



DEPARTMENT OF GENERAL SERVICES

Samantha Sweikata
Acting Commissioner

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Steven M. Neuhaus
County Executive

December 22, 2022

RFB-OC177-22 Orange County Medical Examiner's Office

Addendum A

This Addendum is to address questions and provide additional information for the above mentioned RFB:

- *REVISED QUESTION DEADLINE***

Please be advised that the revised question deadline is extended until 5:00 P.M. prevailing time on January 5, 2023.
- *REVISED BID DUE DATE***

Please be advised that the revised bid due date is Tuesday, January 24, 2023 at 2:00 P.M. prevailing time.
- The Bid Forms for all Contracts have been revised and are enclosed with this Addendum. Please submit the REVISED BID FORMS with your bid, as submissions on original bid forms will be rejected as non-responsive.
- Currently there is a future water treatment system under design. Final design of this system is likely to be post bid due date. Contractors shall be aware that a water treatment system will be installed as part of the project. This change in work shall be administered per the Contract Documents and funded from the Contingencies for each Contract, as applicable.
- Section 00 0001 Table of Contents is revised to add the following in the applicable location:

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY	
28 1300	Electronic Access Control
28 2300	Video Surveillance Systems

- Q: Is it possible to see the sign in sheet from [the pre-bid meeting]?

A: See attached.
- Q: Would you have a mechanical bidder's list available by chance or know who the GC is?

A: Plan holder list is not available.
- Q: Can you send the plan holders list so we know who to submit our quotes to?

A: Plan holder list is not available.

9. Q: HVAC: Are grooved Victaulic piping systems acceptable on piping 2-1/2" and large?
A: Yes.
10. Q: Drawing P100 shows a lavatory LV-1 in Room 145. Neither plumbing drawing P200 nor the architectural drawings show a lavatory in this room. Is there supposed to be a LV-1 in Room 145?
A: No.
11. Q: Drawing P100 shows a 3" drain line going to equipment tagged #227. Drawing A100 has #227 labeled as a janitor's closet cabinet. Neither specification sections 101700 nor 117800 have #227 specified. Does #227 need a 3" drain connection?
A: Yes and domestic hw and cw connections. Equipment is provided by GC, basis of design Mopec model 9-OPC-84DR or equal with integral service faucet.
12. Q: How does the sanitary waste piping terminate at the emergency shower/eyewash stations?
A: Provide floor drain. Coordinate with mason to slope floor toward drain for a 6' diameter.
13. Q: Please provide a specification for the shower drains.
A: Zurn : Z415-B.
14. Q: The specification calls for the floor drains to have a trap primer. Drawing P200 shows water piping going to the floor drains in the Autopsy rooms but does not show water going to the other floor drains. Do the floor drains outside of the Autopsy rooms need trap primers? If they do not, please provide a specification for these floor drains.
A: The floor drains outside of the Autopsy rooms do not need trap primers. Instead they should be provided with "sureseal" trap seals.
15. Q: Rooms 131 and 118 each have a sink tagged LV-1. Is this the correct tag or should they be counter mounted sinks? If they are to be counter mounted, please provide a specification.
A: Counter mounted equal to "Just" model SLNY-1921-A-GR-JO with Z812A4-XL faucet.
16. Q: The lavatories in rooms 135 and 136 are tagged LV-1. On the architectural drawings they appear to be counter mounted. Is this the correct tag or should they be counter mounted lavatories? If they are to be counter mounted, please provide a specification.
A: Counter mounted equal to "Just" model SLNY-1921-A-GR-JO with Z812A4-XL faucet.
17. Q: Room 140 has a sink tagged LV-1. This is a laundry room. Is this the correct tag or should it be a laundry sink? Please provide a specification if it is to be a laundry sink.
A: Counter mounted equal to "Just" model -SLFX-2125-16-GR with J-900 faucet.
18. Q: On the equipment schedule, RPS-1 is noted as having a treated water connection. Does RPS-1 need treated water or just domestic hot and cold water?
A: No treated water. S.S. 2 bay wash sink (equipment #214 on A100) is by GC, basis of design Mopec model CH100CUST with foot-controlled valves. Plumbing by PC. Note: stainless steel handwash sink (equipment #204 on A100) is also to be by GC, basis of design Mopec model CH100. Plumbing by PC.

19. Q: Is there compressed air on the project?
A: No.
20. Q: Where is the location for the hydronic make up water? The air separators are in room 121, but there is no makeup water shown. Does each air separator need its own make up water connection?
A: Yes, per the one-line on dwg H-703.
21. Q: Please provide the schedule for spec 010110.
A: Will be released in a future addendum.
22. Q: Please provide the physicist report. This is needed to know the thickness of lead lined sheetrock.
A: There is no physicist report. Provide thickness specified in the documents.
23. Q: Numerous partition types are not labeled. Please provide the partition type.
A: Per the drawings, partitions are type J18 unless noted otherwise. See dwg A002.
24. Q: Specification 084113 calls for a (10) year material warranty thru the installer whereas all of the other warranties throughout different specifications all call for the manufacturer to cover the (10) year material warranty. Please advise if the (10) year material warranty should be covered by the manufacturer in lieu of the installer.
A: The 10-year warranty should be covered by the manufacturer.
25. Q: Specification 084113 – section 2.7-a calls for “automatic door operators: section 087113 automatic door operators”, however this specification is not listed in the table of contents. Please advise.
A: Section 2.7-a should call for “low energy door operators: section 087100”.
26. Q: Section 088836 – section 2.3-c calls for “annealed clear or low iron glass”. Due to the significant cost difference between “clear” and “low iron” substrates, can you select which one is to be included.
A: Include annealed clear.
27. Q: Doors #141 & 142 are shown on the door schedule (a700) as door type “f” (no vision lite) but “temp” is shown in the glass column. Please advise if glass is required in these doors.
A: Doors 141 and 142 are solid, no vision lite.
28. Q: Spec 007000, 7.2.6.2.1.1&2 states only 5% is allowed for labor and 5% for materials. This is exceedingly low in the current market and well below the industry standard. Please advise if the total markup can be adjusted to 15%. We would expect the client would also want back the current market value in the event of a credit.
A: The markup rates for contingency funded change orders will remain as specified.
29. Q: Spec 007000, 7.2.6.2.2.1&2&3 states a subcontractor is only 5% is allowed for labor and 5% for materials. This is exceedingly low in the current market and well below the industry standard. Please advise if the total markup can be adjusted to 15%. Also, we would like to request an increase to the contractor’s markup on subcontractor work to 8% for the same reasons above. We would expect the client would also want back the current market value in the event of a credit.
A: The markup rates for contingency funded change orders will remain as specified. Any credits would be based on the Scheduled of Values for work included in the bid price. Any credits for contingency funded work would be based on the amounts specified in the approved change order.

