



**BRAZOS COUNTY  
BRYAN, TEXAS**

DEPARTMENT: Purchasing

NUMBER:

DATE OF COURT MEETING: 12/10/2024

ITEM: Approval of Amendment #2 to Contract #24-603 Construction Manager at Risk for the Medical Examiner's Facility with J.T. Vaughn Construction for the Guaranteed Maximum Price (GMP) #2 of \$25,961,965.00. This is the final GMP package making the total contracted amount with J.T. Vaughn Construction \$33,865,513.00 for this project.

TO: Commissioners Court

FROM: Kaitlyn Battles

DATE: 12/05/2024

FISCAL IMPACT: False

BUDGETED: False

DOLLAR AMOUNT: \$0.00

**ATTACHMENTS:**

<b><u>File Name</u></b>	<b><u>Description</u></b>	<b><u>Type</u></b>
<a href="#">BCMEO - GMP 02 - Vaughn - Partially Executed.pdf</a>	BCMEO - GMP 02 - Vaughn - Partially Executed	Cover Memo

## **AMENDMENT NO. 2 TO Brazos County Contract #24-603**

### **STANDARD AGREEMENT AND GENERAL CONDITIONS BETWEEN OWNER AND CONSTRUCTION MANAGER**

**(Where the Basis of Payment is a Guaranteed Maximum Price with an Option for  
Preconstruction Services)**

November 08, 2024

Pursuant to Section 3.4 of the Agreement dated April 16, 2024 between the Owner, Brazos County and the Construction Manager, J.T. Vaughn Construction, LLC for Brazos County Medical Examiner's Office (the Project), the Owner and the Construction Manager desire to establish a Guaranteed Maximum Price ("GMP") for the Work. Therefore, the Owner and the Construction Manager agree as follows:

#### **ARTICLE 1 GUARANTEED MAXIMUM PRICE**

The Construction Manager's Total GMP (inclusive of Amendment No. 1 executed in the amount of \$7,903,548 on October 15, 2024 & Amendment No. 2 seen herein valued at \$25,961,965) for the Work, including the Cost of the Work as defined in Article 8 and the Construction Manager's Fee as set forth in Section 7.3, is thirty-three million, eight hundred sixty-five thousand, five hundred thirteen Dollars (\$33,865,513).

The GMP is for the performance of the Work in accordance with the exhibits listed below, which are part of this Agreement.

EXHIBIT A: GMP 02 from the Construction Manager (Inclusive of GMP 01), dated 11/08/2024, 125 pages.

EXHIBIT B: Brazos County DOL Wage Determination TX20240234, dated 07/12/2024, 6 pages.

#### **ARTICLE 2 DATE OF SUBSTANTIAL COMPLETION**

The Date of Substantial Completion of the Work is for four hundred forty-nine (449) Calendar Days after issuance of the Notice to Proceed for GMP 02.

#### **ARTICLE 3 DATE OF FINAL COMPLETION**

The Date of Final Completion of the Work is: within sixty (60) Calendar Days after the Date of Substantial Completion, subject to adjustments as provided for in the Contract Documents

#### **ARTICLE 4 WAGES and SALARIES**

Attention is particularly called to the requirement of paying not less than the prevailing wage rates specified in the Contract Documents. These rates are minimums to be paid during the life of the contract. It is therefore the responsibility of all vendors to inform themselves as to local labor conditions

#### **ARTICLE 5 COMPLIANCE WITH LABOR STANDARDS PROVISIONS**

1



ConsensusDocs® 500.1 – Amendment No. 1 to ConsensusDocs 500 Standard Agreement and General Conditions Between Owner and Construction Manager (GMP with Option for Preconstruction Services) - ©2007, Revised 2011. THIS DOCUMENT MAY HAVE BEEN MODIFIED. The ConsensusDocs technology platform creates a redline comparison to the standard language which the purchaser of this contract is authorized to share for review purposes. Consultation with legal and insurance counsel are strongly encouraged. You may only make copies of finalized documents for distribution to parties in direct connection with this contract. Any other uses are strictly prohibited.

CONTENT SECURE ID: EAFBAE3C-479B

All laborers and mechanics employed upon the work covered by this Contract shall be paid unconditionally and not less often than once each week, and without subsequent deduction or rebate on any account (except such payroll deductions as are made mandatory by law and such other payroll deductions as are permitted by the applicable regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to the Anti-Kickback Act hereinafter identified), the full amount due at time of payment computed at wage rates not less than those contained in the wage determination decision of said Secretary of Labor (a copy of which is attached and herein incorporated by reference), regardless of any contractual relationship which may be alleged to exist between the Contractor or any subcontractor and such laborers and mechanics. All laborers and mechanics employed upon such work shall be paid in cash, except that payment may be by check if the employer provides or secures satisfactory facilities approved by the County for the cashing of the same without cost or expense to the employee. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

The Contractor and its subcontractors shall not, by any means, induce any person employed in the construction, completion, or repair of public work, give up any part of the compensation to which he or she is otherwise entitled.

The Contractor shall be responsible for following all provisions of Chapter 2258 of the Government Code relating to the payment of prevailing wages. The wage rates to be used are included in Exhibit H attached. A contractor or subcontractor who violates this section shall pay to Brazos County \$60 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated on Exhibit H.

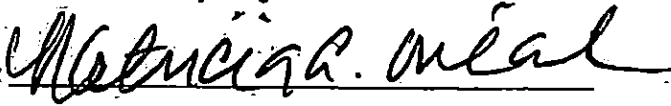
This Amendment is entered into as of December 10, 2024.

WITNESS:  \_\_\_\_\_

OWNER: Brazos County

BY:  \_\_\_\_\_

Duane Peters, Brazos County Judge

WITNESS:  \_\_\_\_\_

CONSTRUCTION MANAGER: J.T. Vaughn Construction, LLC

BY:  \_\_\_\_\_

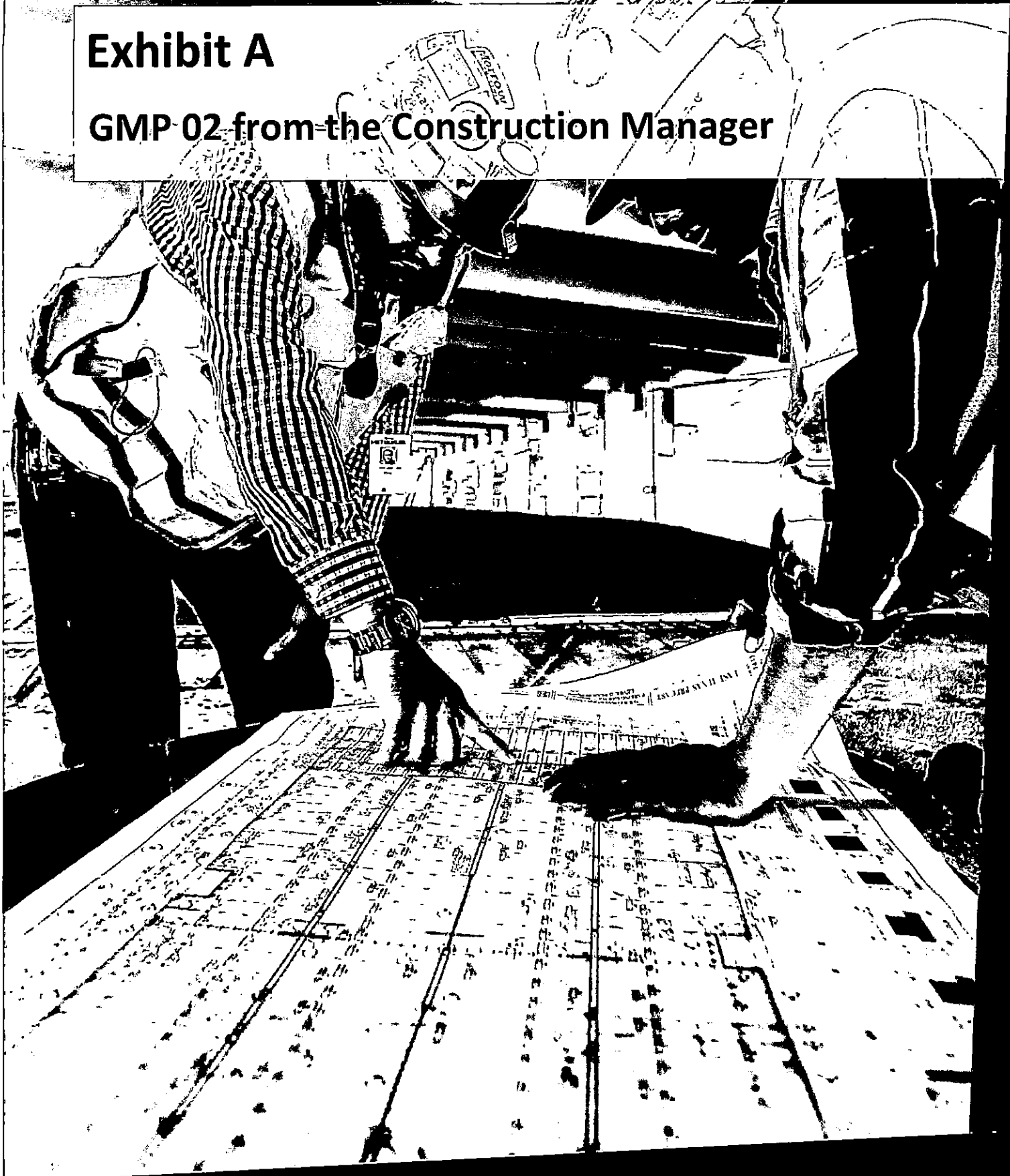
Danny Thompson, CEO

END OF DOCUMENT.



# Exhibit A

## GMP-02 from the Construction Manager



# Brazos County

## Brazos County Medical Examiner's Office GMP 02 – November 08, 2024



- 90% Construction Drawings
- 50% Construction Specifications

Prepared by:  
J. T. Vaughn Construction, LLC  
401 W. 26<sup>th</sup> Street  
Bryan, TX 77803  
(713) 243-8300

[www.vaughnconstruction.com](http://www.vaughnconstruction.com)

\*Additional/modified items on Tabs One, Four and Five have been bolded/struck thru.

**VAUGHN**

**Date: November 8, 2024**

**Tab 1** Executive Summary **(Amended)**

**Tab 2** Staffing Plan

**Tab 3** **GMP 02** Budget Summary

**Tab 4** Listing of Documents **(Amended)**

**Tab 5** Qualifications & Assumptions **(Amended)**

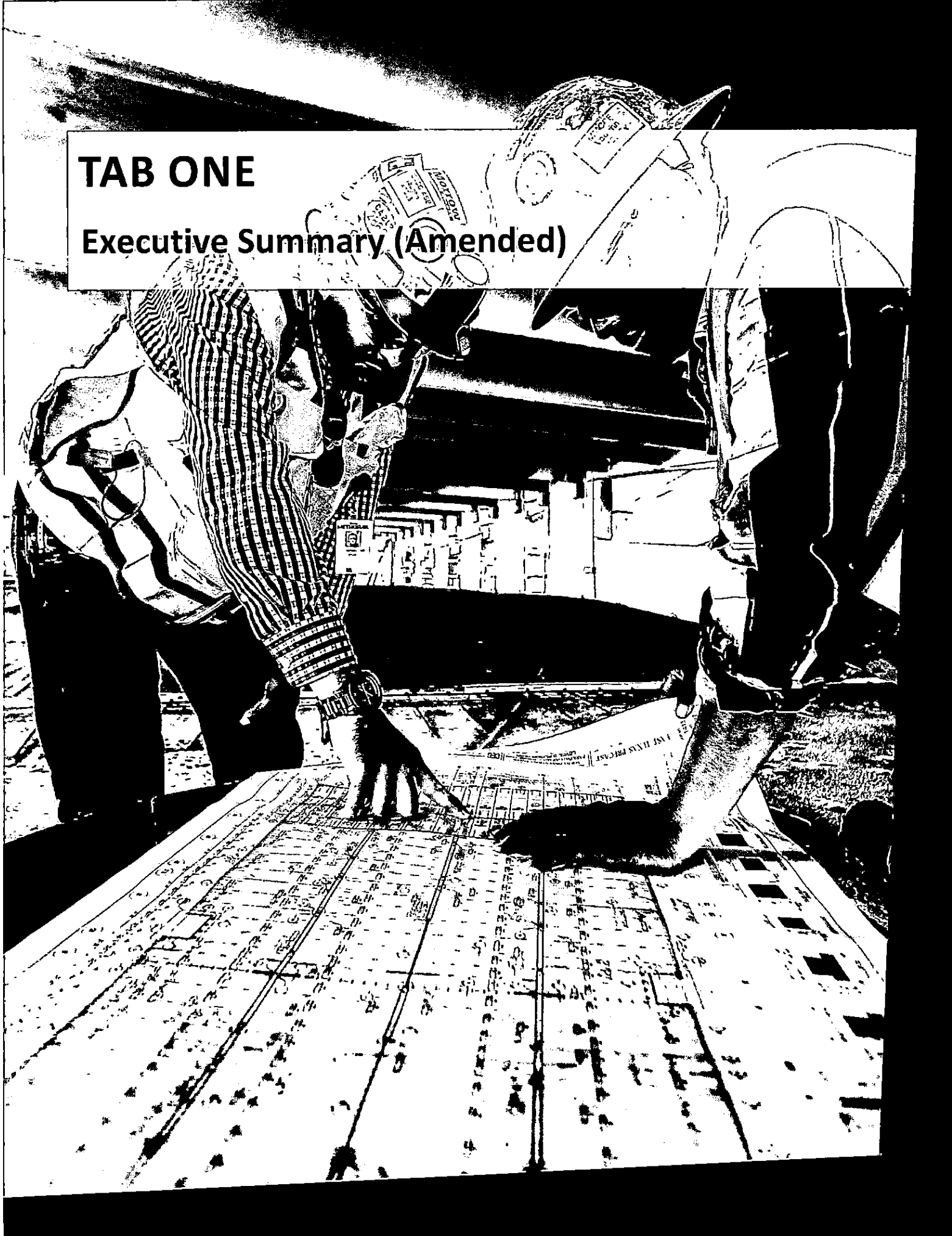
**Tab 6** Schedule **(Amended)**

**Tab 7** BIM Execution Plan

**Tab 8** Quality Control Plan

# TAB ONE

## Executive Summary (Amended)



The Brazos County Medical Examiner's office totals approximately 21,500 gross square feet. The new building site will be located along E. 29th Street between Broadmoor Drive and Briarcrest Drive.

The Brazos County Medical Examiner's Office will feature offices for up to nine full-time employees with room for expansion, dedicated examination rooms, restrooms, a break room, conference/training areas, and other necessary spaces. The single-story facility will serve Brazos County and counties within a 100-mile radius. Brazos County will now have the ability to expedite forensic investigation and medical examinations in-house to better serve families in their greatest time of need. Additionally, the building will serve as a training space for law enforcement, and other related fields.

The Project will have three bid packages in an effort to maintain the schedule as well as assisting with the deadline set forth by the County. The bid packages will be broken into the following:

GMP 02 Inclusive of:

- **GMP 01:**
  - **Bid Package 1 – Site, Site Utilities, Site Paving and Long Lead Electrical Equipment.**
- Bid Package 2 – Foundations
- Bid Package 3 – Roofing, Envelope, Structure, Skin, Buildout, Site Improvements, Furniture, and Medical Equipment.

The Guaranteed Maximum Price is generated from the documents issued as the “**90% Construction Drawings**” in conjunction with “**50% Construction Specifications**”. The schedule for construction currently stands at **16 months** for **GMP#02**.

Key Dates (Tentative):

- **Issue Documents for Bid Package 3 – November 6, 2024**
- **Commissioners Court Approval of GMP 02– December 10, 2024**
- **Issue Notice to Proceed for GMP 02 – December 10, 2024**
- **Substantial Completion – March 03, 2026.**

**End of Executive Summary**



# TAB TWO

## Staffing Plan



**Offsite Corporate Staff**

The following staff costs below are included in the Construction Phase Fee and **will not** be charged to the Project.

**Project Executive, Director of Preconstruction Services – Bill Vaughn**  
Overall executive oversight of preconstruction phase.

**Project Executive, Construction Director – Judd Blume**  
Overall executive oversight of project execution.

**Onsite Staff**

The following staff costs will be charged to **General Conditions** for time on site at the percentages indicated:

**Project Senior Superintendent – Craig Cottrell**  
As senior superintendent, Craig supervises field personnel working on the construction project including superintendents, field staff, and field engineers. He is responsible for all field operations and reports to the Project Executive.

**Project Superintendent – Alberto Pantoja**  
Daily onsite responsibility for field operations, coordination of trades, schedule compliance, deliveries, QA/QC, and safety and reports to the Senior Superintendent.

**Project Assistant Superintendent/QC Inspector – Parker Bankston**  
Daily onsite responsibility for field operations, coordination of trades, schedule compliance, deliveries, QA/QC, and safety and reports to the Superintendent.

**Project Field Assistant/Intern – TBD**  
Daily onsite responsibility to assist with field management processing of project documentation, including daily reports, SWPPP, deliveries and safety and reports to the Project Superintendent.

**Senior Project Manager – Jonathan Winkler**  
As senior project manager, Jonathan supervises all personnel working on the construction project including construction and project managers, field staff, and administrative personnel. He serves as the senior-level client contact.

**Project Manager – Jack Brewer**  
Daily responsibility for project and GMP oversight for the trade contractor award and procurement process, pay requests, document control, schedule, QA/QC, coordination with Owner and Owner's consultants, and progress meetings and reports to the Construction Director.

**Project Engineer – Will Ibarra**

Daily onsite responsibility to assist Project Staff with the processing of project documentation including submittals, procurement, RFIs, changes, inspections, meeting minutes (OAC, Sub Meetings, etc.), pay applications, and reports to the Project Manager.

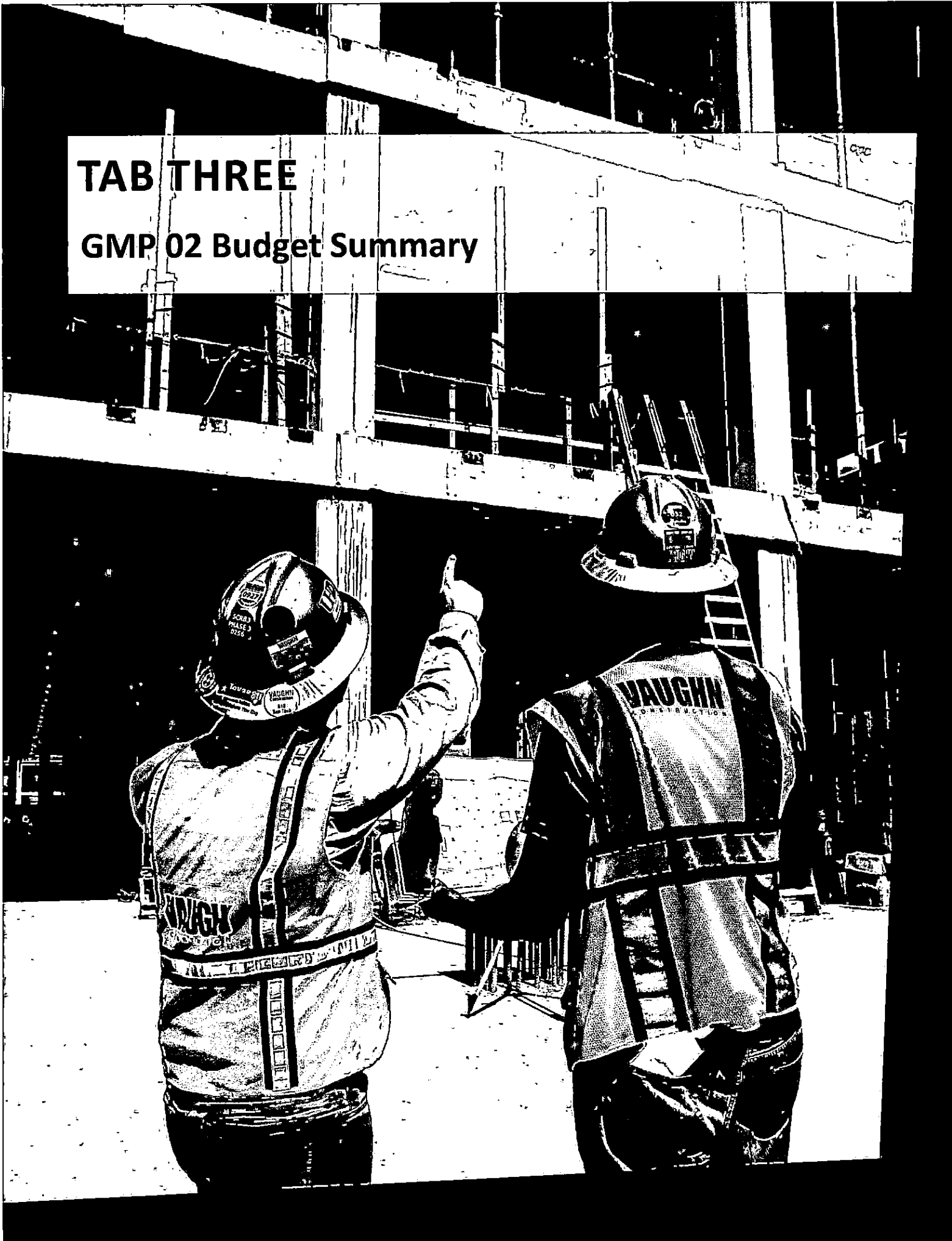
**QA/QC Commissioning Manager – Brian Hughes**

Daily onsite responsibility for quality control and assistance with projects commissioning activities. Brian supervises the QC inspectors and provides overall direction for managing punchlists, checklists, observation reports, and testing during all phases of the project.

**End of Staffing Plan**

# TAB THREE

## GMP 02 Budget Summary



Phase: 90% CD - GMP 2

Date: November 8, 2024

Estimate Summary	Site & Building	Breakdown	
		GMP 1 - Site	GMP 2 - Building
Cost of Work (Refer to Estimate Detail)	\$29,300,112	\$6,695,392	\$22,604,720
Design Contingency	\$0	\$0	\$0
Escalation	\$0	\$0	\$0
<b>Total Cost of Work</b>	<b>\$29,300,112</b>	<b>\$6,695,392</b>	<b>\$22,604,720</b>
<b>CM Contingency</b>	<b>\$835,053</b>	<b>\$190,819</b>	<b>\$644,234</b>
<b>Owner Contingency</b>	<b>\$835,053</b>	<b>\$133,908</b>	<b>\$701,145</b>
General Conditions	\$1,497,275	\$539,649	\$957,626
Permit	\$68,157	\$16,556	\$51,601
P&P Bonds	\$235,364	\$60,960	\$174,404
Insurances	\$0	\$0	\$0
Incl. in COW			
Builders Risk	\$58,214	\$24,416	\$33,798
<b>Total General Conditions*</b>	<b>\$1,859,010</b>	<b>\$641,581</b>	<b>\$1,217,429</b>
<b>Construction Phase Fee</b>	<b>\$1,036,285</b>	<b>\$241,849</b>	<b>\$794,436</b>
<b>Projected Guaranteed Maximum Price (GMP)</b>	<b>\$33,865,513</b>	<b>\$7,903,548</b>	<b>\$25,961,965</b>
<b>Grand Total</b>	<b>\$33,865,513</b>		

**Clarifications**

\*Overall GC percentage is down compared to RFP\*

Phase: 90% CD - GMP

Date: November 8, 2024

	Quantity	Unit	Rate	Total
<b>On-Site Project Management Staff</b>				<b>1,227,094.00</b>
<b>01.01 - GENERAL CONDITIONS</b>				<b>1,227,094</b>
<b>Project Management Staff</b>	<b>0.00</b>	<b>MO</b>		<b>1,227,094.00</b>
Senior Project Manager	14.00	WEEK	5,015.00	70,210.00
Project Manager 1	78.00	WEEK	2,993.00	233,454.00
Senior Superintendent	14.00	WEEK	4,567.00	63,938.00
Superintendent 1	78.00	WEEK	2,809.00	219,102.00
QA/QC Assistant Manager	14.00	WEEK	3,090.00	43,260.00
QA/QC Inspector 1	78.00	WEEK	2,335.00	182,130.00
Assistant Project Manager	78.00	WEEK	2,519.00	196,482.00
Project Engineer 1	26.00	WEEK	2,174.00	56,524.00
Field Intern	78.00	WEEK	1,540.00	120,120.00
Project Safety Coordinator 2	14.00	WEEK	2,991.00	41,874.00
<b>Bond and Insurance</b>				<b>Incl. COW</b>
<b>01.10 - INSURANCE</b>				<b>0</b>
<b>Labor Burden, Insurance, Assoc Fees, Etc</b>	<b>0.00</b>	<b>SF</b>		<b>0.00</b>
Builder's Risk (incl on Cover)	0.00	LS	0.00	0.00
General Liability (incl in COW with Workers Comp)	0.00	LS	0.00	0.00
<b>01.14 - BOND</b>				<b>0</b>
<b>Labor Burden, Insurance, Assoc Fees, Etc</b>	<b>0.00</b>	<b>SF</b>		<b>0.00</b>
GC Bond (incl on Cover)	0.00	LS	0.00	0.00
<b>Temporary Project Utilities</b>				<b>103,419.55</b>
<b>01.01 - GENERAL CONDITIONS</b>				<b>17,200</b>
<b>Trailers Technology</b>	<b>0.00</b>	<b>MO</b>		<b>15,200.00</b>
Jobsite Technology - Single Trailer Monthly	16.00	MO	950.00	15,200.00
<b>Temporary Utilities</b>	<b>0.00</b>	<b>MO</b>		<b>2,000.00</b>
Project Water (Temp Usage)	1.00	LS	2,000.00	2,000.00
<b>01.03 - SITE ADMINISTRATION</b>				<b>85,420</b>
<b>Contractor Offices &amp; Sheds</b>	<b>0.00</b>	<b>MO</b>		<b>0.00</b>
Temporary Electric & Plumbing Service (in COW)	0.00	EACH	0.00	0.00
<b>Temporary Utilities</b>	<b>0.00</b>	<b>MO</b>		<b>36,274.52</b>
Project Electricity (Temp Power Consumption)	16.00	MO	2,267.16	36,274.52
<b>Project Cleaning</b>	<b>0.00</b>	<b>SF</b>		<b>28,415.63</b>
Dumpster	70.00	PULL	405.94	28,415.63
<b>Jobsite Administration</b>	<b>0.00</b>	<b>SF</b>		<b>17,129.48</b>
Temp. Toilets - Jobsite - 4 Each, 2x Per Week	16.00	MO	1,070.59	17,129.48
<b>Safety</b>	<b>0.00</b>	<b>SF</b>		<b>3,599.97</b>
Temporary Fire Extinguishers - (including Recert)	21,450.00	SF	0.17	3,599.97
<b>01.66 - TRAFFIC CONTROL/BARRIERS</b>				<b>800</b>
<b>Street / Sidewalk Rentals</b>	<b>0.00</b>	<b>MO</b>		<b>799.96</b>
Street Rental Permit	4.00	WEEK	199.99	799.96
<b>Field Offices and Office Supplies</b>				<b>166,761.83</b>

**Brazos County Medical Examiners Office**  
**Vaughn Project No. 3180**  
**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
<b>01.01 - GENERAL CONDITIONS</b>				<b>52,520</b>
<b>Contractor Offices &amp; Sheds</b>	<b>0.00</b>	<b>MO</b>		<b>34,920.00</b>
Temp. Tank Toilets For Trailers- Service 2 Days A Week	16.00	MO	1,082.50	17,320.00
Security System	1.00	LS	3,200.00	3,200.00
Office Janitorial Service - 8 Hours A Week	67.00	WEEK	214.93	14,400.00
<b>Trailers Technology</b>	<b>0.00</b>	<b>MO</b>		<b>11,200.00</b>
Reprographic Services & Copier	16.00	MO	700.00	11,200.00
<b>Postage &amp; Printing</b>	<b>0.00</b>	<b>MO</b>		<b>6,400.00</b>
Postage	16.00	MO	400.00	6,400.00
<b>01.03 - SITE ADMINISTRATION</b>				<b>114,242</b>
<b>Contractor Offices &amp; Sheds</b>	<b>0.00</b>	<b>MO</b>		<b>80,806.57</b>
Trailer Rentals - Pick Trailer Size From Resources	14.00	MO	5,149.04	72,086.56
Monthly Office Supplies	16.00	MO	275.00	4,400.00
Drinking Water Service - Office	67.00	WEEK	64.48	4,320.01
<b>Project Cameras/Photos</b>	<b>0.00</b>	<b>MO</b>		<b>7,200.00</b>
Job Photos/Videos	16.00	MO	450.00	7,200.00
<b>Project Signage</b>	<b>0.00</b>	<b>SF</b>		<b>4,000.00</b>
Job Required Signage	1.00	EACH	4,000.00	4,000.00
<b>Jobsite Administration</b>	<b>0.00</b>	<b>SF</b>		<b>13,000.00</b>
Move In and Move Out	2.00	LS	6,500.00	13,000.00
<b>Jobsite Security</b>	<b>0.00</b>	<b>MO</b>		<b>827.95</b>
Project Badging	1.00	EACH	827.95	827.95
<b>Safety</b>	<b>0.00</b>	<b>SF</b>		<b>8,407.31</b>
First Aid (Setup, EyeWash, AED)	16.00	MO	375.46	6,007.31
Safety PPE for Visitors	67.00	WEEK	35.82	2,400.00
<b>Totals</b>				<b>1,497,275</b>

Phase: 90% CD

Date: November 8, 2024

	Total	\$/SF
<b>BP2 &amp; BP 3 - Building</b>	<b>\$22,604,720</b>	<b>\$1,004.65</b>
01.03 - SITE ADMINISTRATION	\$937,133	\$41.65
01.10 - INSURANCE	\$576,638	\$25.63
01.74 - FINAL CLEAN	\$21,150	\$0.94
01.84 - MOCKUPS	\$50,000	\$2.22
03.00 - CONCRETE TURNKEY	\$1,447,671	\$64.34
04.01 - MASONRY	\$516,315	\$22.95
05.01 - STEEL FABRICATION	\$1,364,524	\$60.65
05.02 - STEEL ERECTION	\$406,983	\$18.09
05.50 - ORNAMENTAL METALS	\$71,550	\$3.18
06.02 - ARCHITECTURAL WOODWORK/MILLWORK/TRIM	\$68,920	\$3.06
07.01 - WATERPROOF / DAMPPROOF / JOINT SEALANTS	\$157,977	\$7.02
07.02 - INSULATION	\$111,255	\$4.94
07.03 - ROOFING	\$943,474	\$41.93
07.06 - COMPOSITE PANELS	\$230,173	\$10.23
08.00 - DOORS, FRAMES, AND HARDWARE	\$303,413	\$13.48
08.02 - ALUMINUM FRAMES & TRIM	\$14,780	\$0.66
08.10 - OVERHEAD DOORS/COILING GRILLS	\$68,000	\$3.02
08.15 - AUTOMATIC DOORS	\$121,500	\$5.40
08.16 - ICU DOORS	\$17,000	\$0.76
08.18 - BULLET RESISTANT DOORS	\$16,500	\$0.73
08.28 - GLASS & GLAZING	\$196,119	\$8.72
08.32 - BULLET RESISTANT GLASS	\$31,200	\$1.39
08.38 - DOOR & HARDWARE INSTALLATION	\$28,342	\$1.26
09.02 - DRYWALL	\$990,411	\$44.02
09.03 - TILE	\$61,180	\$2.72
09.04 - TERRAZZO	\$284,741	\$12.66
09.05 - ACOUSTICAL CEILING & WALL PANELS	\$62,582	\$2.78
09.07 - CARPET, VINYL FLOORING, & BASE	\$75,623	\$3.36
09.12 - PAINTING	\$114,172	\$5.07
09.16 - CONCRETE SEALER	\$6,627	\$0.29
10.03 - TOILET COMPARTMENTS	\$5,225	\$0.23
10.04 - LOUVERS	\$12,000	\$0.53
10.05 - WALL PROTECTION	\$46,970	\$2.09
10.07 - FLAGPOLES	\$8,250	\$0.37
10.08 - SIGNAGE	\$32,050	\$1.42
10.09 - LOCKERS	\$16,100	\$0.72
10.10 - FIRE PROTECTION SPECIALTIES	\$5,100	\$0.23
10.11 - ALUMINUM COVERS & AWNINGS	\$81,000	\$3.60



	Total	\$/SF
10.14 - OPERABLE PARTITIONS	\$26,640	\$1.18
10.17 - TOILET ACCESSORIES	\$23,948	\$1.06
10.19 - CUBICLE CURTAIN AND IV TRACKS	\$1,092	\$0.05
10.22 - KNOX BOX	\$1,347	\$0.06
10.26 - MISCELLANEOUS SPECIALTIES	\$152,750	\$6.79
11.06 - LOADING DOCK EQUIPMENT	\$46,728	\$2.08
11.08 - RESIDENTIAL APPLIANCES	\$24,597	\$1.09
11.13 - MEDICAL EQUIPMENT VENDOR	\$1,054,283	\$46.86
11.43 - RADIOLOGY EQUIPMENT	\$563,450	\$25.04
12.02 - MEDICAL CASEWORK	\$463,929	\$20.62
12.05 - BLINDS AND SHADES	\$22,296	\$0.99
12.10 - SYSTEMS FURNITURE	\$500,000	\$22.22
13.01 - RADIATION PROTECTION	\$22,400	\$1.00
13.04 - ENVIRONMENTAL ROOMS	\$809,815	\$35.99
21.01 - FIRE PROTECTION	\$153,084	\$6.80
22.01 - PLUMBING	\$1,045,988	\$46.49
23.01 - HVAC	\$4,069,219	\$180.85
23.02 - TEST & BALANCE	\$60,500	\$2.69
26.01 - ELECTRICAL	\$1,564,359	\$69.53
26.03 - FIRE ALARM	\$37,401	\$1.66
27.01 - TELECOM/DATA	\$200,858	\$8.93
27.02 - AUDIO VISUAL	\$287,417	\$12.77
28.01 - SECURITY	\$182,307	\$8.10
31.01 - EARTHWORK	\$105,000	\$4.67
32.07 - FENCES & GATES	\$1,431,850	\$63.64
32.13 - LANDSCAPE & IRRIGATION	\$250,817	\$11.15
<b>Totals</b>	<b>\$22,604,720</b>	<b>\$1,004.65</b>

