

REBID
NEW HANOVER COUNTY
REQUEST FOR BIDS
JUDICIAL BUILDING ELEVATORS 6 AND 7 MODERNIZATION
RFB # 22-0548



COUNTY COMMISSIONERS

JULIA OLSON-BOSEMAN, CHAIR
DEB HAYS, VICE-CHAIR
JONATHAN BARFIELD, JR.
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CHRIS COUDRIET, COUNTY MANAGER

Section 1 – Advertisement

REBID
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REQUEST FOR BIDS
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Bids addressed to Sara Warmuth, Chief Facilities Officer, 200 Division Drive, Wilmington, NC 28401 and marked “**REBID RFB# 22-0548 JUDICIAL BUILDING ELEVATORS 6 AND 7 MODERNIZATION**” will be accepted until **3:00 P.M. EST, Friday, June 17, 2022.**

Bids may also be emailed to: swarmuth@nhcgov.com. Deadline for receipt of Bids via email is **3:00 P.M. EST, Friday, June 17, 2022.**

Instructions for submitting bids and complete requirements and information may be obtained by visiting the County’s website at <https://finance.nhcgov.com/purchasing-solicitation/open-and-closed-bids/> or by contacting Sara Warmuth at swarmuth@nhcgov.com.

New Hanover County reserves the right to accept or reject any or all Bids and to make the Award which will be in the best interest of the County.

Released: May 25, 2022

Section 2 – Instructions and General Conditions

2.1 – Schedule

Date	Action
May 25, 2022	RFB issued.
Tuesday, May 31, 2022, 10am	Optional pre-bid meeting onsite at New Hanover County Judicial Building at 316 Princess Street, Wilmington, NC.
Thursday, June 2, 2022, 12 pm	Deadline for questions. All questions must be submitted in writing to Sara Warmuth, Chief Facilities Officer (swarmuth@nhcgov.com).
Friday, June 3, 2022	Questions will be answered via written addendum.
Friday, June 17, 2022, at 3:00pm	Deadline for receipt of bids.

2.2 – Preparation of Bid

2.2.1 Bidders are instructed to submit their bid in a sealed envelope clearly marked **“REBID RFB# 22-0548 JUDICIAL BUILDING ELEVATORS 6 AND 7 MODERNIZATION”** Bids may also be emailed to: swarmuth@nhcgov.com.

2.2.2 The bid shall be submitted by **3:00 P.M. EST, Friday, June 17, 2022**.and addressed to:

New Hanover County
Facilities Management
Attn: Sara Warmuth, Chief Facilities Officer
200 Division Drive
Wilmington, NC 28401

Or Send your Bid via email to: swarmuth@nhcgov.com

2.2.3 **Completion of Bid Form (Price Sheet):** Bidders are expected to examine the specifications herein, the schedule and all instructions. Failure to do so will be at the bidder’s risk. Each bidder shall furnish the information required on the price sheet and exhibits(s). Bids **must** be submitted on the price sheet and exhibit A contained in this bid package. Bids submitted that are not on the attached price sheet and exhibits will be rejected. **BIDS NOT SIGNED WILL BE DEEMED NONRESPONSIVE AND REJECTED.**

All prices and notations shall be written in ink or typed. Discrepancies between words and numerals will be resolved in favor of words.

Changes or corrections made in the bid must be initialed by the individual signing the bid. No corrections will be permitted once bids have been opened.

2.2.4 No telephone or facsimile bids will be considered. Bids received after the time and date for closing will not be considered.

2.3 – Site Visit

An optional pre-bid meeting and site visit will be conducted on Tuesday, May 31, 2022, at 10am. The meeting will be held at the New Hanover County Judicial Building located at 316 Princess Street, Wilmington, NC 28401.

2.4 – Questions

Questions concerning the specifications in this Request for Bids (RFB) should be directed to the Sara Warmuth, Chief Facilities Officer at swarmuth@nhcgov.com. Questions will be received until **Wednesday June 2, 2022, at 12:00 pm**. An addendum summarizing all questions and answers will be posted to the County's website. Bidders who have notified the County of their intent to submit a bid along with the email address will be sent the addendum upon posting.

2.5 – Communication

Bidders may not have communications, verbal or otherwise, concerning this RFB with any personnel or boards from New Hanover County, other than the person listed in this section which is Sara Warmuth, Chief Facilities Officer email swarmuth@nhcgov.com. If any vendor attempts any unauthorized communication, the bid may be rejected.

2.6 – Intent to Submit

All Bidders who intend to submit a bid on this project should send an email to swarmuth@nhcgov.com including pertinent contact information. Upon receipt of this notification, most recent building plan will be shared with you, if desired. This will also ensure that you receive any addenda issued for this RFB; if applicable.