30. Q: Are the EV car charging stations being furnished by the electrical contractor or by others?
A: EV charging stations are furnished by the electrical contractor.
31. Q: Drawing ES101 calls for (4) 4" conduits for telecommunications from the emergency services center to the examiner's office. Drawing TA002 and TA003 call for (6) 4" conduits for telecommunications. Please clarify.
A: Provide (6) 4" conduits for telecommunications.
32. Q: Drawing TA100 does not give a door type number under the access door symbol. Please clarify which detail each door should be that are shown on the door detail drawing TA500
A: The door details on TA500 are generic details. Contractor to coordinate TA500 details with section 087100 Door Hardware.
33. Q: The specified product for glass type "ld1" (okalux plus) needs a minimum dimension smaller than 48", and as currently constructed, frame type "t" has d.l.o.'s of approx. 49" x 50" which would make the actual glass size larger than that. Please advise if an additional vertical mullion should be added to allow the specified glass product to be used, or if a different product is desired.
A: Glass panels will be reduced to 48"x 48" max.
34. Q: The bullet resistant panel on partition type JS18 does not give a height. Please advise as to what height do they want the protection?
A: Full height of partition.
35. Q: Spec 042200, 2.3, C/D & 2.10, D/E state to match the architects' samples. Please provide all architects' samples with makes and models to price accordingly.
**A: CMU-1 basis of design is Duke Concrete sample DCP 30.
CMU-2 basis of design is Dagostino sample DAG CT-213.
CMU-3 manufacturers standard CMU color.**
36. Q: Requesting a bid extension for the Orange County Medical Examiner's Office project. We have had numerous conversations with various architectural trades and they have stated manpower will be scarce between Christmas and New Year's week due to time taken off.
A: See Items 1 and 2 to this Addendum.
37. Q: For the BMS controls, please advise if the controls subcontractor should be bidding to the GC directly or please advise on the list of current mechanical bidders they should be reaching out to
A: BMS Controls are under the HVAC Contract. Plan holders list are not being provided.
38. Q: The Mortuary Equipment numbers in specification section 117800 do not match the equipment numbers and equipment descriptions on drawing A100? At this time we are unable to verify quantities of some of the Mortuary equipment required.
A: See attached revised specification section 117800.

Regards,

Samantha Sweikata
Acting Commissioner

SECTION 00 3000

**BID FORM FOR
CONTRACT NO. 1 – GENERAL CONSTRUCTION WORK**

NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials, and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents and for the UNIT PRICES listed as follows:

UNIT PRICES shall be add or deduct from listed quantities.

A. **UNIT PRICE #1 – EXCAVATION AND LEGAL OFF-SITE DISPOSAL OF UNSUITABLE SOILS.**

\$ _____/CY MEASURED AS IN-PLACE YARDAGE.

NOTE: UNIT PRICE IS TO INCLUDE ALL COSTS ASSOCIATED WITH THE EXCAVATION, HAULING AND PROPER LEGAL OFF –SITE DISPOSAL OF THE EXCAVATED UNSUITABLE SOILS.

B. **UNIT PRICE #2 – FURNISH, INSTALL AND COMPACT SUITABLE FILL.**

\$ _____/CY MEASURED AS IN-PLACE YARDAGE.

C. **UNIT PRICE #3 – FURNISH, INSTALL AND COMPACT PROCESSED STONE.**

\$ _____/CY MEASURED AS IN-PLACE YARDAGE.

PART 4 – TOTAL BID PRICE

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. **BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT**, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

- 1. **Base Bid Price** Lump Sum price for all of the General Construction work shown and specified in the Contract Documents and described in Division 01 through Division 13 and Division 31 through Division 33, inclusive of any related work in Division 21 through Division 28, plans, and/or specifications that require General Construction Work and Section 010100 – “Summary of Work”.

(Amount) \$ _____

- 2. **Unit price #1** for the removal and legal off-site disposal of unsuitable soils, measured as in-place yardage 1,000 cubic yards x Unit Price #1 \$ _____ /cy =

(Amount) \$ _____

- 3. **Unit price #2** to furnish, install, and compact suitable fill measured as in-place yardage 1,000 cubic yards x Unit Price #2 \$ _____ /cy =

(Amount) \$ _____

- 4. **Unit price #3** to furnish, install and compact processed stone measured as in-place yardage 1,000 cubic yards x Unit Price #3 \$ _____ /cy =

(Amount) \$ _____

- 5. **SUBTOTAL = SUMS OF ITEMS 1 + 2 + 3 + 4**

(Amount) \$ _____

- 6. 10% of Base Bid Price (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

8. TOTAL BID PRICE = SUM OF ITEMS 5 AND 6 (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #8, TOTAL BID PRICE.

PART 5 – ALTERNATES

In accordance with the above understanding, the undersigned proposes to perform the following Alternate Work, furnish all materials, and complete the Alternate Work in its entirety in the manner and under the conditions required in the Bid Documents as follows:

1. ALTERNATE #1 FOR PARKING LOT WORK

General Construction work for additional (18) asphalt parking spaces and concrete walk as described on Drawing C101, except for relocation of (1) light pole by EC.