**Brazos County Medical Examiners Office**

**Vaughn Project No. 3180**

**ESTIMATE DETAIL**



**Phase: 90% CD**

**Date: November 8, 2024**

	Quantity	Unit	Rate	Total
<b>BP2 &amp; BP 3 - Building</b>				<b>\$22,604,720</b>
<b>01.03 - SITE ADMINISTRATION</b>				<b>\$937,133</b>
<b>General Labor</b>				<b>\$252,513</b>
Construction Worker - Operator	25.00	WEEK	1,998.43	\$49,961
Cleanup/Maintenance - 1 Man	25.00	WEEK	1,687.94	\$42,198
Construction Worker - Flagman/Tire clean	25.00	WEEK	1,687.94	\$42,198
Cleanup/Maintance - 1 Man	70.00	WEEK	1,687.94	\$118,156
<b>Contractor Offices &amp; Sheds</b>				<b>\$51,924</b>
Tool Sheds	6.00	MO	492.54	\$2,955
Tool Sheds - In & Out	1.00	EACH	2,600.00	\$2,600
Small Tools	6.00	MO	1,196.16	\$7,177
Office Furnishings	16.00	MO	1,688.70	\$27,019
Purchase Office Furnishings (Per Conf. Room)	1.00	EACH	3,377.40	\$3,377
Job Office Supplies - Add Number Of Personnel In Resource	16.00	MO	281.45	\$4,503
Temporary Electric Service - Power Company Charge	1.00	EACH	780.00	\$780
Power Bill - Per Trailer	16.00	MO	219.53	\$3,512
<b>Trailers Technology</b>				<b>\$36,941</b>
Jobsite Technology - Single Trailer Monthly	16.00	MO	2,308.80	\$36,941
<b>VDC Technology</b>				<b>\$84,741</b>
Project BIM Coordination Support	20.00	EACH	845.00	\$16,900
Drone Deploy System	6.00	MO	3,088.15	\$18,529
BIM Modeling Package	1.00	LS	49,312.00	\$49,312
<b>Temporary Utilities</b>				<b>\$1,950</b>
Temporary Water Meter - Transient Meter	1.00	LS	1,950.00	\$1,950
<b>Project Cleaning</b>				<b>\$79,228</b>
Street Sweeper	25.00	WEEK	1,618.34	\$40,458
Mule - 4 Seat/Diesel	25.00	WEEK	1,407.25	\$35,181
Pressure Washer	6.00	MO	598.08	\$3,588
<b>Jobsite Administration</b>				<b>\$7,879</b>
Radios - 4 Ea.	6.00	MO	112.58	\$675
Water - Jobsite	25.00	WEEK	101.05	\$2,526
Ice Machine	6.00	MO	562.90	\$3,377
Stairs & Ladders	2.00	EACH	650.00	\$1,300
<b>Layout</b>				<b>\$296,239</b>
Layout Setup (Verification And Software Setup)	1.00	LS	7,036.25	\$7,036
Layout Crew - 2 Man (Field Eng./Instrument man/w equipment)	12.00	WEEK	24,100.25	\$289,203
<b>Safety</b>				<b>\$47,290</b>
Misc. Safety Consumables	70.00	WEEK	105.54	\$7,388

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**ESTIMATE DETAIL**



	Quantity Unit	Rate	Total
Perimeter Safety Rail 2 Each - 3/8' Wire Cable With Turnbuckles, Metal Stands , And Clips Or Sleeves	650.00 LF	9.60	\$6,241
Wood Handrails - 2 Line	650.00 LF	5.63	\$3,659
Add Toeboards	650.00 LF	3.38	\$2,195
Add Orange Perimeter Mesh	800.00 LF	3.10	\$2,477
Opening Covers - Small Openings	250.00 SF	4.43	\$1,108
Milestone Events	2.00 EACH	10,000.00	\$20,000
Misc. Safety Equipment @ Detention System	1.00 LS	4,221.75	\$4,222
<b>Closeout Requirement</b>			<b>\$16,238</b>
Milestone Event	2.00 EACH	8,118.75	\$16,238
<b>Forklifts</b>			<b>\$28,708</b>
Backhoe	6.00 MO	4,784.65	\$28,708
<b>Temporary Dewatering Scope Items</b>			<b>\$3,085</b>
Sump Pump w/ 100' Hose	3.00 EACH	1,028.38	\$3,085
<b>Earthwork General Conditions</b>			<b>\$30,397</b>
Fuel, Oil, Grease - Jobsite Equipment	6.00 MO	5,066.10	\$30,397
<b>01.10 - INSURANCE</b>			<b>\$576,638</b>
<b>Labor Burden, Insurance, Assoc Fees, Etc</b>			<b>\$576,638</b>
Insurance - Workers Comp. GL	1.00 LS	576,638.00	\$576,638
<b>01.74 - FINAL CLEAN</b>			<b>\$21,150</b>
<b>Project Cleaning</b>			<b>\$21,150</b>
Final Clean Up - Sub 1st Clean	22,500.00 SF	0.50	\$11,250
Final Clean Up - Sub 2nd Clean	22,500.00 SF	0.20	\$4,500
Final Clean Up - Sub 3rd Clean	22,500.00 SF	0.20	\$4,500
Final Clean Exterior Windows	2,000.00 SF	0.45	\$900
<b>01.84 - MOCKUPS</b>			<b>\$50,000</b>
<b>Subcontractor</b>			<b>\$50,000</b>
Mockup Allowance	1.00 LS	50,000.00	\$50,000
<b>03.00 - CONCRETE TURNKEY</b>			<b>\$1,447,671</b>
<b>Concrete Subcontractor</b>			<b>\$1,447,671</b>
Concrete Turnkey Sub Bid	1.00 LS	1,447,671.00	\$1,447,671
<b>Concrete General Conditions</b>			<b>\$0</b>
Washout Containers (1 Pull Every 350 CY) - Concrete Self Perform 1762 CY	5.00 EACH	0.00	\$0
Forklift For Concrete Work	3.00 MO	0.00	\$0
<b>Drilled and Underreamed</b>			<b>\$0</b>
Bell Bottom Piers 18' to 21.42' deep (Drilling Based on 21.42 LF/EA)	122.00 EACH	0.00	\$0
<b>Pile / Pier Caps</b>			<b>\$0</b>
Pier Caps - 4X4X3, 8" Void Fm, 200 PCY	28.00 EACH	0.00	\$0
<b>Strip Footing</b>			<b>\$0</b>

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
Monument Sign Foundations - No Detail - Footing & Stub Wall	8.00	LF	0.00	\$0
<b>Grade Beam</b>				<b>\$0</b>
Assumed Grade Bm 16X30, 150 PCY, 8" Void Fm - Dumpster Screen Wall	35.00	LF	0.00	\$0
Grade Beam, 8" Void Fm	903.00	LF	0.00	\$0
<b>Grade Walls</b>				<b>\$0</b>
Loading Dock Pit (no detail)	1.00	EACH	0.00	\$0
<b>Slab on Grade</b>				<b>\$0</b>
Chiller & Generator Mech. Pad - Slab On Grade 12" with Thickened Perim. (8/S3.12)	633.00	SF	0.00	\$0
<b>Slab on Carton Form</b>				<b>\$0</b>
Slab On Carton 10", 8" Void	22,894.00	SF	0.00	\$0
Assumed at Stoops (2 EA) - Slab On Carton 8", 8" Void, 5 PSF with Gr Bm 18X24 (no detail)	87.00	SF	0.00	\$0
<b>Topping slab</b>				<b>\$0</b>
Concrete Fill Recess at Scale 4/2LB5.00	110.00	SF	0.00	\$0
Excluded - Topping Slabs for Slab Slope	0.00	SF	0.00	\$0
<b>Walls</b>				<b>\$0</b>
Wall & Strip Footing at Mech Yard Steps (assume 8" Thick Wall)	188.00	SF	0.00	\$0
<b>Curbs</b>				<b>\$0</b>
Autopsy Table Curb - 4"X3"	76.00	LF	0.00	\$0
<b>Slab on Metal Deck</b>				<b>\$0</b>
Slab On Metal Deck 5.5"	3,141.00	SF	0.00	\$0
<b>Pads</b>				<b>\$0</b>
Transformer Pad 9'X9' - 12" Thick	1.00	EACH	0.00	\$0
MEP Pads - 16 EA	880.00	SF	0.00	\$0
Cabinet Curb (Keynote 29/2LB2.01) - 24" Wide X 6" Thick	72.00	SF	0.00	\$0
<b>Stairs</b>				<b>\$0</b>
Pan Stair Concrete Fill - 2 Sets	100.00	SF	0.00	\$0
Stairs on Grade at Mechanical Yards (no detail) - 2 Sets	204.00	SF	0.00	\$0
<b>Miscellaneous Concrete</b>				<b>\$0</b>
Sallyport Interior Bollard - Set embed, Fill stl pipe	6.00	EACH	0.00	\$0
Sallyport (Exterior) Bollard Foundation, Set & Fill Pipe	4.00	EACH	0.00	\$0
SuperVoid System @ Autopsy Suite Underfloor Piping	760.00	LF	0.00	\$0
<b>04.01 - MASONRY</b>				<b>\$516,315</b>
<b>Face Brick</b>				<b>\$261,800</b>
BR-01 - Field Brick - Ash Grey	10,174.00	SF	25.00	\$254,350
BR-01 - Field Brick - Ash Grey @ Dumpster Enclosure	298.00	SF	25.00	\$7,450
<b>Concrete Masonry Units (CMU)</b>				<b>\$203,624</b>
CS-01 - 4"x8"x16" Ground Face Block	4,416.00	SF	28.00	\$123,648

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**ESTIMATE DETAIL**



	Quantity Unit	Rate	Total
CS-01 - 4"x8"x16" Ground Face Block @ Monument Sign	142.00 SF	28.00	\$3,976
M18 - CMU - 8" Solid Grout Filled	3,102.00 SF	20.00	\$62,040
CMU - 8" Solid Grout Filled @ Dumpster Enclosure	145.00 SF	20.00	\$2,900
M181 - CMU - 8" Solid Grout Filled	553.00 SF	20.00	\$11,060
<b>Cast Stone</b>			<b>\$50,891</b>
Stone Banding	1,032.00 LF	39.00	\$40,248
Stone Banding @ Monument Sign	42.00 LF	39.00	\$1,638
Cast Stone Parapet Cap @ Monument Sign	7.00 LF	70.00	\$490
Cast Stone Panels @ Monument Sign	131.00 SF	65.00	\$8,515
<b>05.01 - STEEL FABRICATION</b>			<b>\$1,364,524</b>
<b>Steel Fabrication</b>			<b>\$986,602</b>
Steel Beams at Roof	120.78 TON	4,250.00	\$513,315
HSS Columns	40.44 TON	4,250.00	\$171,870
HSS Columns - Hangers @ Catwalks	1.53 TON	5,000.00	\$7,650
Steel Framing at Mezzanine	19.84 TON	5,000.00	\$99,200
1/4" Thick Bent Plate Around Perimeter	9.54 TON	5,500.00	\$52,470
Miscellaneous Framing / Shop Prefabricated items	4.30 TON	5,500.00	\$23,650
Brace Frames	18.66 TON	5,500.00	\$102,630
Floating Millwork Supports	0.06 TON	5,500.00	\$347
Stainless Steel - Autopsy Supports	1.82 TON	8,500.00	\$15,470
<b>Decking</b>			<b>\$136,832</b>
Mezzanine Floor Composite Framing - 2" 18 Gage	28.92 SQUARE	750.00	\$21,690
Roof Deck - 1.5" B Deck - High Roof and Overhangs	130.56 SQUARE	450.00	\$58,752
Roof Deck - 1.5" B Deck - Low Roof	125.31 SQUARE	450.00	\$56,390
<b>Anchor Bolts</b>			<b>\$520</b>
Anchor Bolts	65.00 SET	8.00	\$520
<b>Grating</b>			<b>\$32,600</b>
Welded Grating @ Mezzanine Catwalks	652.00 SF	50.00	\$32,600
<b>Pan Stairs</b>			<b>\$11,100</b>
Pan Stairs w/ Int. Landings (Guard / Wall Rails Separate) - 3' Wide Primed	15.00 RISER	300.00	\$4,500
Pan Stairs w/ Int. Landings (Guard / Wall Rails Separate) - 3' Wide Primed	22.00 RISER	300.00	\$6,600
<b>Guardrails</b>			<b>\$91,769</b>
Guardrail - 2 Line @ Catwalk	335.00 LF	260.00	\$87,100
Guardrail - 2 Line Primed @ Stairs	29.00 EACH	85.00	\$2,465
Wall Rail - Primed @ Stairs	76.00 EACH	29.00	\$2,204
<b>Hang Down, Knee Wall, &amp; Facade Framing</b>			<b>\$98,939</b>
Parapet Framing - 6' Tall, All Galvanized - 60 PLF or 10 PSF	12.62 TON	7,000.00	\$88,340
Cantilevered Supports for Steel Channel	1.51 TON	7,000.00	\$10,599
<b>Masonry Supports</b>			<b>\$6,163</b>
Masonry Lintels - On Inserts	192.00 LF	32.10	\$6,163

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
<b>05.02 - STEEL ERECTION</b>				<b>\$406,983</b>
<b>Steel Fabrication</b>				<b>\$284,750</b>
Steel Beams at Roof	120.78	TON	1,275.00	\$153,995
1/4" Thick Bent Plate Around Perimeter	9.54	TON	1,275.00	\$12,164
Miscellaneous Framing / Shop Prefabricated items	4.30	TON	1,275.00	\$5,483
HSS Columns	40.44	TON	1,275.00	\$51,561
Brace Frames	18.66	TON	1,275.00	\$23,792
Stainless Steel - Autopsy Supports	1.82	TON	4,500.00	\$8,190
HSS Columns - Hangers @ Catwalks	1.53	TON	1,275.00	\$1,951
Steel Framing at Mezzanine	19.84	TON	1,275.00	\$25,296
Stainless Steel - Autopsy Supports	1.82	TON	1,275.00	\$2,321
<b>Decking</b>				<b>\$45,611</b>
Mezzanine Floor Composite Framing - 2" 18 Gage	28.92	SQUARE	250.00	\$7,230
Roof Deck - 1.5" B Deck - High Roof and Overhangs	130.56	SQUARE	150.00	\$19,584
Roof Deck - 1.5" B Deck - Low Roof	125.31	SQUARE	150.00	\$18,797
<b>Anchor Bolts</b>				<b>\$390</b>
Anchor Bolts	65.00	SET	6.00	\$390
<b>Grating</b>				<b>\$19,560</b>
Welded Grating @ Mezzanine Catwalks	652.00	SF	30.00	\$19,560
<b>Pan Stairs</b>				<b>\$2,550</b>
Pan Stairs w/ Int. Landings (Guard / Wall Rails Separate) - 3' Wide Primed	1.00	EACH	1,275.00	\$1,275
Pan Stairs w/ Int. Landings (Guard / Wall Rails Separate) - 3' Wide Primed	1.00	EACH	1,275.00	\$1,275
<b>Guardrails</b>				<b>\$31,787</b>
Guardrail - 2 Line @ Catwalk	335.00	LF	90.00	\$30,150
Guardrail - 2 Line Primed @ Stairs	29.00	EACH	25.00	\$725
Wall Rail - Primed @ Stairs	76.00	EACH	12.00	\$912
<b>Hang Down, Knee Wall, &amp; Facade Framing</b>				<b>\$18,021</b>
Parapet Framing - 6' Tall, All Galvanized - 60 PLF or 10 PSF	12.62	TON	1,275.00	\$16,091
Cantilevered Supports for Steel Channel	1.51	TON	1,275.00	\$1,930
<b>Masonry Supports</b>				<b>\$4,314</b>
Masonry Lintels - On Inserts	192.00	LF	22.47	\$4,314
<b>05.50 - ORNAMENTAL METALS</b>				<b>\$71,550</b>
<b>Stainless Steel Handrails and Railings</b>				<b>\$71,550</b>
Guard Rail - Furnish & Install @ Exterior	159.00	LF	450.00	\$71,550
<b>06.02 - ARCHITECTURAL WOODWORK/MILLWORK/TRIM</b>				<b>\$68,920</b>
<b>Plastic Laminate Cabinetry</b>				<b>\$27,200</b>
PL-01 - Lower PLAM Cabinets	87.00	LF	165.00	\$14,355
PL-01 - Lower PLAM Cabinets @ Restrooms	24.00	LF	165.00	\$3,960
PL-01 - Upper PLam Cabinets	28.00	LF	145.00	\$4,060
PL-01 - Full Height PLam Cabinets	3.00	LF	325.00	\$975

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
PLam Reception Desk (No Countertops)	11.00	LF	350.00	\$3,850
<b>Plastic Laminate Countertops</b>				<b>\$3,380</b>
Countertops - At Reception Desk	26.00	LF	130.00	\$3,380
<b>Plastic Laminate Shelving</b>				<b>\$1,890</b>
PL-01 - P-Lam Shelving (1Shelf)	27.00	LF	70.00	\$1,890
<b>Solid Surface Fabrications</b>				<b>\$33,000</b>
SS-02 - Quartz Counter Top With Back Splash	40.00	LF	350.00	\$14,000
SS-03 - Quartz Counter Top With Back Splash	20.00	LF	350.00	\$7,000
SS-01 - Quartz Counter Top No Backsplash	40.00	LF	300.00	\$12,000
<b>Plastic Wall Protection</b>				<b>\$3,450</b>
Wall Protection In Conference Room / Training	69.00	LF	50.00	\$3,450
<b>07.01 - WATERPROOF / DAMPPROOF / JOINT SEALANTS</b>				<b>\$157,977</b>
<b>Air Barriers</b>				<b>\$111,433</b>
Fluid-Applied Membrane Air Barriers @ Masonry and Metal Panel	19,439.00	SF	5.69	\$110,608
Fluid-Applied Membrane Air Barriers @ Dumpster Enclosure	145.00	SF	5.69	\$825
<b>Stainless Steel Flashings</b>				<b>\$38,242</b>
Stainless Steel Drip Edge	295.00	LF	13.82	\$4,077
Stainless Steel Thru Wall Flashing @ Windows in Metal Panel	44.00	LF	18.01	\$792
Stainless Steel Thru Wall Flashing @ Base of Wall	627.00	LF	18.01	\$11,292
Stainless Steel Thru Wall Flashing @ Sloped Roof Transition	130.00	LF	18.01	\$2,341
Stainless Steel Thru Wall Flashing @ Bottom of C-Channel	420.00	LF	18.01	\$7,564
Stainless Steel Thru Wall Flashing @ Top of Windows	168.00	LF	18.01	\$3,026
Stainless Steel Thru Wall Flashing @ Window Jambs	269.00	LF	18.01	\$4,845
Stainless Steel Thru Wall Flashing @ Masonry Window Sills	83.00	LF	18.01	\$1,495
Stainless Steel Thru Wall Flashing @ Top of HM and OH Doors	127.00	LF	18.01	\$2,287
Stainless Steel Thru Wall Flashing @ Louvers	29.00	LF	18.01	\$522
<b>Building Facade Joint Sealants</b>				<b>\$8,302</b>
Joint Sealant @ Exterior Doors	6.00	EACH	118.00	\$708
Horizontal Joint Sealants - Brick To Brick	384.22	LF	8.70	\$3,343
Vertical Joint Sealants - Brick To Metal Panel	488.67	LF	8.70	\$4,251
<b>07.02 - INSULATION</b>				<b>\$111,255</b>
<b>Rigid Insulation</b>				<b>\$87,699</b>
2" (R10) Rigid Insulation	18,739.00	SF	4.68	\$87,699
<b>Insulation Batts</b>				<b>\$17,269</b>
(R10) Batt Insulation @ C-Channel	559.99	SF	0.85	\$476
(R10) Batt Insulation @ Exterior Wall System	18,739.00	SF	0.85	\$15,928
(R10) Batt Insulation @ Roof Overhangs	1,017.00	SF	0.85	\$864

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
<b>Sprayed Insulation</b>				<b>\$6,287</b>
Sprayed Cementitious Foam Insulation - 6" Thick @ Above Stink Wall, M18 Partitions, and Y-Type Partitions	499.00	SF	12.60	\$6,287
<b>07.03 - ROOFING</b>				<b>\$943,474</b>
<b>Standing Seam Roofing</b>				<b>\$382,137</b>
Standing Seam Metal Roofing - 24 Gauge Kynar	12,327.00	SF	31.00	\$382,137
<b>Flashings &amp; Trim</b>				<b>\$36,190</b>
Parapet Cap / Coping - 12" Wide @ Parapet Wall	194.00	LF	35.00	\$6,790
Parapet Cap / Coping - 12" Wide @ Top of C-Channel	420.00	LF	35.00	\$14,700
Continuous Cleat @ Bottom of C-Channel	420.00	LF	35.00	\$14,700
<b>Membrane Roofing</b>				<b>\$226,425</b>
PVC Membrane Roof -60 Mil Fully Adhered	10,571.00	SF	15.00	\$158,565
PVC Membrane Roof -60 Mil Fully Adhered @ Parapet Walls	3,684.00	SF	15.00	\$55,260
PVC Membrane Roof -60 Mil Fully Adhered @ Top of C-Channel	840.00	SF	15.00	\$12,600
<b>Roof Insulation</b>				<b>\$170,337</b>
Polyisocyanurate - 5" @ PVC Roof Membrane	10,571.00	SF	4.50	\$47,570
Polyisocyanurate - 5" @ Metal Roof Panels	12,327.00	SF	4.50	\$55,472
Coverboard Overlay - 1/2"	10,571.00	SF	0.60	\$6,343
Polyisocyanurate - Tapered For Drainage @ PVC Roof	10,571.00	SF	3.00	\$31,713
30# Felt Underlayment @ Metal Roof	12,327.00	SF	1.10	\$13,560
1/4" Densglass @ Parapet and C-Channel	3,684.00	SF	1.10	\$4,052
1/4" Densdeck @PVC Roof	10,571.00	SF	1.10	\$11,628
<b>Roof Accessories</b>				<b>\$2,375</b>
Roof Hatch - 5x4	1.00	EACH	2,000.00	\$2,000
Roof Walkway Pads	15.00	EACH	25.00	\$375
<b>Roof Blocking</b>				<b>\$126,010</b>
Roof Blocking - Plywood Sheathing - 1/2" @ Metal Roof	12,327.00	SF	4.64	\$57,162
Roof Blocking - Plywood Sheathing - 1/2"@ Bottom of C-Channel	2,520.00	SF	4.64	\$11,686
Roof Blocking - Plywood Sheathing - 1/2" @ PVC Roof	12,327.00	SF	4.64	\$57,162
<b>07.06 - COMPOSITE PANELS</b>				<b>\$230,173</b>
<b>Composite Panels</b>				<b>\$230,173</b>
Aluminum Composite Metal Panel - 4mm - @ Parapet	1,820.00	SF	55.00	\$100,100
Thermal Spacers	2,711.00	SF	18.00	\$48,798
Aluminum Composite Metal Panel - 4mm @ Exterior Walls	891.00	SF	55.00	\$49,005
Metal Panel Soffit	922.00	SF	35.00	\$32,270
<b>08.00 - DOORS, FRAMES, AND HARDWARE</b>				<b>\$303,413</b>
<b>Door Frames</b>				<b>\$9,200</b>
3070 Hollow Metal Frame PS	9.00	EACH	500.00	\$4,500
3070 Hollow Metal Frame - 90 Minute Fire Rated	3.00	EACH	500.00	\$1,500



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	Quantity	Unit	Rate	Total
6070 Hollow Metal Frame - Exterior	1.00	EACH	800.00	\$800
6070 Hollow Metal Frame - 90 Minute Fire Rated	1.00	EACH	800.00	\$800
6070 Hollow Metal Frame	2.00	EACH	800.00	\$1,600
<b>Hollow Metal Doors</b>				<b>\$13,300</b>
3070 Hollow Metal Door - 90 Minute Fire Rated	4.00	EACH	700.00	\$2,800
3070 Hollow Metal Door PS	9.00	EACH	700.00	\$6,300
3070 Hollow Metal Door - Exterior PS	2.00	EACH	700.00	\$1,400
3070 Hollow Metal Door - Exterior W/ Small Glass Window PS	2.00	EACH	700.00	\$1,400
3070 Hollow Metal Door - Exterior 90 Minute Fire Rated	2.00	EACH	700.00	\$1,400
<b>Stainless Steel Doors &amp; Frames</b>				<b>\$108,000</b>
3070 Stainless Steel Door & Frame Assembly PS	9.00	EACH	8,000.00	\$72,000
Pair 3070 Stainless Steel Door & Frame Assembly	3.00	PAIR	12,000.00	\$36,000
<b>Solid Core Plastic Laminate Doors</b>				<b>\$27,750</b>
3070 Plastic Laminate Door - Solid Core PS	27.00	EACH	900.00	\$24,300
3070 Plastic Laminate Door - Solid Core W/ Small Glass Window Big Window PS	1.00	EACH	1,150.00	\$1,150
3070 Plastic Laminate Door - 90 Minute Fire Rated	2.00	EACH	1,150.00	\$2,300
<b>Hardware Sets</b>				<b>\$145,163</b>
Hardware Set TYP Office / Corridor	25.00	EACH	1,487.50	\$37,188
Interior Corridor / Office Door Hardware - Electrified	17.00	EACH	2,800.00	\$47,600
Restroom Lockable	6.00	EACH	2,625.00	\$15,750
Multi Restroom Hardware	2.00	EACH	2,625.00	\$5,250
OPT Auto Bisliding Hardware	4.00	EACH	2,625.00	\$10,500
OPT Auto Single Slide Hardware	1.00	EACH	2,625.00	\$2,625
TYP Exit Hardware	5.00	EACH	2,625.00	\$13,125
TYP DBL Exit Hardware	1.00	EACH	2,625.00	\$2,625
Back of House Double Hardware	3.00	EACH	2,625.00	\$7,875
Back Of House Single Hardware	1.00	EACH	2,625.00	\$2,625
<b>08.02 - ALUMINUM FRAMES &amp; TRIM</b>				<b>\$14,780</b>
<b>Aluminum Frames &amp; Trim</b>				<b>\$14,780</b>
3070 Aluminum Frame	31.00	EACH	440.00	\$13,640
3070 Aluminum Frame - 90 Minute Fire Rated	2.00	EACH	440.00	\$880
6070 Aluminum Frame	1.00	EACH	260.00	\$260
<b>08.10 - OVERHEAD DOORS/COILING GRILLS</b>				<b>\$68,000</b>
<b>Overhead Doors</b>				<b>\$68,000</b>
Overhead Coiling Door-14x14 - Motorized	2.00	EACH	23,500.00	\$47,000
Overhead Coiling Door-8x8 - Motorized	2.00	EACH	10,500.00	\$21,000
<b>08.15 - AUTOMATIC DOORS</b>				<b>\$121,500</b>
<b>Automatic Door Operators</b>				<b>\$121,500</b>
Automatic Sliding Doors - Double - Lead Lined	1.00	EACH	45,000.00	\$45,000
Openers, Automatic Sliding Doors - Double	3.00	EACH	20,500.00	\$61,500

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	Quantity	Unit	Rate	Total
Openers, Automatic Swing Doors - Pair	1.00	EACH	15,000.00	\$15,000
<b>08.16 - ICU DOORS</b>				<b>\$17,000</b>
<b>ICU Doors</b>				<b>\$17,000</b>
8070 - 2 Panel Sliding Breakaway Door @ Autopsy	1.00	EACH	17,000.00	\$17,000
<b>08.18 - BULLET RESISTANT DOORS</b>				<b>\$16,500</b>
<b>Ballistic Doors</b>				<b>\$16,500</b>
UL Level 3 3070 Bullet Resistant Door Frame & Hardware	3.00	EACH	5,500.00	\$16,500
<b>08.28 - GLASS &amp; GLAZING</b>				<b>\$196,119</b>
<b>Glass Doors &amp; Entrances</b>				<b>\$40,300</b>
Pair Aluminum Entrance Door & Frame-(2)3080, Interior	1.00	PAIR	7,800.00	\$7,800
Pair Aluminum Entrance Door & Frame-(2)3080, Exterior	1.00	PAIR	8,450.00	\$8,450
Aluminum Entrance Door & Frame-3070, Interior	3.00	EACH	3,900.00	\$11,700
Aluminum Entrance Door & Frame - 3070, Exterior	1.00	EACH	4,550.00	\$4,550
Aluminum Entrance Door & Frame-3070, Interior PS	2.00	EACH	3,900.00	\$7,800
<b>Aluminum Punch Windows</b>				<b>\$2,633</b>
Storefront K - Observation Window at 12 Degree Slope	27.00	SF	97.50	\$2,633
<b>Storefront Window Systems</b>				<b>\$149,791</b>
Storefront Glazing Systems - Interior SF3 - 1/4" Insulated Vision Glass	43.00	SF	84.50	\$3,634
Storefront Glazing Systems - Exterior @ Entrance - 1" Insulated Tempered Glass Gray Lite W/ Solarban 60	333.00	SF	84.50	\$28,139
Storefront Glazing Systems - Exterior @ Entrance - 1" Insulated Vision Glass Gray Lite W/ Solarban 60	55.00	SF	84.50	\$4,648
Storefront Glazing Systems - Exterior - 1" Insulated Vision Glass Gray Lite W/ Solarban 60	1,143.00	SF	84.50	\$96,584
Storefront J Glazing Systems - Interior @ Morgue Atten. Office	28.00	SF	84.50	\$2,366
Storefront L Glazing Systems - Interior @ Private Offices	50.00	SF	84.50	\$4,225
Storefront G Glazing Systems - Interior @ Private Offices	83.00	SF	84.50	\$7,014
Storefront F Glazing Systems - Interior @ Director, Morgue Atten., Admin	23.00	SF	84.50	\$1,944
Storefront R Glazing Systems - Interior @ Decomp Isolation Room	14.67	SF	84.50	\$1,240
<b>Interior Glass in Doors</b>				<b>\$650</b>
Tempered Glass In Doors (Small Size)	4.00	EACH	162.50	\$650
<b>Other Glass &amp; Glazing</b>				<b>\$2,746</b>
3M Glass Frost Film	176.00	SF	15.60	\$2,746
<b>08.32 - BULLET RESISTANT GLASS</b>				<b>\$31,200</b>
<b>Bullet Resistant Glass</b>				<b>\$31,200</b>
Storefront C - Bullet Resistant Glass - Level 3	24.00	SF	780.00	\$18,720
Storefront H - Bullet Resistant Glass - Level 3	16.00	SF	780.00	\$12,480
<b>08.38 - DOOR &amp; HARDWARE INSTALLATION</b>				<b>\$28,342</b>

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	Quantity	Unit	Rate	Total
<b>Door Distribution</b>				<b>\$850</b>
Distribute Hollow Metal Doors	18.00	EACH	47.21	\$850
<b>Frame Distribution</b>				<b>\$850</b>
Distribute Hollow Metal Frames	18.00	EACH	47.21	\$850
<b>Set Hollow Metal Doors</b>				<b>\$2,227</b>
Set Hollow Metal Doors	18.00	EACH	123.74	\$2,227
<b>Set Stainless Steel Doors</b>				<b>\$17,818</b>
Set Stainless Steel Doors	18.00	EACH	989.90	\$17,818
<b>Wood Door Distribution</b>				<b>\$1,322</b>
Distribute Doors	28.00	EACH	47.21	\$1,322
<b>Set Wood Doors</b>				<b>\$3,465</b>
Set Doors	28.00	EACH	123.74	\$3,465
<b>Aluminum Frame Distribution</b>				<b>\$1,102</b>
Distribute Aluminum Frames	28.00	EACH	39.35	\$1,102
<b>Stainless Steel Door Distribution</b>				<b>\$708</b>
Distribute Stainless Steel Door	18.00	EACH	39.35	\$708
<b>09.02 - DRYWALL</b>				<b>\$990,411</b>
<b>Exterior Gypboard Partitions</b>				<b>\$282,891</b>
Ext. Wall to 14'	6,800.00	SF	11.93	\$81,090
Ext. High Roof	12,635.00	SF	12.83	\$162,044
Parapet	1,550.00	SF	25.65	\$39,758
<b>Interior Partitions to Deck, 1 Layer EA Side</b>				<b>\$281,184</b>
A23 Partitions - To 14' -20 Ga.3 5/8"@16",1 Ea 5/8"Gyp Ea. Side	500.00	LF	103.60	\$51,800
A26 Partitions - To 14' -20 Ga.6"@16",1 Ea 5/8"Gyp Ea. Side	430.00	LF	117.60	\$50,568
A16 Partitions - To 24' -20 Ga.6"@16",1 Ea 5/8"Gyp Ea. Side	200.00	LF	201.60	\$40,320
A86 "Stink Wall" Partitions - To 24' -20 Ga.6"@16",1 Ea 5/8"Gyp Ea. Side	147.00	LF	201.60	\$29,635
A13 Partitions - To 24' -20 Ga.3 5/8"@16",1 Ea 5/8"Gyp Ea. Side	200.00	LF	177.60	\$35,520
Y43 Partitions - To 24' -20 Ga.3 5/8"@16",1 Ea 5/8"Gyp Ea. Side	74.00	LF	177.60	\$13,142
Y13 Partitions - To 24' -20 Ga.3 5/8"@16",1 Ea 5/8"Gyp Ea. Side W/ Wire Security Mesh Welded to Studs	40.00	LF	257.60	\$10,304
Y16 Partitions - To 24' -20 Ga.6"@16",1 Ea 5/8"Gyp Ea. Side W/ Wire Security Mesh Welded to Studs	25.00	LF	281.60	\$7,040
1 Hour Fire Rated Wall To 14'	156.00	LF	134.40	\$20,966
1 Hour Fire Rated Wall To 24'	95.00	LF	230.40	\$21,888
<b>Chase Walls, 1 Layer EA Side</b>				<b>\$1,389</b>

