4.70		0.8798		\$66.16	

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Record	CSI Numb	oer		Modifier UOM	Description					LIII	e Total
Categ	ory - No	Ci	ategory	Input							
130	23 05 48	8 (00 0051	EA	2-1/2" Diamete Bronze Hose V Threaded Nipp	Vith Hex		onnect	ion, For Vibration Isolation,		\$311.70
					Quantity		Unit Price		Factor	Total	
				Installation	2.00	x	177.14	X	0.8798 =	\$311.70	
131	23 05 4	8	00 0135	EA	2-1/2" Or 3" Di Stainless Stee Braided Carbo Connection, W Quantity	l Over n Steel	x 24" Long, Fle Unit Price	xible Ho	ose Connectors, Braided	Total	\$456.09
				Installation	2.00	X	259.20	x	0.8798 =	\$456.09	
132	23 05 5	3	00 0022	EA		Diameter	Press-Sensitiv		er Stick-on With Arrow Tap		\$132.23
					Quantity		Unit Price		Factor	Total	
				Installation	30.00	Х	5.01	Х	0.8798 =	\$132.23	
133	23 05 5	53	00 0023	EA	Over Insulation			re Mark	er Stick-on With Arrow Tap	e Total	\$73.06
				Installation	Quantity		Unit Price	.,	Factor 0.8798 =	\$73.06	
				Installation	16.00	X	5,19	X		Ψ73.00	
134	23 05 5	53	00 0024	EA	Over Insulation			Marker	r Stick-on With Arrow Tape	Total	\$58.59
				Installation	Quantity		Unit Price 5.55	x	Factor 0.8798 =	\$58.59	
135	23 05 5	53	00 0026	EA					arker Stick-on With Arrow		\$64.8
					Tape Over In: Quantity	sulation	Unit Price		Factor	Total	
				Installation	12.00	×	6.14	х	0.8798 =	\$64.82	
136	23 05	53	00 0027	EA			Press-Sensitive	Marke	r Stick-on With Arrow Tape		\$98.9
					Quantity		Unit Price		Factor	Total	
				Installation	18.00	Х	6.25	Х	0.8798 =	\$98.98	
137	23 05	53	00 0041	EA	1-1/2" Diame	ter Ident	ification Tag, P	lastic			\$242.3
					Quantity		Unit Price		Factor	Total	
				Installation	60.00	X	4.59	Х	0.8798 =	\$242.30	
138	23 05	93	00 0004	EA	Balancing In-	Line Far	า				\$452.6
. • •		_			Quantity		Unit Price		Factor	Total	
				Installation	3.00	X	171.51	х	0.8798 =	\$452.68	
139	23 05	93	00 0010	EA	Balancing Ce	entral A/0	C Station				\$472.5
.00				 -	Quantity		Unit Price		Factor	Total	
				Installation	2.00	x	268.53	X	0.8798 =	\$472.51	
140	23 05	93	00 0020	EA	Balancing H' Exhaust, Re	VAC Duo	ct System, Ceil nd Diffuser	ing Hei	ght > 12' Supply, Return,		\$41.9
					Quantity		Unit Price		Factor	Total	
				Installation	1.00	Х	47.64	X	0.8798 =	\$41.91	
141	23 05	93	3 00 0021	EA	Register And		r	or Heigh	nt Supply, Return, Exhaust,	Total	\$2,965.
				Installation	Quantity		Unit Price	v	Factor 0.8798 =	\$2,965.00	
				installation	136.00	x	24.78	x	0.0730	,	
142	23 05	93	3 00 0022	EA EA	Balance Var	iable Air	Volume Box				\$23.
					Quantity		Unit Price		Factor	Total \$23.61	
				Installation	1.00	X	26.84	Х	0.8798 =	\$23.01	

Job Order Number: 10415

Job Order Title:

Total	Line							Description	UOM	Modifier		nber	SI Nu	Record
										nput	ategory l	o Ca	ry - N	Catego
\$71.90	Takal						ers	Balance Dampe	EA		00 0029	93 (23 05	143
	Total \$71.90		Factor 0.8798 =	,		Unit Pri		Quantity	ataliation	l				
\$693.86			0.0730	X (X	12.00	stallation	in:				
	Total		Factor				ıg, Coc	Water Balancin	EA		00 0043	93	23 05	144
	\$693.86	:	0.8798	х (Unit Pri 16.	x	Quantity	stallation	In				
\$560.66								47.00						
	Total		Factor	nameter Pip		Unit Pr	st, 0-10	Hydrostatic Tes	EA		00 0083	93	23 05	145
	\$560.66	=	0.8798	x		318.	x	Quantity 2.00	stallation	Ir				
\$730.69			Pine					Hydrostatic Te						
	Total		Factor	Diameter		Unit Pr	51, 0-10	Quantity	EA		8800 00	93	23 05	146
	\$730.69	Ξ	0.8798	x		415	х	2.00	stallation	lr				
1,782.28	\$1 ⁻	Density	Foil. 1.5# [Reinforced F		s Blanket \	ıc Glas	2" Thick Fibrou	SF		00 0013	12	00.07	4 4 7
	Total		Factor			Unit Pr	13 Olas	Quantity	Sr.		00 00 13	13	23 07	147
	\$11,782.28	= \$	0.8798	x			x	4,800.00	nstallation	Ir				
2,468.17	\$1:		sulation	erglass Insu	ck Fibe	1-1/2" Thi	er Pine	2-1/2" Diamete	LF		00 0036	10	23 07	148
	Total		Factor			Unit Pr		Quantity	υ,		00 0000	10	20 07	140
	\$10,469.27	•	0.8798	x	.38	8	x	1,420.00	nstallation	lr.				
	\$1,998.91		0.8798	X	.60	1	x	1,420.00	Demolition	. [
1,486.69	- \$			ket, Add	as Jack	Vith Canv	ilicate \	For Calcium S		0165	00 0036	19	23 07	149
	Total		Factor			Unit P		Quantity						
	\$1,486.69	Z	0.8798	X	.19	1	x	1,420.00	nstallation	. 1				
6,142.68	\$			ith Bands	ket Wi	ulation Jac	um Ins	0.016" Alumin	SF		00 0141	19	23 07	150
	Total		Factor		rice	Unit P		Quantity						
	\$6,142.68	=	0.8798	X	.55	5	X	1,258.00	nstallation].				
\$399.08	Total	Note: Priced		Design And			n Engir	EMCS Systen per point.	PNT		00 0018	23	23 09	151
	\$399.08	=	Factor 0.8798			Unit P		Quantity	nstallation	ı				
T 000 19				X	5.20		- X	28.00	IIStaliation					
\$5,986.18	2	RS-485 port, 2 with other olication. Unit of volt power Pack C-SP-5XX)	net port, 4 Fevices). As is of the appure, and 120 ace Station on Pack (EC	MB Ethernel orts 126 dev racteristics le enclosure Jser Interfac ivity Station	0/100 M supportion char nuntable plus Us nnective	3 Flash, 10 forks port (mited by the el, wall mo B-545-AX erprise Co	/ 32 Mi 1 LonW city is li th a ste les WE and En	Easy Pack La 128 MB RAM RS-232 port, JACEs, capac is supplied wir supply. Includ (UI-SP-5XX) a bundled as an	EA		00 0127	23	23 09	152
	Total		Factor			Unit F	. casy	Quantity						
	\$5,986.18	======================================	0.9398	х	9.63	6,36	Х	1.00	Installation					
\$291.5		t volume sing	B2011.	ler Note: Fo	neywe	AHUs. Ho	OO (Tri at pump	6 AI, 5 DI, 8 I zone and hea	EA		00 0165	9 23	23 0	153
	Total \$291.56	=	Factor 0.8798	v		Unit F		Quantity	Installation					
\$627.3				X Reheat Re	1.39 lectric			1.00 Fan Coil Unit W7752F2002	Installation EA		00 0172	9 23	23 0	154
	Total		Factor		Price	Unit f		Quantity						
	\$627.37		0.8798	Х	6.54	35	X	2.00	Installation					

Job Order Title:

Job Order Number: 10415
Job Order Title: WUD SRWRF - Bldg A - HVAC engineering

Line Total						Description	Modifier UOM	r	ımbe	CSI Nu	Record
							nput	ategory l	No C	ory - N	Catego
\$3,288.96			ol HVA(nitor And Contr 111.		Building Mana Honeywell W7	EA	00 0175	23	23 09	155
Total \$3,288.96		Factor 0.8798	x	Unit Price		Quantity	Installation				
\$3,055.58				747.66	X	5.00					
Total		Factor	neywell	ensor Note: Ho	CO2 S		EA	00 0287	23	23 09	156
\$3,055.58		0.8798	x	Unit Price 434.13	x	Quantity 8.00	Installation				
\$351.18	ntrol, Spring	Floating Contro	DC Or F	-20mA, 0-10 VI d Damper Actua	VAC. 4	175 IN-I B 24	EA	00 0316	23	23 09	157
iotai	or	Factor		Unit Price	Ocupie	Quantity					
\$351.18	8 =	0.8798	Х	399.16	X	1.00	Installation				
	sitive Positione		ctuator \	09E1018.		Note: Honeyw	EA	00 0323	23	23 09	158
Total \$2,634.72		Factor 0.8798		Unit Price		Quantity	1 tallatian				
			X	230.36	Х	13.00	Installation				
Jnit \$1,140.62 Total	nventional Unit	Pump Or Conve	Heat P	neywell TH832	ogramm Note: H	Thermostat.	EA	00 0436	23	23 09	159
\$1,140.62		0.8798	X	Unit Price 259.29	x	Quantity	Installation				
\$3,016.83						5.00					
Total		Factor	d Sched	Pipe, Plain En Unit Price	n) Blacl		LF	23 0229	1 13	23 2	160
\$3,016.83		0.8798	x	11.43	x	Quantity 300.00	Installation				
\$1,959.67				e, Plain End Sc							
Total		Factor		Unit Price	аск Рір	Quantity	LF	23 0232	1 13	23 2	161
\$1,959.67		0.8798	x	31.82	x	70.00	Installation				
\$3,129.27	aht	andard Weight	ow. Sta	egree Weld Elb			EA	23 0247	1 13	22.2	162
Total		Factor		Unit Price	11) 50 5	Quantity	LA	23 0247	1 (3	23 2	102
\$3,129.27	98 =	0.8798	x	88.92	x	40.00	Installation				
\$427.29		lard Weight	, Standa	Full, Butt Weld	m) Tee,	2-1/2" (60 mi	EA	23 0294	1 13	23 2	163
Total	tor	Factor		Unit Price		Quantity					, , ,
\$427.29	98 =	0.8798	Х	161.89	х	3.00	Installation				
\$760.57	ht	ndard Weight	id, Stan	entric, Butt We	cer, Ec	3" x 2" Redu	EA	23 0323	21 13	23 2	164
Total		Factor		Unit Price		Quantity					
\$760.57		0.8798		108.06	X	8.00	Installation				
\$1,265.96				centric, Butt We	cer, Ec	6" x 3" Redu	EA	3 23 0327	21 1:	23 2	165
Total \$1,265.96		Factor 0.8798		Unit Price		Quantity	14-11-4:				
				359.73	X	4.00	Installation		<u>.</u>		
\$71.86 Total				, Welded, Stand			EA	3 23 0344	21 1	23 2	166
\$71.86		Facto 0,8798		Unit Price 40.84		Quantity	Installation				
\$341.61					×	2.00					
Total	ctor	Facto		d Neck Flange,			EA	3 23 0356	21 1	23	167
\$341.61	798 =			Unit Price 97.07		Quantity 4.00	Installation				
\$1,675.39											
Total	ictor	Facto		-On Flange, 15 Unit Price		2-1/2" (60 n Quantity	EA	3 23 0370	21 1	23	168
\$1,675.39	798 =			68.01		28.00	Installation				

Job Order Number: 10415

ne Total	Li						Description	· UOM	Modifier	·	nber	CSI Nur	Record
									nput	ategory	o C	ry - N	Categ
\$251.48				je Steel	Let, 300# Forg	hread-C	1/2" (12 mm) 1	EA		23 0397	13	23 21	169
	Total		Factor		Unit Price		Quantity						
	\$251.48	=	0.8798	Х	35.73	Х	8.00	nstallation	In				
\$299.48				ge Steel	Let, 300# Forg	hread-C	3/4" (19 mm) T	EA		23 0398	13	23 21	170
	Total		Factor		Unit Price		Quantity						
	\$299.48	= .	0.8798	x	42.55	X	8.00	nstallation	In				
657.33		Pipe	Black Steel F	60 mm) B	elding 2-1/2" (re For V	Cut And Prepa	EA		23 0449	13	23 21	171
	Total		Factor		Unit Price		Quantity						
	\$1,657.33	=	0.8798	x	11.28	x	167.00	nstallation	lr				
\$204.96			Steel Pipe	m) Black	elding 6" (15 c	re For V	Cut And Prepa	EA		23 0452	13	23 21	172
	Total		Factor		Unit Price		Quantity			20 0 .02			
	\$204.96	=	0.8798	x	14.56	X	16.00	nstallation	lr				
51,944.06		d Stool	tric Flanco	Concort	 			ΓΛ		22.0540	12	22 24	472
, , , , , , , , , , , , , , , , , , ,	,	u Sieei,	uic, riange	, Concent	mm) Reducer		3" x 2-1/2" (76 Standard Weig	EA		23 0540	13	23 21	173
	Total		Factor		Unit Price	<u>, , , , , , , , , , , , , , , , , , , </u>	Quantity						
	\$1,944.06	=	0.8798	Х	1,104.83	X	2.00	nstallation	1r				
\$200.96					n End Fitting	pple, Pla	6" Adapted Ni	EA		23 0657	13	23 21	174
	Total		Factor		Unit Price		Quantity						
	\$200.96	=	0.8798	x	114.21	χ .	2.00	installation	li				
\$2,186.83		,		user	n Suction Diff	d Cast I	4" x 3" Flange	EA	· · · · · · · · · · · · · · · · · · ·	00 0072	16	23 21	175
	Total		Factor		Unit Price		Quantity						
	\$2,186.83	=	0.8798	X	621.40	X	4.00	Installation	li				
\$6,050.7	, 2	al Split Case	age, Vertica	Single Sta	rifugal Pump,	Iron Cer	50 GPM Cast	EA		16 0017	23	23 21	176
	Total		Factor		Unit Price		Quantity						
	\$6,050.72	=	0.8798	X	3,438.69	Χ.	2.00	Installation	li I				
\$1,123.2		0# ASME	r Mount, 30	der, Floor	Chemical Fee	ass Sho	10 Gallon Byp Code	EA		00 0018	13	23 25	177
	Total		Factor		Unit Price		Quantity						
	\$1,123.28	=	0.8798	X	1,276.74	x	1.00	Installation	I				
41,816.8	·	alvanized,	abricated, G	, Field Fa	High Pressure		Sheet Metal D Field Assemb	LB		13 0005	13	23 31	178
	Total		Factor		Unit Price		Quantity						
	\$33,933.89		0.8798	X .	5.51	X	7,000.00	Installation					
	\$7,883.01	=	0.8798	X	1.28	×	7,000.00	Demolition]				
\$1,293.3		(g), Add	kg to 2268 k	. (> 907 k	.b. To 5000 Lb	> 2000	For Quantities		0406	13 0005	13	23 31	179
	Total		Factor		Unit Price		Quantity						
	\$1,293.31	=	0.8798	x	0.21	×	7,000.00	Installation	I				
\$52.8		, UL Listed,	Construction	r, Steel C	in Fire Dampe	•	16" x 16" Fold 1-1/2 Hour Ra	EA		16 0012	13	23 33	180
	Total	_	Factor		Unit Price		Quantity	14-41-41					
	\$52.84		0.8798	Х	60.06	Х	1.00	Installation					
\$124.3		, UL Listed,		er, Steel C	in Fire Dampe		1-1/2 Hour Ra	EA		16 0015	13	23 33	181
	Total	_	Factor		Unit Price		Quantity						
	\$124.35		0.8798	X	70.67	Х	2.00	Installation			_		