(Amount) \$ _____

2. ALTERNATE #2 FOR GEOTHERMAL WELLS WORK

The County is seeking ALTERNATE pricing from potential General Construction Contractors for performance of the work under Contract 2 Geothermal Wells Work. If the lowest responsible and responsive bidder for Contract 1 General Construction Work has a TOTAL ALTERNATE PRICE lower than the TOTAL BID PRICE of lowest responsive and responsible bid for Contract 2 Geothermal Wells Work, the Alternate for the Geothermal Wells Work may be awarded to that General Construction bidder ONLY IF that bidder or its proposed subcontractor(s) meet(s) all necessary qualifications and requirements for performance of the Geothermal Wells Work. If that bidder or its proposed subcontractor(s) do(es) not meet all necessary qualifications and requirements, then Geothermal Wells Work will then be awarded to the lowest responsive and responsible bidder for Contract 2 Geothermal Wells Work, even if that low bid is higher than the General Construction bidder's alternate pricing.

A. In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials, and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents and for the UNIT PRICES listed as follows:

UNIT PRICES shall be add or deduct from listed quantities.

UNIT PRICE #1 FOR ALTERNATE #2 – FURNISH AND INSTALL GEOTHERMAL WELL CASING

\$ _____/LF.

B. TOTAL ALTERNATE #2 PRICE

1. **Base Alternate #2 Price** Lump Sum price for all of the work shown and specified in the Contract Documents and described in Division 01 Section 238149, Section 238150, inclusive of any other related work in Section 23, plans, and/or specifications that require Geothermal .Work and Section 010100 – “Summary of Work”

(Amount) \$ _____

2. **Unit Price #1 for Alternate #2** to furnish and install geothermal well casing 1,000 lineal feet x Unit Price #1
\$ _____ /lf =

(Amount) \$ _____

3. **SUBTOTAL = SUMS OF ITEMS 1 + 2**

(Amount) \$ _____

4. 10% of Base Alternate #2 Price (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

5. **TOTAL ALTERNATE #2 PRICE = SUM OF ITEMS 3 AND 4** (Amount) \$ _____

PART 6 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 7 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3100

**BID FORM FOR
CONTRACT NO. 2 – GEOTHERMAL WELLS WORK**

NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials, and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents and for the UNIT PRICES listed as follows:

UNIT PRICES shall be add or deduct from listed quantities.

A. **UNIT PRICE #1 – FURNISH AND INSTALL GEOTHERMAL WELL CASING**

\$ _____/LF.

PART 4 – TOTAL BID PRICE

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

- 1. **Base Bid Price** Lump Sum price for all of the Geothermal work shown and specified in the Contract Documents and described in Division 01, Section 238149, Section 238150, inclusive of any other related work in Section 23, plans, and/or specifications that require Geothermal Work and Section 010100 – “Summary of Work”.

(Amount) \$ _____

- 2. **Unit price #1** to furnish and install geothermal well casing 1,000 lineal feet x Unit Price #1 \$ _____ /lf =

(Amount) \$ _____

- 3. **SUBTOTAL = SUMS OF ITEMS 1 + 2**

(Amount) \$ _____

- 4. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

- 5. **TOTAL BID PRICE = SUM OF ITEMS 3 AND 4** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #5, TOTAL BID PRICE.

PART 5 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 6 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3200

**BID FORM FOR
CONTRACT NO. 3 – PLUMBING WORK**

NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1:	_____	_____
	(date received)	(Signature of Individual or Officer Signing this Bid)
Addendum #2:	_____	_____
	(date received)	(Signature of Individual or Officer Signing this Bid)
Addendum #3:	_____	_____
	(date received)	(Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES – Not Used

PART 4 – TOTAL BID PRICE

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the Plumbing work shown and specified in the Contract Documents and described in Division 01 and Division 21 through Division 22, inclusive of any related work in Division 02 through Division 13, and Divisions 23 through Division 32, plans, and/or specifications that require Plumbing Work and Section 010100 – “Summary of Work”, Section 078413, and Section 079200.

(Amount) \$ _____

2. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

3. **TOTAL BID PRICE = SUM OF ITEMS 1 AND 2** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #3, TOTAL BID PRICE.

PART 5 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 6 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3300

**BID FORM FOR
CONTRACT NO. 4 – HVAC WORK**

NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 3 – UNIT PRICES – Not Used.

PART 4 – TOTAL BID PRICE

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the HVAC work shown and specified in the Contract Documents and described in Division 01 and Division 23, except sections 238194 and Section 238150, inclusive of any related work in Division 02 through Division 22, and Divisions 26 through Division 32, plans, and/or specifications that require HVAC Work and Section 010100 – “Summary of Work”, Section 078413, and Section 079200.

(Amount) \$ _____

2. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

3. **TOTAL BID PRICE = SUM OF ITEMS 1 AND 2** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #3, TOTAL BID PRICE.

PART 5 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 6 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3400

**BID FORM FOR
CONTRACT NO. 5 – ELECTRICAL WORK**

NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES – Not Used.

PART 4 – TOTAL BID PRICE

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the Electrical work shown and specified in the Contract Documents and described in Division 01 and Division 26 through Division 28, inclusive of any related work in Division 02 through Division 23, and Divisions 31 through Division 32, plans, and/or specifications that require Electrical Work and Section 010100 – “Summary of Work”, Section 078413, Section 079200, Section 084229, and Section 087100.

(Amount) \$ _____

2. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

3. **TOTAL BID PRICE = SUM OF ITEMS 1 AND 2** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #3, TOTAL BID PRICE.

PART 5 – ALTERNATES

In accordance with the above understanding, the undersigned proposes to perform the following Alternate Work, furnish all materials, and complete the Alternate Work in its entirety in the manner and under the conditions required in the Bid Documents as follows:

- 1. ALTERNATE #1** – Electrical work associated with the relocation of (1) light pole located adjacent to additional asphalt parking spaces by GC as described on Drawing C101.

(Amount) \$ _____

- 2. ALTERNATE #2** – Electrical work associated with providing 3-phase electrical service in lieu of 2-phase as described on Addendum Drawing SK-1.0 and SK-1.1.