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	Quantity	Unit	Rate	Total
C23 Partitions - 2 To 14' -20 Ga.3 5/8"@16",1 Ea 5/8"Gyp Ea. Finish Side	8.00	LF	173.60	\$1,389
<b>Furred Walls, 1 Layer on Finish Side</b>				<b>\$12,319</b>
F13 Partitions - To 24' -20 Ga.3 5/8"@16",1 Ea 5/8"Gyp Finish Side	22.00	LF	139.20	\$3,062
M28 Partitions - To 24' -20 Ga.3 5/8"@16",1 Ea 5/8"Gyp Finish Side	63.00	LF	139.20	\$8,770
F16 Partitions - To 14' -20 Ga.6"@16",1 Ea 5/8"Gyp Finish Side	6.00	LF	81.20	\$487
<b>Stub Walls</b>				<b>\$53,680</b>
Parapet Walls	610.00	LF	88.00	\$53,680
<b>Other Gyp Board Partitions</b>				<b>\$3,875</b>
Wall Cement Tile Backer	1,907.00	SF	2.03	\$3,875
<b>Drywall Ceilings</b>				<b>\$81,034</b>
GWB Ceiling 1 layer - 14 FT	6,879.00	SF	7.32	\$50,354
GBC - 02 Monolithic Ceiling	767.00	SF	40.00	\$30,680
<b>Drywall Furrdowns</b>				<b>\$16,500</b>
Furrdown - 2' Wide	300.00	LF	55.00	\$16,500
<b>Sealants by Drywall</b>				<b>\$2,805</b>
Acoustical Sealant	1,079.00	LF	2.60	\$2,805
<b>Tape &amp; Float</b>				<b>\$24,000</b>
Tape & Float Included	50,000.00	SF	0.48	\$24,000
<b>Insulation by Drywall</b>				<b>\$10,772</b>
Acoustical Wall Insulation - 2 "	16,832.00	SF	0.64	\$10,772
<b>Lead Lined Gypboard</b>				<b>\$219,960</b>
1/16" Lead Lined Gypboard @ Y43 Partitions	1,833.00	SF	120.00	\$219,960
<b>09.03 - TILE</b>				<b>\$61,180</b>
<b>Ceramic Tile</b>				<b>\$56,201</b>
TB - 01 - Tile Base	200.00	LF	12.00	\$2,400
T - 01 - Floor Tile @ Restrooms	498.00	SF	15.47	\$7,704
T - 02 - Wall Tile @ 130/129 Restrooms	1,056.00	SF	17.10	\$18,058
SW - 01 - Shower Tile	195.00	SF	20.45	\$3,988
T - 03 - Wall Tile @ Men/Women's restroom	98.00	SF	37.29	\$3,654
T - 04 - Wall Tile @ Wellness/Break Room	48.00	SF	81.28	\$3,901
T - 05 - Wall Tile @ Shower	451.00	SF	16.64	\$7,505
T - 06 Wall Tile @ Shower	209.00	SF	43.02	\$8,991
<b>Other Tile</b>				<b>\$462</b>
Transitions - Stainless Steel	4.00	EACH	38.50	\$154
Metal Wall Tile Edge - Stainless Steel	8.00	EACH	38.50	\$308
<b>Tile Scope Items</b>				<b>\$4,517</b>
Crack Isolation Membrane	498.00	SF	4.40	\$2,191
Epoxy Grout	195.00	SF	3.85	\$751

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	Quantity Unit	Rate	Total
Floor Prep	21.00 EACH	75.00	\$1,575
<b>09.04 - TERRAZZO</b>			<b>\$284,741</b>
<b>Terrazzo - Epoxy</b>			<b>\$267,885</b>
TZB - 01 - Terrazzo Base	498.00 LF	35.00	\$17,430
TZ - 01 - Epoxy Terrazzo	2,704.00 SF	25.00	\$67,600
TZ - 02 - Epoxy Terrazzo	5,812.00 SF	25.00	\$145,300
TZB - 02 - Terrazzo Base	1,073.00 LF	35.00	\$37,555
<b>Terrazzo - Specialties</b>			<b>\$1,236</b>
Divider Strips - Stainless Steel	103.00 LF	12.00	\$1,236
<b>Terrazzo Scope Items</b>			<b>\$15,620</b>
Floor Prep	284.00 EACH	55.00	\$15,620
<b>09.05 - ACOUSTICAL CEILING &amp; WALL PANELS</b>			<b>\$62,582</b>
<b>Acoustical Ceilings</b>			<b>\$51,872</b>
ACT - 01 - Acoustical Ceiling	7,496.00 SF	6.92	\$51,872
<b>Metal Ceilings</b>			<b>\$10,710</b>
Wood-Look Metal Slat Ceiling	255.00 SF	42.00	\$10,710
<b>09.07 - CARPET, VINYL FLOORING, &amp; BASE</b>			<b>\$75,623</b>
<b>Resilient Sheet Flooring</b>			<b>\$18,515</b>
R - 01 - Rubber Flooring	1,217.00 SF	15.00	\$18,255
R - 01 - Rubber Stairs @ Observation	10.00 SF	26.00	\$260
<b>Carpet Tile</b>			<b>\$52,668</b>
CP - 01 - Carpet Tile	1,735.00 SF	6.00	\$10,410
CP - 02 - Carpet Tile	2,657.00 SF	9.00	\$23,913
CP - 03 - Carpet Tile	2,555.00 SF	6.00	\$15,330
WO - 01 - Walkoff Carpet	335.00 SF	9.00	\$3,015
<b>Resilient Base</b>			<b>\$4,440</b>
RB - 01 - Rubber Base	2,337.00 LF	1.75	\$4,090
RB - 02 - Rubber Base	200.00 LF	1.75	\$350
<b>09.12 - PAINTING</b>			<b>\$114,172</b>
<b>Wallcoverings</b>			<b>\$6,650</b>
WC - 01 - Wallcovering @ 104/105 Restrooms	655.00 SF	7.00	\$4,585
WC - 02 - Wallcovering @ Conference Rooms	295.00 SF	7.00	\$2,065
<b>Paint Drywall</b>			<b>\$75,245</b>
EPT - 02 - Epoxy Paint	5,045.00 SF	2.00	\$10,090
PT - 02 - Wall Paint	21,621.00 SF	0.80	\$17,297
PT - 03 - Wall Paint	1,776.00 SF	0.80	\$1,421
ERW - 01 - Epoxy Paint	4,779.00 SF	2.00	\$9,558
ERW - 01-&02 - Epoxy Paint	2,357.00 SF	2.00	\$4,714
Paint Drywall Ceilings - Interior	1,724.00 SF	0.75	\$1,293
Paint Plaster Ceilings - Exterior	669.00 SF	0.85	\$569
EPT - 02 - Epoxy Paint @ Sally Port to 25'	12,192.00 SF	2.00	\$24,384
Paint Gyp Furrdowns	285.00 SF	0.75	\$214

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	Quantity	Unit	Rate	Total
Epoxy Paint Drywall Ceilings	4,565.00	SF	1.25	\$5,706
<b>Paint Masonry</b>				<b>\$3,658</b>
Block Filler	12,192.00	SF	0.30	\$3,658
<b>Paint Doors &amp; Frames</b>				<b>\$1,850</b>
Paint Hollow Metal Frames	20.00	EACH	50.00	\$1,000
Paint Hollow Metal Doors	17.00	EACH	50.00	\$850
<b>Paint Stairs &amp; Railings</b>				<b>\$3,710</b>
Paint Handrails - 2 Line	371.00	LF	10.00	\$3,710
<b>MEP Painting</b>				<b>\$23,059</b>
Paint Exposed Structure & MEP	3,391.00	SF	6.80	\$23,059
<b>09.16 - CONCRETE SEALER</b>				<b>\$6,627</b>
<b>Concrete Sealer</b>				<b>\$6,627</b>
SC - 01 - Sealed Concrete	3,192.00	SF	2.00	\$6,384
Stairs SC - 01 - Sealed Concrete Stairs @ IT/Storage	108.00	SF	2.25	\$243
<b>10.03 - TOILET COMPARTMENTS</b>				<b>\$5,225</b>
<b>Plastic Toilet Compartments</b>				<b>\$5,225</b>
HDPE Toilet Compartments	2.00	EACH	1,100.00	\$2,200
HDPE Plastic Laminate Handicap Toilet Compartments	2.00	EACH	1,250.00	\$2,500
HDPE Urinal Screens	1.00	EACH	525.00	\$525
<b>10.04 - LOUVERS</b>				<b>\$12,000</b>
<b>Louvers - Aluminum</b>				<b>\$12,000</b>
Louver - Aluminum Hurricane	100.00	SF	120.00	\$12,000
<b>10.05 - WALL PROTECTION</b>				<b>\$46,970</b>
<b>Stainless Steel Wall Protection</b>				<b>\$44,280</b>
CG - SS Corner Guards	26.00	EACH	195.00	\$5,070
CG - SS Corner Guards - Install	26.00	EACH	273.00	\$7,098
WG - SS Wall Guards	223.00	LF	60.00	\$13,380
WG - SS Wall Guards - Install	223.00	LF	84.00	\$18,732
<b>Plastic Wall Protection</b>				<b>\$2,690</b>
FRP - 01 - Fiberglass Panel @ Janitor	278.00	SF	5.00	\$1,390
FRP - 01 - Fiberglass Panel @ Housekeeping	260.00	SF	5.00	\$1,300
<b>10.07 - FLAGPOLES</b>				<b>\$8,250</b>
<b>Flagpoles</b>				<b>\$8,250</b>
Flagpole	2.00	EACH	4,125.00	\$8,250
<b>10.08 - SIGNAGE</b>				<b>\$32,050</b>
<b>Exterior Signage</b>				<b>\$16,675</b>
Monument Sign Seal	2.00	EACH	2,500.00	\$5,000
Monument Sign Letter	75.00	EACH	75.00	\$5,625
Front of Building Lettering	27.00	EACH	150.00	\$4,050
Building Plaque	1.00	EACH	2,000.00	\$2,000
<b>Interior Signage</b>				<b>\$15,375</b>
Restroom/Shower Signs	6.00	EACH	425.00	\$2,550

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	Quantity	Unit	Rate	Total
Room/Office Sign	57.00	EACH	225.00	\$12,825
<b>10.09 - LOCKERS</b>				<b>\$16,100</b>
<b>Metal Lockers</b>				<b>\$12,800</b>
Metal Lockers - Double Tier	16.00	EACH	800.00	\$12,800
<b>Locker Room Benches</b>				<b>\$3,300</b>
Locker Bench - 6'	6.00	EACH	550.00	\$3,300
<b>10.10 - FIRE PROTECTION SPECIALTIES</b>				<b>\$5,100</b>
<b>Fire Extinguishers</b>				<b>\$2,700</b>
FE - Wall Mounted Fire Extinguisher	2.00	EACH	1,350.00	\$2,700
<b>Fire Extinguisher Cabinets</b>				<b>\$1,800</b>
FEC - S Fire Extinguisher Cabinet Semi-Recessed	1.00	EACH	900.00	\$900
FEC - R Fire Extinguisher Cabinet Fully Recessed	1.00	EACH	900.00	\$900
<b>Install Fire Protection Specialties</b>				<b>\$600</b>
Install Fire Extinguishers	4.00	EACH	150.00	\$600
<b>10.11 - ALUMINUM COVERS &amp; AWNINGS</b>				<b>\$81,000</b>
<b>Canopies - Anodized Aluminum</b>				<b>\$81,000</b>
Aluminum Canopies Over Storefront - 9'x3'	6.00	EACH	7,500.00	\$45,000
Aluminum Canopies Over Storefront - 7'x3'	3.00	EACH	6,000.00	\$18,000
Aluminum Canopies Over Storefront - 13'x3'	2.00	EACH	9,000.00	\$18,000
<b>10.14 - OPERABLE PARTITIONS</b>				<b>\$26,640</b>
<b>Horizontal Operable Partitions</b>				<b>\$26,640</b>
Horizontal Operable Wall	444.00	SF	60.00	\$26,640
<b>10.17 - TOILET ACCESSORIES</b>				<b>\$23,948</b>
<b>Grab Bars</b>				<b>\$746</b>
Grab Bars - 36" @ Restrooms	6.00	EACH	52.50	\$315
Grab Bars - 42" @ Restrooms	6.00	EACH	53.90	\$323
Grab Bars - 42" @ Shower	2.00	EACH	53.90	\$108
<b>Paper Towel Dispensers</b>				<b>\$3,767</b>
Paper Towel Dispenser	10.00	EACH	74.62	\$746
Glove Dispenser	5.00	EACH	105.25	\$526
Paper Towel Dispenser W/Waste Recept Rec Mtd - Large	6.00	EACH	415.83	\$2,495
<b>Toilet Paper Dispensers</b>				<b>\$924</b>
Toilet Tissue Dispenser	8.00	EACH	115.50	\$924
<b>Sanitary Napkin Disposals</b>				<b>\$1,372</b>
Sanitary Napkin Disposal	7.00	EACH	53.13	\$372
Toilet Seat Cover Dispenser	8.00	EACH	124.95	\$1,000
<b>Soap Dispensers</b>				<b>\$651</b>
Soap Dispenser	11.00	EACH	59.18	\$651
<b>Shower Seats</b>				<b>\$868</b>
Shower Seat	2.00	EACH	433.79	\$868
<b>Shower Curtains &amp; Rods</b>				<b>\$256</b>
Shower Curtain	2.00	EACH	56.34	\$113

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	Quantity	Unit	Rate	Total
Shower Curtain Rod	2.00	EACH	71.79	\$144
<b>Mirrors</b>				<b>\$1,451</b>
24x36 Mirror @ Wellness	1.00	EACH	151.93	\$152
24x36 Mirror @ 129/130 Restroom	2.00	EACH	151.93	\$304
24x36 Mirror @ Showers	2.00	EACH	151.93	\$304
36x60 Mirror @ 105 Restrooms	2.00	EACH	345.53	\$691
<b>Mop Holders</b>				<b>\$237</b>
Mop Holders @ Housekeeping/Janitor	2.00	EACH	118.54	\$237
<b>Robe &amp; Hat Hooks</b>				<b>\$666</b>
CH1 - Single Coat Hook	8.00	EACH	45.20	\$362
CH2 - 3 Coat Holder 24"	2.00	EACH	91.35	\$183
LAR - Lead Apron Rack @ X-Ray	1.00	EACH	121.80	\$122
<b>Diaper Changing Stations</b>				<b>\$410</b>
Diaper Changing Station	1.00	EACH	410.20	\$410
<b>Install Toilet Accessories</b>				<b>\$12,600</b>
Install Grab Bars	14.00	EACH	150.00	\$2,100
Install Paper Towel Dispensers	10.00	EACH	150.00	\$1,500
Install Paper Towel Dispensers W/ Recept.	6.00	EACH	150.00	\$900
Install Toilet Tissue Dispenser	8.00	EACH	150.00	\$1,200
Install Toilet Seat Cover Dispenser	8.00	EACH	150.00	\$1,200
Install Soap Dispenser	11.00	EACH	150.00	\$1,650
Install Shower Seats	2.00	EACH	150.00	\$300
Install Shower Curtain Rod	2.00	EACH	150.00	\$300
Install Shower Curtain	2.00	EACH	150.00	\$300
Install Mirror - 24x36	5.00	EACH	150.00	\$750
Install Mirror - 36x60	2.00	EACH	150.00	\$300
Install Mop Holder	2.00	EACH	150.00	\$300
Install Single Coat Hook	8.00	EACH	150.00	\$1,200
Install Lead Apron and 3 Coat Hook	3.00	EACH	150.00	\$450
Install Diaper Changing Station	1.00	EACH	150.00	\$150
<b>10.19 - CUBICLE CURTAIN AND IV TRACKS</b>				<b>\$1,092</b>
<b>Cubicle Curtain Track</b>				<b>\$252</b>
Cubicle Curtain Track	21.00	LF	12.00	\$252
<b>Cubicle Curtains</b>				<b>\$840</b>
Cubicle Curtains	21.00	LF	40.00	\$840
<b>10.22 - KNOX BOX</b>				<b>\$1,347</b>
<b>Knox Box</b>				<b>\$1,347</b>
Knox Box	2.00	EACH	673.74	\$1,347
<b>10.26 - MISCELLANEOUS SPECIALTIES</b>				<b>\$152,750</b>
<b>Miscellaneous Specialties</b>				<b>\$141,750</b>
High Density Storage Rack - Automatic	1.00	EACH	98,250.00	\$98,250
High Density Storage Rack - Manual	1.00	EACH	43,500.00	\$43,500



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	Quantity	Unit	Rate	Total
<b>Install Miscellaneous Specialties</b>				<b>\$11,000</b>
Install High Density Storage Rack - Automatic	1.00	EACH	6,500.00	\$6,500
Install High Density Storage Rack - Manual	1.00	EACH	4,500.00	\$4,500
<b>11.06 - LOADING DOCK EQUIPMENT</b>				<b>\$46,728</b>
<b>Dock Levelers</b>				<b>\$40,000</b>
Dock Leveler - 50,000 Lb Capacity	1.00	EACH	40,000.00	\$40,000
<b>Miscellaneous. Loading Dock Equipment</b>				<b>\$6,728</b>
Dock Bumpers	3.00	EACH	175.87	\$528
Dock Curtain	2.00	EACH	3,100.00	\$6,200
<b>11.08 - RESIDENTIAL APPLIANCES</b>				<b>\$24,597</b>
<b>Residential Appliances</b>				<b>\$24,597</b>
Refrigerator/Freezer	1.00	EACH	3,061.87	\$3,062
Undercounter Refrigerator	1.00	EACH	1,261.87	\$1,262
Microwave	1.00	EACH	361.87	\$362
Dishwasher	1.00	EACH	761.87	\$762
Icemaker	1.00	EACH	5,901.87	\$5,902
Washer	1.00	EACH	1,561.87	\$1,562
Washer - Com.	1.00	EACH	5,061.87	\$5,062
Dryer	1.00	EACH	1,561.87	\$1,562
Dryer - Com.	1.00	EACH	5,061.87	\$5,062
<b>11.13 - MEDICAL EQUIPMENT VENDOR</b>				<b>\$1,054,283</b>
<b>Miscellaneous Medical Equipment</b>				<b>\$7,365</b>
Pass Thru Window - Stainless Steel 30"x30"x24"	1.00	EACH	7,365.40	\$7,365
<b>Install Miscellaneous Medical Equipment</b>				<b>\$2,500</b>
Install Pass Thru Window - Stainless 30"x30"x24"	1.00	EACH	2,500.00	\$2,500
<b>Miscellaneous Medical Equipment Scope Items</b>				<b>\$1,044,418</b>
ME1 - Back Draft Autopsy Station	1.00	EACH	28,995.00	\$28,995
ME2 - Autopsy Carrier	25.00	EACH	3,300.00	\$82,500
ME4 - 4-Tier Racking System w/Casters	12.00	EACH	3,475.00	\$41,700
ME11 - Hydraulic Cadaver Lift	1.00	EACH	8,650.00	\$8,650
ME1A - Down Draft Autopsy Station	2.00	EACH	39,550.00	\$79,100
ME2A - Stainless Steel Autopsy Tray	81.00	EACH	2,600.00	\$210,600
ME5 - Recessed Floor Scale	1.00	EACH	30,000.00	\$30,000
ME12 - Steam Kettle	1.00	EACH	28,500.00	\$28,500
IES - Insect Repellent System	6.00	EACH	2,500.00	\$15,000
ME1B - Down Draft Autopsy Station	1.00	EACH	39,550.00	\$39,550
ME3 - Bariatric Autopsy Carrier w/Stainless Steel Tray	3.00	EACH	8,580.00	\$25,740
ME10 -Overhead Cadaver Lift	1.00	EACH	16,500.00	\$16,500
Install	1.00	LS	275,000.00	\$275,000
Freight	1.00	LS	162,583.00	\$162,583
<b>11.43 - RADIOLOGY EQUIPMENT</b>				<b>\$563,450</b>
<b>Subcontractor</b>				<b>\$563,450</b>

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
Portable X-ray	1.00	EACH	35,450.00	\$35,450
Lodox	1.00	EACH	528,000.00	\$528,000
<b>12.02 - MEDICAL CASEWORK</b>				<b>\$463,929</b>
<b>Fume Hoods</b>				<b>\$12,361</b>
Fume Hood - 6'	1.00	EACH	12,360.79	\$12,361
<b>Install Fume Hoods</b>				<b>\$301</b>
Install Fume Hood - 6'	1.00	EACH	300.66	\$301
<b>Miscellaneous Medical Equipment Scope Items</b>				<b>\$105,000</b>
F1A - Lab Freezer	5.00	EACH	15,000.00	\$75,000
R1A - Lab Fridge	1.00	EACH	15,000.00	\$15,000
R2A - Lab Fridge/Freezer	1.00	EACH	15,000.00	\$15,000
<b>Casework Cabinets</b>				<b>\$296,618</b>
SCT24-2 - S.S. Metal Casework Base Cabinets	4.00	LF	900.00	\$3,600
SS SHX14	21.00	LF	262.50	\$5,513
SS SHX18	15.00	LF	307.50	\$4,613
SS SHX24	24.00	LF	337.50	\$8,100
STC-12 - S.S. Metal Casework Base Cabinets	1.00	LF	900.00	\$900
SCT 30 - S.S. Metal Casework Base Cabinets	45.00	LF	900.00	\$40,500
SCT 36 - S.S. Metal Casework Base Cabinets	27.00	LF	900.00	\$24,300
MC36-9 - Cart	2.00	EACH	9,750.00	\$19,500
MT3660 - Cart - SS 3'X5'	3.00	EACH	10,125.00	\$30,375
LC-1 - Lab Cart	2.00	EACH	9,750.00	\$19,500
NARC - Upper SS - Single Double Locking	2.00	EACH	1,425.00	\$2,850
SS SHX15	3.00	LF	292.50	\$878
SSB36-1 - S.S. Metal Casework Base Cabinets	15.00	LF	900.00	\$13,500
SSB36-ADA - S.S. Metal Casework Base Cabinets	6.00	LF	900.00	\$5,400
TC30-2 - Metal Casework Upper Cabinets - Glass Front	5.00	LF	1,650.00	\$8,250
TC30-3 - Metal Casework Upper Cabinets - Glass Front	5.00	LF	1,650.00	\$8,250
TC36-2 - Metal Casework Upper Cabinets - Glass Front	27.00	LF	1,650.00	\$44,550
TC48-2 - Metal Casework FULL HIEGHT Cabinets - Glass Front	4.00	LF	1,650.00	\$6,600
TCS - Metal Casework FULL Cabinets - Tall Chem Storage	6.00	LF	1,650.00	\$9,900
WC30 - 1 - Upper Cabinets - Glass Front	33.00	LF	525.00	\$17,325
WC36 - 1 - Upper Cabinets - Glass Front	21.00	LF	525.00	\$11,025
Dry Rack Floor Mounted	1.00	EACH	2,250.00	\$2,250
EWS - Emergency Eyewash/Shower - Wall Mounted	2.00	EACH	4,470.00	\$8,940
<b>Casework Tops</b>				<b>\$38,400</b>
Stainless Steel Tops (2' Wide)	128.00	LF	300.00	\$38,400
<b>Medical Casework Scope</b>				<b>\$11,250</b>
LS-1 - Single Bowl - SS	2.00	EACH	2,250.00	\$4,500
LS-1 - Single Bowl - SS	3.00	EACH	2,250.00	\$6,750
<b>12.05 - BLINDS AND SHADES</b>				<b>\$22,296</b>

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
<b>Mecho Shades</b>				<b>\$22,296</b>
Motorized Roller Shades @ Autopsy	396.00	SF	28.00	\$11,088
Blackout Motorized Roller Shades @ Observation Window	42.00	SF	28.00	\$1,176
Manual Roller Shades	912.00	SF	11.00	\$10,032
<b>12.10 - SYSTEMS FURNITURE</b>				<b>\$500,000</b>
<b>Subcontractor</b>				<b>\$500,000</b>
Systems Furniture - PGAL/Owner Allowance	1.00	LS	500,000.00	\$500,000
<b>13.01 - RADIATION PROTECTION</b>				<b>\$22,400</b>
<b>Lead Lined Doors &amp; Frames</b>				<b>\$15,400</b>
Installation of Lead Lined Door & Frame	1.00	EACH	2,400.00	\$2,400
Lead Lined Biparting Sliding SS Door & Hm Frame - 6070 (Material Only)	1.00	EACH	13,000.00	\$13,000
<b>Leaded Windows</b>				<b>\$7,000</b>
1/16" Lead Window - 4' x 4' - X-Ray Viewing Window	1.00	EACH	6,200.00	\$6,200
Installation of Leaded Window Frame - Small - X-Ray Viewing Window	1.00	EACH	800.00	\$800
<b>13.04 - ENVIRONMENTAL ROOMS</b>				<b>\$809,815</b>
<b>Environmental Rooms</b>				<b>\$809,815</b>
ME6 - Main Cooler	991.67	SF	590.00	\$585,085
ME7 - Decop Cooler	347.00	SF	590.00	\$204,730
Remote Condenser - Within 100'	2.00	SCOPE	0.00	\$0
Dehumidifier	2.00	SCOPE	0.00	\$0
Internal Blocking In Cold Room Walls	12.00	SCOPE	0.00	\$0
Control Panel	2.00	SCOPE	0.00	\$0
Internal Blocking In Cold Room Walls	4.00	SCOPE	0.00	\$0
Environmental Room Doors - sliding	3.00	SCOPE	0.00	\$0
Environmental Room Doors - swing	1.00	SCOPE	0.00	\$0
Dehumidifier	2.00	EACH	10,000.00	\$20,000
<b>21.01 - FIRE PROTECTION</b>				<b>\$153,084</b>
<b>Site Fire Suppression Piping</b>				<b>\$550</b>
Bring Fire Line 5' Outside Building	1.00	SCOPE	0.00	\$0
Fire Line - 6"	10.00	LF	40.00	\$400
Fire Line - 4"	5.00	LF	30.00	\$150
<b>Site Fire Suppression Structures</b>				<b>\$13,000</b>
Fire Department Tree And Riser	2.00	EACH	5,000.00	\$10,000
Indicator Post	1.00	EACH	3,000.00	\$3,000
<b>Standpipes</b>				<b>\$4,005</b>
C.I. Standpipe 6"	45.00	LF	63.00	\$2,835
C.I. Standpipe 4"	30.00	LF	39.00	\$1,170
<b>Sprinkler Systems</b>				<b>\$135,529</b>
Fire Protection - Autopsy	10,188.00	SF	4.75	\$48,393
Fire Protection - Offices	7,405.00	SF	3.50	\$25,918

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	Quantity	Unit	Rate	Total
Fire Protection - Entry/Training	3,992.00	SF	3.50	\$13,972
Fire Protection - Mezz/Clear Story	3,999.00	SF	3.50	\$13,997
Fire Protection - Accessable Space Above Autopsy	7,000.00	SF	4.00	\$28,000
Fire Protection - Outdoor Seating	1,500.00	SF	3.50	\$5,250
<b>22.01 - PLUMBING</b>				<b>\$1,045,988</b>
<b>Domestic Water Piping</b>				<b>\$211,507</b>
CW L-Cu Dist. Piping 1"	486.45	LF	21.18	\$10,301
HW L-Cu Dist. Piping 1"	535.90	LF	21.18	\$11,348
HW - L-Cu Dist. Piping 3/4"	883.20	LF	28.04	\$24,767
CW - L-Cu Dist. Piping 3"	126.50	LF	106.26	\$13,442
6" Fire Line	212.00	LF	212.52	\$45,055
CW L-Cu Dist. Piping 1/2"	954.60	LF	24.68	\$23,561
HW L-Cu Dist. Piping 1/2"	34.50	LF	24.68	\$852
CW L-Cu Dist. Piping 3/4"	1,152.30	LF	28.04	\$32,313
HW - L-Cu Dist. Piping 2"	338.10	LF	41.55	\$14,047
DCW L-Cu Dist. Piping 2"	300.15	LF	41.55	\$12,470
DCW L-Cu Dist. Piping 2 1/2"	108.10	LF	68.71	\$7,427
CW L-Cu Dist. Piping 1 1/2"	136.85	LF	33.22	\$4,546
HW L-Cu Dist. Piping 1 1/2"	194.35	LF	33.22	\$6,455
HW L-Cu Dist. Piping 1-1/4"	179.40	LF	27.45	\$4,924
<b>Cleanouts &amp; Specialties</b>				<b>\$1,377</b>
WHA-A - Water Hammer Arrestors 1/2"	1.00	EACH	98.70	\$99
WHA-B - Water Hammer Arrestors 3/4"	1.00	EACH	98.70	\$99
WHA-C - Water Hammer Arrestors 1"	1.00	EACH	98.70	\$99
WHA-D - Water Hammer Arrestors 1-1/4"	1.00	EACH	98.70	\$99
WHA-E - Water Hammer Arrestors 1-1/2"	1.00	EACH	98.70	\$99
WHA-F - Water Hammer Arrestors 2"	1.00	EACH	98.70	\$99
BFP-1 - Backflow Preventer	1.00	EACH	784.70	\$785
<b>Domestic Water Pumps</b>				<b>\$24,497</b>
DWP-1 - Domestic H2O Booster / Duplex 5 HP	1.00	EACH	24,497.20	\$24,497
<b>Sanitary Waste &amp; Vent Piping</b>				<b>\$253,865</b>
C.I. Vent Underground 3"	39.00	LF	38.84	\$1,515
C.I. Sanitary Underground 2"	475.05	LF	38.84	\$18,450
C.I. Sanitary Underground 4"	2,019.40	LF	44.09	\$89,032
C.I. Sanitary Underground 6"	51.75	LF	72.26	\$3,740
C.I. Sanitary Underground 3"	132.25	LF	43.74	\$5,784
C.I. Vent Above Ground 2"	2,837.50	LF	40.88	\$115,984
C.I. Vent Above Ground 4"	259.90	LF	42.95	\$11,162
C.I. Waste & Vent Above Ground 3"	190.90	LF	42.95	\$8,198
<b>Floor Drains, Cleanouts, &amp; Specialties</b>				<b>\$4,187</b>
Floor Cleanout 4"	6.00	EACH	697.90	\$4,187
<b>Storm Piping</b>				<b>\$36,446</b>

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	Quantity	Unit	Rate	Total
C.I. Storm Sewer Above Ground 8"	45.00	LF	88.90	\$4,001
C.I. Storm Sewer Underground 8"	7.00	LF	121.80	\$853
C.I. Storm Sewer Above Ground 4"	159.40	LF	44.10	\$7,030
C.I. Storm Sewer Above Ground 6"	96.60	LF	61.60	\$5,951
C.I. OD Line 4"	131.00	LF	57.40	\$7,519
C.I. OD Line 6"	89.00	LF	89.60	\$7,974
C.I. OD Line 8"	33.00	LF	94.50	\$3,119
<b>Roof Drains</b>				<b>\$4,252</b>
4" Brass Cow Tongue for Overflow Drain	3.00	EACH	140.00	\$420
RD-1 - 4" Roof Drain	3.00	EACH	525.00	\$1,575
RD-1 - 6" Roof Drain	2.00	EACH	578.20	\$1,156
OD-1 - 6" Overflow Drain	2.00	EACH	550.20	\$1,100
<b>Natural Gas Piping</b>				<b>\$6,006</b>
Black Steel Nat. Gas Piping 1 1/2"	202.00	LF	21.00	\$4,242
Black Steel Nat. Gas Piping 1"	105.00	LF	16.80	\$1,764
<b>Piping Insulation</b>				<b>\$79,824</b>
Piping Insulation - Mineral Fiber - 1" Wall - 1/2" Pipe	2,011.00	LF	5.04	\$10,135
Piping Insulation - Mineral Fiber - 1" Wall - 1" Pipe	1,022.00	LF	5.54	\$5,666
Piping Insulation - Mineral Fiber - 1" Wall - 3/4" Pipe	2,035.00	LF	5.54	\$11,282
Piping Insulation - Mineral Fiber - 1" Wall - 1 1/2" Pipe	331.00	LF	5.54	\$1,835
Piping Insulation - Mineral Fiber - 1" Wall - 1 1/4" Pipe	179.40	LF	5.54	\$995
Piping Insulation - Mineral Fiber - 1" Wall - 2" Pipe	3,950.00	LF	6.72	\$26,544
Piping Insulation - Mineral Fiber - 1" Wall - 2 1/2" Pipe	108.00	LF	6.72	\$726
Piping Insulation - Mineral Fiber - 1" Wall - 4" Pipe	2,438.00	LF	8.47	\$20,650
Piping Insulation - Mineral Fiber - 1" Wall - 6" Pipe	148.00	LF	8.47	\$1,254
Piping Insulation - Mineral Fiber - 1" Wall - 8" Pipe	52.00	LF	14.20	\$738
<b>Fixtures, Drains, Connections</b>				<b>\$94,666</b>
BF-1 - Drinking Fountain, Wall Hung, Elec W/ Bottle Filler	1.00	EACH	1,932.00	\$1,932
CW-1 - Cart Wash (Wall Mounted Car Wash Boom)	1.00	EACH	1,137.15	\$1,137
EDF-1 - Drinking Fountain, Wall Hung, Elec	1.00	EACH	1,732.50	\$1,733
L-1 - Lavatory, Countertop, Self-Rimming	4.00	EACH	1,141.00	\$4,564
L-2 - Lavatory, Countertop, Self-Rimming	4.00	EACH	1,141.00	\$4,564
WS-1 - Wash Station - Mixing Unit	2.00	EACH	1,792.70	\$3,585
TMV-1 - Thermostatic Mixing Valve	4.00	EACH	105.00	\$420
MS-1 - Mop Sink - Floor Mounted, Terrazzo	2.00	EACH	1,295.00	\$2,590
Hook-Up Lab Sink LS-2 Provided By Others - Sinks carried in 12.02	4.00	EACH	700.00	\$2,800
Hook-Up ME1A Autopsy Tables Provided By Others - Tables carried in 12.02	2.00	EACH	700.00	\$1,400
Hook-Up Lab Sink LS-1 Provided By Others - Sinks carried in 12.02	2.00	EACH	700.00	\$1,400