Job Order Number: 10415

Job Order Title:

	Li					escription	er UOM					
								y Input	ategory l	o Ca	ory - N	Categ
\$302.02		UL Listed,	Construction,	r, Steel (tain Fire Damper	0" x 20" Folding C	EA		16 0016	13	23 33	182
	Total		Factor		Unit Price	-1/2 Hour Rated Quantity						
	\$302.02	=	0.8798	X	85.82	4.00 X	Installation					
\$87.94		UL Listed.	Construction.	r Steel	tain Fire Damper	4" x 24" Folding C	EA		16 0017	13	23 33	183
						-1/2 Hour Rated	271		10 0017	15	20 00	103
	Total \$87.94		Factor		Unit Price	Quantity						
	\$07.94	- 	0.8798	X	99.95	1.00 ×	Installation					
\$111.49		UL Listed,	Construction,	r, Steel	rtain Fire Dampe	32" x 24" Folding C	EA		16 0018	13	23 33	184
	Total		Factor		Unit Price	-1/2 Hour Rated Quantity						
	\$111.49	=	0.8798	Х	126.72	1.00 ×	Installation					
\$157.4		III Listed	Construction	r Stool		32" x 40" Folding (ГΛ		40.0040	40	00.00	405
		OL LISTOG,	Construction,	1, 31661	itain File Dampe	I-1/2 Hour Rated	EA	1	16 0019	13	23 33	185
	Total		Factor		Unit Price	Quantity						
	\$157.41	<u></u>	0.8798	Х	178.91	1.00 ×	Installation					
\$470.43		UL Listed,	Construction,	r, Steel	rtain Fire Dampe	48" x 48" Folding (1-1/2 Hour Rated	EA)	16 0020	13	23 33	186
	Total		Factor		Unit Price	Quantity						
	\$470.43	=	0.8798	Х	267.35	2.00 X	Installation				_	
49,144.6		With Integral		ssor Chi	d Scroll Compres	50 Ton Water Coo Heat Exchanger	EA)	00 0020	23	23 64	187
	Total	_	Factor		Unit Price	Quantity						
	\$49,144.63	-	0.8798	X	55,858.86	1.00 ×	Installation					
						niller	42 Ton York					
15,195.6		al / Vertical,	t-Up, Horizoni	Init, Buil	ne Air Handling U	13500 CFM Multiz Draw-Through Fai	EA	1	00 0071	13	23 73	188
	Total		Factor		Unit Price	Quantity						
					Office Free	1.00 X	Installation					
	\$15,195.62	=	0.8798	х	17,271.67	1.00						400
\$1,790.4	\$15,195.62				17,271.67	For Economizer, I	EA	1 0354	00 0071	13	23 73	189
\$1,790.4	Total	, Add	nd Damper(s) Factor		17,271.67			1 0354	00 0071	13	23 73	789
\$1,790.4		, Add	.nd Damper(s)		17,271.67 Iuding Panel, Co	For Economizer, I	EA Installation	1 0354	00 0071	13	23 73	789
\$1,790.4 \$3,379.8	Total	, Add =	nd Damper(s) Factor 0.8798	ntrols A	17,271.67 Sluding Panel, Co Unit Price 2,035.07	For Economizer, I Quantity			00 0071			190
	Total \$1,790.45 Total	, Add =	nd Damper(s) Factor 0.8798	x nd Throv	17,271.67 Sluding Panel, Co Unit Price 2,035.07	For Economizer, I Quantity 1.00 ×						
	Total \$1,790.45	, Add = Add	nd Damper(s) Factor 0.8798 waway Filters,	x nd Throv	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar	For Economizer, I Quantity 1.00 × For Combination I						
	Total \$1,790.45 Total	, Add = Add	Factor 0.8798 waway Filters, Factor 0.8798	x nd Throv	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61	For Economizer, I Quantity 1.00 × For Combination I Quantity	Installation	1 0361	00 0071	13	23 73	190
\$3,379.8	Total \$1,790.45 Total	, Add = Add	Factor 0.8798 waway Filters, Factor 0.8798	x nd Throv	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 ×	Installation	1 0361		13	23 73	
\$3,379.8	Total \$1,790.45 Total \$3,379.85	, Add = Add =	ractor 0.8798 waway Filters, Factor 0.8798	x nd Throv	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 cooling Coil, Copp	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water	Installation	1 0361	00 0071	13	23 73	190
\$3,379.8	Total \$1,790.45 Total \$3,379.85	, Add = Add =	Factor 0.8798 waway Filters, Factor 0.8798 , Add	x nd Throx x per Fins x	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 cooling Coil, Copp Unit Price 8,070.51	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity 1.00 ×	Installation Installation	1 0361 1 0368	00 0071	13	23 73	190
\$3,379.8 \$7,100.4	Total \$1,790.45 Total \$3,379.85	, Add = Add =	Factor 0.8798 waway Filters, Factor 0.8798 , Add	x nd Throx x per Fins x	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 cooling Coil, Copp Unit Price 8,070.51	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity	Installation Installation	1 0361 1 0368	00 0071	13	23 73	190
\$3,379.8 \$7,100.4	Total \$1,790.45 Total \$3,379.85 Total \$7,100.43	, Add = Add =	ractor 0.8798 waway Filters, Factor 0.8798 , Add Factor 0.8798	x nd Throx x per Fins x	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 cooling Coil, Copp Unit Price 8,070.51	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity 1.00 × For Combination I Response to the second sec	Installation Installation	1 0361 1 0368	00 0071	13	23 73	190
\$3,379.8 \$7,100.4	Total \$1,790.45 Total \$3,379.85 Total \$7,100.43	, Add = Add =	ractor 0.8798 waway Filters, Factor 0.8798 , Add Factor 0.8798 Factor	x nd Throx x per Fins x	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 ooling Coil, Copp Unit Price 8,070.51 Indent Circuits, Ac Unit Price 2,009.09	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity 1.00 × For 2 Coils, Indep Quantity 1.00 ×	Installation Installation Installation	1 0361 1 0368 1 0382	00 0071	13	23 73	190 191 192
\$3,379.8 \$7,100.4 \$1,767.6	Total \$1,790.45 Total \$3,379.85 Total \$7,100.43	, Add = Add =	ractor 0.8798 waway Filters, Factor 0.8798 , Add Factor 0.8798 Factor	x nd Throx x per Fins x	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 ooling Coil, Copp Unit Price 8,070.51 Indent Circuits, Ac Unit Price 2,009.09	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity 1.00 × For 2 Coils, Indep Quantity 1.00 × For Coil Coating I	Installation Installation Installation	1 0361 1 0368 1 0382	00 0071	13	23 73	190
\$3,379.8 \$7,100.4 \$1,767.6	Total \$1,790.45 Total \$3,379.85 Total \$7,100.43 Total \$1,767.60	, Add = Add =	ractor 0.8798 waway Filters, Factor 0.8798 , Add Factor 0.8798 Factor 0.8798	x nd Throx x per Fins x	17,271.67 Sluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 cooling Coil, Copp Unit Price 8,070.51 Indent Circuits, Ac Unit Price 2,009.09 or Each Coil, Add	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity 1.00 × For 2 Coils, Indep Quantity 1.00 ×	Installation Installation Installation	1 0361 1 0368 1 0382	00 0071	13	23 73	190 191 192
\$3,379.8 \$7,100.4 \$1,767.6	Total \$1,790.45 Total \$3,379.85 Total \$7,100.43 Total \$1,767.60	, Add = Add =	ractor 0.8798 waway Filters, Factor 0.8798 , Add Factor 0.8798 Factor 0.8798 Factor 0.8798	ontrols A x nd Throx x per Fins x dd x	17,271.67 cluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 cooling Coil, Copp Unit Price 8,070.51 cludent Circuits, Ac Unit Price 2,009.09 or Each Coil, Add Unit Price 1,057.22	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity 1.00 × For 2 Coils, Indep Quantity 1.00 × For Coil Coating I Quantity 2.00 ×	Installation Installation Installation Installation	1 0361 1 0368 1 0382 1 0383	00 0071	13	23 73 23 73 23 73	190 191 192 193
\$3,379.8 \$7,100.4 \$1,767.6 \$1,860.2	Total \$1,790.45 Total \$3,379.85 Total \$7,100.43 Total \$1,767.60	, Add = Add =	ractor 0.8798 waway Filters, Factor 0.8798 , Add Factor 0.8798 Factor 0.8798 Factor 0.8798	ontrols A x nd Throx x per Fins x dd x	17,271.67 cluding Panel, Co Unit Price 2,035.07 ter Mixing Box Ar Unit Price 3,841.61 cooling Coil, Copp Unit Price 8,070.51 cludent Circuits, Ac Unit Price 2,009.09 or Each Coil, Add Unit Price 1,057.22	For Economizer, I Quantity 1.00 × For Combination I Quantity 1.00 × For Chilled Water Quantity 1.00 × For 2 Coils, Indep Quantity 1.00 × For 2 Coils, Indep Quantity 1.00 × For Coil Coating I Quantity	Installation Installation Installation	1 0361 1 0368 1 0382 1 0383	00 0071	13	23 73 23 73 23 73	190 191 192