2.7 - Cost of Preparation of Response

Costs incurred by prospective Bidders in the preparation of the response to this Request for Bids are the responsibility of the Bidder and will not be reimbursed by The County.

2.8 – Bid Opening

Bids will not be opened publicly. The bid deadline is **Friday, June 17, 2022, at 3:00pm**.

2.9 – Award

Award “shall be made to the lowest responsive responsible bidder taking into consideration quality, performance, and the time specified in the bid for the performance of the contract.”

The County may also consider other factors such as past performance, financial stability, and availability of equipment in the consideration of award.

2.10 - Execution of Agreement

The successful Bidder will be required to enter into a formal agreement that is consistent with the bid requirements outlined within. The successful Bidder to whom the Contract is awarded by the County shall within five (5) business days after notice of award and receipt of Agreement from the County, sign and deliver to the County all required copies of said Agreement.

2.11 – Ownership of Documents

All bids and accompanying documentation will become the property of New Hanover County at the time the bids are opened and as such will not be returned to the bidder.

2.12 - Trade Secret Confidentiality

Upon receipt of your bid by New Hanover County, your bid is considered a public record except for material which qualifies as "trade secret" under N.C. General Statute 132-1.2. After opening, your bid will be provided to County staff and others who participate in the evaluation process, and to members of the general public who submit public records requests.

To properly designate material as trade secret under these circumstances, each Bidder must take the following precautions: (a) any trade secrets submitted by a Bidder must be submitted in a separate, sealed envelope marked "Trade Secret - Confidential and Proprietary Information - Do Not Disclose Except for the Purpose of Evaluating This Bid," and (b) the same trade secret/confidentiality designation must be stamped on each page of the trade secret materials contained in the envelope.

Do not attempt to designate your entire Bid as a trade secret, and do not attempt to designate pricing information as a trade secret. Doing so will result in your Bid being disqualified.

In submitting a Bid, each Bidder agrees that the County may reveal any trade secret materials contained in such response to all County staff and County officials involved in the selection process, and to any outside consultant or other third parties who assist the County in the selection process. Furthermore, each Bidder agrees to indemnify and hold harmless the County and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material, which the Bidder has designated as a trade secret.

2.13 - Withdrawal of Bids

Bidders may withdraw or withdraw and resubmit their bid at any time prior to the closing time for receipt of bids. NO bid may be withdrawn after the scheduled closing time for receipt of bids for a period of ninety (90) days.

2.14 - Equal Opportunity

The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein.

The Bidder agrees not to discriminate against any employees or applicant for employment because of physical or mental handicap in regard to any position for which the employees or applicant is qualified. The Bidder agrees to take affirmative action to employ, advance in

employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices.

Pursuant to GS 143-48, New Hanover County encourages small, minority, physically handicapped, and women firms to submit bids in response to this RFB.

2.15- Indemnity

The successful Bidder shall indemnify and hold the County, its agents and employees, harmless against any and all claims, demands, causes of action, or other liability, including attorney fees, on account of personal injuries or death or on account of property damages arising out of or relating to the work to be performed by the Successful Bidder hereunder, resulting from the negligence of or the willful act or omission of the Bidder, his agents, employees and subcontractors.

2.16 – E-Verify

Pursuant to Session Law 2013-418, Contractor shall fully comply with the U.S. Department of Homeland Security employee legal status E-Verify requirements for itself and all its subcontractors. County requires an affidavit attesting to Contractor's compliance. Violation of the provision, unless timely cured, shall constitute a breach of contract.

2.17 - Insurance

Before commencing any work, the Bidder shall procure insurance in the Bidder's name and maintain all insurance policies for the duration of the contract of the types and in the amounts listed in this Agreement. The insurance shall provide coverage against claims for injuries to persons or damages to property which may arise from operations or in connection with the performance of the work hereunder by the Bidder, his agents, representatives, employees, or subcontractors, whether such operations are done by himself/herself or anyone directly or indirectly employed by him/her.

Limits of insurance required are detailed in the attached Draft Contract.

2.18 - Addendum

The bid package constitutes the entire set of instructions to the bidder. The County shall not be responsible for any other instructions, verbal or written, made by anyone. Any changes to the specifications will be in the form of an Addendum which will be sent to all known Bidders who are listed with the Finance Office and posted on the County's website.

You may visit our website at <https://finance.nhcgov.com/purchasing-solicitation/open-and-closed-bids/>, or email swarmuth@nhcgov.com to check for the issuance of any addenda before submitting your bid.