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	Quantity	Unit	Rate	Total
Hook-Up ME1B Autopsy Tables Provided By Others - Tables carried in 12.02	1.00	EACH	700.00	\$700
RBV-2 - Wall Box - Washer	1.00	EACH	471.10	\$471
CCD-1- Center Drain Outlet Box	3.00	EACH	471.10	\$1,413
RBV-1 - Wall Box - Ice Maker	1.00	EACH	471.10	\$471
SH-1 - Shower Head & Trim - Ceramic Tile Showers	2.00	EACH	1,630.30	\$3,261
U-1 - Urinal, Wall Hung Flush Valve	2.00	EACH	2,221.80	\$4,444
WC-1 - Water Closet, Wall Hung, Flush Valve ADA	4.00	EACH	2,352.00	\$9,408
WC-2 - Water Closet, Wall Hung, Flush Valve	4.00	EACH	2,352.00	\$9,408
WH-1 - Wall Hydrant 3/4"	4.00	EACH	147.00	\$588
FD-1 - (3") Floor Drain, Cast Iron	3.00	EACH	397.60	\$1,193
FD-1 - (2") Floor Drain, Cast Iron	1.00	EACH	397.60	\$398
FFD-1 - Flushing Floor Drain, Stainless Steel w/ Wall Box	7.00	EACH	840.00	\$5,880
FS-1 - Cast Iron, Acid Resistant Floor Sink	9.00	EACH	676.90	\$6,092
Hook-up Emergency Eyewash - in 12.02	2.00	EACH	612.50	\$1,225
FD-1 - (4") Floor Drain, Cast Iron	18.00	EACH	588.00	\$10,584
SK-1 - Sink, Stainless Steel	2.00	EACH	2,571.80	\$5,144
SK-2 - Sink, Stainless Steel	2.00	EACH	2,571.80	\$5,144
FDC - Fire Department Connection	1.00	EACH	350.00	\$350
HB-1 - Hose Bib 3/4"	2.00	EACH	105.00	\$210
TG-2 - Trap Guard	38.00	EACH	10.50	\$399
Hook-Up Boilers Provided By Others - in 23.01	2.00	EACH	880.00	\$1,760
<b>Water Heaters</b>				<b>\$16,275</b>
GWH-1 - Gas Wh, Domestic, 100 Gal	1.00	EACH	5,425.00	\$5,425
GWH-2 - Gas Wh, Domestic, 100 Gal	1.00	EACH	5,425.00	\$5,425
GWH-3 - Gas Wh, Domestic, 100 Gal	1.00	EACH	5,425.00	\$5,425
<b>Domestic Water Heat Exchangers</b>				<b>\$5,208</b>
HWCP-1 - Domestic Water Return Pump - 1 Pump System, Heat Exchanger, Water To Water, 8 GPM	2.00	EACH	2,604.00	\$5,208
<b>Water Storage Tanks</b>				<b>\$88,595</b>
WST-1 - Indoor Potable Water Storage Tank - 105 Gal - Water Skid	1.00	EACH	88,595.00	\$88,595
<b>Other Plumbing</b>				<b>\$219,282</b>
SuperVoid System @ Underfloor Piping	2,724.00	LF	80.50	\$219,282
<b>Plumbing Scope Items</b>				<b>\$0</b>
Plumbing To 5' Outside Bldg	1.00	SCOPE	0.00	\$0
<b>23.01 - HVAC</b>				<b>\$4,069,219</b>
<b>Site HVAC Piping</b>				<b>\$59,098</b>
Valve - 8" - 125 Lb, Flanged	4.00	EACH	3,245.00	\$12,980
Pre-Insulated HVAC Piping - 8" CHWR/CHWS	129.00	LF	357.50	\$46,118
<b>Test &amp; Balance</b>				<b>\$40,808</b>
Test & Balance By HVAC Subcontractor	25,585.00	SF	1.60	\$40,808

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
<b>Building HVAC Controls</b>				<b>\$457,380</b>
Control Points	62.00	EACH	0.00	\$0
Chiller Plants - Average (Two Chillers, Two Pumps, Cooling Tower)	1.00	EACH	33,000.00	\$33,000
Boilers - Average (Boilers, Two Pumps)	1.00	EACH	26,400.00	\$26,400
VAVs / FPB - Hot Water Reheat - Hospital / Lab	44.00	EACH	1,760.00	\$77,440
FCU's - 4 Pipe - Hospital / Lab	1.00	EACH	3,080.00	\$3,080
Unit Heater	3.00	EACH	1,320.00	\$3,960
Exhaust Fans	10.00	EACH	1,320.00	\$13,200
Lab Valves - LEV 1-17	16.00	EACH	10,010.00	\$160,160
Lab Valves - LSV 1-14	14.00	EACH	10,010.00	\$140,140
<b>Chilled Water Piping</b>				<b>\$203,530</b>
Valve - 4" - 125 Lb, Flanged	6.00	EACH	846.02	\$5,076
Valve - 6" - 125 Lb, Flanged	4.00	EACH	1,482.55	\$5,930
Valve - 8" - 125 Lb, Flanged	4.00	EACH	1,600.45	\$6,402
1 1/2" L-Hard Copper - CHWR/CHWS	350.00	LF	69.42	\$24,297
3/4" L-Hard Copper	100.00	LF	48.09	\$4,809
2 1/2" Schedule 40 CS Welded	75.00	LF	86.36	\$6,477
4" Schedule 40 CS Welded	425.00	LF	155.43	\$66,058
6" Schedule 40 CS Welded	225.00	LF	215.08	\$48,394
8" Schedule 40 CS Welded	125.00	LF	288.70	\$36,087
<b>Hot Water Piping</b>				<b>\$254,451</b>
1 1/2" L-Hard Copper - HHWR/HHWS	725.00	LF	69.42	\$50,330
2 1/2" Schedule 40 CS Welded - CHWR/CHWS	575.00	LF	86.36	\$49,658
4" Schedule 40 CS Welded - HHWR/HHWS	174.00	LF	155.43	\$27,045
3/4" L-Hard Copper	500.00	LF	48.09	\$24,046
3" Schedule 40 CS Welded	650.00	LF	99.25	\$64,514
4" Schedule 40 CS Welded	250.00	LF	155.43	\$38,858
<b>Piping Connections</b>				<b>\$600,250</b>
FCU/VAV Reheat Coils 1/2" To 1 1/2"	37.00	EACH	3,886.08	\$143,785
HWHH Reheat Coils 1/2" To 1 1/2"	5.00	EACH	3,886.08	\$19,430
Chilled Water AHU Coils 4"	1.00	EACH	35,750.00	\$35,750
Chilled Water AHU Coils 6"	2.00	EACH	52,800.00	\$105,600
Hot Water AHU Coils 3"	1.00	EACH	29,150.00	\$29,150
Pumps Centrifugal 4"	2.00	EACH	17,240.30	\$34,481
Pumps Centrifugal 6"	2.00	EACH	26,583.70	\$53,167
Pumps Centrifugal 8"	2.00	EACH	30,555.80	\$61,112
Expansion Tanks 4"	2.00	EACH	8,666.90	\$17,334
Chiller Hook Up 8" CHW	2.00	EACH	30,349.00	\$60,698
Hot Water Boiler 4" Hookup	2.00	EACH	19,871.50	\$39,743
<b>Chilled Water Equipment</b>				<b>\$674,463</b>
Scroll Chillers	156.00	TON	2,090.00	\$326,040

**Brazos County Medical Examiners Office**

**Vaughn Project No. 3180**

**ESTIMATE DETAIL**



	Quantity Unit	Rate	Total
Scroll Chillers	156.00 TON	2,090.00	\$326,040
CHW Water Pump 7.5HP 350 GPM	2.00 EACH	8,470.00	\$16,940
Variable Frequency Drive 20 HP	20.00 HP	272.15	\$5,443
<b>Heating Water Equipment</b>			<b>\$179,990</b>
HW Boiler Tube 1500 MBH	1,500.00 MBH	56.61	\$84,909
Variable Frequency Drive 10 HP	10.00 HP	508.60	\$5,086
HW Boiler Tube 1500 MBH	1,500.00 MBH	56.61	\$84,909
Variable Frequency Drive 10 HP	10.00 HP	508.60	\$5,086
<b>Hydronic Specialties</b>			<b>\$49,080</b>
Expansion Tank - 30 Gallon	2.00 EACH	1,584.00	\$3,168
Air Separator W/ Strainer - 4"	2.00 EACH	4,961.00	\$9,922
Air Separator W/ Strainer - 8"	2.00 EACH	17,994.90	\$35,990
<b>Supply, Return, &amp; Exhaust Duct</b>			<b>\$378,740</b>
Galvanized Rectangular Duct	14,339.00 LB	11.55	\$165,615
Galvanized Rectangular Duct - Drops	10,000.00 LB	11.55	\$115,500
Galvanized Spiral Duct	6,500.00 LB	8.80	\$57,200
Stainless Steel Rectangular Duct	1,500.00 LB	14.30	\$21,450
Stainless Steel Spiral Duct	1,500.00 LB	12.65	\$18,975
<b>Duct &amp; Piping Insulation</b>			<b>\$189,682</b>
Piping Insulation - Close Cell (Phenolic, Foam Glass) 1-1/2" Wall - 1" Pipe	4,325.00 LF	21.56	\$93,247
Piping Insulation - Close Cell (Phenolic, Foam Glass) 1-1/2" Wall - 3" Pipe	1,500.00 LF	32.34	\$48,510
Piping Insulation - Close Cell (Phenolic, Foam Glass) 1-1/2" Wall - 6" Pipe	225.00 LF	39.86	\$8,969
Piping Insulation - Close Cell (Phenolic, Foam Glass) 2" Wall - 8" Pipe	125.00 LF	50.49	\$6,311
Duct Insulation - Blanket - 1-1/2" - .75#/CF Density	15,251.00 SF	1.87	\$28,519
Duct Insulation - Stainless Steel Jacket (In Addition to Duct Insulation Base Cost)	250.00 SF	16.50	\$4,125
<b>Miscellaneous Ductwork</b>			<b>\$20,222</b>
S.S. All Welded Rect. Duct	350.00 LB	17.60	\$6,160
Type "B" Flue - 6"	85.00 LF	55.44	\$4,712
EAH-1 - 8.5' x 5.5' x 3'	1.00 EACH	9,350.00	\$9,350
<b>Flexible Duct</b>			<b>\$28,702</b>
6" Diameter, Insulated	850.00 LF	12.43	\$10,566
8" Diameter, Insulated	900.00 LF	13.44	\$12,098
12" Diameter, Insulated	300.00 LF	20.13	\$6,039
<b>Air Distribution Devices</b>			<b>\$146,359</b>
Type A - Supply - 24x24	93.00 EACH	178.20	\$16,573
Type B - Return - 24x24	48.00 EACH	178.20	\$8,554
Type E - 4" Slot Diff. 10"x48"	76.00 LF	80.30	\$6,103



**Brazos County Medical Examiners Office**

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
Fan Powered Box 1000 - 1500 CFM	19.00	EACH	2,750.00	\$52,250
Air Curtain W/ Electric Reheat	1.00	EACH	5,751.90	\$5,752
Type C - 36x24 - Side Wall Grill	2.00	EACH	412.50	\$825
Type D - 36x20 - Side Wall Grill	7.00	EACH	412.50	\$2,888
Fan Powered Box 0 - 400 Cfm	2.00	EACH	1,848.00	\$3,696
Fan Powered Box 400 - 600 Cfm	3.00	EACH	2,310.00	\$6,930
Fan Powered Box 600 - 800 CFM	4.00	EACH	2,750.00	\$11,000
Fan Powered Box 800 - 1000 CFM	4.00	EACH	3,410.00	\$13,640
Fan Powered Box 2000 - 2500 CFM	3.00	EACH	6,050.00	\$18,150
<b>Air Distribution Accessories</b>				<b>\$5,500</b>
Louvers 20'X5' NOT SHOWN	100.00	SF	55.00	\$5,500
Roof Curbs	8.00	EACH	0.00	\$0
<b>Exhaust &amp; Return Fans</b>				<b>\$242,730</b>
EF-6 - General Exhaust Fans	740.00	CFM	1.76	\$1,302
EF-7 - General Exhaust Fans - CFM Not shown	50.00	CFM	1.76	\$88
EF-8 - General Exhaust Fans - CFM Not shown	50.00	CFM	1.76	\$88
EF-9 - General Exhaust Fans - CFM Not shown	350.00	CFM	1.76	\$616
EF-10 - General Exhaust Fans	12,000.00	CFM	1.76	\$21,120
EF-2 - Morgue Exhaust Fan	4,520.00	CFM	16.39	\$74,083
EF-3 - Morgue Exhaust Fan	2,620.00	CFM	16.39	\$42,942
EF-4 - Morgue Exhaust Fan	4,520.00	CFM	16.39	\$74,083
EF-5 - Morgue Exhaust Fan	740.00	CFM	16.39	\$12,129
EF-1 - High Plume Exhaust Fans	9,250.00	CFM	1.76	\$16,280
<b>AHUs &amp; OAHUs</b>				<b>\$511,443</b>
Indoor AHU	18,500.00	CFM	13.20	\$244,200
Indoor OAHU	17,000.00	CFM	15.40	\$261,800
Variable Frequency Drive 20 HP	20.00	HP	272.15	\$5,443
<b>Fan Coil Units</b>				<b>\$23,402</b>
BCU-1 - Ceiling Mounted - 1850 CFM w/ HHW	1.00	EACH	4,920.92	\$4,921
BCU-2 - Ceiling Mounted - 2450 CFM	1.00	EACH	4,094.55	\$4,095
Water Source Heat Pumps - Vertical - 14000 BTU/Hr - 500 Cfm	1.00	EACH	1,727.88	\$1,728
Water Source Heat Pumps - Vertical - 19000 BTU/Hr - 600 Cfm	6.00	EACH	2,109.80	\$12,659
<b>Unit Heaters</b>				<b>\$3,388</b>
Electric - 15Kw	1.00	EACH	3,388.00	\$3,388
<b>23.02 - TEST &amp; BALANCE</b>				<b>\$60,500</b>
<b>Test &amp; Balance</b>				<b>\$60,500</b>
Test and Balance Sub Bid	1.00	LS	0.00	\$0
Independent Test & Balance Subcontractor	27,500.00	SF	2.20	\$60,500
<b>26.01 - ELECTRICAL</b>				<b>\$1,564,359</b>
<b>Site Electrical Ductbank</b>				<b>\$119,280</b>

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**ESTIMATE DETAIL**



	Quantity Unit	Rate	Total
1200 Amp Wire in Ductbank	355.00 LF	336.00	\$119,280
<b>Light Poles &amp; Standards</b>			<b>\$72,900</b>
Light Poles - One Arm 30'	14.00 EACH	3,600.00	\$50,400
Light Poles - Two Arm 30'	5.00 EACH	4,500.00	\$22,500
<b>Miscellaneous Site Electrical</b>			<b>\$17,500</b>
Power to Monument Sign	1.00 EACH	10,000.00	\$10,000
Power to Electric Gate	1.00 EACH	7,500.00	\$7,500
<b>Secondary Feeders</b>			<b>\$123,750</b>
Secondary Feeders	27,500.00 SF	4.50	\$123,750
<b>Distribution Panels and Panelboards</b>			<b>\$65,857</b>
H1 - 277/480 V, 4 Wire, 400 Amp Main	1.00 EACH	5,349.89	\$5,350
H2 - 277/480 V, 4 Wire, 400 Amp Main	1.00 EACH	5,349.89	\$5,350
1200 Amp Dissconect Switch	1.00 EACH	28,357.00	\$28,357
CB1 - 100 Amp Dissconet	1.00 EACH	3,500.00	\$3,500
CB2 - 125 Amp Dissconet	1.00 EACH	4,000.00	\$4,000
SPD	4.00 EACH	250.00	\$1,000
L1 - 120/208 V, 4 Wire, 225 Amp Main	1.00 EACH	2,250.00	\$2,250
IT - 120/208 V, 4 Wire, 225 Amp Main	1.00 EACH	2,250.00	\$2,250
L2 - 120/208 V, 4 Wire, 225 Amp Main 2 Section	1.00 EACH	3,500.00	\$3,500
L3 - 120/208 V, 4 Wire, 225 Amp Main 2 Section	1.00 EACH	3,500.00	\$3,500
L4 - 120/208 V, 4 Wire, 225 Amp Main	1.00 EACH	2,250.00	\$2,250
EH1 - 277/480 V, 4 Wire, 100 Amp Main	1.00 EACH	4,550.69	\$4,551
<b>Branch Circuiting</b>			<b>\$110,978</b>
120V Duplex Outlet	175.00 EACH	206.00	\$36,050
120V GFI Duplex Outlet - Normal Power	34.00 EACH	215.00	\$7,310
120V GFI/WC Duplex Outlet - Normal Power	8.00 EACH	215.00	\$1,720
120V Fourplex Outlet	17.00 EACH	285.00	\$4,845
120V Fourplex Floorbox / Poke Thru	14.00 EACH	1,552.00	\$21,728
Single Switches	22.00 EACH	215.00	\$4,730
Projection Screen	2.00 EACH	385.00	\$770
Gas Boiler 120V Controls	2.00 EACH	435.00	\$870
Fume Hood, Single Point Connection, 208, 20A	1.00 EACH	1,135.00	\$1,135
HVAC Control Panel Power	2.00 EACH	318.00	\$636
Dock Leveler Power Connections	1.00 EACH	535.00	\$535
Roll-Up Door / WON Door / Fire Shutter Power Connections	2.00 EACH	997.00	\$1,994
20A Outlet 120V 3W SW (30' Emt)	11.00 EACH	215.00	\$2,365
J-Box w/ Conduit & Wire	2.00 EACH	245.00	\$490
Floor J-Box	5.00 EACH	268.00	\$1,340
Cord Drops w/ 30A Dedicated Outlet - 20' in Length	6.00 EACH	1,500.00	\$9,000
Triple Switch	3.00 EACH	335.00	\$1,005
Dimmers	3.00 EACH	155.00	\$465

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
Push Button Switch	7.00	EACH	275.00	\$1,925
Wall Mounted Occ. Sensors	28.00	EACH	215.00	\$6,020
Ceiling Mounted Occ. Sensors	29.00	EACH	145.00	\$4,205
Add For Weatherproof Cover	8.00	EACH	35.00	\$280
Motor Rated Switch	4.00	EACH	390.00	\$1,560
<b>Low Voltage Rough-In</b>				<b>\$118,225</b>
Fire Alarm Rough-In	27,500.00	SF	0.55	\$15,125
Data Rough-In	116.00	EACH	175.00	\$20,300
Security Rough-In	56.00	EACH	535.00	\$29,960
AV Rough-In	20.00	EACH	1,500.00	\$30,000
Security Rough-In - Card Reader	20.00	EACH	1,142.00	\$22,840
<b>Wiremold</b>				<b>\$4,060</b>
Stainless Steel Receptacle Raceway	116.00	LF	35.00	\$4,060
<b>Imaging Room Feeders &amp; Empty Conduits</b>				<b>\$45,000</b>
X-Ray Room - Feeders & Empty Conduit	1.00	EACH	45,000.00	\$45,000
<b>Cable Tray</b>				<b>\$12,475</b>
Cable Tray - Galvanized 4" x 18" No Cover	75.00	LF	41.00	\$3,075
Cable Tray - Galvanized 4" x 24" No Cover	200.00	LF	47.00	\$9,400
<b>Light Fixtures</b>				<b>\$268,044</b>
2' X 2' Recessed Direct / Indirect Troffer - A2	117.00	EACH	348.00	\$40,716
2' X 2' Gasketed OR Light - AU1	81.00	EACH	1,000.00	\$81,000
2' X 2' Gasketed OR Light - AU2	29.00	EACH	1,000.00	\$29,000
2' X 2' Gasketed OR Light - AU3	1.00	EACH	1,000.00	\$1,000
2' X 4' Gasketed OR Light - V	2.00	EACH	2,000.00	\$4,000
2' X 4' Recessed Direct / Indirect Troffer - A1	11.00	EACH	465.00	\$5,115
2' X 4' Recessed Direct / Indirect Troffer - AP2	11.00	EACH	465.00	\$5,115
1' X 4' Recessed Linear - F4	17.00	EACH	713.00	\$12,121
1' X 8' Recessed Linear - F12	4.00	EACH	1,426.00	\$5,704
1' X 22' Recessed Linear - F22	4.00	EACH	2,139.00	\$8,556
4" Round Downlight - D	38.00	EACH	333.00	\$12,654
Single Face Exit Sign - X	20.00	EACH	224.00	\$4,480
Double Face Exit Sign - X1	2.00	EACH	272.00	\$544
4' Recessed Linear Strip Lights - M4	16.00	EACH	713.00	\$11,408
8' Recessed Linear Strip Lights - M8	2.00	EACH	1,426.00	\$2,852
2' Wall Mtd Fixture - T1	4.00	EACH	775.00	\$3,100
2' Wall Mtd Fixture - T2	19.00	EACH	775.00	\$14,725
6" Cylinder Pendant - H	16.00	EACH	483.29	\$7,733
Recessed Mtd Linear Fixture Around Ceiling per A.401	64.00	LF	164.00	\$10,496
LED Wall Pack - WL	3.00	EACH	515.00	\$1,545
LED Wall Pack - WS	12.00	EACH	515.00	\$6,180
<b>Lighting Controls</b>				<b>\$56,200</b>
Lighting Controls Programming, Wiring & Integration	27,500.00	SF	1.80	\$49,500

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	Quantity	Unit	Rate	Total
Lighting Relay Panel	2.00	EACH	3,350.00	\$6,700
<b>Lighting Install</b>				<b>\$99,580</b>
Install Lay-In Fixture	252.00	EACH	225.00	\$56,700
Install Downlights	38.00	EACH	275.00	\$10,450
Install Pendants	16.00	EACH	350.00	\$5,600
Install Misc Speciality Fixture	13.00	EACH	45.00	\$585
Install Linear Fixture	268.00	LF	40.00	\$10,720
J-Box w/ Conduit & Wire - Lighting	345.00	EACH	45.00	\$15,525
<b>UPS Systems</b>				<b>\$45,000</b>
0 To 30 Kw System	30.00	KW	1,500.00	\$45,000
<b>Lightning Protection &amp; Grounding Systems</b>				<b>\$54,000</b>
Lightning System (SF Of Roof)	27,000.00	SF	2.00	\$54,000
<b>Equipment Connections</b>				<b>\$192,093</b>
CHWP/HWP (30 HP) Connection	5.00	EACH	3,500.00	\$17,500
Chiller Connection	2.00	EACH	29,188.00	\$58,376
Exhaust Fan (40 HP) Connection	10.00	EACH	3,000.00	\$30,000
CRAC Unit Connection	1.00	EACH	3,300.00	\$3,300
FPB Connections	35.00	EACH	850.00	\$29,750
Fan Coil Units Connecitons	7.00	EACH	1,250.00	\$8,750
BCU Connections	2.00	EACH	1,650.00	\$3,300
Electric Unit Heaters	1.00	EACH	1,917.00	\$1,917
Air Curtain Heater Connection	1.00	EACH	950.00	\$950
Lab Control Air Valve Connection	30.00	EACH	1,050.00	\$31,500
VAV Connection	9.00	EACH	750.00	\$6,750
<b>Transformers</b>				<b>\$24,617</b>
75 Kva Transformer	4.00	EACH	4,906.98	\$19,628
15 Kva Transformer	1.00	EACH	1,507.00	\$1,507
45 Kva Transformer	1.00	EACH	3,482.00	\$3,482
<b>Main Switchboards</b>				<b>\$34,800</b>
480 V 4 Wire, 1200 Amp	1.00	EACH	34,800.00	\$34,800
<b>Transfer Switches</b>				<b>\$100,000</b>
100 Amp Automatic Transfer Switch w/ Bypass	1.00	EACH	15,000.00	\$15,000
1200 Amp Automatic Transfer Switch w/ Bypass	1.00	EACH	85,000.00	\$85,000
<b>26.03 - FIRE ALARM</b>				<b>\$37,401</b>
<b>Fire Alarm</b>				<b>\$37,401</b>
Fire Alarm System	22,042.00	SF	1.50	\$33,063
Fire Alarm System - Accessable Space Above Autopsy	2,892.00	SF	1.50	\$4,338
<b>27.01 - TELECOM/DATA</b>				<b>\$200,858</b>
<b>Miscellaneous Site Electrical</b>				<b>\$60,297</b>
Telecom Maintenance Hole with Split Lid	4.00	EACH	225.00	\$900
NEMA 4x Lockable Enclosure	1.00	EACH	375.00	\$375
Site Telecom Hand Holes	2.00	EACH	16,875.00	\$33,750

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**ESTIMATE DETAIL**



	Quantity Unit	Rate	Total
2" Site Conduit for Telecom	16.00 LF	18.86	\$302
1" Site Conduit for Telecom	147.00 LF	15.11	\$2,222
4" Site Conduit for Telecom	1,006.00 LF	22.61	\$22,748
<b>Subcontractor</b>			<b>\$0</b>
<b>Backbone</b>			<b>\$7,613</b>
Backbone Cabling	56.00 LF	41.25	\$2,310
12x6" Horizontal Basket Tray	188.00 LF	26.25	\$4,935
12x6" Vertical Basket Tray	14.00 LF	26.25	\$368
<b>Equipment</b>			<b>\$7,444</b>
19" x 84" Equipment Rack	5.00 EACH	412.50	\$2,063
22" x 20" Deep Cabinet	5.00 EACH	262.50	\$1,313
48 Port Patch Panel - 4 Post Rack	3.00 EACH	551.25	\$1,654
48 Port Patch Panel - 2 Post Rack	2.00 EACH	551.25	\$1,103
Vertical Wire Manager - Double Sided	35.00 LF	37.50	\$1,313
<b>Horizontal Cabling/Distribution</b>			<b>\$124,504</b>
Data Outlet - 1 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing)	3.00 EACH	296.25	\$889
Data Outlet - 1 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - AV	2.00 EACH	296.25	\$593
Data Outlet - 1 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - AV Ceiling Mounted	8.00 EACH	296.25	\$2,370
Data Outlet - 1 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - Site	1.00 EACH	900.00	\$900
Data Outlet - 2 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing)	2.00 EACH	592.50	\$1,185
Data Outlet - 2 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - AV	3.00 EACH	592.50	\$1,778
Data Outlet - 3 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing)	93.00 EACH	888.75	\$82,654
Data Outlet - 3 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - AV	4.00 EACH	888.75	\$3,555
Data Outlet - 3 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - Ceiling Mounted	4.00 EACH	888.75	\$3,555
Data Outlet - 4 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing)	2.00 EACH	1,185.00	\$2,370
Data Outlet - 5 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing)	7.00 EACH	1,777.50	\$12,443
Data Outlet - 5 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - AV	2.00 EACH	1,777.50	\$3,555
Data Outlet - 10 Data Drop (Incl. Cabling, Connectors, Face Plate, Testing) - Ceiling Mounted	2.00 EACH	2,370.00	\$4,740
Wireless Access Point - Ceiling Mounted	11.00 EACH	356.25	\$3,919

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**ESTIMATE DETAIL**



	Quantity	Unit	Rate	Total
<b>Data Scope Items</b>				<b>\$1,001</b>
Telephone Backer Board - 3/4" Fire Treated Plywood	534.00	SF	1.88	\$1,001
<b>27.02 - AUDIO VISUAL</b>				<b>\$287,417</b>
<b>TV Supports</b>				<b>\$2,095</b>
TV Brackets - Wall Mtd (Peerless Jumbo 2000)	8.00	EACH	261.87	\$2,095
<b>Audio Equipment</b>				<b>\$62,590</b>
Ceiling Microphones	6.00	EACH	3,000.00	\$18,000
Flush Mounted Speakers	35.00	EACH	350.00	\$12,250
Monitor Panel	6.00	EACH	1,090.00	\$6,540
Cabinets	4.00	EACH	4,600.00	\$18,400
Intercom, 25 Station	1.00	EACH	5,000.00	\$5,000
Surface Mounted Soundbar	4.00	EACH	600.00	\$2,400
<b>Video Equipment</b>				<b>\$180,332</b>
Monitors - 19"	1.00	EACH	450.00	\$450
A/V Camera For Video Capture	2.00	EACH	4,600.00	\$9,200
Video Conference Camera	4.00	EACH	5,200.00	\$20,800
Flat Screen QLED Display - 75"	6.00	EACH	8,632.00	\$51,792
Flat Screen QLED Display - 75" - Autopsy Suite	3.00	EACH	8,632.00	\$25,896
Flat Screen QLED Display - 98"	3.00	EACH	17,000.00	\$51,000
Encoder/Decoder	14.00	EACH	1,401.00	\$19,614
Room Schedulers	2.00	EACH	790.00	\$1,580
<b>Control System</b>				<b>\$42,400</b>
A/V Equipment Rack	1.00	EACH	40,000.00	\$40,000
A/V Control Panel	2.00	EACH	1,200.00	\$2,400
<b>28.01 - SECURITY</b>				<b>\$182,307</b>
<b>Access Control</b>				<b>\$53,400</b>
Card Readers (Per Door, Reader, REX, Lock, Door Contacts, Wiring, Install)	17.00	EACH	2,900.00	\$49,300
Card Readers (Per Door, Reader, REX, Lock, Door Contacts, Wiring, Install) @ Exterior Gate	1.00	EACH	3,500.00	\$3,500
Door Contacts	3.00	EACH	200.00	\$600
<b>Electronic Surveillance</b>				<b>\$128,907</b>
Cameras - Interior PTZ	1.00	EACH	5,191.00	\$5,191
Cameras - Exterior PTZ - Pole Mounted	4.00	EACH	5,200.00	\$20,800
Camera - Exterior	3.00	EACH	1,200.00	\$3,600
Camera - Exterior @ Exterior Gate	1.00	EACH	1,800.00	\$1,800
Camera - Exterior Wall mount	3.00	EACH	2,000.00	\$6,000
Camera - Exterior Pole mount	1.00	EACH	2,500.00	\$2,500
Wire & Cable For Camera - Exterior	4.00	EACH	520.00	\$2,080
Camera Power Supply	28.00	EACH	350.00	\$9,800
Camera Supports	28.00	EACH	350.00	\$9,800
Cameras - Interior 180 - Wall Mounted	3.00	EACH	3,112.00	\$9,336

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**ESTIMATE DETAIL**



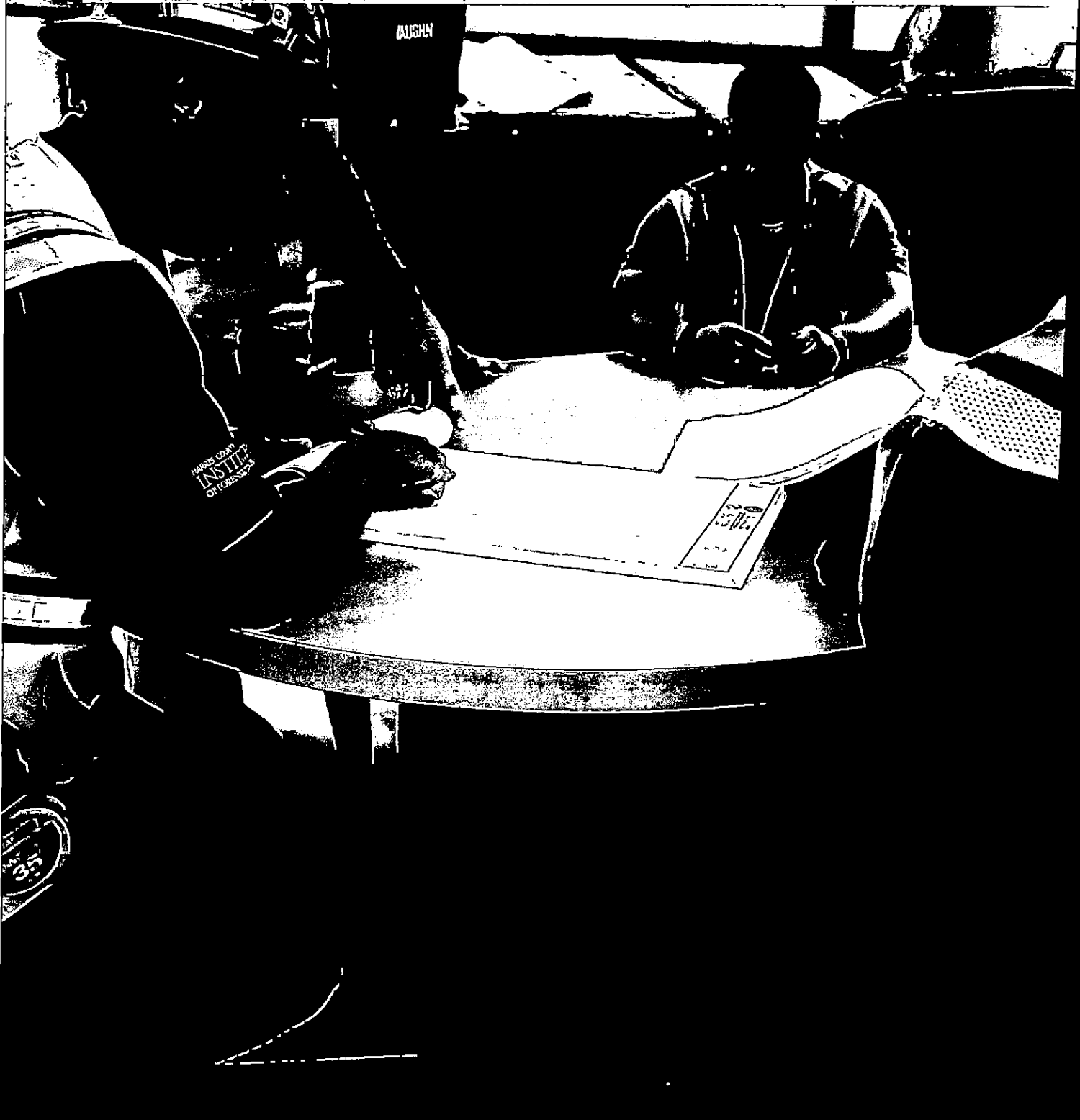
	Quantity	Unit	Rate	Total
Cameras - Interior Stationary - Wall Mounted	3.00	EACH	2,900.00	\$8,700
Cameras - Interior Stationary - Ceiling Mounted	14.00	EACH	2,900.00	\$40,600
Cameras - Interior Stationary - Corner Mounted	3.00	EACH	2,900.00	\$8,700
<b>31.01 - EARTHWORK</b>				<b>\$105,000</b>
<b>Subcontractor</b>				<b>\$105,000</b>
Earthwork Sub Bid	1.00	LS	105,000.00	\$105,000
<b>32.07 - FENCES &amp; GATES</b>				<b>\$1,431,850</b>
<b>Subcontractor</b>				<b>\$1,430,000</b>
Fence Sub Bid	1.00	LS	1,430,000.00	\$1,430,000
<b>Vinyl Coated Chain Link Fencing</b>				<b>\$1,850</b>
Vinyl Coated Chain Link Fence - 6' Tall - Cold Room	30.00	LF	35.00	\$1,050
Vinyl Chain Link Fence Gates - 4' Wide - Cold Room	1.00	EACH	800.00	\$800
<b>Ornamental Fencing</b>				<b>\$0</b>
Tubular Picket Fence - 8' Tall	706.00	LF	0.00	\$0
Tubular Picket Gate - 15' Wide - Operated	2.00	EACH	0.00	\$0
Tubular Picket Gate - 5' Wide	2.00	EACH	0.00	\$0
Metal Shadow Box Panel Fence - 8' Tall	2,191.00	LF	0.00	\$0
Metal Shadow Box Panel Gate - 5' Wide	2.00	EACH	0.00	\$0
<b>32.13 - LANDSCAPE &amp; IRRIGATION</b>				<b>\$250,817</b>
<b>Subcontractor</b>				<b>\$25,000</b>
Paver Sub Bid	1.00	LS	25,000.00	\$25,000
<b>Irrigation Systems</b>				<b>\$85,256</b>
Irrigation System	1.00	LS	85,256.00	\$85,256
<b>Trees</b>				<b>\$17,608</b>
Live Oak	15.00	EACH	800.00	\$12,000
Tree Staking	15.00	EACH	75.00	\$1,125
Orange Tree Protection Fencing	2,400.00	LF	1.87	\$4,483
<b>Plants &amp; Shrubs</b>				<b>\$20,504</b>
Mow Strip Along Planting Bed	436.00	LF	16.91	\$7,374
Texas Sage	244.00	EACH	25.00	\$6,100
Dwarf Yaupon Holly	80.00	EACH	25.00	\$2,000
Asparagus Fern	408.00	EACH	5.00	\$2,040
Aztec Grass	598.00	EACH	5.00	\$2,990
<b>Lawns &amp; Grasses</b>				<b>\$28,867</b>
Bermuda Sod	12,723.00	SF	0.60	\$7,634
Hydromulch - Turf	186,542.00	SF	0.10	\$18,654
Row of Bermuda Sod around Turf	4,298.00	SF	0.60	\$2,579
<b>Plant Preparation</b>				<b>\$51,842</b>
Hardwood Mulch	300.00	CY	50.00	\$15,000
Planting Mix	40.00	CY	52.00	\$2,080
Topsoil	400.00	TCY	86.91	\$34,762
<b>Stone / Rock Ground Cover</b>				<b>\$20,000</b>