Job Order Number: 10415

Record	CSI Nu	mbe	r	Modifier UOM	Description						L.	ine Total
Categ	ory - N	o C	ategory	Input								
195	23 74	13	00 0053	EA	50 Ton Gas Co	ooling, 1	1000 MBH Gas	Heating	Self Containe	ed Package		\$843.38
					Rooftop Unit Quantity		Unit Price		Factor		Total	
				Installation	0.00	x	61,187.07	X	0.8798	=	\$0.00	
				Demolition	1.00	x	958.60	x	0.8798	=	\$843.38	
196	23 82	16	00 0198	EA	4 KW Electric Duct Heater	Heater,	Finned Tube E	lement,	Standard Slip	o-In Blast Coi		\$2,264.08
					Quantity		Unit Price		Factor		Total	
				Installation	4.00	Х	643.35	X	0.8798	=	\$2,264.08	
197	23 82	16	00 0200	EA	Duct Heater	Heater,	Finned Tube E	lement,	Standard Slip Factor	o-In Blast Coi	Total	\$1,615.14
				Installation	Quantity		Unit Price	v	0.8798	=	\$1,615.14	
					2.00	X	917.90	X			Ψ1,010.11	
198	23 82	16	00 0203	EA	Coil Duct Hea		r, Finned Tube	Elemen		lip-In Blast	Total	\$1,669.83
				Installation	Quantity		Unit Price		Factor 0.8798	=	\$1,669.83	
				IIIStaliation	2.00	Х	948.98	X	0.0730		Ψ1,000.00	
199	23 82	16	00 0205	EA	Coil Duct Hea		r, Finned Tube	Elemen		lip-In Blast	Total	\$1,177.25
				Installation	Quantity		Unit Price		Factor 0.8798	=	Total \$1,177.25	
				Installation	1.00	×	1,338.09	X	0.0790		Ψ1,177.23	
200	26 01	20	00 0003	EA	Lock Out/Tag	Out Bre	eaker Or Motor	Starter				\$291.81
					Quantity		Unit Price		Factor		Total	
				Installation	24.00	X	13.82	х	0.8798	=	\$291.81	
201	26 05	19	00 0066	MLF	#12 AWG Cal Conduit	ole - XL	P (XHHW), 600	V, Sing		Placed In		\$1,593.59
				1 4 - 11 - 41 - · ·	Quantity		Unit Price		Factor	_	Total	
				Installation	3.00	X	603.77	Х	0.8798		\$1,593.59	
202	26 05	19	00 0067	MLF	Conduit	ble - XL	P (XHHW), 600	V, Sing		Placed In	T-4-1	\$587.5
				Installation	Quantity		Unit Price		Factor	=	Total \$587.57	
				mstanation	0.85	X	785.70	X	0.8798		\$301.31	
203	26 05	19	00 0068	MLF	Conduit	le - XLF	(XHHW), 600	V, Singl		laced In	7-4-1	\$410.3
				Installation	Quantity	.,	Unit Price	v	Factor 0.8798	= .	Total \$410.39	
					0.50	X	932.92	X			Ψ+10.00	
204	26 05	19	00 0298	MLF	Stranded, Pla		LPE-USE-RHH Conduit Unit Price	-RHW 6	00 V Copper, Factor	Single	Total	\$4,638.7
				Installation	Quantity 1.40	x	3,766.06	x	0.8798	=	\$4,638.73	
205	26 05	5 19	00 0369	MLF	500 MCM Ca	ble - Ty	pe THHN-THW					\$535.5
					Stranded, Pla Quantity	icea in	Unit Price		Factor		Tota	1
				Installation	0.35	x	1,739.21	x	0.8798		\$535.55	
206	26 05	5 19	9 00 0818	MLF	4/c #18 300 \		nostat Cable, Lo		Cable For HV	AC System		\$2,352.4
					Controls Quantity		Unit Price		Factor		Tota	l
				Installation	3.00	x	891.29	х	0.8798		\$2,352.47	7
207	26 0	5 19	9 00 1235	EA			ression Lugs, 1				500	\$317.1
					Quantity		Unit Price		Factor	•	Tota	
				Installation	50.00	Х	7.21	x	0.8798	=	\$317.1	7

Job Order Number: 10415

Job Order Title:

Record	CSI Nu	mbe	r	Modifier UOM	Description	المستحدد والمستحدد					Lii	ne Total
Categ	ory - N	lo C	ategory	Input								
208	26 05	19	00 1236	EA	#12-10 AWG (Compres	sion Lugs, 1 F	lole, Wr	apped, Low V	oltage, To 600		\$541.74
					Volts Quantity		Unit Price		Factor		Total	
				Installation	75.00	x	8.21	x	0.8798	=	\$541.74	
209	26 05	26	00 0172	EA		eel. Incl	eld Connection udes molds, m	For Sp aterials	lice, Lug, Gro and all neces	und Rod, rebar sary tools to		\$14.74
Exclude	s				Quantity		Unit Price		Factor	_	Total	
Labor				Installation	1.00	X	16.75	Х	0.8798		\$14.74	
210	26 05	29	00 0007	LF	1-5/8" Wide x	1-3/8" H	igh, 12 Gauge	, Steel I	Jnistrut Chan	nel		\$432.33
					Quantity		Unit Price		Factor		Total	
				Installation	60.00	Х	8.19	X	0.8798		\$432.33	
211	26 05	29	00 0044	EA	3/8-16 Lock N	ut With	Spring For Uni	strut Ch	annel			\$554.27
					Quantity		Unit Price		Factor		Total	
				Installation	200.00	Х	3.15	х	0.8798	<u> </u>	\$554.27	
212	26 05	29	00 0116	EA	1/8" To 1/4" F	lange Th	nickness, Bear	n Clam	(Caddy 6TA	24)		\$73.20
					Quantity		Unit Price		Factor		Total	
				Installation	40.00	X	2.08	X	0.8798	=	\$73.20	
213	26 05	29	00 0117	EA	5/16" To 1/2"	Flange	Thickness, Bea	am Clan	np (Caddy 6T/	A58)		\$178.60
					Quantity		Unit Price		Factor		Total	
				Installation	100.00	Х	2.03	Х	0.8798	=	\$178.60	
214	26 05	29	00 0135	EA	3/4" Diameter	, Rigid S	Steel Conduit C	lamp F	or Unistrut Ch	annel		\$318.49
					Quantity		Unit Price		Factor		Total	
				Installation	200.00	X	1.81	Х	0.8798	=	\$318.49	
215	26 05	5 29	00 0136	EA	1" Diameter,	Rigid Ste	eel Conduit Cla	amp For	Unistrut Cha	nnel		\$16.45
					Quantity		Unit Price		Factor		Total	
		,		Installation	10.00	Х	1.87	X	0.8798		\$16.45	
216	26 05	5 29	00 0138	EA	1-1/2" Diame	ter, Rigio	d Steel Condui	t Clamp	For Unistrut (Channel		\$127.61
					Quantity		Unit Price		Factor		Total	
				Installation	56.00	Х	2.59	×	0.8798		\$127.61	
217	26 0	5 29	00 0178	EA	3/4" Diamete	r Center	, Bridle Ring (C	Caddy 2				\$70.38
				L. Latta Can	Quantity	•	Unit Price		Factor		Total	
			··	Installation	100.00	X	0.80	X	0.8798		\$70.38	
218	26 0	5 29	00 0196	С	14-1/2" Leng	th, 50# 1	Tensile Strengt	h, Nyloi				\$75.98
				lt-Dation	Quantity		Unit Price		Factor		Total \$75.98	
	·			Installation	4.00	X	21.59	X	0.8798		\$75.96	
219	26 0	5 29	00 0218	EA	1/4" x 4" Tog	gle Bolt						\$468.70
				14-11-6	Quantity		Unit Price		Facto		Total \$468.76	
				Installation	160.00	Х	3.33	X	0.8798	-	\$400.76	
220	26 0	5 2	9 00 0223	EA	8-32 x 2" Ma	chine So						\$151.3
				9 4 - 14 - 4*	Quantity		Unit Price		Facto		Total \$151.33	
			 	Installation	200.00	X	0.86		0.8798) -	φ101.33	
221	26 C	5 2	9 00 0254	LF LF	3/8" Diamete	er, Carbo	n Steel Threa					\$279.7
					Quantity		Unit Price		Facto		Total \$279.78	
				Installation	200.00	X	1.59	Х	0.8798	<u> </u>	\$219.18	