(Amount) \$ _____

PART 6 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 7 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 117800 - MORTUARY EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Sections, apply to this Section.
- B. Specification Section 1017000 Medical Equipment for other equipment indicated on the A-100 series drawings, to be furnished and installed by the contractor.

1.1 SUMMARY

- A. Section includes: [equipment list number]

- 1. Autopsy Tables [221].
- 2. Autopsy Headwall System [230].
- 3. Wash Sinks [214 & 204]
- 4. Body fork-lifts [208].
- 5. Body crane lift beams.
- 6. Cabinets [252 & 213 & 251].
- 7. Cadaver storage racks [233].
- 8. Dissecting tables [228 & 239].
- 9. Grossing stations [210].
- 10. S.S. Evidence Table [217].
- 11. Ventilated Cabinet [212].
- 12. Imaging System [250]
- 13. Floor Scale [201].
- 14. Body Refrigerator [248].
- 15. Bone Boiling Kettle [235].
- 16. Bariatric Transfer Carrier [200]
- 17. Transport Carrier [202]
- 18. Refrigerators [216 & 205]
- 19. Rolling Privacy Screen [241]

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include equipment accessories, components and features that will be included for Project.
 - 2. Key equipment using same designation as indicated on Drawings.
- B. Shop Drawings: For built-in equipment attached to other work and other items indicated:

1. Include plans, elevations, sections, details, and attachment to other work.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, support blocking locations, required clearances, roughing-in and utility service requirements, method of field assembly, components, and location and size of each field connection.
3. Include diagrams for power, signal, and control wiring.
4. Key equipment using same designation as indicated on Drawings.

C. Samples: For each exposed product and for each color and texture specified.

1.4 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Experienced installer who have completed installation of products similar to that indicated for this Project, and whose work has resulted in a record of successful in-service performance. Where required by product manufacturer, installers shall be authorized, trained, and approved by product manufacturer.

1.7 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install equipment until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during remainder of construction period.

B. Field Measurements: Verify actual dimensions of openings and construction contiguous with laboratory accessories by field measurements before fabrication.

1. Establish Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabrication without field measurements. Coordinate construction to ensure that actual dimensions correspond to established dimensions. Allow for trimming and fitting.

PART 2 – PRODUCTS

- A. Product Designations: Drawings indicate size and configurations of laboratory equipment by referencing designated manufacturer's catalog numbers. Other manufacturers of laboratory equipment of similar size and configurations and complying with Specifications may be considered.
- B. Basis of Design: Subject to compliance with requirements, provide products indicated below or comparable products meeting the same performance requirements. Substitutions must be submitted before Bid approval. See Section 016000 "Product Requirements."

1.8 MANUFACTURERS

- A. Basis of Design: Subject to compliance with requirements, provide products indicated below by Mopec or comparable products by one of the following:
 - 1. Mortech Manufacturing Co.
- B. Source Limitations: Obtain laboratory equipment of the same kind or function through a single source, from a single manufacturer.
- A. Product Designations: Drawings indicate size and configurations of laboratory equipment by referencing designated manufacturer's catalog numbers. Other manufacturers of laboratory equipment of similar size and configurations and complying with Specifications may be considered. See Section 016000 "Product Requirements."

1.9 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. UL Certification: Provide electric and fuel-burning equipment and components that are evaluated by UL for fire, electric shock, and casualty hazards according to applicable safety standards, and that are UL certified for compliance and labeled for intended use.
- C. Safety Glass: Products complying with testing requirements in 16 CFR 1201 for Category II materials.
 - 1. Glass: Clear tempered glass complying with ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality-Q3; not less than 5.0 mm thick.
 - 2. Permanently mark safety glass with certification label of Safety Glazing Certification Council or another certification agency acceptable to authorities having jurisdiction.

1.10 MATERIALS

- A. Stainless Steel Sheet: ASTM A 666, stretcher-leveled standard for flatness; Type-304 unless otherwise indicated.
- B. Stainless Steel Plates, Shapes and Bars: ASTM A276; Type-304.
- C. Stainless Steel Pipe: ASTM A312; Type-304.
- D. Stainless Steel Tubing: ASTM A269; Type-304.
- E. Glass for Glazed Doors: Clear tempered glass complying with ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality-Q3; not less than 5.0 mm thick.
- F. Stainless Steel Finish: Grind and polish surfaces to produce uniform finish, with no evidence of welds and free of cross scratches. Run grain with long dimension of each piece, unless otherwise indicated.
 - 1. Directional Satin Finish: No. 4.
 - 2. Grain Direction for Fillers and Closure Panels: Match adjoining stainless steel surface.

3. When polishing is complete, passivate and rinse surfaces. Remove foreign matter and leave surface clean.

G. Sealants:

1. Sealant Joints Between Built-in Equipment and Adjoining Construction: Refer to Division 07 Section "Sealants."

1.11 AUTOPSY TABLES [221]

A. Autopsy Cart Type-A (Hydraulic with Top): Mopec – Cart Model DC100 with Top Model GA100. **(Qty 3)**

1. Chassis: High impact PVC chassis.
2. Cart Size with Top: **80.5-inch long by 32-inch wide.**
3. Cart Elevation: From 30.5-inch to 43.75-inch.
4. Twin pedestal hydraulics.
5. Dual end wheel brake activators built-in.
6. Top: Stainless steel, removable, tiltable top with drain hole and plug.
7. Weight Capacity: 700 pounds.
8. Casters with locking mechanisms.
9. Compatible with autopsy sinks.

B. Autopsy Cart Type-B (Bariatric): Mopec Model DC400. **(Qty 2)**

1. Chassis: Stainless steel.
2. Cart Size with Top: **80.5-inch long by 40-inch wide with 1.5-inch by 2-inch return flange.**
3. Top: Stainless steel, non-removable top with drain hole and plug.
4. Weight Capacity: 1,000 pounds.
5. Casters with locking mechanisms.
6. Compatible with autopsy sink.