	Quantity Unit	Rate	Total
Large Aggregate Rock	20.00 TON	1,000.00	\$20,000
<b>Tree Moving</b>			<b>\$1,740</b>
Filter Fabric Under Rock	5,800.00 SF	0.30	\$1,740
<b>Totals</b>			<b>\$22,604,720</b>



# TAB FOUR

## Listing of Documents (Amended)



Phase: 90% Construction Drawings 50% Construction Specifications

Date: November 8, 2024

<b>GENERAL</b>		
1G0.00	COVER SHEET	10.09.2024
1G0.01	SHEET INDEX	10.09.2024
1G0.02	GENERAL PROJECT INFORMATION	10.09.2024
1G0.10	LIFE SAFETY CODE ANALYSIS	10.09.2024
1G0.11	ADA STANDARDS	10.09.2024
1G0.12	ADA STANDARDS	10.09.2024
1G0.15	UL ASSEMBLIES	10.09.2024
1G2.01	GROUND LEVEL LIFE SAFETY PLAN	10.09.2024

<b>STRUCTURE</b>		
1S0.00	COVER SHEET	10.09.2024
1S0.01	GENERAL NOTES	10.09.2024
1S0.02	GENERAL NOTES	10.09.2024
1S0.03	STRUCTURAL SYMBOLS AND NOTATION	10.09.2024
1S1.01	LEVEL 1 PLAN	10.09.2024
1S1.02	MEZZANINE LEVEL FRAMING PLAN	10.09.2024
1S1.03	LOW ROOF FRAMING PLAN	10.09.2024
1S1.04	HIGH ROOF FRAMING PLAN	10.09.2024
1S3.00	TYPICAL DETAILS	09.27.2024
1S3.01	TYPICAL DETAILS	09.27.2024
1S3.10	FOUNDATION TYPICAL DETAILS	09.27.2024
1S3.11	FOUNDATION TYPICAL DETAILS	09.27.2024
1S3.12	FOUNDATION DETAILS	09.27.2024
1S3.13	FOUNDATION DETAILS	09.27.2024
1S3.14	FOUNDATION DETAILS	09.27.2024
1S3.35	CATWALK AND RIGGING DETAILS	10.09.2024
1S3.36	CATWALK AND RIGGING DETAILS	10.09.2024
1S4.00	STEEL TYPICAL DETAILS	10.09.2024
1S4.01	STEEL TYPICAL DETAILS	10.09.2024
1S4.02	TYPICAL STEEL DETAILS	10.09.2024
1S4.04	TYPICAL STEEL DETAILS	10.09.2024
1S4.10	STEEL DETAILS	10.09.2024
1S4.50	TYPICAL MASONRY DETAILS	10.09.2024
1S6.00	ELEVATIONS	10.09.2024
1S6.01	ELEVATIONS	10.09.2024
1S6.02	ELEVATIONS	10.09.2024

**Brazos County Medical Examiner's Office****Vaughn Project No. 3180-01****LISTING OF DOCUMENTS****VAUGHN**

<b>CIVIL</b>		
1C0.01	CIVIL PACKAGE COVER SHEET	08.14.2024
1C0.02	SHEET INDEX	09.18.2024
1C0.10	GENERAL CONSTRUCTION NOTES & PRIVATE UTILITY NOTES	08.14.2024
1C1.01	TOPOGRAPHIC SURVEY (1 OF 5)	08.14.2024
1C1.02	TOPOGRAPHIC SURVEY (2 OF 5)	08.14.2024
1C1.03	TOPOGRAPHIC SURVEY (3 OF 5)	08.14.2024
1C1.04	TOPOGRAPHIC SURVEY (4 OF 5)	08.14.2024
1C1.05	TOPOGRAPHIC SURVEY (5 OF 5)	08.14.2024
1C2.10	OVERALL SITE LAYOUT & STAGING PLAN	09.18.2024
1C2.11	HORIZONTAL CONTROL PLAN	09.18.2024
1C2.20	SITE CLEARING & DEMOLITION PLAN	09.16.2024
1C2.21	SDRC SITE PLAN (SOUTH)	09.16.2024
1C2.22	SDRC SITE PLAN (NORTH)	09.16.2024
1C2.31	SITE PLAN (SOUTH)	09.18.2024
1C2.32	SITE PLAN (NORTH)	09.16.2024
1C2.40	PAVEMENT JOINT LAYOUT	09.17.2024
1C2.50	FIRE PROTECTION PLAN	09.16.2024
1C2.60	WB-67 TRUCK ACCESS PLAN	09.18.2024
1C2.61	BOX TRUCK ACCESS PLAN	08.14.2024
1C3.00	IMPERVIOUS COVER PLAN	08.14.2024
1C3.10	DRAINAGE AREA MAP	09.18.2024
1C3.31	GRADING PLAN (SOUTH)	09.18.2024
1C3.32	GRADING PLAN (NORTH)	09.18.2024
1C3.40	DRAINAGE & STORM SEWER PLAN	09.18.2024
1C3.61	DRAINAGE CALCULATIONS (2-YEAR)	08.14.2024
1C3.62	DRAINAGE CALCULATIONS (10-YEAR)	08.14.2024
1C3.63	DRAINAGE CALCULATIONS (25-YEAR)	08.14.2024
1C3.64	DRAINAGE CALCULATIONS (100-YEAR)	08.14.2024
1C4.00	OVERALL UTILITY PLAN	09.16.2024
1C4.10	UTILITY PLAN (SOUTH)	09.16.2024
1C4.20	UTILITY PLAN (NORTH)	09.16.2024
1C4.30	8" WATER LINE & TELECOM PLAN & PROFILE (SOUTH)	09.16.2024
1C4.31	PUBLIC 8" WATER LINE PLAN & PROFILE (NORTH)	08.14.2024
1C4.40	RUSTLING OAKS DRIVE PLAN & PROFILE	09.16.2024
1C4.50	LOADING DOCK RETAINING WALL SECTION PROFILE	08.14.2024
1C5.00	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	09.09.2024
1C6.10	TRAFFIC CONTROL PLAN - EAST 29th STREET (UTIL CONNECTIONS)	08.14.2024
1C6.20	TRAFFIC CONTROL PLAN - EAST 29th STREET (DWY CONSTRUCTION)	08.14.2024
1C7.01	SITE PAVING DETAILS	08.14.2024
1C7.02	SITE PAVING DETAILS	08.14.2024
1C7.10	SITE DETAILS	09.16.2024

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1C7.20	SITE UTILITY DETAILS	08.14.2024
1C7.21	SITE UTILITY DETAILS	08.14.2024
1C7.22	SITE UTILITY DETAILS	09.10.2024
1C8.00	BRYAN-COLLEGE STATION STANDARD DETAILS - SWPP	08.14.2024
1C8.10	BRYAN-COLLEGE STATION STANDARD DETAILS - SIDEWALK	08.14.2024
1C8.20	BRYAN-COLLEGE STATION STANDARD DETAILS - STREET	08.14.2024
1C8.21	BRYAN-COLLEGE STATION STANDARD DETAILS - STREET	08.14.2024
1C8.30	BRYAN-COLLEGE STATION STANDARD DETAILS - WATER	08.14.2024

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<b>1A0.02</b>	<b>TYPICAL MOUNTING HEIGHTS</b>	<b>10.09.2024</b>
<b>1A0.10</b>	<b>PARTITION TYPES</b>	<b>10.09.2024</b>
<b>1A0.20</b>	<b>MATERIAL LEGENDS</b>	<b>10.09.2024</b>
<b>1A0.30</b>	<b>DOOR ASSEMBLY TYPES</b>	<b>10.09.2024</b>
<b>1A0.31</b>	<b>TRANSITIONS</b>	<b>10.09.2024</b>
<b>1A0.35</b>	<b>DOOR DETAILS</b>	<b>10.09.2024</b>
<b>1A0.36</b>	<b>DOOR DETAILS</b>	<b>10.09.2024</b>
<b>1A0.40</b>	<b>WINDOW TYPES</b>	<b>10.09.2024</b>
<b>1A0.45</b>	<b>WINDOW DETAILS</b>	<b>10.09.2024</b>
<b>1A0.46</b>	<b>WINDOW DETAILS</b>	<b>10.09.2024</b>
<b>1A0.50</b>	<b>SIGNAGE SCHEDULE</b>	<b>10.09.2024</b>
<b>1A1.01</b>	<b>SITE PLAN</b>	<b>10.09.2024</b>
<b>1A1.20</b>	<b>SITE PLAN DETAILS</b>	<b>10.09.2024</b>
<b>1A2.01</b>	<b>BUILDING ZONING PLAN</b>	<b>10.09.2024</b>
<b>1A2.05</b>	<b>ARCHITECTURAL SLAB PLAN</b>	<b>10.09.2024</b>
<b>1A2.10</b>	<b>OVERALL GROUND LEVEL FLOOR PLAN</b>	<b>10.09.2024</b>
<b>1A2.11</b>	<b>DIMENSION PLANS -OVERALL GROUND LEVEL</b>	<b>10.09.2024</b>
<b>1A2.20</b>	<b>FLOOR PLAN - EQUIPMENT PLATFORMS &amp; CLERESTORY</b>	<b>10.09.2024</b>
<b>1A2.30</b>	<b>OVERALL ROOF PLAN</b>	<b>10.09.2024</b>
<b>1A2.37</b>	<b>OVERALL FINISH FLOOR PLAN</b>	<b>10.09.2024</b>
<b>1A3.10</b>	<b>OVERALL GROUND LEVEL REFLECTED CEILING PLAN</b>	<b>10.09.2024</b>
<b>1A3.20</b>	<b>EQUIPMENT PLATFORMS &amp; CLERESTORY REFLECTED CEILING PLAN</b>	<b>10.09.2024</b>
<b>1A4.01</b>	<b>ENLARGED PLAN - CONFERENCE</b>	<b>10.09.2024</b>
<b>1A4.02</b>	<b>ENLARGED PLAN - RESTROOMS, WELLNESS &amp; CORRIDORS</b>	<b>10.09.2024</b>
<b>1A4.03</b>	<b>ENLARGED PLAN - OFFICE AREAS, CONFERENCE &amp; BREAK ROOM</b>	<b>10.09.2024</b>
<b>1A4.04</b>	<b>ENLARGED PLAN - LOCKER ROOMS</b>	<b>10.09.2024</b>
<b>1A4.05</b>	<b>ENLARGED PLAN - AUTOPSY SUITE</b>	<b>10.09.2024</b>
<b>1A4.06</b>	<b>ENLARGED PLAN - SALLYPORT</b>	<b>10.09.2024</b>
<b>1A5.01</b>	<b>PLAN DETAILS</b>	<b>10.09.2024</b>
<b>1A5.11</b>	<b>CEILING DETAILS</b>	<b>10.09.2024</b>
<b>1A6.01</b>	<b>EXTERIOR BUILDING ELEVATIONS</b>	<b>10.09.2024</b>
<b>1A6.02</b>	<b>3D VIEWS &amp; MOCKUP</b>	<b>10.09.2024</b>

1A6.03	3D RENDERS	10.09.2024
1A6.04	3D RENDERS	10.09.2024
1A7.01	BUILDING SECTIONS	10.09.2024
1A7.02	BUILDING SECTIONS	10.09.2024
1A7.50	WALL SECTIONS	10.09.2024
1A7.51	WALL SECTIONS	10.09.2024
1A7.70	WALL SECTION DETAILS	10.09.2024
1A7.71	WALL SECTION DETAILS	10.09.2024
1A7.75	VERTICAL CIRCULATION SECTIONS	10.09.2024
1A7.77	EXTERIOR DETAILS	10.09.2024
1A7.78	EXTERIOR DETAILS	10.09.2024
1A8.50	INTERIOR DETAILS	10.09.2024
1A9.01	OVERALL GROUND LEVEL FURNITURE PLAN	10.09.2024

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1LB1.01	LAB CASEWORK ELEVATIONS	10.09.2024
1LB2.00	OVERALL FLOOR PLAN	10.09.2024
1LB2.01	ENLARGED FLOOR PLAN A	10.09.2024
1LB2.02	ENLARGED FLOOR PLAN B	10.09.2024
1LB5.00	LAB DETAILS	10.09.2024
1LB5.01	LAB DETAILS	10.09.2024
1LB5.02	AUTOPSY STATION ELEVATIONS	10.09.2024
1LB5.03	AUTOPSY STATION ELEVATIONS	10.09.2024

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1M2.01	MECHANICAL EQUIPMENT & DUCTWORK PLAN - UNDER FLOOR	10.09.2024
1M2.01A	MECHANICAL EQUIPMENT & DUCTWORK PLAN - AREA A	10.09.2024
1M2.01B	MECHANICAL EQUIPMENT & DUCTWORK PLAN - AREA B	10.09.2024
1M2.01C	MECHANICAL EQUIPMENT & DUCTWORK PLAN - AREA C	10.09.2024
1M2.03	MECHANICAL EQUIPMENT & DUCTWORK PLAN - ROOF	10.09.2024
1M2.04	MECHANICAL AIRFLOW DIAGRAM -AUTOPSY AREA	10.09.2024
1M3.01	MECHANICAL EQUIPMENT & PIPING PLAN	10.09.2024
1M4.01	ENLARGED MECHANICAL PLAN	10.09.2024
1M5.01	MECHANICAL DETAILS	10.09.2024
1M5.02	MECHANICAL DETAILS	10.09.2024
1M5.03	MECHANICAL DETAILS	10.09.2024
1M5.04	MECHANICAL DETAILS	10.09.2024
1M5.05	MECHANICAL CONTROLS	09.06.2024
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1E1.02	ELECTRICAL SITE PLAN - POWER	10.09.2024
1E1.03	ELECTRICAL ENLARGED SITE PLAN - GENERATOR YARD	10.09.2024
1E2.01	ELECTRICAL LIGHTING PLAN - LEVEL 01 - OVERALL	10.09.2024
1E3.01	ELECTRICAL POWER PLAN - LEVEL 01 - OVERALL	10.09.2024
1E4.01	ELECTRICAL EQUIPMENT POWER PLAN -LEVEL 01	10.09.2024
1E4.02	ELECTRICAL EQUIPMENT POWER PLAN -MEZZANINE	10.09.2024
1E4.03	ELECTRICAL EQUIPMENT POWER PLAN -ROOF LEVEL	10.09.2024
1E6.01	ELECTRICAL ENLARGED POWER PLAN - LEVEL 01	10.09.2024
1E7.01	ELECTRICAL ONE-LINE DIAGRAM	10.09.2024
1E8.01	ELECTRICAL PANEL SCHEDULES	10.09.2024
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1PU1.01	PLUMBING UNDERFLOOR PLAN - LEVEL 01 -OVERALL	10.09.2024
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1P4.01	ENLARGED PLUMBING PLANS	10.09.2024
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1P5.02	PLUMBING DETAILS	10.09.2024
1P5.03	PLUMBING DETAILS	10.09.2024
1P5.04	PLUMBING DETAILS	10.09.2024
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1P7.01	PLUMBING NATURAL GAS RISERS	10.09.2024

**AV**

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1T4.01	TELECOM -ENLARGED MDR	10.09.2024
1T5.01	TELECOM SITE DETAILS 1	10.09.2024
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1L1.01	PLANTING PLANENLARGEMENT 1 OF 2	09.06.2024
1L1.02	PLANTING PLANENLARGEMENT 2 OF 2	09.06.2024
1L2.01	PLANTING DETAILS 1 OF 1	09.06.2024
1L3.01	TREE PRESERVATION PLAN ENLARGEMENT 1 OF 2	09.06.2024
1L3.02	TREE PRESERVATION PLAN ENLARGEMENT 2 OF 2	09.06.2024

# Brazos County Medical Examiner's Office

## Vaughn Project No. 3180-01

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01 57 23	TEMPORARY STORM WATER POLLUTION CONTROL	9/9/2024
01 60 00	PRODUCT REQUIREMENTS	9/9/2024
01 73 00	EXECUTION	9/9/2024
01 73 29	CUTTING AND PATCHING	9/9/2024
01 74 19	CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL	9/9/2024
01 77 00	CLOSEOUT PROCEDURES	9/9/2024
01 78 23	OPERATION AND MAINTENANCE DATA	9/9/2024
01 78 39	PROJECT RECORD DOCUMENTS	9/9/2024
01 79 00	DEMONSTRATION AND TRAINING	9/9/2024
<b>03 10 00</b>	<b>CONCRETE FORMING AND ACCESSORIES</b>	<b>9/6/2024</b>
<b>03 20 00</b>	<b>CONCRETE REINFORCING</b>	<b>9/6/2024</b>
<b>03 30 00</b>	<b>CAST-IN-PLACE CONCRETE</b>	<b>9/6/2024</b>
<b>03 35 43</b>	<b>POLISHED CONCRETE FINISH</b>	<b>9/6/2024</b>
<b>04 20 00</b>	<b>UNIT MASONRY</b>	<b>9/6/2024</b>
<b>05 12 00</b>	<b>STRUCTURAL STEEL FRAMING</b>	<b>9/6/2024</b>
<b>05 31 00</b>	<b>STEEL DECKING</b>	<b>9/6/2024</b>
<b>05 50 00</b>	<b>METAL FABRICATION</b>	<b>9/6/2024</b>
<b>05 51 13</b>	<b>METAL PAN STAIRS</b>	<b>9/6/2024</b>
<b>06 10 00</b>	<b>ROUGH CARPENTRY</b>	<b>9/6/2024</b>
<b>06 16 00</b>	<b>SHEATHING</b>	<b>9/6/2024</b>
<b>06 20 23</b>	<b>INTERIOR FINISH CARPENTRY</b>	<b>9/6/2024</b>



**Brazos County Medical Examiner's Office****Vaughn Project No. 3180-01****LISTING OF DOCUMENTS****VAUGHN**

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06 41 16	PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS	9/6/2024
06 64 00	PLASTIC PANELING	9/6/2024
07 13 26	SELF-ADHERING SHEET WATERPROOFING	9/6/2024
07 19 00	WATER REPELLENTS	9/6/2024
07 21 00	THERMAL INSULATION	9/6/2024
07 22 00	ROOF AND DECK INSULATION	9/6/2024
07 27 26	FLUID-APPLIED MEMBRANE AIR BARRIERS	9/6/2024
07 41 13	STANDING-SEAM METAL ROOF PANELS	9/6/2024
07 42 13.02	METAL WALL PANELS	9/6/2024
07 42 13.23	METAL COMPOSITE MATERIAL WALL PANELS	9/6/2024
07 54 19	POLYVINYL-CHLORIDE (PVC) ROOFING	9/6/2024
07 62 00	SHEET METAL FLASHING AND TRIM	9/6/2024
07 71 00	ROOF SPECIALTIES	9/6/2024
07 72 00	ROOF ACCESSORIES	9/6/2024
07 84 13	PENETRATION FIRESTOPPING	9/6/2024
07 92 00	JOINT SEALANTS	9/6/2024
08 11 13	HOLLOW METAL DOORS AND FRAMES	9/6/2024
08 14 16	FLUSH WOOD DOORS	9/6/2024
08 31 13	ACCESS DOORS AND FRAMES	9/6/2024
08 33 23	OVERHEAD COILING DOORS	9/6/2024
08 41 13	ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS	9/6/2024
08 42 29.23	SLIDING AUTOMATIC ENTRANCES	9/6/2024
08 56 53	SECURITY WINDOWS	9/6/2024
08 71 00	DOOR HARDWARE	9/6/2024
08 80 00	GLAZING	9/6/2024
08 88 53	SECURITY GLAZING	9/6/2024
08 90 00	LOUVERS AND VENTS	9/6/2024
09 22 16	NON-STRUCTURAL METAL FRAMING	9/6/2024
09 29 00	GYPSUM BOARD	9/6/2024
09 30 00	TILING	9/6/2024
00 51 13	ACOUSTICAL PANEL CEILINGS	9/6/2024
09 51 23	ACOUSTICAL TILE CEILINGS	9/6/2024
09 65 13	RESILIENT BASE AND ACCESSORIES	9/6/2024
09 65 19	RESILIENT TILE FLOORING	9/6/2024
09 66 23	RESINOUS MATRIX TERRAZZO FLOORING	9/6/2024
09 68 13	TILE CARPETING	9/6/2024
09 77 30	HIGH-BUILD EPOXY URETHANE WALL FINISH SYSTEM	9/6/2024
09 91 13	EXTERIOR PAINTING	9/6/2024
09 91 23	INTERIOR PAINTING	9/6/2024

**Brazos County Medical Examiner's Office**

**Vaughn Project No. 3180-01**

**LISTING OF DOCUMENTS**



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09 96 00	HIGH-PERFORMANCE COATINGS	9/6/2024
09 96 53	ELASTOMERIC COATINGS	9/6/2024
10 14 00	SIGNAGE	9/6/2024
10 14 16	PLAQUES	9/6/2024
10 21 13	TOILET COMPARTMENTS	9/6/2024
10 22 39	MOVING OPERABLE PARTITIONS	9/6/2024
10 26 41	BULLET RESISTANT PANELS	9/6/2024
10 28 00	TOILET, BATH, AND LAUNDRY ACCESSORIES	9/6/2024
10 44 13	FIRE EXTINGUISHER CABINETS	9/6/2024
10 44 16	FIRE EXTINGUISHERS	9/6/2024
10 51 13	METAL LOCKERS	9/6/2024
10 51 14	ADA BENCH	9/6/2024
10 56 13	METAL STORAGE SHELVING (FOUR-POST)	9/6/2024
10 73 15	EXTRUDED ALUMINUM CANOPIES	9/6/2024
11 13 13	LOADING DOCK BUMPERS	9/6/2024
11 13 16	LOADING DOCK SEALS AND SHELTERS	9/6/2024
11 13 19	STATIONARY LOADING DOCK EQUIPMENT	9/6/2024
11 31 00	RESIDENTIAL APPLIANCES	9/6/2024
11 53 00	LABORATORY EQUIPMENT	9/6/2024
11 53 13	LABORATORY FUME HOODS	9/6/2024
11 53 60	AUTOPSY & MORGUE EQUIPMENT	9/6/2024
12 24 13	ROLLER WINDOW SHADES	9/6/2024
12 35 53	LABORATORY CASEWORK, FIXTURES AND ACCESSORIES	9/6/2024
12 36 61	SIMULATED STONE COUNTERTOPS	9/6/2024
13 21 26	COLD ROOMS	9/6/2024
21 05 00	COMMON WORK RESULTS FOR FIRE SUPPRESSION	9/6/2024
22 05 00	COMMON WORK RESULTS FOR PLUMBING	9/6/2024
22 05 29	PLUMBING HANGERS AND SUPPORT	9/6/2024
22 05 53	IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT	9/6/2024
22 11 16	DOMESTIC WATER PIPING	9/6/2024
22 13 13	FACILITY SANITARY SEWERS	9/9/2024
22 13 16	SANITARY WASTE AND VENT PIPING	9/6/2024
22 14 13	STORM DRAINAGE PIPING	9/6/2024
23 05 00	COMMON WORK RESULTS FOR HVAC	9/6/2024
23 05 13	COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT	9/6/2024
23 05 16	EXPANSION FITTINGS AND LOOPS FOR HVAC PIPING	9/6/2024
23 05 17	SLEEVES AND SLEEVE SEALS FOR HVAC PIPING	9/6/2024
23 05 18	ESCUTCHEONS FOR HVAC PIPING	9/6/2024
23 05 19	METERS AND GAUGES FOR HVAC PIPING	9/6/2024
23 05 23	GENERAL DUTY VALVES FOR HVAC PIPING	9/6/2024

**Brazos County Medical Examiner's Office****Vaughn Project No. 3180-01****VAUGHN****LISTING OF DOCUMENTS**

23 05 29	HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT	9/6/2024
23 05 48	VIBRATION CONTROLS FOR HVAC	9/6/2024
23 05 53	IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT	9/6/2024
23 05 93	TESTING, ADJUSTING, AND BALANCING FOR HVAC	9/6/2024
23 07 13	DUCT INSULATION	9/6/2024
23 07 16	HVAC EQUIPMENT INSULATION	9/6/2024
23 07 19	HVAC PIPING INSULATION	9/6/2024
23 08 00	COMMISSIONING OF HVAC	9/6/2024
23 09 00	INSTRUMENTATION AND CONTROL FOR HVAC	9/6/2024
23 09 30	LABORATORY AIRFLOW CONTROL SYSTEM	9/6/2024
23 09 93	SEQUENCE OF OPERATIONS FOR HVAC CONTROLS	9/6/2024
23 11 23	NATURAL GAS PIPING	9/6/2024
23 21 13	HYDRONIC PIPING	9/6/2024
23 21 16	HYDRONIC PIPING SPECIALTIES	9/6/2024
23 21 23	HYDRONIC PUMPS	9/6/2024
23 23 00	REFRIGERANT PIPING	9/6/2024
23 25 13	WATER TREATMENT FOR CLOSED-LOOP HYDRONIC SYSTEMS	9/6/2024
23 29 23	VARIABLE FREQUENCY MOTOR DRIVES	9/6/2024
23 31 13	METAL DUCTS	9/6/2024
23 31 16	NON-METAL DUCTS	9/6/2024
23 33 00	AIR DUCT ACCESSORIES	9/6/2024
23 34 13	AXIAL HVAC FANS	9/6/2024
23 34 23	HVAC POWER VENTILATORS	9/6/2024
23 34 33	AIR CURTAINS	9/6/2024
23 34 43	LABORATORY HIGH PLUME EXHAUST FANS	9/6/2024
23 36 00	AIR TERMINAL UNITS	9/6/2024
23 37 13	DIFFUSERS, REGISTERS, AND GRILLES	9/6/2024
23 52 16	CONDENSING BOILERS	9/6/2024
23 64 23	AIR-COOLED SCREW WATER CHILLERS	9/6/2024
23 73 13	INDOOR AIR HANDLING UNITS	9/6/2024
23 73 24	CUSTOM AIR HANDLING UNITS	9/6/2024
23 81 23	COMPUTER ROOM AIR CONDITIONERS	9/6/2024
23 82 19	FAN COIL UNITS	9/6/2024
23 72 38	UNIT HEATERS	9/6/2024
26 05 33	RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS	9/6/2024
26 32 13	ENGINE GENERATORS	9/6/2024
26 36 00	TRANSFER SWITCHES	9/6/2024
27 05 00	COMMON WORK RESULTS FOR COMMUNICATIONS	9/6/2024
27 05 26	GROUNDING AND BONDING FOR COMMUNICATIONS	9/6/2024
27 05 28	PATHWAYS FOR COMMUNICATIONS SYSTEMS	9/6/2024
27 05 43	UNDERGROUND DUCT AND RACEWAYS	9/6/2024
27 05 53	IDENTIFICATION FOR COMMUNICATIONS SYSTEMS	9/6/2024
27 11 00	COMMUNICATIONS EQUIPMENT ROOM FITTINGS	9/6/2024

**Brazos County Medical Examiner's Office**

**Vaughn Project No. 3180-01**



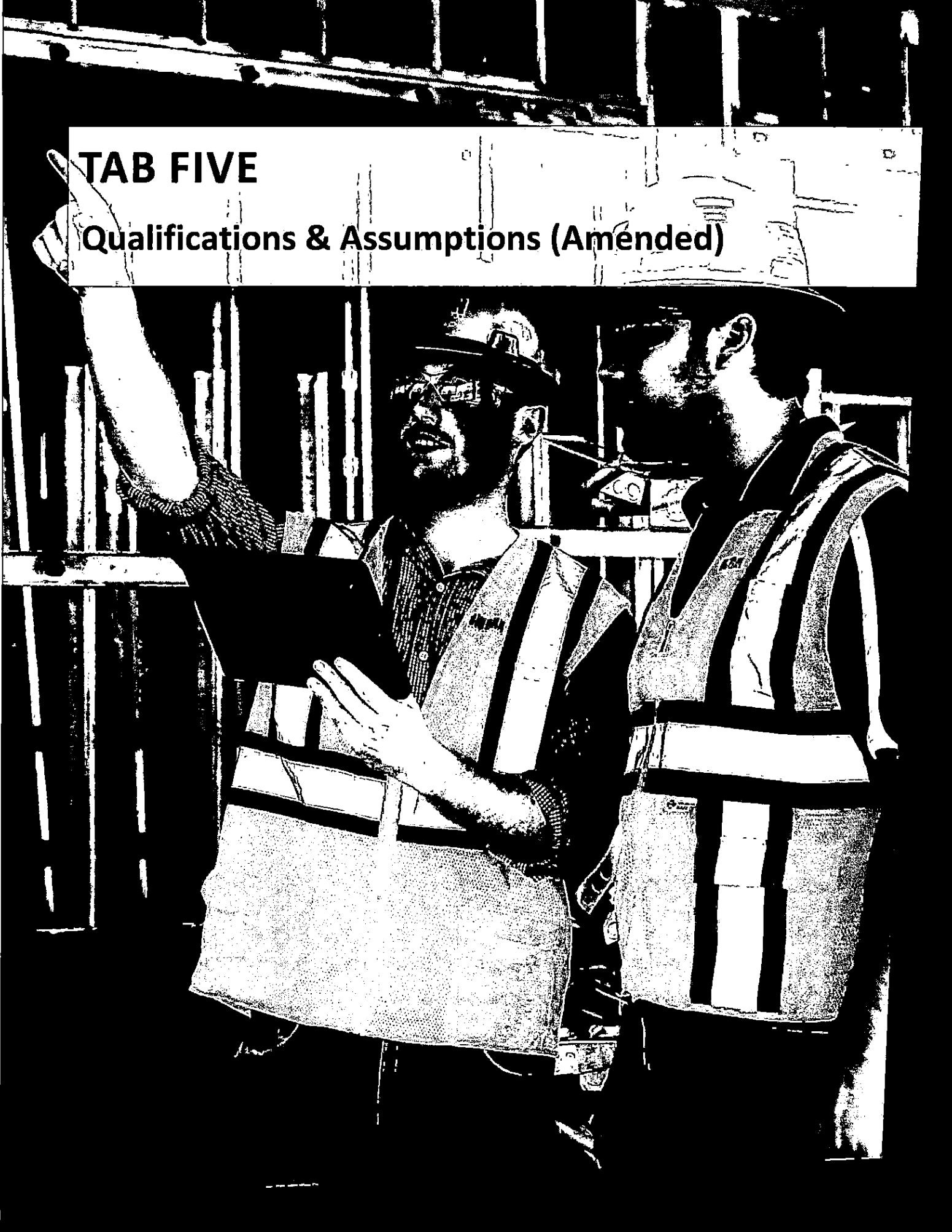
**LISTING OF DOCUMENTS**

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<b>27 13 00</b>	<b>COMMUNICATIONS BACKBONE CABLING</b>	<b>9/6/2024</b>
<b>27 15 00</b>	<b>COMMUNICATIONS HORIZONTAL CABLING</b>	<b>9/6/2024</b>
<b>27 40 00</b>	<b>AUDIOVISUAL SYSTEMS</b>	<b>9/6/2024</b>
<b>28 13 00</b>	<b>ACCESS CONTROL</b>	<b>9/6/2024</b>
<b>28 23 00</b>	<b>VIDEO SURVEILLANCE</b>	<b>9/6/2024</b>
31 10 00	SITE CLEARING	9/9/2024
31 20 00	EARTH MOVING	9/9/2024
<b>31 23 00</b>	<b>EXCAVATION AND FILL</b>	<b>9/6/2024</b>
31 23 19	DEWATERING	9/9/2024
31 31 16	TERMITE CONTROL	9/9/2024
31 50 00	EXCAVATION SUPPORT AND PROTECTION	9/9/2024
<b>31 63 24</b>	<b>DRILLED AND UNDERREAMED FOOTINGS</b>	<b>9/6/2024</b>
32 13 13	CONCRETE PAVING	9/9/2024
32 13 73	CONCRETE PAVING JOINT SEALANTS	9/9/2024
32 17 23	PAVEMENT MARKINGS	9/9/2024
<b>32 31 19</b>	<b>ORNAMENTAL STEEL FENCES AND GATES</b>	<b>9/6/2024</b>
32 32 23	SEGMENTAL RETAINING WALLS	9/9/2024
33 14 15	SITE WATER DISTRIBUTION PIPING	9/9/2024
33 42 00	STORMWATER CONVEYANCE	9/9/2024
33 46 00	SUBDRAINAGE	9/9/2024
33 47 13	POND AND RESERVOIR LINERS	9/9/2024

# TAB FIVE

## Qualifications & Assumptions (Amended)



**Phase: 90% CD – GMP 2**

**Date: November 8, 2024**

**General Qualifications**

1. Excludes a line item estimate; line items are only shown for convenience of review.
2. Assumes work during normal work hours Monday through Friday, 7:00 AM to 3:30 PM, and intermittent weekend work as required.
3. Assumes that every specification, either referenced by manufacturer or performance, is designed so that more than one manufacturer for each specification will be able to meet the design intent of the project, and that details shown in the Contract Documents will not preclude any manufacturer specified from participating in the proposal process. Excludes proprietary specifications.
4. Excludes building code changes, life safety code changes, or other regulatory changes that may occur beyond what is currently designed.
5. Assumes reasonable efforts to locate and protect existing underground utilities and facilities but excludes responsibility for damage or the impacts from damage to unknown, unforeseen, or non/incorrectly located by others underground utilities or facilities.
6. Excludes the excavation or transportation of hazardous materials discovered in a foreseen or unforeseen condition. Excludes the excavation, removal, or transportation of unclassified excavation that may be uncovered, including but not limited to concrete foundations, underground fuel or water storage tanks, masonry underground walls, and hidden sampling wells.
7. Excludes testing laboratory services, envelope testing, geotechnical services, material testing, environmental testing, site surveys, or sub-surface investigations.
8. Excludes wetlands mitigation and site changes required by flood control.
9. Excludes 3rd party environmental (i.e., asbestos, lead, mold, etc.) monitoring.
10. Excludes all municipal utility, water impact, or sewage fees.
11. **Includes utilities (water, electrical, etc.) utilized during the construction phase.**
12. Excludes leasing of public right of ways and sidewalks and excludes lane closures.
13. ~~Excludes acquiring air rights outside the project's property boundaries.~~
14. Assumes complete use of the entire site, including the parking areas.
15. Excludes the design of, including but not limited to, any system, detail, equipment, and component, whether included or not included in the project plans or specifications unless it has been specifically indicated to be Construction Manager's responsibility for "delegated design". Furthermore, if delegated design by Construction Manager is indicated, the resulting design must be able to be achieved within the original design intent. Any other design changes, as a result of the delegated design, are excluded.
16. Assumes that the Owner does not want to pay premium costs and incur schedule impacts due to any non-industry standard sized materials listed in the Contract Documents and that material sizes listed are simply nominal when non-industry standard (i.e. – 4" studs are shown but 3-5/8" are industry standard and will be used or 8" CMU block is shown but 7-5/8" is industry standard and will be used).
17. Assumes isolation or termination of existing MEP systems, including, but not limited to, valves and breakers, will be performed by others. Excludes "hot" or "live" tie-in work.