Job Order Number: 10415

Job Order Title:

e Total	Lir						Description	odifier UOM	r 1	mbei	CSI Nu	Record
								ut	ategory In	o C	ory - N	ateg
\$36.6					eel Hex Nut	Carbon	3/8" Diameter	EA	00 0284	29	26 05	222
	Total \$36.60	=	Factor 0.8798	X	Unit Price 0.26	x	Quantity 160.00	Installation				
3,649.4	\$	am Clamp	Mount I-Bea	. Bottom	Flange Width	Up To 6	3/8" Rod Size,	EA	00 0329	29	26 05	223
	Total		Factor		Unit Price	·	Quantity					
	\$3,649.41	=	0.8798	Х	20.74	х	200.00	Installation				
\$79.6				n Clamp	Coated Bear	ngle, P	1-1/2", Right A	EA	00 0362	29	26 05	224
	Total \$79.67	_	Factor		Unit Price		Quantity	Installation				
			0.8798	X	45.28	X	2.00					
3,140.8 	\$ Total	at Wall		inted Exp		duit Wit	3/4" RGS Cone	LF	00 1081	33	26 05	225
	10tai \$3,140.89	=	Factor 0.8798	x	Unit Price 3.57	x	Quantity 1,000.00	Installation				
\$25.1	**,		<u>_</u>					·	00.4000	22	20.05	200
φ2.5.1	Total		Factor	ea Expo	Unit Price	iit vvitn	1" RGS Condu	LF	00 1082	33	26 05	226
	\$25.13	=	0.8798	X	4.76	x	6.00	Installation				
1,712.0	9	Flat Wall	xposed On	ounted F	Coupling M	anduit V	1-1/2" RGS Cd	LF	00 1084	33	26 05	227
	Total		Factor		Unit Price		Quantity					
	\$1,712.09	=	0.8798	X	6.95	x	280.00	Installation				
\$375.0					ow	Degree I	3/4" RGS 90 D	EA	00 1094	33	26 05	228
	Total		Factor		Unit Price		Quantity					
	\$375.06		0.8798	Х	14.21	X	30.00	Installation				
\$292.1						gree Ell	1" RGS 90 De	EA	00 1095	33	26 05	229
	Total \$292.18	=	Factor 0.8798	V	Unit Price		Quantity	Installation				
* 00.4	Ψ232.10		0.0790	X	18.45	X	18.00					
\$98.4	Total		Factor		Unit Price) Degre	1-1/2" RGS 90 Quantity	EA	00 1097	33	26 05	230
	\$98.40	=	0.8798	x	27.96	x	4.00	Installation				
\$6.4				knuts			1" RGS Plasti	EA	00 1108	33	26.05	231
	Total		Factor		Unit Price	C Dusin	Quantity	LA	00 1100	00	20 00	201
	\$6.47	=	0.8798	X	7.35	x	1.00	Installation				
\$72.9			s	Locknuts	ing Set With	lastic B	1-1/2" RGS PI	EA	00 1110	33	26 05	232
	Total		Factor		Unit Price		Quantity					
	\$72.92	<u>=</u>	0.8798	X	10.36	X	8.00	Installation				
\$12.6				ishing Se	Grounding B	Insulate	1" RGS Steel	EA	00 1134	33	26 05	233
	Total \$12.68		Factor 0.8798		Unit Price		Quantity	Installation				
A 454	\$12,00			X	14.41	х	1.00					
\$151.	Total		g Set With L Factor	g Bushin		teel Ins	1-1/2" RGS S	EA	00 1136	33	26 05	234
	\$151.75		0.8798	х	Unit Price 21.56	x	Quantity 8.00	Installation				
\$268.							3/4" RGS Box	EA	00 1146	33	26.05	235
	Total		Factor	JI C W	Unit Price	Comie	Quantity	LA	00 1140	JJ	20 03	233
	\$268.27		0.8798	x	7.26	x	42.00	Installation				
\$17.				ew	With Set Scr	Connect	1" RGS Box (EA	00 1147	33	26 05	236
	Total		Factor		Unit Price		Quantity	·				
	\$17.30	=	0.8798	×	9.83	x	2.00	Installation				

Job Order Number: 10415 Job Order Title: WUD S WUD SRWRF - Bldg A - HVAC engineering

Recor	d CSI Number	Modifier UOM	Description					L	ine Total
Cate	gory - No Categor	y Input							
237	26 05 33 00 1273	EA	3/4" RGS Cou	ıpling					\$250.74
			Quantity		Unit Price		Factor	Total	
		Installation	100.00	Х	2.85	Х	0.8798 =	\$250.74	
238	26 05 33 00 1274	EA	1" RGS Coup	ling					\$17.29
			Quantity		Unit Price		Factor	Total	
		Installation	5.00	X	3.93	X	0.8798 =	\$17.29	
239	26 05 33 00 1276	EA	1-1/2" RGS C	oupling]				\$156.18
			Quantity		Unit Price		Factor	Total	
		Installation	28.00	X	6.34	х	0.8798 =	\$156.18	
240	26 05 33 00 1328	LF	1" EMT Cond	uit, Mo	unted Exposed (On Flat	Wall		\$70.47
			Quantity		Unit Price		Factor	Total	
		Installation	30.00	x	2.67	X	0.8798 =	\$70.47	
241	26 05 33 00 1329	LF	1-1/4" EMT C	onduit.	Mounted Expos	ed On I	Flat Wall		\$85.52
			Quantity		Unit Price		Factor	Total	
		Installation	30.00	X	3.24	х	0.8798 =	\$85.52	
242	26 05 33 00 1434	EA	3/4" I B I R ()rll F	itting With Cove	r And S	et Screw		\$50.89
			Quantity		Unit Price		Factor	Total	
		Installation	4.00	X	14.46	x	0.8798 =	\$50.89	
243	26 05 33 00 1434	0040	For Work In R	Restrict	ed Working Spa	ce Add			\$8.90
			Quantity		Unit Price	,	Factor	Total	
		Installation	4.00	х	2.53	х	0.8798 =	\$8.90	
244	26 05 33 00 1434	0041	For Installatio	n Abov	re 14' (4.3 m), A	dd			\$4.43
			Quantity		Unit Price		Factor	Total	
		Installation	4.00	x	1.26	x	0.8798 =	\$4.43	
245	26 05 33 00 1436	EA	1-1/4" LB, LR	Or LL	Fitting With Cov	ver And	Set Screw		\$44.98
			Quantity		Unit Price		Factor	Total	
		Installation	2.00	х	25.56	x	0.8798 =	\$44.98	
246	26 05 33 00 1470	EA	3/4" IMC Bust	ning Se	et With Locknut,	Mounte	ed Exposed On Flat Wall		\$45.21
			Quantity		Unit Price		Factor	Total	
		Installation	9.00	X	5.71	X	0.8798 =	\$45.21	
247	26 05 33 00 1473	EA	1-1/2" IMC Bu	shing	Set With Locknu	ıt, Mour	nted Exposed On Flat Wall		\$9.22
			Quantity		Unit Price		Factor	Total	
		Installation	1.00	X	10.48	X	0.8798 =	\$9.22	
248	26 05 33 00 1596	LF		edule 4	40 Conduit With	Couplin	ng, Direct Burial, Glued		\$216.43
			Coupling Quantity		Unit Price		Factor	Total	
		Installation	150.00	х	1.64	X	0.8798 =	\$216.43	
249	26 05 33 00 1599	LF		•				\	600.44
273	20 00 00 00 1099	LF .	Coupling	Sucaul	e 40 Conduit VVI	ııı Coup	oling, Direct Burial, Glued		\$23.14
			Quantity		Unit Price	1.0.44	Factor	Total	
		Installation	10.00	Х	2.63	X	0.8798 =	\$23.14	
250	26 05 33 00 1609	EA	3/4" PVC Sch	edule 4	40 Elbow 90 Deg	gree Dir	ect Burial, Glued Coupling		\$66.43
			Quantity	**************************************	Unit Price		Factor	Total	
		Installation	9.00	х	8.39	X	0.8798 =	\$66.43	