1.12 AUTOPSY HEADWALL SYSTEM [230]

A. Autopsy Headwall Type-A (Wall Mount, Center Approach): Mopec – Model CC100.

1. Construction: Formed sheet metal work surface and backsplash over tube frame; welded.
2. Material: Stainless steel, **Type-316.**
3. Size: **114-inch wide by 28-inch deep by 61-inch high (34-inch high work surface).**
4. Utilities:
 - a. Electrical: 3-wire, 120VAC.
 - b. Water: Pre-piped within the equipment.
 - c. Waste: 1.5-inch diameter acid waste piping with trap.
5. Accessories:
 - a. Hydro aspirator with reversing flow valve, hose hanger and 8-foot clear PVC tubing at both ends.
 - b. Cold water body rinse with vacuum breaker and serrated hose fitting; hose hanger and 8-foot clear PVC tubing.
 - c. Two (2) Hot and cold-water fixtures with wrist blade handles and 8-inch swing spout with vacuum breaker.

- d. Four (40 interchangeable, removable, perforated grid plates with 1/2-inch recess and 3/4-inch diameter holes on 2-inch centers.
- e. Two (2) hand spray assemblies, heavy duty brass chrome plated hand piece with 8-foot, high pressure hose and J-hook.
- f. Specimen scale located in the center of the bench over the center sink.
- g. User operated concealed task lighting to be positioned at both ends of the counter over the area for cutting.
- h. At center sink provide a user operated 2 (two) horsepower under sink mounted grinder / disposal with removable strainer in the sink.
- i. Two (2) GFCI duplex outlets with waterproof covers.
- j. Two (2) instrument drawers and rinse basket grid plate.
- k. Autopsy cart latch, compatible with autopsy carts.

1.13 WASH SINKS [214 & 204]

A. 2-Bay Wash Sink [214] – Mopec – Model CH100CUST

- 1. Material: Stainless steel.
- 2. Double bowl configuration.
- 3. Non-elevating.
- 4. Hands free foot-pedal mixing faucets.

B. Handwash Sink [204] – Mopec – Model CH100

- 1. Material: Stainless steel.
- 2. Single sink configuration.
- 3. Hands free knee operated push panel.

1.14 BODY FORK-LIFT [208]

A. Body Fork-Lift Type-A (Hydraulic): Mopec – Model JD307.

- 1. Minimum Lift Height: 0-inches.
- 2. Maximum Lift Height: 84-inches.
- 3. 34-inch inverted forks.
- 4. Accessories:
 - a. Support Bar with Body Straps: Mopec – Model JD600.
 - 1) Four (4) nylon straps, 3-inch by 54-inch.
 - 2) One (1) support bar, 60-inches long.
 - b. High-Capacity Cadaver Lift Bar: Mopec – Model JD610.
 - 1) Five (5) heavy duty nylon slings, 2-inch by 96-inch.
 - 2) One (1) heavy duty support bar, 60-inch long.

1.15 BODY CRANE LIFT BEAM [not numbered]

A. Body Crane Lift Beam Type-A: Mopec – Model JD3004.

- 1. 4-foot I-beam with leg assembly, trolley with 360-deg rotation, adjustable riser beam and 6-inch casters with swivel and brake.

2. Accessories:
 - a. Power Operated Hoist: Mopec PowerLift with 1,000-pound capacity, with hand-held lift controller, 115 V 20' line power cord, and adjustable nylon straps.

1.16 CABINETS [252 & 213 & 251]

A. Cabinet Type-A [252] (Tall Cabinet, 22-Inch, Solid Swing, 2-Door): Mopec – Model LD307-36MOD.

1. Cabinet Size: **36-inch long by 22-inch deep by nominal 84-inch high.**
2. Material: Stainless steel.
3. Doors: Stainless steel swing doors.
4. Shelves: Five (5) adjustable shelves, perforated.
5. Accessories:
 - a. Stainless steel cabinet hardware.
 - b. Ventilation Cuff for Tall Storage Cabinets: Mopec – Model LV200, 6-inch diameter.

B. Cabinet Type-B [213] (Tall cabinet, 22-Inch, Solid Swing, 1-Door): Mopec – Model LC313-24

1. Cabinet Size: **36-inch long by 22-inch deep by nominal 84-inch high.**
2. Material: Stainless steel
3. Doors: Stainless steel swing doors.
4. Shelves: Five (5) adjustable shelves, perforated.
5. Accessories:
 - a. Stainless steel cabinet hardware.
 - b. Ventilation Cuff for Tall Storage Cabinets: Mopec – Model LV200, 6-inch diameter.

C. Cabinet Type-C [251] (Mobile Storage Cabinet): Mopec – Model KUST

1. Size: 27" L x 18" W x 32" H
2. Includes:
 - a. All welded construction (except casters)
 - b. Stainless steel #4 polished shelves in durable 16 gauge
 - c. Bolt on casters, 2 swivel & 2 rigid, for superior tracking
 - d. Tubular handle with smooth radius bend-standard
 - e. (3) 7 in. H drawers with pull handle
 - f. (1) left-hand hinged solid door w/ball catch assembly
 - g. (1) right-hand hinged solid door w/ball catch assembly
 - h. 1.5" / 4cm lip for retention on cabinet top

1.17 CADAVER STORAGE RACKS [233]

A. Cadaver Storage Rack Type-A (Stationary, 32" x 5-Tier, Cantilever): Mopec – Model IA32501.

1. Rack Size: **22-inch long by 26-inch deep by nominal 80-inch high.**
2. Heavy-duty cantilever storage rack, 5 tier.
3. Material: Stainless steel.
4. Adjustable arms
5. Capacity: 500 lbs per arm.

6. Adjustable leveling pads.
7. Modular construction.
8. 5 stainless steel body trays design to work with Autopsy Carts

1.18 DISSECTING TABLES [228 & 239]

A. Dissecting Table Type-A (S.S. Work Table): Mopec – Model HA400CUST [239]

1. Size: **60-inch long by 30-inch wide by nominal 37-inch high.**
2. Material: Stainless steel.
3. Tabletop: Designed with 2-inch marine edge; top sloped 1.5-inch to drain hole.
4. Fully welded construction with heavy-duty undercarriage subframe. Four (4) upright legs, two (2) cross leg support tubes and two (2) lateral support tubes.
5. Casters: Heavy-duty wheels, swivel/locking type.
6. Medical Paper Roll holder, 30-inch wide
7. Drawers: Two (2) drawers, 20-inch wide by 20-inch deep by 6-inch high.