18. Assume equipment provided by Owner or others, but connected by the trade contractors, will be delivered and set in place at the required time to meet the schedule.
19. Excludes 3rd party commissioning agent. Includes assistance for the commissioning agent to accomplish their work.
20. Assumes execution of ConsensusDoc contract forms.
21. Contingent upon the Owner and/or its lender providing satisfactory evidence to us and our bonding company that sufficient funds are available and have been set aside specifically to pay the construction contract, before starting work.
22. Includes project specific Contractor Controlled Insurance Program (Workers Compensation and General Liability) within the cost parameters of the estimate.
23. Includes professional pollution liability, automobile, and offsite general liability insurance coverages, which shall be reimbursable as part of the GMP.
24. Assumes the following regarding builder's risk insurance:
  - A. Costs included are based on the total project limit of GMP 2.
  - B. Construction Manager shall be responsible for deductibles only to the extent that the loss arose out of or was caused by Construction Manager's negligence.
25. Excludes provisions for, or any impacts from, any errors or omissions in the Contract Documents prepared and/or issued by the Owner, Owner's vendors/separate contracts, Architect, Engineer, Consultant, or similar party.
26. Assumes all separate contractors shall execute Construction Manager's Site Access Agreement setting forth project rules, responsibilities, and boundaries. Separate contractors shall provide the same insurance required by the Owner-Construction Manager contract, along with safety plans (including a COVID management plan) acceptable to Construction Manager.
- ~~27. Assumes the Guaranteed Maximum Price is based on market conditions at the time of entering into this Agreement.~~
  - ~~A. If the Cost of the Work, or a portion of thereof, increases by more than 10% as a result of an external cause, then the Guaranteed Maximum Price shall be equitably adjusted by such increased cost unless the Owner, Architect, and Construction Manager are able to cooperate in revising the project scope and/or quality as required to reduce the Cost of the Work by an equal amount.~~
28. If the project schedule is delayed as a result of an external cause, then the schedule float shall be consumed to offset any such delays. If the float is inadequate, an equitable adjustment to the contract time shall be made.
29. External causes shall include, but not be limited to, natural disasters such as hurricanes, earthquakes, floods, or other severe weather events, new taxes or tariffs, pandemics, labor strikes or shortages, highly adverse economic conditions, or sudden market fluctuations resulting in shortages of materials or increases in cost thereof.
30. **Excludes utilization of the Payroll Deduction Authorization form.**
31. ~~Includes delivery of generator and docking stations after specified Substantial Completion date as depicted in Exhibit D.~~
32. **Includes GMP1 scope combined with GMP 2 scope to become a single project incorporated into Amendment 2.**

33. Includes using any uncommitted balance from GMP 1 as part of GMP 2.
34. Includes 10 percent total project float as contingency within the baseline construction schedule to accommodate inclement weather and/or schedule slippages that may occur.

**01.07 – Allowances**

1. Assumes each allowance amount below is specifically dedicated for the indicated work. Any unused portion of an individual allowance amount shall be returned to the Owner. ~~When an individual allowance amount is exceeded, the Guaranteed Maximum Price shall be increased accordingly unless the Owner, Architect, and Construction Manager are able to cooperate in revising the project scope and/or quality as required to reduce the cost to within the original allowance amount.~~
2. Includes a \$500,000 allowance for the furniture package provided by Owner/PGAL.

**01.62 – Temporary Fence**

1. Includes 17 months of temporary fence rental.

**05.01 – Steel Fabrication**

1. Includes ¼" bent plate at 15 lbs/lf at the roof perimeter. The size of the bent plate was not specified.

**07.01 – Waterproofing**

1. Excludes water repellant coatings. Specification section 071900 calls for water repellants as indicated on drawings; however, water repellant was not shown on the drawings.

**07.02 – Insulation**

1. Includes R-10 batt insulation at the exterior wall, bottom of c-channel, and at both roof overhangs. The exterior wall details showed conflicting requirements for the exterior batt insulation.

**07.06 – Composite Panels**

1. Includes 24-gage single skin metal panel with manufacture's standard finishes at soffits; not shown.

**08.00 – Door Hardware**

1. Includes the following material only target values for the hardware sets purchase per leaf:
  - A. Typical office / corridor hardware set at \$1,487.50.
  - B. Interior corridor / office electrified at \$2,800.
  - C. All other hardware: \$2,625.

**10.04 – Louvers**

1. Includes manufacture's standard colors. Excludes full range of colors as stated in specifications.



**12.05 – Blinds and Shades**

1. Excludes blinds and shades at SF-1 and SF-2. General note calls for all exterior storefronts to receive blinds and shades. These locations are entrance storefronts that will not receive shades.

**26.01 – Electrical (Generator Purchase)**

1. Assumes that the electricity utility provider will bring their service to the building transformer that they will provide and set. The Construction Manager will extend the service into the building from the transformer.
2. ~~Excludes installation of equipment.~~
3. ~~Excludes load bank and underground raceways; Brazos County will use mobile load bank through the docking station to test the generator.~~

**26.02 – Electrical Site**

1. ~~Excludes underground wiring.~~
2. ~~Excludes main service disconnect.~~
3. ~~Excludes light poles and light fixtures.~~
4. ~~Excludes underground raceways associated with generator, load bank, and docking stations.~~

**27.01 – Data/ Telecommunications**

1. ~~Excludes low voltage wiring.~~
2. ~~Excludes fiber connections.~~
3. ~~Excludes low voltage devices.~~
4. ~~Excludes steel casing for telecom indicated on drawings.~~
5. Excludes associated easements; final BTU easements were not confirmed on drawings.
6. Includes a 12"x6" Basket Tray. The specifications did not detail the depth of the basket tray.

**31.01 – Earthwork**

1. Includes select fill backfill at block retaining walls. Assumes the higher quality backfill of the two conflicting delegated designs will be utilized for the underground storm system and retaining wall.
2. Excludes import of topsoil from offsite for all landscape areas. Includes in-situ topsoil.

**31.04 – SWPPP**

1. ~~Includes 17 months of inspections.~~

**32.02 – Site Concrete**

1. Assumes 2'x2' x.5' card reader foundations. The drawings did not include foundation details for the card readers.
2. ~~Assumes dumpster pad as 7" paving; no detail provided.~~
3. ~~Excludes generator chiller pads.~~

**32.07 – Fences and Gates**

1. Includes a target value of \$500/LF for the shadowbox fence. The drawings and specifications did not provide a style or manufacturer for the fence.

**32.14 – Striping & Signage**

1. ~~Includes 2 mobilizations.~~
2. Includes public right-away signage at connection to existing public roads.

**32.32 – Pavers**

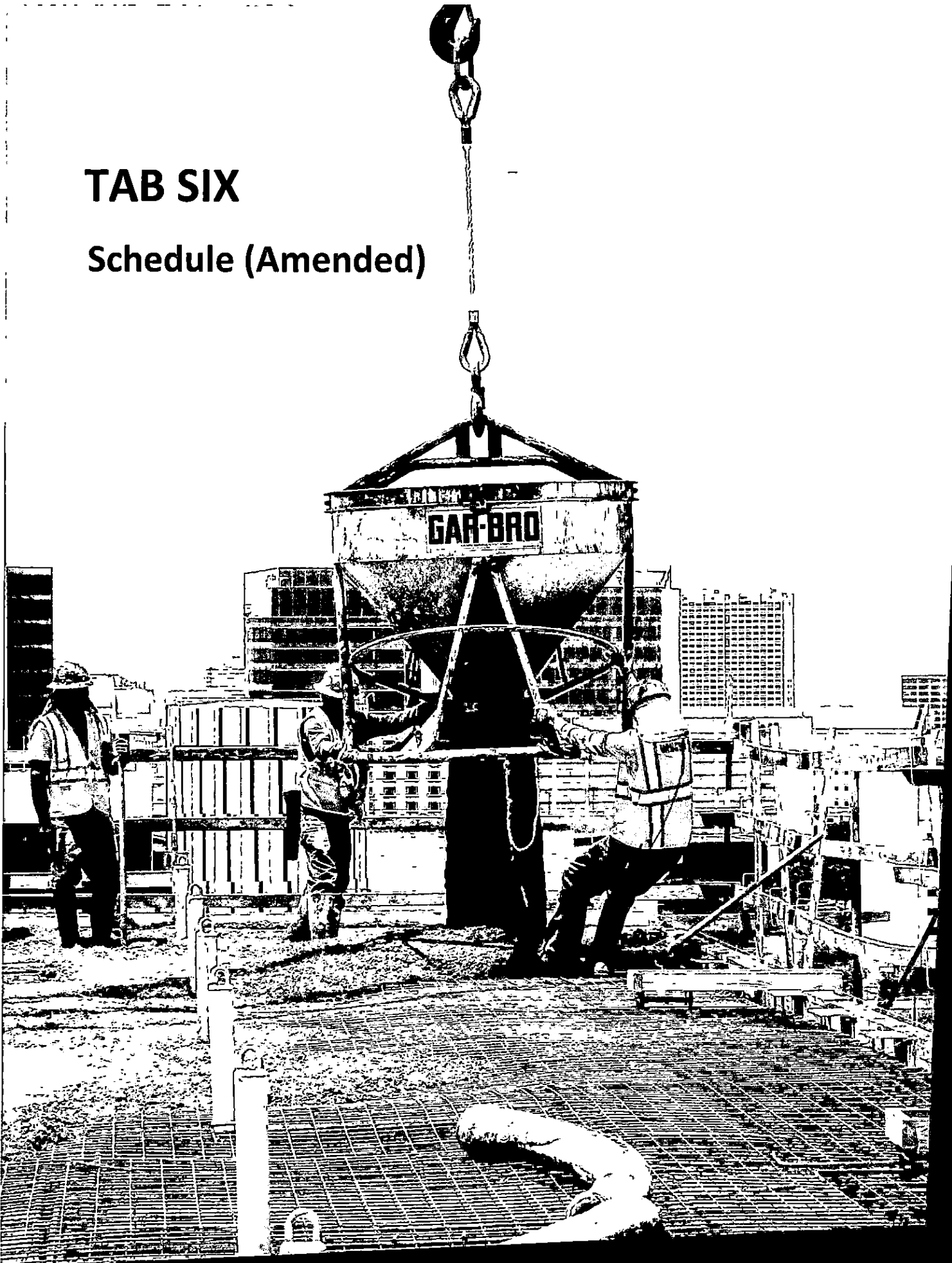
1. ~~Excludes pavers.~~

**33.01 – Utilities**

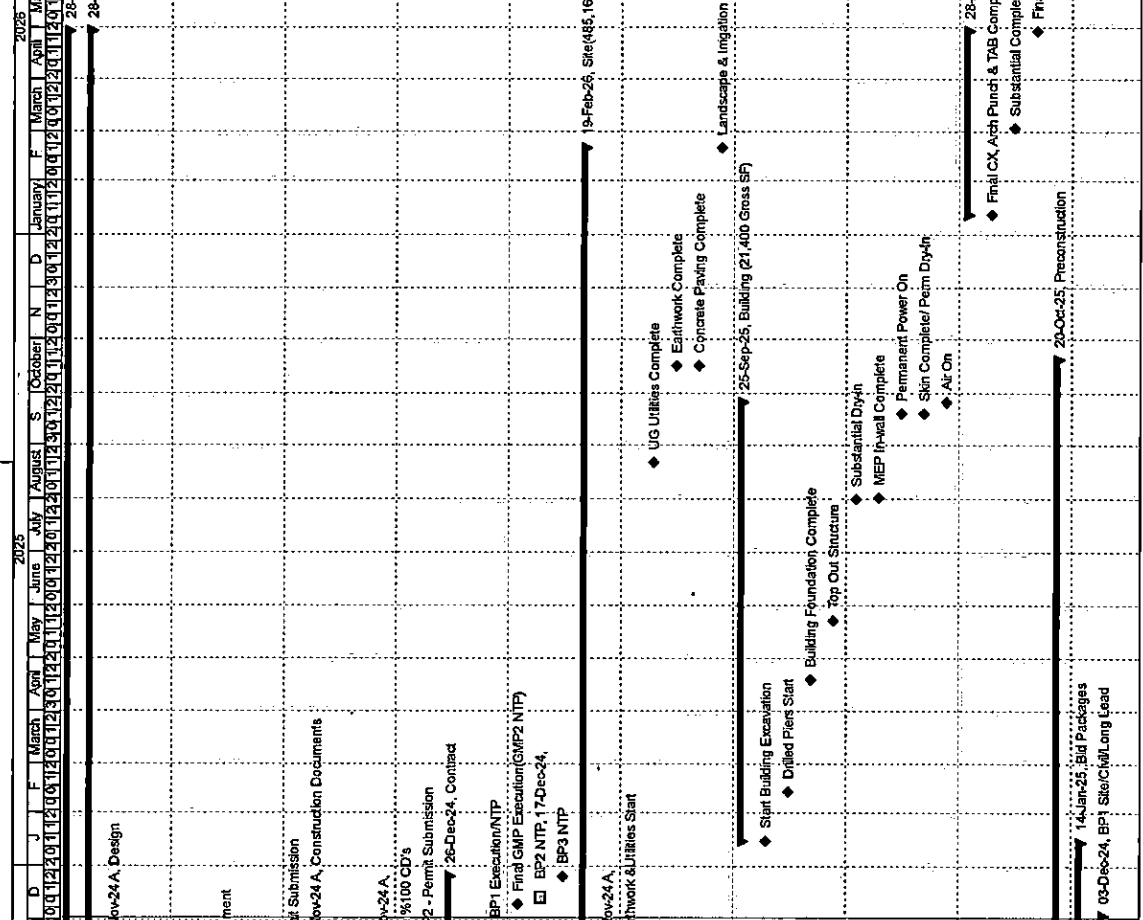
1. Assumes the backfill and structural requirements for the underground detention system and retaining wall are not in conflict. **These 2 delegated design systems have different backfill requirements that overlap each other. There is the possibility of conflicts between the 2 systems until the delegated design of each system is completed and coordination completed.**
2. ~~Excludes natural gas scope of work.~~

# TAB SIX

## Schedule (Amended)



#	Activity ID	Activity Name	Remaining Duration	Start	Finish
1	3180 - BCMEO - 2024.12.02		365	16-Apr-24	28-Apr-26
2	Milestone		349	16-Apr-24	28-Apr-26
3	Design		0	30-Apr-24	08-Nov-24
4	Schematic Design		0	30-Apr-24	19-Jun-24
5	A1010 Issue SD's for Review		0	24-May-24	31-May-24
6	A1040 SD - Validation		0	30-Apr-24	19-Jun-24
7	A1100 Schematic Design Validation Debatable		0	15-Jun-24	15-Jun-24
8	Design Development		0	31-May-24	14-Aug-24
9	A1120 Issue %100 DD's		0	14-Jun-24	19-Jul-24
10	A1110 Issue %100 Site/Civil CD's		0	31-May-24	14-Aug-24
11	A1160 BP1 - Site Development Permit Submission		0	14-Aug-24	14-Aug-24
12	Construction Documents		0	14-Aug-24	08-Nov-24
13	A1170 Issue Permit Review (60% CD's ARCH/MEP)		0	14-Aug-24	13-Sep-24
14	A1710 Issue %100 Foundation Package		0	13-Sep-24	27-Sep-24
15	A1180 Review 50% CD's		0	13-Sep-24	05-Nov-24
16	A1180 Issue %100 CD's		0	08-Nov-24	08-Nov-24
17	A1220 GMP2 - Permit Submission		0	08-Nov-24	08-Nov-24
18	Contract		10	16-Apr-24	26-Dec-24
19	A1000 CMAR Contract Execution		0	16-Apr-24	26-Dec-24
20	A1130 GMP 1 - BP1 Execution/NTP		0	25-Oct-24	25-Oct-24
21	A1280 Final GMP Execution(GMP2 NTP)		0	10-Dec-24	10-Dec-24
22	A1730 BP2 NTP		5	11-Dec-24	17-Dec-24
23	A1520 BP3 NTP		0	26-Dec-24	26-Dec-24
24	Site(485,167SF(11.1AC)		124	28-Oct-24	19-Feb-26
25	A1200 Project Mobilization		0	28-Oct-24	08-Nov-24
26	A1910 Earthwork & Utilities Start		0	13-Nov-24	13-Nov-24
27	A1330 UG Utilities Complete		0	21-Aug-25	21-Aug-25
28	A1070 Earthwork Complete		0	16-Oct-25	16-Oct-25
29	A1410 Concrete Paving Complete		0	16-Oct-25	16-Oct-25
30	A1360 Landscape & Irrigation Complete		0	19-Feb-26	19-Feb-26
31	Building (21,400 Gross SF)		173	15-Jan-25	25-Sep-25
32	A1320 Start Building Excavation		0	15-Jan-25	15-Jan-25
33	A1380 Drilled Piers Start		0	13-Feb-25	13-Feb-25
34	A1080 Building Foundation Complete		0	18-Apr-25	18-Apr-25
35	A1370 Top Out Structure		0	22-May-25	22-May-25
36	A1500 Substantial Dry-In		0	31-Jul-25	31-Jul-25
37	A1990 MEP In-wall Complete		0	01-Aug-25	01-Aug-25
38	A1340 Permanent Power On		0	19-Sep-25	19-Sep-25
39	A1400 Skin Complete/ Perm Dry-In		0	19-Sep-25	19-Sep-25
40	A1350 Air On		0	25-Sep-25	25-Sep-25
41	Closeout & Completion		77	12-Jan-26	28-Apr-26
42	A1440 Final CX Arch Punch & TAB Complete		0	12-Jan-26	12-Jan-26
43	A1460 Substantial Completion (w/ float)		0	03-Mar-26	03-Mar-26
44	A1430 Final Completion (ARPA Funds Expenditure Complete)		0	28-Apr-26	28-Apr-26
45	Preconstruction		235	14-Aug-24	20-Oct-25
46	Bid Packages		29	14-Aug-24	14-Jan-25
47	BP1 Site/Civil Long Lead		2	14-Aug-24	03-Dec-24
48	A1680 BP1 - Bid Invitation/Sub Bid Development		0	14-Aug-24	03-Sep-24

























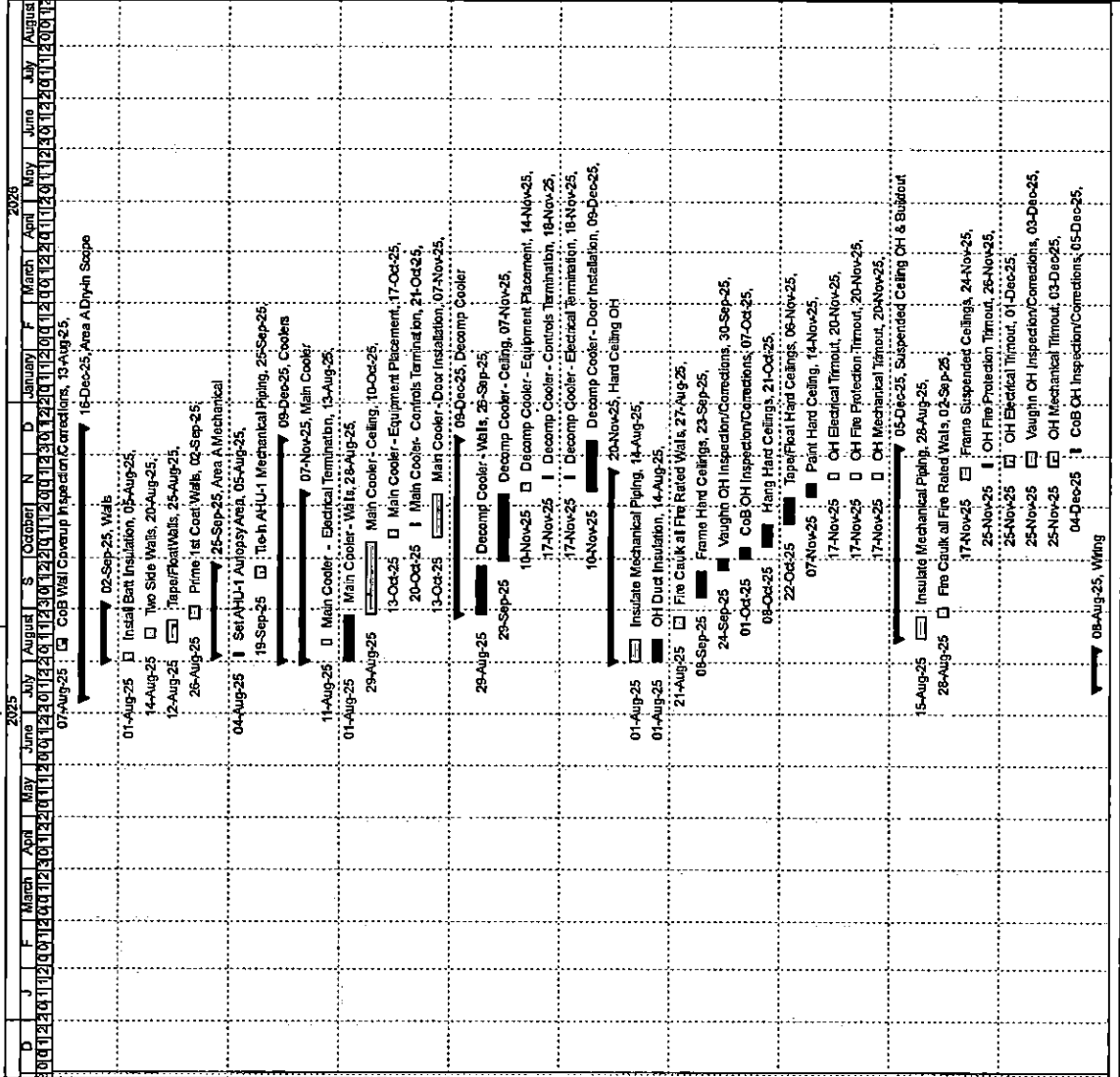








#	Activity ID	Activity Name	Remaining Duration	Start	Finish
673	A3920	CoB Wall Coverup Inspection/Corrections	5	07-Aug-25	13-Aug-25
674		Area A Dry-In Scope	11	10-Jul-25	18-Sep-25
675	A3910	Install Batt Insulation	3	01-Aug-25	05-Aug-25
676	A3970	Two Side Walls	10	12-Aug-25	20-Aug-25
677	A4000	Tape/Flash Walls	5	26-Aug-25	02-Sep-25
678	A4160	Prime 1st Coat Walls	3	04-Aug-25	05-Aug-25
679	A4250	Set AHU-1 Autopsy Area	2	04-Aug-25	05-Aug-25
680	A4500	Tile in AHU-1 Mechanical Piping	5	19-Sep-25	25-Sep-25
681	A4520	CoB Wall Coverup Inspection/Corrections	80	01-Aug-25	08-Dec-25
682		Main Cooler	70	11-Aug-25	07-Nov-25
683	B50340	Main Cooler - Electrical Termination	3	11-Aug-25	13-Aug-25
684	B50250	Main Cooler - Walls	20	01-Aug-25	28-Aug-25
685	B50260	Main Cooler - Ceiling	30	29-Aug-25	10-Oct-25
686	B50280	Main Cooler - Equipment Placement	5	13-Oct-25	17-Oct-25
687	B50330	Main Cooler - Controls Termination	2	20-Oct-25	21-Oct-25
688	B50270	Main Cooler - Door Installation	20	13-Oct-25	07-Nov-25
689		Decomp Cooler	70	23-Aug-25	09-Dec-25
690	B50290	Decomp Cooler - Walls	20	29-Aug-25	26-Sep-25
691	B50300	Decomp Cooler - Ceiling	30	26-Sep-25	07-Nov-25
692	B50320	Decomp Cooler - Equipment Placement	5	10-Nov-25	14-Nov-25
693	B50350	Decomp Cooler - Controls Termination	2	17-Nov-25	18-Nov-25
694	B50360	Decomp Cooler - Electrical Termination	2	17-Nov-25	18-Nov-25
695	B50310	Decomp Cooler - Door Installation	20	10-Nov-25	09-Dec-25
696		Hand Ceiling OH	78	01-Aug-25	20-Nov-25
697	A3950	Insulate Mechanical Piping	10	01-Aug-25	14-Aug-25
698	A4060	OH Duct Insulation	10	01-Aug-25	14-Aug-25
699	A3960	Fire Caulk at Fire Rated Walls	5	21-Aug-25	27-Aug-25
700	A4010	Frame Hand Ceilings	12	09-Sep-25	23-Sep-25
701	A3980	Vaughn OH Inspection/Corrections	5	24-Sep-25	30-Sep-25
702	A3990	CoB OH Inspection/Corrections	5	01-Oct-25	07-Oct-25
703	A4020	Hang Hard Ceilings	10	08-Oct-25	21-Oct-25
704	A4030	Tap/Floor Hard Ceilings	12	22-Oct-25	06-Nov-25
705	A4120	Paint Hard Ceiling	6	07-Nov-25	14-Nov-25
706	A4030	OH Electrical Timout	4	17-Nov-25	20-Nov-25
707	A4040	OH Fire Protection Timout	4	17-Nov-25	20-Nov-25
708	A4480	OH Mechanical Timout	4	17-Nov-25	20-Nov-25
709		Suspended Ceiling OH & Bulbout	78	15-Aug-25	05-Dec-25
710	A4070	Insulate Mechanical Piping	10	15-Aug-25	28-Aug-25
711	A4080	Fire Caulk at Fire Rated Walls	3	28-Aug-25	02-Sep-25
712	A4110	Frame Suspended Ceilings	6	17-Nov-25	24-Nov-25
713	A4140	OH Fire Protection Timout	25	25-Nov-25	26-Nov-25
714	A4130	OH Electrical Timout	3	25-Nov-25	01-Dec-25
715	A4090	Vaughn OH Inspection/Corrections	5	25-Nov-25	03-Dec-25
716	A4150	OH Mechanical Timout	5	25-Nov-25	03-Dec-25
717	A4100	CoB OH Inspection/Corrections	2	04-Dec-25	05-Dec-25
718		Wing	17	17-Jul-25	06-Aug-25















**TAB SEVEN**

**BIM Execution Plan**



**BRAZOS COUNTY**  
**MEDICAL EXAMINER OFFICE**  
*Model Coordination Execution Plan*

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## 2 MODEL COORDINATION EXECUTION PLAN OVERVIEW

### 2.1.1 INTRODUCTION

The Design and Construction team is committed to utilizing Building Information Modeling (BIM) technologies to improve the design, construction, and operation of the client's facilities. It is with this commitment in mind that this Model Coordination Execution Plan (MCxP) has been developed. This project specific MCxP shall serve as a road map for the integration of collaborative technologies by outlining the procedures and aligning expectations between all key project team members.

This MCxP is intended for Clash Detection and Resolution of the Design Models, Construction Models, and Subcontractor Models.

### 2.1.2 PROJECT INFORMATION

Project Owner: Brazos County

Project Name: Brazos County Medical Examiner Office

Project Location Address: 3037 E 29th Street. Bryan, TX 77803; Brazos County Texas

Project Description: New Construction of a new single story 21,470 SF Forensic Medical Examiner Building. The project includes site clearing and related site work.

### 2.1.3 TEAM MEMBERS

Architect: PGAL, INC.

Structural Engineer: Walter P Moore

MEP Engineer: Johnston, LLC

Construction Manager: Vaughn Construction

Sheet Metal Sub: TBD

Hydronic Piping Sub: TBD

Electrical Sub: TBD

Plumbing Sub: TBD

Fire Suppression Sub: TBD

Steel Fabricator Sub: TBD

Concrete Sub: TBD

Other Subs: TBD

#### **2.1.4 VAUGHN CONSTRUCTION'S ROLE**

Vaughn Construction will provide the Project Coordination Manager or PCM. The PCM will act as the model administrator and will be responsible for procuring a model from the Architect/Engineer. Any scope gap between Design Team and Subcontractor models will be responsibility of Vaughn VDC Team representatives. The PCM enables and coordinates the hand-off of information between each party along with the coordination effort itself. The PCM will work with the subcontractors to develop a workable detailing schedule to support the construction schedule. Once the schedule is established, the PCM will work with the detailers to achieve sign-off milestones. The PCM will work with the Design Team members and Subcontractors to maintain schedule, streamline issue resolutions, and publish submittals through contractual channels.

#### **2.1.5 TRADE AND SPECIALTY CONTRACTORS**

The trade and specialty contractors are responsible for modeling their scope of work using 3D tools and the guidelines listed below. Each trade contractor shall provide sufficient manpower and expertise to complete the modeling and coordination process within the scheduled timeframe. Each contractor will also be responsible for providing copies of detailed shop drawings and submittal information as required in the project specifications to each other contractor that provides a connecting service for any equipment.

## **3 ACC BUILD PLATFORM**

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#### **3.1.1 HOSTING, MODULES AND ACCESS**

Vaughn Construction will establish an electronic workspace by hosting the ACC Build platform. The electronic workspace will provide a location where the construction documents and coordination files will reside. Team members are to share updated copies of their files (through the ACC Build Platform) as often as necessary to maintain the schedule. See other Front End section(s) for license requirements.

#### **3.1.2 PROJECT ADMINISTRATION ROLES**

The CONSTRUCTION MANAGER'S Project Coordination Manager (PCM) will be responsible for folder structure setup for Model Coordination. The PCM will grant access to appropriate team members to appropriate modules (see module description below for further specifics on member access to modules). The PCM will oversee the clash detection process within the Model Coordination module.

## **3.2 DOCUMENT MANAGEMENT**

#### **3.2.1 FOLDER STRUCTURE**

The folder structure on ACC Build is intended to organize files in a well-thought-out fashion that most members can intuitively navigate to find the appropriate file(s) they are looking for. This document cannot address all the variables that will take place during the course of a project, but some guidelines can be addressed.

1. CONSTRUCTION MANAGER'S PCM will provide standard folder structure.

- a. PCM will set up appropriate member access and permissions for these folders.
2. CONSTRUCTION MANAGER'S PCM will add specific folders to further define file locations.

### **3.2.2 SOFTWARE & FILE TYPES**

All CAD software versions utilized by the trades and any required object enablers must be acceptable to the project team. Each trade will be responsible for providing any required object enablers to Vaughn Construction. Revit (versions to be agreed upon at startup) models are acceptable to be used by all trades. Trades shall use products compatible with ACC Build Model Coordination and shall provide files saved to the .dwg, .ifc, .nwc or .rvt format. If any of the team is utilizing Autodesk Fabrication MEP, they will be required to provide a .maj file as well. No wiremesh models are allowed and must have 3d components.

Autodesk CAD (.dwg) file settings should use the following guidelines:

- Use only standard AutoCAD fonts in the model space; do not use true type fonts or custom AutoCAD fonts
- For all AutoCAD based models each trade will use EXTERNAL REFERENCE (Xref) command to bring in any drawings needed into the "background".
- Xref's are not to be bound or inserted
- All Xref's must be detached prior to uploading documents
- Nothing is drawn in paper space
- No trades draw anything on layer zero (0) or Defpoints
- Drawings are purged (AutoCAD purge command) and audited (AutoCAD audit command) prior to being uploaded to get rid of any errors or garbage in the drawing file
- Text is on separate layers from the modeled objects so that text can be turned off without turning off objects
- Any thick lines to designate wall fire ratings are on a separate layer
- All layers are on and thawed
- All entities are delivered with colors, line types, and line weights set to by layer
- All clearance requirements will be modeled on a separate layer named "Clearance Zones". This will facilitate transparency manipulation as well as helping to define the conflict during clash detection.

### **3.2.3 FILE NAMING**

File naming will consist of the following format:

"Project\_Building\_Level\_Area\_System/Trade\_Minor System.dwg"

Abbreviations or full names can be used where practical. Unless otherwise requested, please upload models/documents in their original file format and adhere to the guidelines listed above. Please note file types may vary. Once a file is named and uploaded, do not change or modify the name of the file. All versions of models must retain the same file name throughout the coordination process to aid in clash detection & file management.

### 3.3 MODEL COORDINATION

#### **3.3.1 MODEL COORDINATION PURPOSE**

Model Coordination will be used to identify and resolve clashes between individual scope models. This is an integral part of the coordination process to ensure the design intent can be met during construction, by eliminating a majority of clashes during coordination.