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Record	CSI Nur	mber	Modifier UOM	Description						Li	ne Total
Categ	ory - N	o Catego	ry Input								
251	26 05	33 00 1610) EA	1" PVC Sched	dule 40	Elbow 90 Degre	ee Direc	t Burial, Glue	d Coupling		\$17.9
				Quantity		Unit Price		Factor		Total	
			Installation	2.00	X	10.21	X	0.8798	=	\$17.97	
252	26 05	33 00 1622	2 EA	3/4" PVC Sch	edule 4	0 Adapter, Dire	ct Buria	I, Glued Coup	ling		\$145.3
				Quantity		Unit Price		Factor	<u>-</u>	Total	
			Installation	28.00	Х	5.90	X	0.8798	=	\$145.34	
253	26 05	33 00 1625	5 EA	1-1/2" PVC S	chedule	40 Adapter, Di	rect Bur	ial, Glued Co	upling		\$39.7
				Quantity		Unit Price		Factor	<u> </u>	Total	
			Installation	6.00	х	7.53	х	0.8798	=	\$39.75	
254	26 05	33 00 1637	7 EA	2-1/2" PVC S Coupling	chedule	e 40 Bell End Ar	nd Plug,	Direct Burial,	Glued		\$47.0
			t4-10-41	Quantity		Unit Price		Factor		Total	
			Installation	4.00	Х	13.36	Х	0.8798		\$47.02	
255	26 05	33 00 1637	7 0052	For Schedule	80, Ad	d					\$8.7
			1 / 11 /	Quantity		Unit Price		Factor		Total	
			Installation	4.00	Х	2.48	Х	0.8798	=	\$8.73	
256	26 05	33 00 1982	2 LF	3/4" Flexible !	vletallic	Conduit					\$69.0
			14-11-4.	Quantity		Unit Price		Factor		Total	
			Installation	50.00	X	1.57	X	0.8798		\$69.06 	
257	26 05	33 00 1983	3 LF	1" Flexible Me	etallic C	onduit					\$261.3
			t t - H - C -	Quantity		Unit Price		Factor		Total	
			Installation	150.00	Х	1.98	Х	0.8798	=	\$261.30	
258	26 05	33 00 1984	4 LF	1-1/4" Flexible	e Metal	lic Conduit					\$11.9
			(motollotics	Quantity		Unit Price		Factor		Total	
			Installation	6.00	X	2.27	X	0.8798		\$11.98	
259	26 05	33 00 198	5 LF	1-1/2" Flexible	e Metal	lic Conduit					\$15.8
			lantallation	Quantity		Unit Price		Factor		Total	
			Installation	6.00	×	3.00	X	0.8798	= 	\$15.84	
260	26 05	33 00 1993	3 EA	1/2" Flexible	Straight	Connectors, Pl	ain				\$74.7
			Installation	Quantity		Unit Price		Factor		Total	
			installation	30.00	×	2.83	Х	0.8798	=	\$74.70	
261	26 05	33 00 1994	4 EA	3/4" Flexible	Straight	Connectors, PI	ain				\$14.3
				Quantity		Unit Price		Factor		Total	
			Installation	5.00	×	3.25	X	0.8798	=	\$14.30	
262	26 05	33 00 199	5 EA	1" Flexible St	raight C	Connectors, Plai	n				\$110.4
			lantallatian	Quantity		Unit Price		Factor		Total	
			Installation	24.00	X	5.23	X	0.8798		\$110.43	
263	26 05	33 00 201	7 EA	3/4" Flexible	90 Degi	ree Connector, I	Plain				\$24.4
			lmakallakia	Quantity		Unit Price		Factor		Total	
			Installation	5.00	Х	5.56	X	0.8798		\$24.46	
264	26 05	33 00 201	8 EA	1" Flexible 90) Degre	e Connector, Pl	ain				\$6.8
			1	Quantity		Unit Price		Factor		Total	
		-	Installation	1.00	X	7.83	X	0.8798	<u> </u>	\$6.89	
265	26 05	33 00 202	0 EA	1-1/2" Flexibl	e 90 De	egree Connector	r, Plain				\$16.9
			}4_H_4!.	Quantity		Unit Price		Factor		Total	
			Installation	1.00	×	19.26	х	0.8798	=	\$16.94	

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Recor	d CSI Nui	mbe	r	Modifi	er UOM	Description						Li	ne Total
Cate	gory - N	o C	ategory	Input									
266	26 05	33	00 2088		LF	3/4" Non-Meta	lic Liqu	uid Tight Flex Co	onduit				\$13.46
						Quantity		Unit Price		Factor		Total	
					Installation	5.00	X	3.06	Х	0.8798	=	\$13.46	
267	26 05	33	00 2100		EA	2" Non-Metallio	Straig	ht Connector					\$83.62
						Quantity		Unit Price		Factor		Total	
					Installation	2.00	X	47.52	x	0.8798	=	\$83.62	
268	26 05	33	00 2100	0061		For Work In Re	estricte	d Working Spa	ce. Ado				\$2.50
						Quantity		Unit Price		Factor		Total	
					Installation	2.00	x	1.42	х	0.8798	=	\$2.50	
269	26 05	33	00 2108	-	EA	2" Non-Metallio	: 90 De	egree Angle Cor	nector				\$114.90
						Quantity		Unit Price		Factor		Total	
					Installation	2.00	х	65.30	x	0.8798	=	\$114.90	
270	26.05	33	00 2108	0061			estricto	d Working Spa	co Ado				\$3.20
2,0	20 00	00	00 2100	0001		Quantity		Unit Price	ce, Auc	Factor		Total	40.20
					Installation	2.00	x	1.82	х	0.8798	=	\$3.20	
271	26.05	23	00 2212		EA			X 1-1/2" Deep V		\\0.F			\$119.83
211	20 03	33	00 2212		EA	Quantity	31 BOX /	Unit Price	vith Co	ver Factor		Total	\$119.03
					Installation	12.00	x	11.35	x	0.8798	=	\$119.83	
070	20.05		00.0040		<u> </u>							4	
272	26 05	33	00 2213		EA		31 Box 2	X 2-1/8" Deep V	Vith Co			Tatal	\$134.40
					Installation	Quantity 12.00	x	Unit Price 12.73	X	Factor 0.8798	=	Total \$134.40	
070			00 0007							0.07.00		Ψ10 1. 10	***
273	26 05	33	00 2227		EA	4" Square Stee	el Blani						\$38.77
					Installation	Quantity	x	Unit Price 3.39	x	Factor 0.8798	=	Total \$38.77	
				· · · · · · · · · · · · · · · · · · ·		13.00							
274	26 05	33	00 2383		EA		≥ Cut T	ile Ring, 1 Gan	g, Flusi				\$55.87
					Installation	Quantity	x	Unit Price 6.35	x	Factor 0.8798	=	Total \$55.87	
						10.00						Ψ00.07	
275	26 05	33	00 2435		EA		ion Bo	x, Plaster Ring	And Co		nputer)		\$60.15
					Installation	Quantity		Unit Price		Factor 0.8798	=	Total \$60.15	
						3.00	х	22.79	X	0.0790		\$60.15	
276	26 05	53	00 0019		EA	Labeling Wire							\$55.43
					Installation	Quantity		Unit Price		Factor	_	Total	
						75.00	X	0.84	X	0.8798		\$55.43	
277	26 24	13	00 0186		EA	•	C Brand	ch Breaker, 480	/ 277 \	/			\$4,424.37
					Installation	Quantity		Unit Price		Factor	_	Total	
					Installation	9.00	Х	558.76	Х	0.8798		\$4,424.37	
278	26 24	13	00 0188		EA	125-225 Amp	MC Bra	anch Breaker, 4	80 / 27	7 V			\$1,002.89
						Quantity		Unit Price		Factor	_	Total	
					Installation	1.00	Х	1,139.91	X	0.8798	<u>=</u>	\$1,002.89	
279	26 24	16	00 0320		EA	Panelboard, M Breaker, Unas	/lain		V, 4 W		NEMA 1	·	\$2,740.96
					Installation	Quantity		Unit Price		Factor	= .	Total	
					mstanation	1.00	X	3,115.43	X	0.8798		\$2,740.96	