B. Dissecting Table Type-B (Utility Cart): Mopec – Model HA210CUST [228]

1. Size: **24-inch long by 30-inch wide by nominal 34-inch high.**
2. Material: Stainless steel.
3. Tabletop: Creased for drainage.
4. Frame: 1.625-inch diameter tubing legs, fully welded construction with heavy-duty undercarriage subframe.
5. Casters: Heavy-duty wheels, swivel/locking type.
6. Post style option socket (for use with post style book holder, instrument tray and leg support).

1.19 GROSSING STATIONS [210]

A. Grossing Station Type-A: Mopec – Model MB 400, Maestro Lite, Elevating Grossing Station.

1. Size: 60" Long by 29" Wide by 79" High
2. Material: Stainless steel.
3. Sink, right-hand side of grossing station; faucet mixing/flow control, 19" L by 14" W by 10" D
4. Backdraft ventilation; dual 8-inch duct stubs.
5. Side/column accessory mounts
6. 14" Stainless steel shelf
7. Organizer Bin - (1) small stainless steel
8. Organizer Bin - (1) large stainless steel
9. Elevation system and control switch for up/down in height.
10. Utilities:
 - a. Electrical: Pre-wired within the equipment, 115v- 60 hz - 1 ph - 1 circuit - 20 amps
 - b. Waterproof LED light
 - c. Water: Pre-piped within the equipment. Cvxif 2bfcfe
11. Accessories:
 - a. One (1) perforated grid plate.
 - b. One (1) large and one (1) small organizer bin.
 - c. Mopec peg board system.
 - d. Stainless Steel C-Fold paper towel dispenser
 - e. One (1) sliding work surface cutting board, Removable polyethylene cutting board-color white, 23" L by 16" W by 3/4" H
 - f. 1/2-HP disposal.
 - g. One (1) GFCI receptacle.

- h. Magnetic tool bar

1.20 EVIDENCE TABLE [217]

A. Stainless Steel Evidence Table Type-A: Mopec – Model HA400CUST

1. Size: **60-inch long by 30-inch wide by nominal 37-inch high.**
2. Material: Stainless steel.
3. Tabletop: Designed with 2-inch marine edge; top sloped 1.5-inch to drain hole.
4. Fully welded construction with heavy-duty undercarriage subframe. Four (4) upright legs, two (2) cross leg support tubes and two (2) lateral support tubes.
5. Casters: Heavy-duty wheels, swivel/locking type.
6. Medical Paper Roll holder, 30-inch wide
7. Drawers: Two (2) drawers, 20-inch wide by 20-inch deep by 6-inch high.

1.21 VENTILATED CABINETS [212]

A. Cabinet Type-A (Tall Cabinet, Swing, 2-Door): Purafil – Model CA-2000V.

1. Cabinet Size: **55-inch long by 27-inch wide by nominal 85-inch high.**
2. Material: CRS.
3. Sealent: Joints are sealed with RTV silicon rubber.
4. Doors: Swing doors on front only.
5. Gasket: Door gasket is compressible
6. Shelves: Five (5) adjustable shelves, perforated.
7. Airflow: 1000 CFM allows for 100 percent of recirculation air.
8. Accessories:
 - a. Stainless steel cabinet hardware.
 - b. Ventilation Cuff for Tall Storage Cabinets.
 - c. VFD Keypad

1.22 IMAGING SYSTEM [250]

A. Basis-of Design Many: Lodox, Exero-dr high speed digital radiology with low emission and scatter radiation.

B. Full-Body Imaging System (X-Ray with Equipment Cabinet)

1. Image Quality
 - a. Contrast resolution: > 16 000 grey levels (14 bits) - After log compression
 - b. Fundamental pixel size: 60 µm (1x1 binning)
 - c. Maximum size: 1 800 mm x 680 mm (70.9" x 26.8") (full body size, measured at lowest table height on tabletop)
2. Scanner Throughput
 - a. Linear scanning rate or speed (3 settings): 35 mm/s, 70 mm/s, and 140 mm/s
 - b. Beam width (FWHM @ 1000mm from focal spot): 1.4 – 2.8 mm
 - c. Instantaneous frame rate (X-ray exposure duration at any one point): 22 – 88 milliseconds small slit
 - d. Full field scan time (AP): <13 seconds (nominally 12.98 s at normal speed)
 - e. Time from “end-of-scan” until a diagnostic image becomes available on the DVS screen: < 15 seconds (normal resolution image on a stand-alone 100 Mbits/s ethernet base-T network)

- f. Best case time between two successive X-rays on the same body: 28 seconds (provided heat capacity of X-ray tube < 20%)
3. Image Flexibility
 - a. Radial angles: 0 to 90 degrees. The supine or prone body can be X-rayed in any radial angle from AP (or PA) to the supine lateral positions.
 - b. Caudal-cranial / Cranio-caudal angles: 0 to 10 degrees. Projections can easily be accomplished by angling imaging transversely tabletop as needed.
 - c. Longitudinal angles: The trolley (gurney) top height can be adjusted vertically by 802.5 to 1 142.5 mm. Adjusting only one side of the trolley gives Trendelenburg angles up to ± 10 degrees.
4. Machine Dimensions
 - a. Weight: 1 500 kg / 3 307 lbs
 - b. Maximum dimensions : L x W x H: 2 810 mm x 2 276 mm x 2 271 mm (110.6" x 89.6" x 89.4")
 - c. Room height requirement: 2 450 mm (96.5")
 - d. Operation envelope: L x W x H: 2 834 mm x 2 322 mm x 2 322 mm (111.6" x 91.4" x 91.4")
 - e. Ideal room area: L x W 6 000 mm x 3 000 mm (236.2" x 118.1")
5. Detector System
 - a. Detector: Proprietary ultra-low noise TDI CCD detector
 - b. X-ray to light conversion: Gadox = GdOS2: Tb
6. Power
 - a. The 208v/3p for system structure power