#### **3.3.2 COORDINATION SPACE**

The PCM will create a Coordination Space named "Subcontractor Coordination". This is to reference the MODEL COORDINATION folder in which models are stored. The "Model Coordination" coordination space will be the primary clash detection for the team. Additional Coordination Spaces can be created if the team sees a value for it. This is to be determined by the team.

## 4 SCHEDULE

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#### **4.1.1 OVERALL SCHEDULE**

See the Project Schedule provided by Vaughn Project Management (separate document). This schedule includes all tasks related to Critical Submittals and Procurement and Construction. As the project progresses, the schedule will be modified to include VDC milestones, Submittal reviews, Design Team reviews, and any other major events which occur during the project lifecycle. It is expected that this schedule will be updated by the Project Team.

#### **4.1.2 MODEL COORDINATION EXECUTION SCHEDULE**

See the Project Schedule referenced above. The Subcontractors will adhere to the schedule regarding Model Coordination Execution deadlines.

#### **4.1.3 SUBCONTRACTOR MODEL PUBLISH/UPLOAD DEADLINE**

Sub's models are due to be uploaded no later than:

Frequency: TBD

Date: TBD

Time: **Close of Business**

#### **4.1.4 COORDINATION MEETINGS**

Frequency: TBD

Date: TBD

Time: TBD

Place: **Microsoft Teams**

## 5 PROJECT COORDINATION

### 5.1.1 MODEL COORDINATION EXPECTATIONS

Each MEPF coordination team member is to draw all the major components of their work to scale, at elevation, and free from interference with the structure, their own components, and other MEPF trades' work. Horizontal and vertical serviceability access and maintenance clearances are to be incorporated. All participants are to collaborate between coordination meetings and resolve spatial conflicts to the greatest extent possible outside of the formal weekly meeting. The formal weekly meeting's primary objective will be to discuss large issues that may need design team intervention.

### 5.1.2 MODEL DETAIL FOR COORDINATION AND SHOP DRAWINGS

All model files must contain sufficient 3D detail to provide dimensions and information needed to convey installation, operation, and maintenance requirements for each system. Some elements may require additional detail, but the model detail defined below is expected as a minimum required for coordination and shop drawings. There will be additional areas identified for "Virtual Mockups" as discussed in the kick-off meeting. These areas will require a higher level of modeling effort than the industry norm.

<b>General Requirements -- All Systems/Trades</b>	
Clearance & Access Zones	<p>Areas in which access must be provided for installation, operation, or maintenance. Includes safety zones for any equipment and code-required clear space where other material is not allowed.</p> <p>Must be modeled on a separate/dedicated layer.</p> <p>Must encompass all horizontal and vertical clearance dimensions to the extent required for access by future personnel (i.e. clearance to deck above or from equipment to ceiling plane/access point below).</p> <p>Examples of commonly missed clearance zones:</p> <ul style="list-style-type: none"> <li>• Air space required around A/V equipment racks</li> <li>• Work area around j-box/pull-boxes and cable tray</li> <li>• Access space for inspection ports and pipe/duct-mounted gauges</li> <li>• Swing area for mounted panel doors and hatches</li> <li>• Path of access for future equipment replacement or upgrade</li> <li>• Clear space needed to lift access door or ceiling tile</li> <li>• Ladder/lift clearance for highest equipment access</li> </ul>
Pre-Fabricated Materials	<p>Anything that will be prefabricated or delivered intact should be modeled to ensure proper space for installation and connection locations.</p>
Equipment with attributes scheduled to be exported to CMMS	<p>Must be modeled as a block encompassing all attached elements and containing all attributes required for the element.</p> <p>Block/Family must be named per document schedule and/or tagged appropriately to be easily filtered for export.</p>
Connection points to existing systems	<p>Must be modeled based on field-verified dimensions.</p> <p>Should include at least one joint/section of the existing element past the connection point.</p>

### **Structural Model – DIV 03, 04, & 05**

<p>Slabs, Decks, Flatwork</p>	<p>Modeled to overall finished dimensions and including any shafts, openings, depressions, or thickened areas. Rebar, embeds, and deck details should be modeled in areas where the additional detail aids in coordinating other trades.</p>
<p>Structural Framing, Beams, &amp; Columns</p>	<p>Modeled to final dimensions including any corbels, braces, and gusset plates. Rebar, embeds, and connection details should be modeled in areas where additional detail aids in coordinating other trades.</p>
<p>Foundations</p>	<p>Modeled to scheduled depth and thickness (including piers).</p>
<p>Secondary Framing &amp; Miscellaneous Steel</p>	<p>Modeled as necessary to coordinate other trades. May be modeled as mass/scheduled elements until sufficient specification details or shop drawings are provided. Includes, but is not limited to, lintels, kickers, edge angles, embeds, opening support framing, Unistrut, equipment supports, curtain wall supports, elevator hoist beams and rail support, shaft piping supports, stiffeners and gusset plates.</p>
<p><b>Architectural Model – DIV 06, 07, 08, &amp; 09</b></p>	
<p>Walls</p>	<p>All interior and exterior walls must be modeled to their overall finished dimensions. Studs/framing/wall structure should be modeled in areas where the additional detail aids in coordinating other trades (e.g. headwalls, king studs, soffit support). Wall elements should be separated by type as defined in the contract documents and may be identified by fire/smoke-rating, finished height, etc. Wall elements may be shown to extend to deck above, even if the finishes are specified to end at a lower elevation, to identify framing interference in the interstitial space.</p>
<p>Doors, Windows, Curtain Walls, &amp; Framed Openings</p>	<p>All interior and exterior openings must be modeled to the overall opening dimensions required for rough framing. Frames and sills should be shown where architecturally significant. Hardware and Security devices will not be modeled unless location requirements are specified, and placement will impact prefabrication or coordination efforts.</p>
<p>Ceilings, Soffits, &amp; Furr-downs</p>	<p>Similar to walls, ceilings must be modeled to their overall finished dimensions and framing details may be necessary for coordinating other trades. <b><u>A Ceiling Coordination Drawing will be provided with the sheets submitted for Design Team Approval.</u></b> This drawing will be inclusive of MEPP. Fire alarm and other surface mounted devices will not be included unless the specifications require them to be.</p>
<p>Furnishings, Casework, Millwork, &amp; Owner-furnished Equipment</p>	<p>Elements requiring connections furnished by other trades (such as electrical whips or plumbing unions) must be modeled with details locating those connections. All non-movable elements should be modeled to the overall built-in dimension, including any access zones. Mobile equipment and minor furnishings should be modeled to their general dimensions and placed in both their “in-use” and “storage” locations for spatial coordination of other trades.</p>
<p>Roofing, Parapets, Screens, &amp; Awnings</p>	<p>Roofing system should be modeled to overall thickness including any slope and blocking elements. This will facilitate coordination of curbs required for rooftop equipment. Screen walls and awnings must include necessary support elements that tie to the</p>



structure and note any pathways for attached electrical or plumbing elements. Parapets and screens may be used for perspective views to verify rooftop equipment is hidden/enclosed as intended.

<b>Fire Protection Model – DIV 21</b>	
Sprinkler Piping (wet or dry systems)	<p>Main &amp; branch piping above 1.25" diameter must be modeled.                      Sprinkler head drops &amp; head locations must be modeled for coordination with other trades.                      All hard-piped connections must be modeled; flex pipe connections should be modeled to allow for space allocation.                      Any piping sloped to drain should be clearly identified.</p>
Hangers & Supports	<p>Must be modeled when pre-installed inserts or embeds are used and must include all trapeze/support elements.</p>
Valves & Controls	<p>All main isolation (shut-off) valves, flow control devices, riser assemblies, and FDC points must be modeled along with their required access zones.                      Drainage requirements and electrical/low-voltage service points must be identified for coordination with other trades.</p>
Fire Protection Equipment	<p>Modeled to specified dimensions and locations for coordination with other trades. Manufacturer's specific models should be used when available and all connection/access points must be identified.                      Equipment pads or support assemblies must be modeled.                      Access zones must be included for any future maintenance/testing or equipment replacement.                      Includes, but is not limited to, fire pumps, jockey pumps, water tanks, valves, bypass assemblies, pre-action air compressors, etc..</p>

<b>Plumbing Model – DIV 22</b>	
Drain, Waste, & Vent Piping (DWV)	<p>Graded/Sloped (gravity drain) piping of any size must be modeled.                      Main &amp; branch piping above 1.5" diameter and any ganged runs must be modeled.                      Sump pits, manholes, drain leaders, and roof/floor drain bodies must be modeled as part of the complete drainage system.</p>
Cold & Hot Water Piping	<p>Main &amp; branch piping above 2" diameter and any ganged runs of three or more (3+) pipes must be modeled.</p>
Insulation	<p>Insulation must be modeled on a dedicated layer where required and represent the full-depth of finished installation.</p>
Hangers & Supports	<p>Must be modeled when pre-installed inserts or embeds are used and must include all trapeze/support elements.                      Should be on a dedicated layer                      Should include sufficient detail for coordination of installation access and future adjustments.</p>
Specialty Gas & Piping	<p>Any specialty piping, including Med Gas, must be modeled where connection points are critical.                      Main &amp; branch piping above 2" diameter and any ganged runs of three or more (3+) pipes must be modeled.</p>
Fuel-Oil & Natural Gas Valves & Controls	<p>All explosive/hazardous fuel gas piping of any size must be modeled.                      All main isolation (shut-off) valves must be modeled along with their required</p>

	<p>access zones.                  Minor/area isolation/control valves should be modeled for access coordination and future maintenance use.</p>
Plumbing Equipment & Fixtures	<p>Modeled to specified dimensions and locations for coordination with other trades. Manufacturer's specific models should be used when available and all connection/access points must be identified.                  Equipment pads or supports must be modeled.                  Access zones must be included for any future maintenance or equipment replacement.                  Includes, but is not limited to, pumps, tanks, valves, filters, bypass assemblies, boilers, etc..</p>
<b>Mechanical Model – DIV 23</b>	
HVAC Air Distribution Ductwork	<p>All ductwork mains and branches including medium- and low-pressure systems modeled to overall exterior dimensions.                  Insulation must be modeled where required.                  Flex ducts, taps, and final device connections must be modeled and positioned per specifications (final layout may be adjusted thru the coordination effort).</p>
Exhaust & Vent Ductwork	<p>All exhaust ductwork must be modeled to overall exterior dimensions.                  Connections to equipment must be identified (e.g. fume hoods).</p>
Insulation	<p>Insulation must be modeled on a dedicated layer where required and represent the full-depth of finished installation.</p>
Diffusers, Grills, & Louvers	<p>Modeled to specified dimensions and locations for coordination with other trades. May include clearance zones for air intake or exhaust flow requirements.</p>
Fire/Smoke Dampers & Duct Devices	<p>Modeled to specified dimensions and locations (including access zones) for coordination with other trades.</p>
HVAC Equipment	<p>Modeled to specified dimensions and locations for coordination with other trades. Manufacturer's specific models should be used when available and all connection/access points must be identified.                  Equipment pads or supports must be modeled.                  Access zones must be included for any future maintenance requirements such as coil pull space or motor replacement.                  Includes, but is not limited to, AHUs, VAV boxes, FCUs, exhaust fans, pumps, and valves.</p>
Hangers, Seismic Bracing, & Supports	<p>Must be modeled when pre-installed inserts or embeds are used and must include any trapeze/support elements.                  Should be on a dedicated layer                  Should include sufficient detail for coordination of installation access and future adjustments.                  Includes, but is not limited to, pipe/valve racks, Unistrut trapezes, and steel angles in shafts.</p>
Hydronic Piping	<p>Main lines, any piping above 1.5" diameter, and ganged runs must be modeled, including valves and gauges as necessary.                  Field-fabricated valve assemblies and final connections may be modeled as mass or clearance area if properly labeled.                  Insulation must be modeled where required.</p>

**Electrical Model – DIV 26**

Electrical Distribution (Conduit)	<p>All conduit larger than 1.5" in diameter and any gang of three or more (3+) conduits of any size must be modeled.</p> <p>Any individual conduit that requires exact placement must be modeled (e.g. hard-piped connection points to equipment).</p> <p>Any buss-duct and high-capacity feeders must be modeled.</p> <p>All J-boxes and Pull-boxes or troughs must be modeled along with their required access zones.</p>
Electrical Equipment	<p>Modeled to specified dimensions and locations for coordination with other trades. Manufacturer's specific models should be used when available and all connection/access points must be identified.</p> <p>Equipment pads or supports must be modeled.</p> <p>Access zones must be included for any future maintenance requirements such as gear pull space or arc flash clearances.</p> <p>Includes, but is not limited to, transformers, ATS, generators, disconnects, distribution panels, paralleling gear, etc..</p>
Hangers & Supports	<p>Must be modeled when pre-installed inserts or embeds are used and must include all trapeze/support elements.</p> <p>Should be on a dedicated layer</p> <p>Should include sufficient detail for coordination of installation access and future adjustments.</p>
Panels & Controls	<p>Recessed and wall-mounted panels must be modeled for rough opening and backing support coordination.</p>
Grounding/Bonding	<p>Locations requiring specific connections or ties to other trades' work must be identified and modeled for coordination.</p>
Light Fixtures	<p>Modeled to specified dimensions and locations for coordination with other trades. Manufacturer's specific models should be used when available and all supports or back-boxes must be identified.</p>
Outlets & Switches	<p>Modeled as necessary at prefabricated assemblies, special conditions requiring coordination (i.e. headwalls), and architecturally significant spaces (e.g. lobby signage, art installations, etc.)</p>
Cable Tray & Low-Voltage cabling	<p>All cable tray sections and supports must be modeled along with the necessary access zones for wire pulls.</p> <p>Where large bundles of cable are anticipated, clearance zones may be used to allocate space with proper labeling.</p>

**Audio/Video, IT, Data, & Security Model – DIV 25, 27, & 28**

Equipment Racks	<p>Modeled to specified dimensions and locations for coordination with other trades. Manufacturer's specific models should be used when available and all connection/access points must be identified.</p> <p>Access zones must be included for any future maintenance/testing or equipment replacement.</p>
Low-Voltage Cabling	<p>All cable tray sections and supports must be modeled along with the necessary access zones for wire pulls.</p> <p>Where large bundles of cable are anticipated, clearance zones may be used to allocate space with proper labeling.</p> <p>All J-boxes and Pull-boxes or troughs must be modeled along with their required</p>

	access zones.
Back-boxes & OFVI Equipment	Any rough-in requirements for critical-placement equipment must be modeled (includes equipment to be provided by Owner or Vendor). Recessed and wall-mounted panels must be modeled for rough opening and backing support coordination. Door swing clearance should be modeled for low-voltage panels.
Outlets & Devices	Modeled as necessary at prefabricated assemblies, special conditions requiring coordination (i.e. headwalls), and architecturally significant spaces (e.g. secure access-controlled areas, auditorium projectors, etc.)
Usage Clearance Zones	Special equipment requiring clearance for proper operation & use should have those zones modeled for coordination/verification with other trades. Includes, but is not limited to, projector screens, security cameras, video signage, motion detectors, etc.
<b>Site Improvements &amp; Civil Utilities Model – DIV 31, 32, 33, &amp; 34</b>	
Excavation & Retaining Systems	Any shoring system, retaining walls, tunnels, or special earthwork foundations must be modeled for coordination with other trades and identification for future improvements. Level of detail for these elements may be determined by the project team.
Site Utilities	All underground piping/conduit larger than 6" or bundled cabling should be modeled as to overall exterior dimension. Any manhole, access hatch, or vaults should be modeled as part of the complete system. Including any access or clearance zones required.
Site Equipment	Modeled to specified dimensions and locations for coordination with other trades. Manufacturer's specific models should be used when available and all connection/access points must be identified. Includes, but is not limited to, site lighting, traffic control devices, water detention pumps/controls, pond pumps and special features, etc..

### **5.1.3 SEQUENCE OF COORDINATION**

Below is hierarchy of model elements and the sequencing by which the models will be coordinated:

- ↓ Structural and Architectural model
- ↓ Miscellaneous steel
- ↓ Perform preliminary space allocation
- ↓ Identify hard constraints (locations of access zones, lights, space requirements, etc.)
- ↓ Main and medium pressure ducts from the shaft out
- ↓ Main graded plumbing lines and vents
- ↓ Cable Tray
- ↓ 4" or larger conduit runs
- ↓ Sprinkler mains and branches
- ↓ 2" or smaller conduit runs
- ↓ Cold and hot water mains and branches
- ↓ Lighting fixtures and plumbing fixtures
- ↓ Smaller sized ducts and flex ducts

↓ Smaller size cold water and hot water piping, flex ducts, etc.

#### **5.1.4 APPLICATION OF COORDINATION EFFORTS**

All subcontractors are expected to complete their coordination according to the schedule agreed upon at the start of the project. All models and coordination should have the full input of the trade foremen to ensure installation procedures do not conflict with the models. Trades that were modeled and coordinated according to the schedule will take priority over those which did not comply with the schedule.

#### **5.1.5 RESOLUTION OF INTERFERENCES**

At the mandatory regular coordination meetings Vaughn Construction will provide a means to electronically reconcile interferences between all affected MEPF trades (ACC Model Coordination). All participants are to collaborate between coordination meetings and resolve spatial conflicts to the greatest extent possible outside of the formal weekly meeting. The formal weekly meeting's primary objective will be to discuss large issues that may need design team intervention. Vaughn Construction and subcontractors can create Issues within the ACC Platform. Vaughn Construction is NOT responsible for identifying every clash. Trade contractors are responsible for identifying and notifying Vaughn of any clashes not previously identified, that would prevent the subcontractor from signing the sign-off drawing.

#### **5.1.6 SUBMITTAL AND COORDINATION SIGN-OFF DRAWINGS**

When all conflicts have been resolved and a fully coordinated MEPF system is achieved, each MEPF coordination contractor is to produce fully annotated and dimensioned drawings of their respective systems, in PDF format, for submission to the Engineer of record for review and approval. Upon final revision and approval by the Engineer of record, a copy of the fully- coordinated coordination submittal drawings are to be signed by each participant and will become the official "Coordination Sign-off Drawings". The "Coordination Sign-off Drawings" and Model Coordination Model based on the drawings are to be stored by Vaughn Construction on ACC Build and will form the basis for resolution of any future field installation conflicts. Components not installed where shown on the "Coordination Sign-off Drawings", or installed but not shown, will be relocated by, and at the expense of, the offending party. Cost for rework, re-coordination, or schedule impact required to accommodate components not shown on, or not installed in accordance with the "Coordination Sign-off Drawings" is to be paid by the party in non-compliance.

#### **5.1.7 COORDINATION SIGN-OFF AND FIELD TURNOVER**

Additionally, Vaughn field personnel will add their input at the individual coordination sign-off meeting. At this time, a Vaughn field representative will be identified as the person responsible for verification that the installation matches the signed-off drawings. It will be mandatory for Subcontractor Trade Foreman and Vaughn's relative field staff to be present for a turn-over meeting for each individual coordination sign off. This will ensure that the project team has a clear understanding of the locations of major items, as well as any outstanding issues that might affect construction. Coordinated drawings for each individual trade will be provided in pdf and paper formats for the project team's use. The paper copies will be stored with the Project Field Documents and posted set of drawings. This will allow for an effective flow from coordination to verification of work. All documents being utilized by Subcontractor Trade Foreman will be compared to the stored documents referenced in this paragraph. Any deviations

from the signed off coordination drawings that cause conflicts in the field, will be the responsibility of the entity making the changes without calling for re-clashing the previously signed off documents.

#### **5.1.8** **CONDITIONAL SIGN-OFF OF COORDINATION DRAWINGS**

If the need arises to sign off the coordination drawings prior to “all conflicts” being resolved to maintain schedule, a list of each of the remaining clashes will be established and integrated into ACC Build as “coordination issues”. Each issue will be assigned to the responsible individuals for tracking to closure. The Vaughn project team will designate a person (or persons) to verify the remaining clashes have been resolved and the installation in the field matches. The Vaughn VDC group will be involved in this process scheduling meetings and performing site walks to assist.

#### **5.1.9** **POST SIGN-OFF RESPONSIBILITIES**

At the time an area is signed off, it will be inclusive of all RFI's, ASI's, and changes to date. It is recognized that the project will continue to progress after the areas are signed-off. It is incumbent on the Vaughn Construction and Subcontractors involved in this process to bring any new RFI's, ASI's, and changes to the table when they will affect previously signed off areas.

#### **5.1.10** **SUBSTANTIAL COMPLETION**

At the completion of MEPF coordination, Vaughn Construction will establish a Federated Model that include updated models (provided by subcontractors) based on as-built conditions. It is the responsibility of the Vaughn Project Team to inform the Vaughn VDC Group on the required dates for turnover of deliverables.

## **6 CONTACT LIST**

---

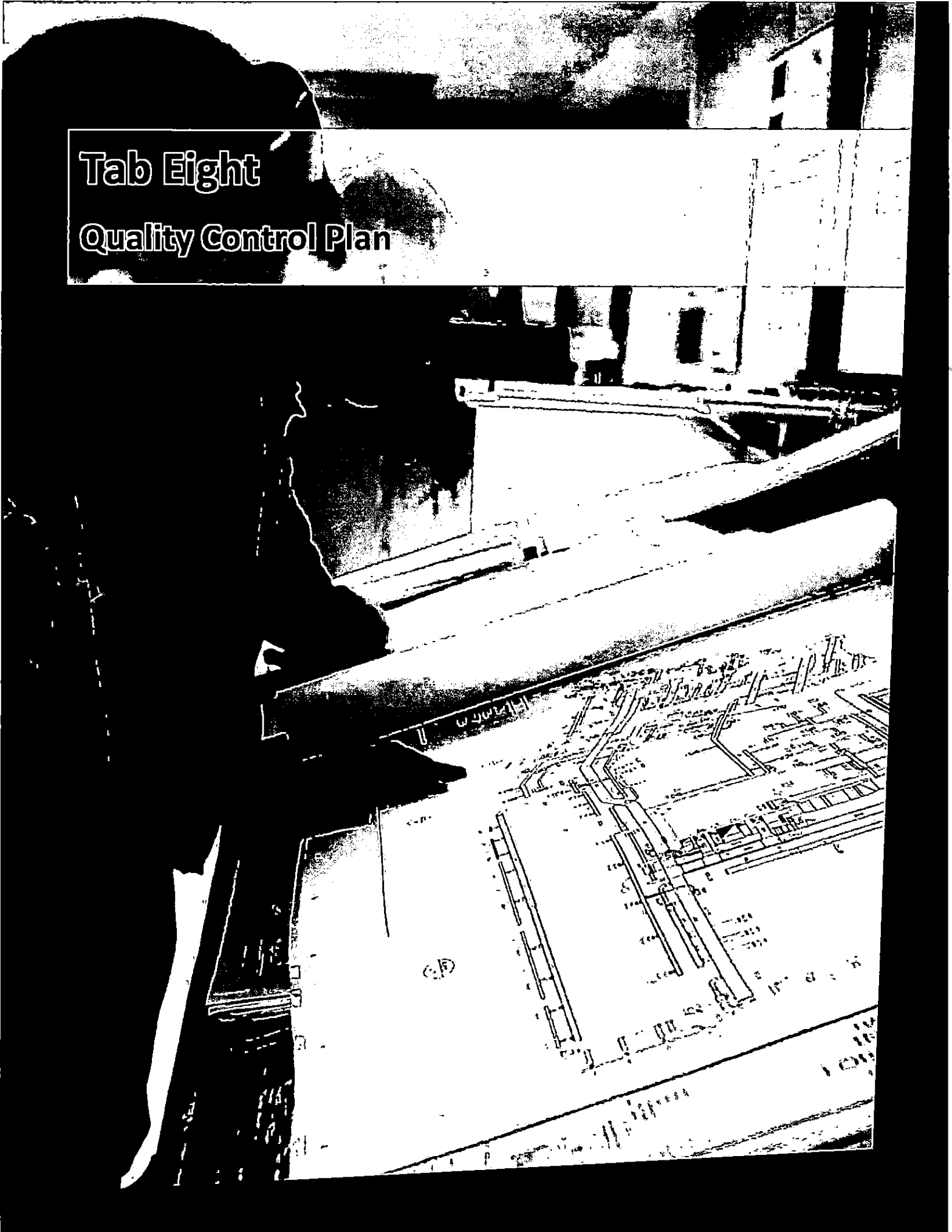
### **6.1.1** **KEY PROJECT CONTACTS**

Each discipline will be asked to provide the names and contact information of two team members to serve as the primary and secondary VDC contacts. The primary contact at each firm shall serve on the technology leadership team. These named contacts are responsible for communicating VDC related information to their respective teams, including changes to this document. They are also responsible for model clean up, transfer, and any coordination requirements related to the production documents, i.e. Sheet lists, linked file changes, etc. These named contacts are not intended to limit communication between team members.

Should business factors necessitate changes to this list, this document shall be revised.

# Tab Eight

## Quality Control Plan



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**Quality Control Plan**  
Brazos County Medical Examiner's Office

**Quality Control Plan**  
**Brazos County Medical Examiner's Office**



## Summary

The *Quality Control Plan – Brazos County Medical Examiner’s Office*, is developed in draft form for the specific project during the construction phase. The plan was developed using the Quality Control specifications provided by the design team. During the construction phase, the plan provides direction for the Quality Control tasks during construction. The plan focuses on providing support for the specifications and provides forms for the application of the Quality Control process.

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**Appendix 1. Construction Phase Application Forms**

## Quality Control Plan—Construction Phase

*Project:* Brazos County Medical Examiner's Office

### 1. Overview

#### 1.1 Abbreviations and Definitions

The following are common abbreviations used in this document:

A/E	Architect and design engineers	QCICL	Quality Control Inspection Checklist
RCM	Resident Construction Manager (OFPC)	PFCL	Pre-Functional Checklist
CI	Construction Inspector (OFPC)	FPT	Functional Performance Test
PM	Contractor's Project Manager	QCIL	Quality Control Issue Log
Super	Contractor's Superintendent	Mfr	Equipment Manufacturer
QA/QCI	Contractor's QA/QC Inspector	Subs	Subcontractors
QC	Quality Control	MC	Mechanical Contractor
QC Plan	Quality Control Plan Document	CC	Controls Contractor
QCITP	Quality Control Inspection and Test Plan	EC	Electrical Contractor
NCR	Non-Conformance Report	TAB	Test and Balance Contractor

#### 1.2 Purpose of the Quality Control Plan

The purpose of the Quality Control plan is to:

1. Provide direction for the Quality Control process during construction, particularly providing resolution for issues and providing details that cannot be, or were not, fully developed during design, such as scheduling, participation of various parties of this project, actual lines of reporting and approvals, coordination, etc.

This plan does not provide a detailed explanation of all required inspections and testing procedures. The detailed inspections and testing requirements and procedures are found in the Specifications. Additionally, this plan does not provide extensive narrative on all Quality Control concepts.

#### 1.3 Quality Control Scope

Quality Control shall be the sole responsibility of the Contractor, unless specifically noted otherwise in the specifications. The Contractor shall be responsible for all testing, coordination, start-up, operational checkout and commissioning of all items of work included in the project, unless specifically noted otherwise in the specifications.

Quality Control during the construction of this project is intended to achieve the following specific objectives:

- a) Comply fully with the Contract Documents
- b) Adhere strictly to the QA/QC Program

- c) Identify QA/QC training needs and provide required training
- d) Identify quality control problems and recommend solutions
- e) Ensure QA/QC of all subcontractors and vendors
- f) Execute projects in a manner that emphasizes safety, quality, schedule and maximum cost effectiveness
- g) Coordinate all QA/QC activities with construction activities

#### **1.4 Inspection Plan and Field Practices**

##### **1. Inspection Criteria**

- a) A thorough review of the contract documents has been conducted as part of Vaughn Construction preconstruction services and all inspection criteria have been incorporated into the Quality Control Inspection and Test Plan (QCITP).

##### **2. Coordination with project schedule**

- a) QA/QC personnel and construction personnel will incorporate all necessary QA/QC activities into the project schedule.
- b) QA/QC personnel will always coordinate QA/QC activities with the construction schedule.
- c) The Director of QA/QC will ensure that adequate numbers and properly trained QA/QC staff are assigned to a project so as not to impede the progress of the work.

##### **3. Frequency of inspections**

- a) The frequency of inspections will be determined by the contract documents; however, at a minimum Vaughn Construction will conduct Civil, Structural, Architectural, and MEP inspections at appropriate construction milestones.

##### **4. Inspection Methods and Procedures**

- a) Preparatory Inspections – A coordination meeting for each definable segment of work is to be held between the QA/QC Inspector, Vaughn Construction’s Project Manager, Vaughn Construction’s Superintendent, Owner’s Representative, and, if applicable, the testing lab and performing subcontractor’s representative. The following items will be reviewed at the meeting:
  - 1. Review contract requirements
  - 2. Check to assure that all materials and/or equipment are on hand or have been ordered and have been tested, submitted, and approved as required by the contract documents
  - 3. Check to assure that provisions have been made to provide required control testing
  - 4. Examine work area to assure that all preliminary work has been accomplished
- b) Initial Inspections – Performed as soon as a representative portion of the feature of work has been accomplished:
  - 1. Check for compliance with contract documents
  - 2. Review of control testing
  - 3. Check for use of defective or damaged materials
  - 4. Check for omissions
  - 5. General check of dimensional requirements

- c) Follow-up Inspections – Performed as work is completed and prior to calling for CI inspection. Inspections shall be scheduled a minimum of 5 working days in advance. Vaughn Construction's Superintendent will inspection record deficiencies and work with the subcontractor to correct these items. Once Vaughn Construction's Superintendent is satisfied the area is ready for a formal inspection, they will notify the QA/QCI who will schedule the inspection with the CI.
- d) Inspection Acceptance Procedures – All construction work shall be performed in accordance with the contract documents. Work found not in compliance with the contract documents will be handled in accordance with the inspection discrepancy procedures.
- e) Inspection Deficiency Procedures – All Major deviations or discrepancies in quality, workmanship, material, equipment or supplies, shall be noted within ACC Build. Deficiencies shall be handled in the following systematic manner:
  - 1. Deficiencies are documented in the 'Issues' tab of ACC Build. These deficiencies are documented through checklist completion and punch lists in the 'Checklists' tab. Deficiencies can also be added directly in the 'Issues' tab.
  - 2. Copies of the deficiencies are sent to the corresponding subcontractor for correction and response.
  - 3. The QA/QC Inspector will meet with the appropriate people to determine the most economical and practical solution to correct the discrepancy.
  - 4. Upon completion of the rework, the QA/QC Inspector will re-inspect the original discrepancy in regard to the agreed solution. If the rework is found acceptable, the discrepancy will be closed in ACC Build.
  - 5. If the rework is NOT acceptable, the QA/QC Inspector will reissue the deficiency which will reassign the deficiency back to the subcontractor until the appropriate corrective action has been made.
  - 6. All issues and the status of issues will be available to view to all users of ACC Build.
  - 7. If the rework is NOT completed in 10 working days, a Non-Conformance Report (form QC-5) will be issued. Each NCR will then be assigned a number by the QA/QC Inspector. A concise statement locating and describing the discrepancy will also be recorded. In addition to the description photographs will be taken, labeled, numbered and filed.
  - 8. Copies of the NCR will be furnished to the Project Manager, Project Superintendent, Director of QA/QC, and the related subcontractor's job representative.
- f) Material Reviews –
  - 1. Preliminary review of all materials and equipment will be the responsibility of the Vaughn Construction's Project Manager. Upon completion of the review, each submittal will be designated in one of the following categories:
    - a. Not acceptable
    - b. Revise to meet specifications
    - c. Acceptable pending A/E's review and approval
  - 2. Acceptable items will be forwarded to the Architect for final review and approval. If a conflict arises as to whether an item meets specification, a

meeting between the following representatives will be set to make a determination:

- a. Owner's Representative
- b. Architect
- c. QA/QC Inspector and Project Manager

5. Follow-up action

- a. All checklists, nonconformance reports and other QA/QC reports will include the responsible party's company, name and title if follow-up action is required.
- b. The responsible party will have 24 hours to acknowledge receipt and respond accordingly.

**1.5 Forms**

Forms used for Quality Control are referred to in this plan by the format: Form QC-xx, where the "QC" represents Quality Control. Blank versions are found in Appendix 1 of this plan.

**2. General Building Information**

Project: Brazos County Medical Examiner's Office

Location: 3037 East 29<sup>th</sup> Street, Bryan, TX 77802

Building Type: Mortuary

Square Footage: 21,470 SqFt    Number of stories: 1

Tenants: BCMEO

**3. Construction Team Data (primary parties)**

Team Member	Co. & Contact Names	Email Address or Other Info
Owner	TREVOR LANSDOWN	<a href="mailto:LANSDOWN@BRAZOSCOUNTYTX.GOV">LANSDOWN@BRAZOSCOUNTYTX.GOV</a> (979) 361-4586
	BOB LAMKIN	<a href="mailto:RLAMKIN@BRAZOSCOUNTYTX.GOV">RLAMKIN@BRAZOSCOUNTYTX.GOV</a> (979) 446-9743
	BILL HADLEY	<a href="mailto:WHADLEY@BRAZOSCOUNTYTX.GOV">WHADLEY@BRAZOSCOUNTYTX.GOV</a>
Construction Manager Director QA/QC	BRIAN HUGHES	<a href="mailto:BHUGHES@VAUGHNCONSTRUCTION.COM">BHUGHES@VAUGHNCONSTRUCTION.COM</a>
QA/QCI	PARKER BANKSTON	<a href="mailto:PBANKSTON@VAUGHNCONSTRUCTION.COM">PBANKSTON@VAUGHNCONSTRUCTION.COM</a>

Project Manager	JACK BREWER	<a href="mailto:JBREWER@VAUGHNCONSTRUCTION.COM">JBREWER@VAUGHNCONSTRUCTION.COM</a>
Superintendent	ALBERTO PANTOJA	<a href="mailto:APANTOJA@VAUGHNCONSTRUCTION.COM">APANTOJA@VAUGHNCONSTRUCTION.COM</a>
Architect Architects Rep	PGAL PAUL BONNETTE	<a href="mailto:PBONETTE@PGAL.COM">PBONETTE@PGAL.COM</a>
Mechanical/Plumbing Engineer Construction Administration Mechanical Plumbing	JOHNSTON LLC RICHARD QUINTANILLA	<a href="mailto:RICK.QUINTANILLA@JOHNSTONLLC.COM">RICK.QUINTANILLA@JOHNSTONLLC.COM</a>
Electrical Engineer Project Manager		
Test & Balance Contractor (TAB) TAB Rep		
Mechanical Contractor Project Manager  Superintendent		
Electrical Contractor Project Manager  Superintendent		
Plumbing Contractor		

**4. Roles and Responsibilities**

**4.1 Locations of Role Descriptions**

Descriptions and explanations of the roles and responsibilities of those in the Quality Control process are found in the following places in the Contract Documents:

List of team members:	QC Plan, Specifications
General roles:	QC Plan, Specifications
Specific responsibilities:	QC Plan, Specifications
Information for all parties:	QC Plan, Specifications
QA/QCI, RCM, CI:	QC Plan, Specifications
Subcontractors:	Specifications
A/E	A/E contract, Specifications

#### **4.2 Team Members**

The members of the Quality Control team consist of the RCM, CI and assigned members of the Contractor, A/E, the Subcontractors, any other installing subcontractor's suppliers of equipment. If known, the Owner's building or plant operator/ engineer is also a member of the Quality Control team.