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Recor	d CSI Nu	mbe	r	Modifier UOM	Description						L	ine Total
Cate	jory - N	lo C	ategory	Input								
280	26 24	16	00 0385	EA	1 Pole, 240 Vo	-	0 A, Branch Ci	rcuit Bre	eaker, 18,000	Amp		\$235.58
					Quantity	<u>-</u>	Unit Price		Factor		Total	
				Installation	4.00	X	66.94	X	0.8798	=	\$235.58	
281	26 24	16	00 0385	0211	For Bolt-On, A	'qq						\$38.54
					Quantity		Unit Price	,	Factor		Total	
				Installation	4.00	Х	10.95	х	0.8798	=	\$38.54	
282	26 27	16	00 0238	EA	6"x6"x4" NEM	A 4X 30	4 Stainless Ste	eel Encl	osure, Clamp	Cover		\$263.74
					Quantity		Unit Price		Factor		Total	
				Installation	1.00	x	299.77	х	0.8798	= '	\$263.74	
283	26 27	16	00 0241	EA	12"x10"x6" NF	MA 4X	304 Stainless	Steel Er	nclosure. Clar	np Cover	· · · · · · · · · · · · · · · · · · ·	\$527.89
					Quantity		Unit Price		Factor		Total	
				Installation	1.00	х	600.01	X	0.8798	=	\$527.89	
284	26 27	26	00 0009	EA	1 Gang, 20 A, receptacle and		uplex Receptad	cle Asse	mbly Note: In	cludes box,		\$40.12
					Quantity		Unit Price		Factor		Total	······································
				Installation	1.00	Х	45.60	Х	0.8798	=	\$40.12	
285	26 27	26	00 0118	EA	1 Gang, 20 A, switch and co			ritch Ass	sembly Note:	Includes box,		\$34.64
				Installation	Quantity		Unit Price	_	Factor		Total	
				mstaliation	1.00	X	39.37	X	0.8798		\$34.64	
286	26 27	26	00 0190	EA	20 Amp, 120 '	V, SPS1	Γ Switch, Weat	herproo	f			\$14.2
				1 4 11 4	Quantity		Unit Price		Factor		Total	
				Installation	1.00	Х	16.15	Х	0.8798	=	\$14.21	
287	26 27	26	00 0244	EA	Heavy Cast A			ertical D				\$26.7
				Installation	Quantity	.,	Unit Price		Factor 0.8798		Total \$26.75	
					1.00	X	30.41	Х			\$20.75	
288	26 28	16	00 0326	EA	30 A, Fused D Fuses, 600 V, Quantity		ect Switch, NEI e Unit Price	MA 4, 4)	X Or 5, Heavy Factor		Total	\$7,216.5
				Installation	6.00	x	1,367.09	х	0.8798		\$7,216.59	
289	26 28	16	00 0327	EA		Disconn	ect Switch, NE		X Or 5, Heavy	Duty, With		\$1,355.7
					Quantity	Jrnas	Unit Price		Factor		Total	
				Installation	1.00	X	1,540.98	x	0.8798	=	\$1,355.75	
290	26 28	16	00 0329	EA	200 A, Fused Fuses, 600 V		nect Switch, Ni	EMA 4,	4X Or 5, Heav	vy Duty, With		\$3,555.8
					Quantity		Unit Price		Factor		Total	
				Installation	1.00	Х	4,041.67	Х	0.8798		\$3,555.86	
291	26 28	16	00 0523	EA	200 A Double	Throw	Safety Switch,	600 V,	4 Pole, NEMA	\1		\$2,085.4
					Quantity	,	Unit Price		Factor		Total	
				Installation	1.00	X	2,370.35	X	0.8798	=	\$2,085.43	
				Manual Trai	nsfer Switch - 4 p	ole A 4	80V Nema!					
292	26 56	23	00 0052	EA	42 Watt Com Wall Pack	pact Flu	iorescent, Sem	i Cutoff,	Polycarbona	te Lens, Mini		\$867.3
					Quantity		Unit Price		Factor		Total	
				Installation	3.00	x	328.61	X	0.8798	= .	\$867.33	

Job Order Number: 10415

Recor	d CSI Numbe	er	Modifier UOM	Description						· L	ine Total
Cateo	jory - No C	Category	Input		···········						
293	27 15 13	00 0038	MLF	4 Pair #18 AWC			, Placed	In Conduit, A	larm And		\$1,566.40
			Installation	Quantity		Unit Price		Factor 0.8798	=	Total \$1,566.40	
			 	1.00	×	1,780.41	X			\$1,500.40	4000.47
294	28 31 23	00 0133	EA	Housing for air	duct m		detecto	r (includes ba Factor	ffle)	Total	\$383.47
			Installation	Quantity 2.00	x	Unit Price 201.34	. x	0.8798	=	\$354.28	
			Demolition	6.00	x	5.53	X	0.8798		\$29.19	
295	28 31 23	00 0134	EA	Photo Detector	Head						\$311.85
200	20 01 20	00 0 10 1	band (Quantity	11000	Unit Price		Factor		Total	***************************************
			Installation	2.00	x	152.36	X	0.8798	=	\$268.09	
			Demolition	6.00	X	8.29	x	0.8798	=	\$43.76	
296	31 05 16	8000 00	CY	#4 Stone Aggre	gate F	ill (3/4" To 1-1	/2" Clea	n)			\$196.05
				Quantity		Unit Price		Factor		Total	
		····	Installation	6.00	Х	37.14	Х	0.8798	=	\$196.05	
297	31 05 36	00 0002	EA	Backhoe, Doze Demobilization similar sized ed return.	Note: 1	Use for backho nt. Includes de	e, doze	r, roller, loade	r, excavator o		\$365.7
			Installation	Quantity		Unit Price		Factor	_	Total	
			lift	1.00	X	415.72	X	0.8798	_	\$365.75	
			,			·					
298	31 11 00	00 0018	CY	Wheel And Rai	mp Loa		ed And C		rial		\$165.6
			Installation	Quantity		Unit Price		Factor	_	Total	
299	31 23 16	13 0008	CY	22.00 Excavation for	x Trench	8.56 ing by Hand in	Loose	0.8798 Rock Includes		\$165.68	\$2,929.8
				Excess Materia	als and		es and E		ich.	Takal	<u></u>
			Installation	Quantity 54.00	x	Unit Price 61.67	x	Factor 0.8798	=	Total \$2,929.89	
300	31 23 16	13 0011	CY	Backfilling or P Materials by Ha	lacing						\$474.6
			la stallation	Quantity		Unit Price		Factor		Total	
			Installation	54.00	X	9.99	X	0.8798		\$474.62	
301	31 23 16	13 0013	CY	Compaction of Tamper, Etcete			renches	by Vibratory I	Plate, Air		\$102.1
			Installation	Quantity		Unit Price		Factor		Total	
				54.00	×	2.15	X	0.8798		\$102.14	
302	31 23 16	36 0032	CY	Spread Excess	Or Im	•	I On Site				\$76.8
			Installation	Quantity	v	Unit Price 14.55	~	Factor 0.8798		Total \$76.81	
				6.00	X		x			Ψ/0.01	
303	31 24 13	00 0024	CY	Load Excess N Landscaping a		bankments by		<u> </u>			\$53.0
			Installation	Quantity	•-	Unit Price	.,	Factor		Total	
			mstaliation	22.00	Х	2.74	X	0.8798		\$53.03	
304	31 31 16	13 0002	SF	Termite Pretre	atment		Soil Pois				\$150.4
			Installation	Quantity		Unit Price	.,	Factor		Total \$150.45	
			Histanation	300.00	X	0.57	Х	0.8798		φ150.45	