C. Smart Trolley

1. Dimensions : L x W x H: 2 448 mm x 704 mm x 803 mm (96.4" x 27.7" x 31.6")
2. Weight capacity & positioning: 300 kg (660 lbs.). Height can be adjusted from 802.5 to 1 142.5 mm. Allows Trendelenburg angles ± 10 degrees. Automatically rises and lowers to accommodate C-arm movement when shifting from AP to lateral orientation.
3. Body loading / unloading: Brake function - lock trolley in desired position.
4. Tabletop attenuation (aluminum equivalence): Bariatric (300 kg): 1.5 mm (max)

1.23 FLOOR SCALE [201]

A. Recessed Floor Scale: Mopec – Model BB155

1. Scale Size: 72-inches by 48-inches.
2. Material: Stainless Steel
3. Pit frame: is one-piece welded unit no field welding required.
4. Pit Dimensions: are determined by the pit frame and accessories [see structural drawings]
5. Electrical: a 3/4-inch diameter conduit from scale, under slab and up inside the wall, interface cable is recommended
6. Scale Controller: a wall mounted touchscreen panel should be provided.

1.24 BONE BOILING KETTLE [235]

A. Electric Steam Tri-leg Kettle by Southbend, Model KELS-100, 24kW, 100 Gallon (379 Liter)

1. Size: KELS-100, in (mm) 35.5" D (902) by 48" H (1219) by 40" W (1016)
2. Self-generating, electric, tri-leg kettle, 208 VAC, 3 Phase, 50/60 Hz.
3. ASME Code stamped, National Board Registered, c-CSA-us and NSF certified
4. Design Intent: A double wall kettle interior shall form a steam jacket around the lower 2/3 of the kettle.
5. The jacket enclosure shall contain distilled water which is factory sealed.

6. The bottom of the kettle shall be of hemispherical design for superior heat circulation.
7. Kettle will be mounted on 3 stainless steel tubular legs fitted with a 4-hole adjustable foot for securing unit to the floor.

B. Construction:

1. shall be all welded #4 finish stainless steel type 304.
2. The liner shall be standard 316 for high acid content cooking.
3. The controls shall be integrally mounted and shall include:
 - a. a power switch,
 - b. thermostat,
 - c. pilot light,
 - d. low water light,
 - e. vacuum/ pressure gauge,
 - f. safety valve,
 - g. low water shut off.
4. Shipping Weight: KELS-100, 480 lbs. (218 kg)

C. The kettle shall be standard with removable elements.

1. The 100-gallon models are supplied with a spring-assist, hinged, stainless steel, domed cover.
2. The kettle shall include a 2" (50 mm) draw-off valve with perforated strainer.
3. The kettle shall operate in a temperature range of 165°F to 285°F (74°C to 140°C) at a maximum pressure of 50 psi (345kPa). Includes faucet bracket

D. Accessories:

1. Single pantry faucet with swing spout (SF-18)
2. Double pantry faucet with swing spout (DF-18)
3. One piece lift off cover (C-)
4. Triple basket assembly (TBA-)
5. Solid stainless-steel disc for draw-off valve (TSS-)
6. Graduated measuring strip (CMS-)
7. Strainer hook (SH)
8. Draw-off valve hose kit (DVHK-2)
9. Calibrated thermostat dial "F"
10. Perforated strainer for draw-off valve (TPS-)

1.25 30-BODY WALK-IN COOLER (Body Refrigerator) [248]

A. Construction: NO FLOOR 32'-10" X 22'-6" X 10'-5" (L) (W) (Ht.)

1. Dow RF 400 High Density Foam Rail (Tongue & Groove), BASF Autofroth 100-B-1103 Resin / 9300A Isocyanate High Density Insulation (Foam in Place) / NSF Approved / LARR #12678
2. Wall Thickness: 4 Inch High Density Rail
3. Wall Finish (Unexposed Exterior): 26ga. Stucco Embossed Galvanized Steel (Standard) Wall Finish (Interior): 22ga. Smooth White Galv. Steel with Anti-Microbial Wall Finish (Exposed Exterior): 22ga. Smooth White Galv. Steel with Anti-Microbial
4. Ceiling Type: Cam Down Ceiling-Requires 6 inches Overhead Clearance
5. Ceiling Thickness: 5 Inch High Density Rail
6. Ceiling Finish Interior: 22ga. Smooth White Galv. Steel with Anti-Microbial
7. Ceiling Finish Exterior: 26ga. Stucco Embossed Galvanized Steel (Standard)
8. Door Size: 48" X 84" (W) (Ht.) 2 Heated Door Flush Style Door
9. Door Finish Interior: 22ga. Smooth White Galv. Steel with Anti-Microbial
10. Door Finish Exterior: 22ga. Smooth White Galv. Steel with Anti-Microbial
11. Door Accessories:
 - a. 2 Hold Open Hinge after 130° opening and manually pushed to close
 - b. 4 Non-Spring-Loaded Hinge
 - c. 2 Handle / Strike Key/Padlock