#### **4.3 General Management Plan**

In general, the QA/QC Inspector coordinates the Quality Control activities. The QA/QC Inspector's responsibilities, along with all other contractors' Quality Control responsibilities, are detailed in the specifications. The specifications will take precedence over this QC Plan. All members work together to fulfill their contracted responsibilities and meet the objectives of the Contract Documents. Refer to the management protocols section below.

#### **4.4 General Descriptions of Roles**

General descriptions of the commissioning roles are as follows:

- QA/QCI: QA/QC Inspectors are responsible for performing the required verification of the correctness and adequacy of the work in accordance with applicable contract documents and procedural requirements. Inspectors will document the results of each inspection function on the designated reporting form and inform responsible personnel about unsatisfactory items, while ensuring that corrective actions are taken to resolve the conditions. For defective work, as described in 1.4.4.d Inspection Discrepancy Procedures, the inspectors will initiate a nonconformance report and submit the report to the Project Manager for resolution and will verify that corrective action is taken. The QA/QC Inspectors have authority to recommend stopping work to the Project Manager and Director of QA/QC. The QA/QC Inspectors report to the Director of QA/QC. The QA/QC Inspectors are responsible for observing and reporting on construction activities. The principal areas of inspection are civil, structural, architectural, mechanical, electrical and plumbing.
- Subs: Participates in inspections, conducts test, demonstrate proper system performance, and participates as directed by QA/QCI in accordance with the project specifications
- A/E: Perform construction observation, approve Submittals/O&M manuals and assist in resolving problems, reviews plans, attends Cx meeting
- RCM / CI: Facilitates, supports, observes and verifies the QC & Cx process.
- Mfr.: The equipment manufacturers and vendors conduct required test and start-up and provide documentation to facilitate the commissioning work

### **5. Quality Control Process**

This section sequentially details the Quality Control process by QC task or activity.

#### **5.1 Quality Control Inspection and Test Plan**

The QCITP is the master document that controls the inspections and testing of the project requirements. The QCITP must be in place prior to the commencement of that construction activity. The QCITP is developed from the project specifications using the following outline:



VAUGHN CONSTRUCTION		Quality Control Inspection and Test Plan					QA/QC DEPARTMENT Date: April 30, 2010	
SPECIFICATION DIVISION		ACTIVITY	SCHEDULED START DATE	DATE INSPECTED	INSPECTED BY	INSPECTION DOCUMENT	COMMENTS	
Revision N#: 0								
<b>Division 03 - Concrete</b>								
<b>03 30 00 Cast-in-Place Concrete</b>								
1.4	Quality Assurance	Comply with ACI 301 & 117	Apr-10					
3.1	Formwork	Comply with ACI 301 & 117	Apr-10					
3.2	Embedded Items	Comply with Section 7.6 of ABC	Apr-10					
3.5	Shores and Reshores	Comply with ACI 318 (ACI 318M) & ACI 301	Apr-10					
3.6	Vapor Retarders	Comply with ASTM E 1843	Apr-10					
3.7	Steel Reinforcement	-Comply with CRSI's "Manual of Standard Practice" for placement -AWS D1.4 for welding where indicated -ACI 318 for splices where not specified; manufacturer's instructions for mechanical splices of bars larger than no. 11	Apr-10					
3.9	Waterstops	Comply with manufacturer's instructions -Comply with ACI 301 for mechanical vibrating	Apr-10					
3.10	Concrete Placement	-Comply with ACI 308 for cold-weather placement (avg. high & low below 40 deg F for three consecutive days) -Comply with ACI 305 for hot-weather placement	Apr-10					
3.13	Installation of Non-shrink Grout Under Baseplates	Comply with manufacturer's instructions	May-10					
3.14	Concrete Protecting and Curing	-Comply with ACI 308 & 305 for protection -Comply with ACI 308.1 for curing Field quality control test and inspection reports	Apr-10					
3.17	Field Quality Control	-Steel reinforcement placement -Steel reinforcement welding -Headed bolts and studs -Verification of use of required design mixture -Concrete placement, including conveying and depositing -Curing procedures and maintenance of curing temperature -Verification of concrete strength before removal of shores and forms from beams and slabs  Concrete Tests: According to ASTM C 172 Slump: According to ASTM C 143/C 143M Air Content: According to ASTM C 231 Concrete Temperature: ASTM C 1064/C 1064M Compression Test Specimens: ASTM C 31/C 31M Compressive Strength Tests: ASTM C 39/C 39M	Apr-10					
						3rd Party	By Owner / third-party	

## 5.2 Pre-Installation Meeting

A coordination meeting for each definable segment of work is to be held between Vaughn Construction's Project Manager, Vaughn Construction's Superintendent, the Quality Control Inspector, Architect/Engineer, and the appropriate representatives of the Owner, and, if applicable, the testing lab and performing subcontractor's representative. The coordination meetings will be held prior to beginning each definable feature of work. The following items will be reviewed at the meetings:

- a) Review contract requirements;
- b) Check to assure that all materials and/or equipment are on hand and have been tested, submitted, and approved as required by the contract documents;
- c) Check to assure that provisions have been made to provide required control testing;
- d) Examine work area to assure that all preliminary work has been accomplished;
- e) Review approved submittal;
- f) Review manufacturer's requirements and recommendations;
- g) Any manufacturer's inspections required, i.e. roof;
- h) 3<sup>rd</sup> party inspections/testing;
- i) Review Codes and References described in the specifications (NFPA, NEC, ASTM, ect)

## 5.3 Site Observation

The RCM, CI and AE if applicable, makes periodic visits to the site, as necessary, to witness equipment and system installations. The QA/QC Inspector will split time between the field and office. While the splitting of this time is not set it generally works out to be fifty percent field and fifty percent office.

## 5.4 Subcontractor Compliance

1. Statement of Compliance

- a) Each subcontractor will submit a statement of compliance that ensures they will comply with the contract documents, Owner's and Vaughn Construction's QA/QC program.

**2. Subcontractor Surveillance**

- a) Surveillance of Subcontractor's QA/QC Procedures is the responsibility of the QA/QC Inspector. QA/QC Procedures will be reviewed to ensure compliance with the contract documents, Owner's and Vaughn Construction's QA/QC Program. Major discrepancies that come to the attention of the QA/QC Inspector will be recorded and transmitted to the appropriate Subcontractor, Director of QA/QC and Vaughn Construction's Project Manager and Superintendent. QA/QC Inspectors have the authority to act directly with the subcontractor's representative to correct these discrepancies. However, Vaughn Construction's Superintendent is responsible for coordination and correction of these discrepancies. Major discrepancies will be followed up on a daily basis. Upon correction of any major discrepancies, the date, solution to the problem, and photographs(s) will be recorded.

**5.5 Miscellaneous Management Protocols**

**1. Lines of Communication and Authority**

- a) All employees have the responsibility and authority for implementation of established QA/QC activities. Resolution of conflicts in QA/QC policies shall flow through the organizational chain of command as follows: 1. Field Employees 2. Craft Leaders 3. General Foreman 4. Field Superintendents 5. QA/QC Inspectors 6. Project Superintendents 7. Project Manager 8. Director of QA/QC 9. President of the company

**2. Approval and Rejection of Work**

- a) It is the responsibility of any employee that manages, performs, or verifies work affecting quality to: 1. Initiate action to prevent the occurrence of work or service nonconformity 2. Identify and record any quality problems 3. Initiate, recommend, or provide solutions through designated channels 4. Verify the implementation of solutions 5. Control further processing, delivery, or installation of nonconforming work until the deficiency or unsatisfactory condition has been corrected.

**3. Authority to Stop Work for Quality Control Issues**

- a) The Project Manager, Project Superintendent, Director of QA/QC, and other Senior Management shall have the authority to stop work for quality control issues.

**4. Statement of Independence**

- a) Vaughn Construction believes it is important that personnel responsible for QA/QC inspections to be independent from personnel responsible for construction. Therefore, all QA/QC personnel will report to the Director of QA/QC who reports to the President of the company.

## 5.6 Progress Reporting

1. Progress Reporting
  - a. QA/QC Inspectors will perform daily checklists in the 'Checklists' tab of ACC Build. These checklists will document any deficiencies found during daily walkthrough/inspections of systems or materials. This function acts as a progress reporting tool. All deficiencies found will be tracked in the 'Issues' tab of ACC Build and will also be forwarded to the appropriate subcontractor via the program. Subs will then correct deficiencies and then notify the QA/QCI through ACC Build. Upon receipt of notification, the QA/QCI will verify correction.
2. Reports
  - a. Individual users of ACC Build can generate numerous report types that exhibit different forms of progress. In the 'Reports' tab (located in the top right corner of the ACC Build home page), the User has the option of generating reports based on Checklists, Equipment, Issues and Tasks.
3. Nonconformance reports
  - a. All employees that manage, perform, or verify work can produce a nonconformance report. This report must include follow-up responsibility information, and the QA/QC Inspector must be copied.
  - b. These reports will include the nature of defects, causes of rejection and proposed remedial action.
  - c. Attached is a sample copy of the nonconformance report (Form QC-5 below).
4. Photographs
  - a. Progress
    1. This project utilizes Multivista. Multivista delivers "visual as-built" records of construction from beginning to end using exclusive Construction Photography, Construction Web Cameras & Video Documentation.
  - b. Nonconformance
    1. Photographs will be taken of all work that requires a NCR to be generated. These photographs will be labeled with date, location and NCR number. Nonconformance photographs will be attached to the appropriate NCR.
    2. Nonconformance photographs will be part of the QA/QC Inspector's monthly report.
  - c. Follow-up action
    1. Follow-up action photographs will be taken of all work described in (b) above, after corrections have been made. These photographs will be labeled with date, location and NCR number. Follow-up action photographs will be attached to the appropriate NCR.
    2. Follow-up action photographs will be part of the QA/QC Inspector's monthly report.
  - d. Excellent work

1. Vaughn Construction feels that a vital part of our QA/QC program is to recognize excellent work therefore our QA/QC and Construction staff will record such work by photograph.
2. Excellent work photographs will be labeled with date, responsible party, location and thorough description.
3. Excellent work photographs will be part of the QA/QC Inspector's daily inspections when applicable.

## **5.7 Mock-Ups**

### **5.7.1 Overview**

The project specifications require the building of mock-ups for certain portions of the work. Before installing portions of the work requiring mock-ups, build mock-ups for each form of construction and finish required, using materials indicated for the completed work. Vaughn Construction's Project Manager will notify the Architect and Owner 5 working days in advance of the dates and times when mock-ups will be constructed.

### **5.7.2 Scope of Testing**

See Quality Control Inspection and Test Plan (attached) and project specifications. Build mock-ups in a location and of size indicated or, if not indicated, as directed by the Architect. The mock-up may be work in place that is intended to remain, unless otherwise directed by the Owner. Maintain mock-ups during construction in an undisturbed condition as a standard for judging the completed work. Demolish and remove mock-ups when directed, unless otherwise noted. For any of the following work items included in the project, a mock-up shall be prepared whether required by the technical section or not:

- a) exterior wall to include: substructure, masonry/stone veneer, plaster, architectural concrete and windows
- b) roof system
- c) interior lab area
- d) interior wall finishes
- e) ceramic tile
- f) finished flooring

### **5.7.3 Inspection**

The Owner and Architect will inspect the mock-up. The Contractor shall demonstrate the proposed aesthetic effects and workmanship. Include anticipated repairs in mock-up, such as precast panels. Obtain Owner and Architect's approval of mock-ups before starting work, fabrication, or construction.

### **5.7.4 Deficiencies and Retesting**

The QA/QCI documents the results of the inspection or test via ACC Build. Corrections of minor deficiencies identified are made during the inspections or tests at the discretion of the QA/QCI. The QA/QCI records the results of the inspections or test on the inspection or test form. Deficiencies or non-conformance issues are noted and reported to the subcontractor via the ACC Build notification process. Subs will then correct deficiencies and then notify the QA/QCI through ACC Build. Upon receipt of notification, the QA/QCI will verify correction. The QA/QCI schedules the re-inspection or retesting. Decisions regarding deficiencies and corrections are

made at as low a level as possible, preferably between QA/QCI and the Sub. For areas in dispute, final authority, besides the Owner's, resides with the A/E.

## **5.8 Quality Control Inspection Checklists**

Quality Control Inspection checklists (QCICL's) are important to ensure that the equipment and systems are installed per contract documents so the project may proceed without unnecessary delays. Most aspects of the work (QCICL Outline attached) have a QCICL however; sampling strategies are used for multiple pieces of non life safety systems and equipment. In general Quality Control Inspection Checklists are completed for 15% of these pieces. ). If it is discovered during the sampling inspection that an unacceptable level of deficiencies is noted, a more detailed evaluation will be performed by the QCI, PM, and Superintendent.

Quality Control Inspection Checklists are primarily static inspections and procedures to prepare the equipment or system for initial operation (e.g., oil levels OK, fan belt tension, gages in place, sensor calibration, etc.). However, some Quality Control Inspection Checklist items entail simple testing of the function of a component, a piece of equipment or system (such as measuring the voltage imbalance on a three phase pump motor of a chiller system). The QA/QCI shall provide Quality Control Inspection Checklist for each system in accordance with the specifications.

### **5.8.1 Initial Start-up**

Independent devices shall not be energized or activated until the QA/QCI has verified that all contract requirements have been met. See specification section 01 91 00 for further detail.

Start up of Building systems: The QA/QCI shall not start up any Building systems until the requirements of specification section 01 91 00 have been met.

### **5.8.2 Execution of Checklists**

As a part of Vaughn Construction Quality Program, Quality Control Inspection Check Lists have been developed and shall be used as follows:

- a) It shall be the QA/QC Inspector's responsibility to complete the QCICL.
- b) It is not the intent of this procedure to complete a QCICL for every category of the work using a 15% sampling strategy.
- c) The QA/QC Inspector shall complete QCICLs each day at random.
- d) Completed QCICL with deficiencies will be recorded in ACC Build and are available for the Vaughn Construction Project Manager and Superintendent as well as the appropriate subcontractor to view.
- e) Deficiencies noted on the QCICLs shall be corrected prior to the continuation of that work.

### **5.8.3 Deficiencies and Non-Conformance**

The QA/QCI clearly lists any outstanding items that were not completed successfully at the appropriate location on the QCICL. The QA/QCI works with the Subs and vendors through the Project Superintendent to correct and recheck deficiencies or uncompleted items, involving others as necessary. The QA/QCI provides this information to the CI.

### **5.8.4 Deficiencies and Retesting**

The QA/QCI documents the results of the inspection or test via ACC Build. Corrections of minor deficiencies identified are made during the inspections or tests at the discretion of the QA/QCI. The QA/QCI records the results of the inspections or test on the inspection or test form.

Deficiencies or non-conformance issues are noted and reported to the subcontractor via the ACC Build notification process. Subs will then correct deficiencies and then notify the QA/QCI through ACC Build. Upon receipt of notification, the QA/QCI will verify correction. The QA/QCI schedules the re-inspection or retesting. Decisions regarding deficiencies and corrections are made at as low a level as possible, preferably between QA/QCI and the Sub. For areas in dispute, final authority, besides the Owner's, resides with the A/E.

## **5.9 Subcontractor Testing**

### *5.9.1 Overview*

The project specifications require the installing subcontractor to perform certain testing (e.g.; pipe pressure, duct pressure, welding inspection, etc) which will be tracked by the QA/QCI. In addition to the onsite testing there are also manufacture required test that will be tracked and may be witnessed by the Owner. The QA/QCI will track these test also.

### *5.9.2 Scope of Testing*

See Quality Control Inspection and Test Plan (attached) and project specifications.

### *5.9.3 Inspection and Testing Documents*

The responsible subcontractor will submit Inspection and test documentation to Vaughn Construction for approval. However, FPC test forms for pipe test, duct test, equipment start-up request, request for utility shutdown, and domestic water sterilization and flushing shall be used without modification. Additionally the QA/QCI will highlight the area on the contract drawings. Once the area is approved the QA/QCI and CI will date and initial the highlighted area with the corresponding QCICL number placed on the drawing in the highlighted area. The QA/QCI will have all required testing documentation readily available for the highlighted area for the CI's review.

### *5.9.4 Deficiencies and Retesting*

The QA/QCI documents the results of the inspection or test via ACC Build. Corrections of minor deficiencies identified are made during the inspections or tests at the discretion of the QA/QCI. The QA/QCI records the results of the inspections or test on the inspection or test form. Deficiencies or non-conformance issues are noted and reported to the subcontractor via ACC Build. Subs will then correct deficiencies and then notify the QA/QCI through the ACC Build. Upon receipt of notification, the QA/QCI will verify correction. The QA/QCI schedules the re-inspection or retesting. Decisions regarding deficiencies and corrections are made at as low a level as possible, preferably between QA/QCI and the Sub. For areas in dispute, final authority, besides the Owner's, resides with the A/E.

## **5.10 Independent Testing**

### *5.10.1 Overview and Process*

The Owner will employ testing agencies for various portions of the work. The QA/QCI and Project Superintendent will coordinate these tests with the CI.

### *5.10.2 Scope of Testing*

See Quality Control Inspection and Test Plan (attached) and project specifications.

### 5.10.3 Not Used

### 5.10.4 Deficiencies and Retesting

The Owner's testing agency shall document the results of the testing. QA/QCI will upload the results to ACC Build. Deficiencies or non-conformance issues are noted and reported to the subcontractor via ACC Build notification process. Subs will then correct deficiencies and then notify the QA/QCI through ACC Build. Upon receipt of notification, the QA/QCI will verify correction. The QA/QCI schedules the re-inspection or retesting. Decisions regarding deficiencies and corrections are made at as low a level as possible, preferably between QA/QCI and the Sub. For areas in dispute, final authority, besides the Owner's, resides with the A/E.

## 5.11 Concealed Space Inspections

### 5.11.1 Overview

Concealed space inspections shall be scheduled a minimum of 5 working days in advance. Subject areas include structural walls, partitions, chases, crawl spaces, ceiling spaces and any other work which will be difficult or impossible to examine once concealed in the final construction. Vaughn Construction's Superintendent will conduct a concealed space inspection, record deficiencies and work with the subcontractor to correct these items. Once Vaughn Construction's Superintendent is satisfied the area is ready for a formal inspection, they will notify the QA/QCI who will schedule the inspection with the CI.

### 5.11.2 In-Wall and Overhead Inspections

All required work and tests for the area to be inspected must be complete and correct prior to the inspection. No finish ceiling material shall be installed until all overhead punch list items have been resolved to the satisfaction of the Owner. Work in place necessary for an overhead inspection shall include:

- a) Ceiling grid or framework installed
- b) All above ceiling electrical work, including light fixtures, installed and operational
- c) All HVAC and plumbing work above ceiling complete with diffusers installed and connected
- d) Fire sprinkler heads installed
- e) All required test for above ceiling work completed and approved
- f) Contractor generated punch list of all areas being requested for inspection
- g) Sealing of all penetrations
- h) Fire and smoke damper installation and appropriately tested

Work in place necessary for an in-wall inspection shall include:

- a) MEP work installed and verified complete and correct location
- b) all required blocking installed
- c) area "Framework QCICL" complete
- d) all required test for in-wall works complete and approved
- e) all required barrier material installed and verified complete and correct type

### ***5.11.3 Inspection and Testing Documents***

A QCICL applicable to the area being inspected will be used. Additionally, the QA/QCI will highlight the area on the contract drawings. Once the area is approved the QA/QCI and CI will date and initial the highlighted area with the corresponding QCICL number placed on the drawing in the highlighted area. The QA/QCI will have all required testing documentation readily available for the highlighted area for the CI's review.

### ***5.11.4 Deficiencies and Retesting***

The QA/QCI documents the results of the inspection or test via ACC Build. Corrections of minor deficiencies identified are made during the inspections or tests at the discretion of the QA/QCI. The QA/QCI records the results of the inspections or test on the inspection or test form. Deficiencies or non-conformance issues are noted and reported to the subcontractor via the ACC Build notification process. Subs will then correct deficiencies and then notify the QA/QCI through ACC Build. Upon receipt of notification, the QA/QCI will verify correction. The QA/QCI schedules the re-inspection or retesting. Decisions regarding deficiencies and corrections are made at as low a level as possible, preferably between QA/QCI and the Sub. For areas in dispute, final authority, besides the Owner's, resides with the A/E.

## **5.12 Commissioning**

Shall be per Contract Specifications see Commissioning Plan for details.

## **5.13 Training and Orientation of Owner Personnel**

Shall be per Contract Specifications see Training Matrix for details.

## **5.14 Warranty Period**

Shall be per Contract Specifications see Warranty Matrix for details.

## **6. *Written Work Products***

The QA/QC Inspector will compile, organize and index the Quality Control and Commissioning data by work category into Equipment Matrix.

## **7. *Schedule***

The Project Master Schedule will include Quality Control and Commissioning Milestones.



**Part IV**  
**APPENDIX 1**

**Construction Phase Application Forms**

<b>Form Name/ Number</b>	<b><u>Description</u></b>	
QCITP	Quality Control Inspection and Test Plan	See above Section 5.1
QC-1	Training Matrix	Attached
QC-2	Warranty Matrix	Attached
QC-3	ACC Build Checklist Example	Attached
QC-4	ACC Build Issues Log	Attached

## Training Matrix Example (Form QC-1)

Division 14									
Type	Training Duration	Training Notes	System	Trainee Dept (# of Attendees)			Contractor		Training Status
				FMC	DPS	Other	1	2	
Hands-on	12 hours		Traction Elevators						
Hands-on	12 hours		Hydraulic Elevators						
Hands-on	8 hours		Escalators						
Division 21									
Type	Training Duration	Training Notes	System	Trainee Dept (# of Attendees)			Contractor		Training Status
				FMC	DPS	Other	1	2	
Hands-on	2 hours	21 10 13 3.06 Contractor shall provide trained and experienced agent to instruct and acquaint the Owner with the proper functioning, operation and maintenance of the fire protection systems and all installed components.	Wet Standpipe and Sprinkler System						
Hands-on	2 hours	21 41 23 3.01 J Contractor shall provide for service of a competent factory-trained supervising agent to instruct the Owner's operating personnel in the use and maintenance of installed equipment.	Fire Water and Domestic Water Surge Tanks						
Division 22									
Type	Training Duration	Training Notes	System	Trainee Dept (# of Attendees)			Contractor		Training Status
				FMC	DPS	Other	1	2	
Hands-on	2 hours		Domestic Water Booster Pumps						
Hands-on	2 hours	22 33 33 3.03 Contractor shall instruct and acquaint the Owner with the proper functioning, operation and maintenance of the water heater and all associated installed components.	Electric Domestic Water Heaters						
Hands-on	2 hours		Domestic Hot Water Circulating System						
Hands-on	2 hours		Domestic Water Storage/Break Tank						
Division 23									
Type	Training Duration	Training Notes	System	Trainee Dept (# of Attendees)			Contractor		Training Status
				FMC	DPS	Other	1	2	
Hands-on	8 hours		Chilled Water System						
Hands-on	4 hours		HVAC piping Systems						
Hands-on	4 hours	23 25 00 3.04	HVAC Chemical Water Treatment						
Hands-on	8 hours		Air Handling Units						
Hands-on	8-12 hours	23 05 13 3.04 Provide two-day training minimum 4 hours per day.	Variable Frequency Drive						
Hands-on	4 hours		Return Fan/Relief Fan						
Hands-on	4 hours		Air Terminal Units						
Hands-on	2 hours		Elevator Shaft Fans						
Hands-on	2 hours		Stairwell Fans						
Hands-on	2 hours		Restroom Central Exhaust Fans						
Hands-on	NA	23 11 13 3.07 Train owner's/maintenance personnel on procedures and schedules related to start-up and shutdown, troubleshooting, servicing, and preventive maintenance. Training should be broke down into modules that should include: Basis of System Design, Regulatory requirements, Equipment function, emergency operation of system, Maintenance of system, Troubleshooting of typical problems. All training should be digitally taped and transferred to DVD for the Owner.	Fuel Oil Piping Systems						
Hands-on	2 hours	23 64 26 3.02 D Manufacturer's certified factory trained representative to provide training for a minimum of two (2) hours for the Owner's maintenance and operational personnel to adjust, operate and maintain equipment.	Air Cooled Rotary Screw Chillers						

## Warranty Matrix Example (Form QC-2)

System	Guarantee / Warranty	Contractor	Spec Section/Special Requirements
Wet Standpipe and Sprinkler System	1 year	Universal	21 10 13 3.07
Fire Pumps	1 year	N/A	21 31 13 3.04
Fire Water and Domestic Water Surge Tanks	1 year	N/A	21 41 23 3.02
Variable Frequency Drives	2 years	N/A	23 05 13 1.08 A,B VFD shall be unconditionally warranted by the manufacturer for two (2) years from the date of Substantial Completion, not to exceed 30 months from date of shipment.
Ductwork	1 year	Way	23 31 00 1.07 Work shall be guaranteed for 1 year from the Project Substantial Completion date against noise, chatter, whistling, vibration, and free from pulsation under all conditions. After the system is in operation, should these defects occur, they shall be corrected as directed by the Owner at the Contractor's expense.
Air Cooled Rotary Screw Chillers	1/5 year	Way	23 64 26 1.07 Base Bid for one-year factory warranty - Coverage shall include 5 year compressor warranty and 1 year warranty for remaining chiller package as manufactured and delivered to the Project Site including materials, refrigerant and labor. Alternate bid for five-year factory warranty - Coverage shall include complete air cooled chiller package as manufactured and delivered to the Project Site including all parts, materials, refrigerant and labor for the first year, and parts and material only for the remaining four years. Warranty period commences upon start-up or 6 months following shipment, whichever occurs first.
Energy Recovery Section of OAHU w/ Enthalpy Wheels	18 months	Way	23 73 13 2.12 C7 Manufacturer warranty period is 18 months from date of shipment.
Computer Room Air Conditioning Units	5 years	Way	23 81 23 1.07
Fan Coil Units	1 year	Way	23 82 19 1.07 Include coverage of fan-coil unit and motors.
BAS Commissioning	N/A	N/A	25 08 00 3.12 Throughout the Warranty Phase, trend logs shall be maintained. Contractor shall forward archive trend logs to the Owner for review upon Owner Request. Owner will review these and notify Contractor of any warranty work required.
Testing and Laboratory Services	1 year	N/A	01 41 11 1.08
Liquid Elastomeric Waterproofing	10 years	N/A	07 14 16 1.07 Failures include but are not limited to the following: Leakage of water through membrane system; Deterioration of waterproofing; Releasing from substrate.
Basement Damp Proofing	10 years	Chamberlin	Defects shall include but are not limited to: Dampness or leakage of water inside the basement; Deterioration of the protective barrier; Weathering of the protective barrier; Sand or fill between waterproofing membrane or concrete; Rips, tears, nicks, holes in damp proofing applications before floor slab or backfill is in place; Weeting and observable expansion before slab or backfill is in place; Surface water, seepage, or rain accumulation on membrane or void space during and after construction of project; Leakage of water through membrane system.
Earth Work	1 year	AYG	31 20 00 1.09

## ACC Build (Form QC-3)

Forms

00 00 00 - Texas Accessibility Standards Checklist

[ In progress ] [ Copy ] [ Export ] [ ⋮ ]

Basic Information


1. TAS - Doors

2. TAS - Water Closets

3. TAS - Urinals

4. TAS - Lavatories and Mirrors

Notes

 This form is only visible to you.

### 1. TAS - Doors

1.1 Doors shall have a minimum opening of 32 inches with door open 90 degrees, measured between the face of door and the opposite stop \*

Pass  Fail  NA  
 Photos  Issues  Note

1.2 Door threshold shall not exceed 1/2 inch \*

Pass  Fail  NA  
 Photos  Issues  Note

1.3 Door hardware shall have a shape that is easy to grip with one hand and does not require tight grasping \*

Pass  Fail  NA  
 Photos  Issues  Note

## ACC Build Issues Log (Form – QC-4)

**Issues**

+ Create Issue

Export (26) filtered

Search by issue title or ID

Filters (1)

Title	ID	Status	Type	Assigned to	Due date
VAV trend review indicates multiple ...	#1231	Open	Commissl...	Dynamic Systems	-
Occupancy sensors not changing sta...	#1230	Open	Commissl...	Dynamic Systems	-
PCHW System - Swapping of lead leg...	#1229	Open	Commissl...	Dynamic Systems	-
PCHW pressure cutoff sequence not ...	#1228	Open	Commissl...	Dynamic Systems	-
L-UPS-12 panel schedule needs upda...	#1216	Open	Commissl...	Britt Rice Electric	-
L UPS 13 panel schedule not final.	#1214	Open	Commissl...	Britt Rice Electric	-
FCU-10.	#1212	Open	Commissl...	Dynamic Systems	-



**Non Conformance Corrective Action Report – NCR (Form QC-5)  
Commissioning Corrective Action Report**

Observation by:

Report No:

Date of Observation:

Project Name/No.:

Date of Report:

Contractor:

Subject:

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**Description of work elements requiring corrective action:**

**Contract References:**

**Re-inspection will be performed on:**

**Re-inspection Remarks:**

**Deficiency Cleared:                      By:**

**Action required:** Acknowledgement of this field report is required. Please provide a statement of corrective action with your response within (3) days of report reception.

Thank You,  
Vaughn Construction

## **Quality Control Inspection Checklist Outline**

- Division 03 – Concrete
- Division 04 – Masonry
- Division 05 – Metals
- Division 06 – Wood, Plastics, and Composites
- Division 07 – Thermal and Moisture Protection
- Division 08 – Openings
- Division 09 – Finishes
- Division 10 – Specialties
- Division 11 – Equipment
- Division 12 – Furnishings
- Division 13 – Special Construction
- Division 14 – Conveying Equipment
- Division 21 – Fire Suppression
- Division 22 – Plumbing
- Division 23 – Heating, Air Conditioning and Ventilation
- Division 26 – Electrical
- Division 27 – Communications
- Division 28 – Electronic Safety and Security

# Exhibit B

Brazos County DOL Wage Determination TX20240234





"General Decision Number: TX20240234 07/12/2024

Superseded General Decision Number: TX20230234

State: Texas

Construction Type: Building

County: Brazos County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.</li> </ul>
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/05/2024
1	06/14/2024
2	07/12/2024

BOIL0074-003 07/01/2023

	Rates	Fringes
BOILERMAKER.....	\$ 37.00	24.64

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ELEV0031-003 01/01/2024

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 51.32	37.885+a+b

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Friday after Thanksgiving Day; Christmas Day; and Veterans Day.

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 ENGI0178-005 06/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(1) Tower Crane.....	\$ 32.85	13.10
(2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above.....	\$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under.....	\$ 32.35	13.10

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 IRON0084-011 06/01/2023

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 27.51	8.13

-----  
 PLUM0068-002 10/01/2023

	Rates	Fringes
PLUMBER.....	\$ 34.86	11.68

-----  
 PLUM0211-002 10/01/2023

	Rates	Fringes
PIPEFITTER (HVAC Pipe Installation Only).....	\$ 38.31	12.61

-----  
 \* PLUM0286-011 06/03/2024

	Rates	Fringes
PIPEFITTER (Excludes HVAC Pipe Installation).....	\$ 36.15	15.92

-----  
 SHEE0054-002 04/01/2020

	Rates	Fringes
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 29.70	13.85

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 \* SUTX2014-009 07/21/2014

	Rates	Fringes
BRICKLAYER.....	\$ 20.00	0.00
CARPENTER, Excludes Form Work....	\$ 14.56 **	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 14.68 **	0.00
ELECTRICIAN.....	\$ 22.96	4.83
FORM WORKER.....	\$ 11.83 **	0.00

INSULATOR - MECHANICAL

(Duct, Pipe & Mechanical System Insulation).....	\$ 19.77	7.13
IRONWORKER, REINFORCING.....	\$ 13.35 **	0.00
IRONWORKER, STRUCTURAL.....	\$ 20.74	5.25
LABORER: Common or General.....	\$ 11.57 **	0.00
LABORER: Mason Tender - Brick...	\$ 10.96 **	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 9.93 **	0.00
LABORER: Pipelayer.....	\$ 12.49 **	2.13
LABORER: Roof Tearoff.....	\$ 11.28 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 14.33 **	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 13.93 **	0.00
OPERATOR: Bulldozer.....	\$ 18.29	1.31
OPERATOR: Drill.....	\$ 16.22 **	0.34
OPERATOR: Forklift.....	\$ 15.00 **	0.00
OPERATOR: Grader/Blade.....	\$ 14.34 **	1.68
OPERATOR: Loader.....	\$ 14.01 **	0.44
OPERATOR: Mechanic.....	\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 16.03 **	0.00
OPERATOR: Roller.....	\$ 13.11 **	0.00
PAINTER (Brush, Roller, and Spray).....	\$ 13.14 **	0.00
ROOFER.....	\$ 13.75 **	0.00
SHEET METAL WORKER, Excludes HVAC Duct Installation.....	\$ 14.62 **	0.00
TILE FINISHER.....	\$ 11.22 **	0.00
TILE SETTER.....	\$ 14.74 **	0.00
TRUCK DRIVER: Dump Truck.....	\$ 11.97 **	1.23
TRUCK DRIVER: Flatbed Truck.....	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....	\$ 12.50 **	0.00
TRUCK DRIVER: Water Truck.....	\$ 12.00 **	4.11

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including

their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

#### State Adopted Rate Identifiers

Classifications listed under the "SA" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R. 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the "SA" identifier took effect under state law in the state from which the rates were adopted.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"