Job Order Number: 10415

Job Order Title: WUD SRWRF - Bldg A - HVAC engineering

Recor	d CSI Nu	mbe	er	Modifier UOM	Description					Li	ine Total
Cateo	jory - N	lo C	Category	Input							
305	31 32	19	16 0013	SY	200 LB Grab	Tensile	Woven Slit Film	n Geote	xtile Fabric		\$26.62
					Quantity		Unit Price		Factor	Total	
				Installation	34.00	х	0.89	х	0.8798 =	\$26.62	
306	32 01	17	63 0015	EA	Asphalt Place Tons	ment F	or Small Repair	Areas,	Hot Mix Modified, Up To 3	3	\$839.68
					Quantity		Unit Price		Factor	Total	
				Installation	1.00	X	954.40	Х	0.8798 =	\$839.68	
307	32 31	13	00 0012	VLF	24" (61 cm) D	iametei	Hole, Auger B	y Machi	ne Fence Post Hole In So	il	\$55.53
					Quantity		Unit Price		Factor	Total	
				Installation	6.00	X	10.52	Х	0.8798 =	\$55.53	
308	32 31	13	00 0029	VLF	Concrete Fill,	24" (61	cm) Diameter	Hole			\$97.61
					Quantity		Unit Price		Factor	Total	
				Installation	6.00	х	18.49	х	0.8798 =	\$97.61	
309	32 31	13	00 0042	VLF	Grout Fill 24'	(61 cm	ı) Diameter Hol	p			\$100.83
000	02 0,		00 00 12	¥ L1	Quantity	(01 011	Unit Price		Factor	Total	
				Installation	6.00	х	19.10	х	0.8798 =	\$100.83	
310	32 31	13	00 0103	LF		·			ed Steel Post, Up To 6' In		\$443.56
					Quantity		Unit Price		Factor	Total	
				Installation	16.00	х	31.51	X	0.8798 =	\$443.56	
311	32 31	13	00 0373	EA	6' (1.9 m) Wid Barbed Wire		1.5 m) High Sir	igle Gat	e Vinyl Coated Without		\$738.24
				to a new	Quantity		Unit Price		Factor	Total	
				Installation	2.00	X	419.55	X	0.8798 =	\$738.24	
312	32 31	13	00 0582	EA	Gate Latch, N	/lalleabl	e Galvanized S	teel			\$21.3
					Quantity		Unit Price		Factor	Total	
				Installation	1.00	×	24.31	Х	0.8798 =	\$21.39	
313	32 31	13	00 0584	EA	Heavy Duty C	Sate Lat	ch, Malleable C	alvaniz	ed Steel		\$36.4
					Quantity		Unit Price		Factor	Total	
_				Installation	1.00	х	41.38	X	0.8798 =	\$36.41	
314	32 31	13	00 0657	OPN	Grounding Fo	or Gates	(Per Opening)				\$204.1
					Quantity		Unit Price		Factor	Total	
				Installation	1.00	х	231.99	X	0.8798 =	\$204.10	
315	32 92	23	00 0003	MSF		Florata		4,000	SF, On Level Ground		\$792.6
				Installation	Quantity		Unit Price		Factor	Total	
			 	mstanation	2.00	X	450.45	X	0.8798 =	\$792.61	
316	40 92	49	00 0010	EA	15 HP, 208/2	30 Volt	Variable Frequ	ency Dr	ive		\$6,153.2
				44-11-4:	Quantity		Unit Price		Factor	Total	
				Installation	2.00	Х	3,496.96	Х	0.8798 =	\$6,153.25	
	(Sub	total for	Category - No Ca	tegory Inpu	t:				\$448	3,369.90
			al	J ,	<u> </u>	·					369.90

This proposal total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding of the line totals and sub-totals.

DATE September 22, 201(GC 06 - SB	E Estimate
Job# 10415 Loc#	WUD SRWRF - "A" Building - HVAC Replacem	ent
	HA Contracting Corp.	Contract: R2010-0804
SUBMITTED BY	941 South Military Trail Suite F4 West Palm Beach, FL 33415	Awarded: 05/18/2010

Proposal Value:

\$ 448,369.90

Contractor/Sub-Contractor	Trade	SBE Status	SBE\$	% of Job
Airtex Corporation		SBE - Disadvantaged	41,230.00	41,230.00
Andrea Construction		SBE - Disadvantaged	25,675.00	25,675.00
BK Electric		SBE - Disadvantaged	33,750.00	33,750.00

22.45%

0%

Estimated Participation

100%

Xavier Sansaricq, Project Manager

BUDGET AVAILABILITY STATEMENT

REQUEST DATE: September 22, 2010		
REQUESTED BY: Daniel Racette	PHONE#: (561) 233-2057	
PROJECT TITLE: WUD SRWRF - Bldg A - HVAC engineering	•	
PROJECT NO.: 10415		
LOCATION #: 663		
LOCATION DESCRIPTION: Water Utiliites Waste Treatment Sou	th Regional Plant Pre-treatment & Admin	
BUILDING NUMBER:	The sport of the s	
CONTRACTOR/CONSULTANT NAME: HA Contracting Corp.		
PROVIDE A BRIEF STATEMENT OF THE SCOPE OF SERVICES CONSULTANT/CONTRACTOR:	S TO BE PROVIDED BY THE	
Install new 42 ton Chilled water system and multizone AHU		
WILL THIS AMENDMENT CHANGE THE ESTIMATED COST OF IF YES, PROVIDE ESTIMATES OF THE NEW COSTS:	THE PROJECT?	
CONSTRUCTION	\$448,369.90	
ARCHITECT/ENGINEER/CONSULTANT	\$6,725 55	
*STAFF COSTS	\$6,800.00	
EQUIPMENT/OTHER	\$0.00	
CONTINGENCY	\$44,836.99	
TOTAL:	\$506,732.44	
*By signing this BAS your department agrees to these staff costs a BAS by FD&O. Unless there is a change in the scope of work, no ac	ind your account will be charged upon receipt of thi dditional staff charges will be billed.	
BUDGET ACCOUNT NUMBERS (IDENTIFY ALL SOURCES) FUNDING	SOURCE (CHECK ALL THAT APPLY)	
4011 JOIN MORP	6545	
FUND: GENCY: AGENCY: ORG:	OBJ: SUBOBJ:	
☐ AD VALOREM ဩ OTHER	FEDERAL IDANIC BACON	
	FEDERAL/DAVIS BACON	
had vu fee		
SUBJECT TO INSPECTOR GENERAL FEE YES NO		
BAS APPROVED BY:		
DATE: 9/)7/(v		
ENCUMBRANCE NUMBER:		