- d. 2 Door Closure K-1094
 - e. 2 Heated Door
 - f. 2 Kickplate Ext. & Int.
 - g. 2 Flush Style Door
12. Accessories:
- a. 8 48" Vapor Proof LED Light Fixture
 - b. 4 Junction Box - Blank (Foamed In Place)
 - c. 2 Modularm IP-1, panic alarm and light switch
 - d. 2 Modularm MC-1, magnetic contacts
 - e. 162 6" Cove Base (Ln Ft.) with 22ga. Smooth White Galv. Steel with AntiMicrobial
 - f. 108 1-1/2" x 1-1/2" Ceiling Tie-Down Angle w22ga. Smooth White Galv. Steel with Anti-Microbial
 - g. 108 1-1/2" x 2-3/4" Floor Tie-Down Angle with 16ga Smooth Galv.
 - h. 1 Misc. Trim, Butyl, Silicone, Top Cap trim, Plugs and Extra hardware.
 - i. 20 1" x 4" Vertical closure trim with 22ga. Smooth White Galv. Steel with AntiMicrobial
13. Buy-Outs:
- a. 2 11GA Stainless Steel ceiling Support with Suspended Brackets
 - b. 1 Custom Control System (Total Control)
 - c. 1 Odor Control (Camfil System)
 - d. Refrigeration with 100% Redundancy System:
14. SPLIT SYSTEM - Remote- Air-Cooled
- a. 2 RFO350E4SEA - SCROLL Unit - 3.5HP - R448A 208/230 - 3ph - 60hz. 28,482BTU's
15. INCLUDES: fixed high/fixed low pressure control standard defrost kit Liquid line with components: Sealed Filter & Sight Glass - Air Defrost Timer 4 RL6A130ADA LOW PROFILE R448A AIR DEFROST WALK-IN UNIT COOLER (115-/1/60HZ)
16. INCLUDED: Dual Steel EC Motor, Air defrost, thermostatic expansion valve Electronic Room Thermostat / Liquid Line Solenoid Valve 2 4 Years Extended warranty.
17. Camfil System (Odor Control Option)

1.26 BARIATRIC TRANSFER CARRIER [200]

A. Bariatric Transfer Carrier – Mopec – Model DC400

- 1. Used in conjunction with Wall Mounted Autopsy Sinks or as a simple viewing Stretcher.
- 2. Weight capacity: 1,000 Lbs
- 3. Top is non-removable and includes a drain
- 4. Total-lock caster system with non-corrosive 8" heavy-duty wheels.
- 5. Cart top measures 80.5" x 40" x 1-1/2" return flange of 2".
- 6. Optional frame and cover available for Discreet Transport can be ordered separately.
- 7. Does not elevate or tilt.

1.27 TRANSPORT CARRIER [202]

A. Autopsy Cart Elev w/ GA100 Top – Mopec – Model DB100

- 1. DB000 Autopsy cart with GA100 Top
- 2. All stainless-steel construction
- 3. Dimensions: 80.5" Long x 32" Wide x 35" High with one side elevation to 42-1/2"
- 4. Tilting mechanism: Hand crank with hydraulic lift system with 7-1/2" of lift adjustment.
- 5. Tilting only on one side of the cart.
- 6. Heavy duty 1.5" stainless steel tubing frame.
- 7. Heavy duty 8" casters with Total Lock.

8. Weight capacity 500 pounds.
9. GA100: Heavy-duty stainless-steel construction (with or without drain hole).
10. ALL DA, DB, DC, DD, and DF series carts are compatible with all CA, CB, and CC series autopsy sinks.

1.28 REFRIGERATORS [216 & 205]

A. Refrigerator Type A (2 Door Upright) – Mopec – Model KG200

1. Stainless steel front, aluminum end panels and interior. Heavy duty, epoxy coated steel shelves.
2. 3" non-CFC polyurethane foam insulation
3. Self-closing doors with chrome plated floor line handles. Magnetic snap door gasket. Cylinder lock in each door.

B. Refrigerator Type B (1 Door Upright) – Mopec – Model KG100

1. Stainless steel
2. 4 swivel casters (5 3/4"Ø)
3. Key door lock
4. Magnetic door gaskets for positive seal
5. 3 adjustable shelves

1.29 ROLLING PRIVACY SCREEN [241]

A. Mobile Three Panel Privacy Screen (Antimicrobial) – R&B Wire Products, Inc. – Model PSS-3C/AML

1. Hinged 3-panel design. White powder coated tubular base and frame. Wide Base with minimum (4) 2" wheel casters.
2. Approximate size (when fully extended:) 81"L x 69"H. Individual panels: 27"W x 55"H, b.o. screens 17.5" a.f.f.
3. Antimicrobial, flame-retardant vinyl panels, washable, color as selected from manufacturer's full range.
4. Self-closing doors with chrome plated floor line handles. Magnetic snap door gasket. Cylinder lock in each door.

PART 2 - EXECUTION

2.1 INSTALLATION

A. Install equipment level and plumb, according to manufacturer's written instructions.

1. Connect equipment to utilities.
2. Provide cutouts in equipment, neatly formed, where required to run service lines through equipment to make final connections.

B. Complete equipment assembly where field assembly is required.

1. Provide closed butt and contact joints that do not require a filler.

2. Grind field welds on stainless-steel equipment until smooth and polished to match adjacent finish.
- C. Install equipment with access and maintenance clearances that comply with manufacturer's written installation instructions and with requirements of authorities having jurisdiction.
- D. Built-In Equipment: Place units in final location after finishes have been completed in each area. Securely anchor to supporting substrate with concealed fasteners where possible. Verify that clearances are adequate for proper function and that rough openings are completely concealed.
 1. Seal joints between built-in equipment and adjoining construction.
- E. Freestanding and Countertop Equipment: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate equipment.

2.2 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage factory authorized service representatives to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 1. Perform visual, mechanical, plumbing and electrical inspection and testing for each product according to manufacturers' written recommendations. Certify compliance with each manufacturer's equipment performance parameters.
 2. Leak Test: After installation, test for leaks. Repair leaks and retest until no leaks exist.
 3. Operational Test: After installation, start units to confirm proper operation.
 4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and components.
 5. After making corrections, retest products that failed to perform.
 6. Where equipment is connected to exhaust system, adjust equipment, building exhaust fans, and building HVAC systems, or replace equipment and make other corrections until tested equipment performs.
 7. Coordinate field testing of equipment connected to exhaust system with requirements of Division 23 Sections "Testing, Adjusting and Balancing for HVAC."
- C. Product will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

2.3 CLEANING AND PROTECTION

- A. After completing installation of equipment, repair damaged finishes.
- B. Clean and adjust equipment as required to produce ready-for-use condition. Adjust hardware and moving parts to function smoothly and lubricate as recommended by manufacturer.
- C. Occupancy Adjustments: When requested within 12 months from date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to Project during other than normal occupancy for this purpose.
- D. Protect equipment from damage during remainder of the construction period.

2.4 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain units.

END OF SECTION