2.19 - Compliance with Bid Requirements

Failure to comply with these provisions or any other provisions of the General Statutes of North Carolina will result in rejection of bid/bid.

2.20- Successful Bidder

The successful Bidder who is not currently registered as a vendor in the County's vendor database will be required to register. Please visit the County's website at [Vendor Self Service \(munisselfservice.com\)](http://munisselfservice.com). For questions, contact David Maurizzi at 910-798-7192 or email dmaurizzi@nhcgov.com.

2.21 – Federal Uniform Guidance

If the source of funds for this contract is federal funds, the following federal provisions apply pursuant to 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II (as applicable): Equal Employment Opportunity (41 C.F.R. Part 60); Davis-Bacon Act (40 U.S.C. 3141-3148); Copeland "Anti-Kickback" Act (40 U.S.C. 3145); Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708); Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387); Debarment and Suspension (Executive Orders 12549 and 12689); Byrd Anti-Lobbying Amendment (31 U.S.C. 1352); Procurement of Recovered Materials (2 C.F.R. § 200.322); and Record Retention Requirements (2CFR § 200.324).

2.22– Estimated Activation Period

The Bidder shall be prepared to sign a contract within five (5) business days of bid award. Services must begin within ten (10) days of receipt of the fully executed contract and either purchase order or notice to proceed, and to continue until services are completed.

2.23– Term and Time/Completion Schedule

Work will commence upon issuance of a purchase order or notice to proceed and will continue until services are completed. All work must be completed prior to June 30, 2023.

2.24 - Right to Reject Bids

New Hanover County reserves the right to accept or reject any or all bids and to make the award which will be most advantageous to the County.

2.25 – Draft Contract

A draft contract is attached for review by the Bidder.

2.26 – Certificate of Authority

Subject to several statutory exceptions, a business entity incorporated or organized in a state other than North Carolina must obtain a certificate of authority from the North Carolina Secretary of State prior to transacting business in the State. See [G.S. 55-15-01\(a\)](#) (business corporations); [G.S. 55A-15-01\(a\)](#) (nonprofit corporations); [G.S. 57D-7-01\(a\)](#) (limited liability companies); [G.S. 59-902\(a\)](#) (limited partnerships); [G.S. 59-91\(a\)](#) (registered limited liability partnerships); [G.S. 55B-16\(a\)](#) (professional corporations). When the requirement applies, the foreign entity transacting business in the State is responsible for obtaining a certificate of authority – not the domestic (i.e.,

North Carolina) corporations, public entities, or individuals with whom the foreign entity might contract.

2.27 – MWBE Form

Bidders are instructed to complete the attached form and submit with their bid proposal.

Section 3 – Scope of Services

1.0 GENERAL

- 1.01 The BIDDER shall comply with all applicable Federal, State and Local codes, ordinances and requirements of all agencies having jurisdiction. The BIDDER will be responsible for obtaining all necessary licenses to complete the scope of work.
- 1.02 Performance: The quality of workmanship concerning the services provided for automotive body repair and painting must reflect professional work and conduct.

2.0 SCOPE OF SERVICES

PLEASE SEE ATTACHED EXHIBIT A

3.0 PRICE SCHEDULE

- 3.1 The contract will be based upon estimated cost to perform the work as outlined in the Scope of Services. Prices proposed by the bidder shall include anything necessary to complete the work including mobilization, insurance, labor, equipment, fuel, overhead, profit, permits and applicable taxes, if any. No minimum or maximum quantity is implied or inferred by this contract.
- 3.2 All bids must be submitted using the attached Price Sheet/Bid Form.

4.0 BIDDER SAFETY REQUIREMENTS

- 4.1 BIDDER shall comply with all local, state and federal safety rules and regulations.
- 4.2 The BIDDER shall be solely responsible for maintaining safety at all work sites. The BIDDER shall take all reasonable steps to insure safety for both workers and visitors to include traffic control.

5.0 OTHER LAWS AND REGULATIONS

BIDDER will comply with any and all applicable federal, state and local standards, regulations, laws, OSHA and all health and safety regulations.

Section 4 – Bid Sheet

NEW HANOVER COUNTY
JUDICIAL BUILDING ELEVATORS 6 AND 7 MODERNIZATION

Price Sheet/Bid Form
REBID RFB # 22-0548

TO: Sara Warmuth, Chief Facilities Officer
New Hanover County
Facilities Management
200 Division Drive
Wilmington, NC 28401

DATE: _____ CONTRACTOR: _____

OFFICE PHONE: _____ CELL PHONE: _____

ADDRESS: _____

EMAIL ADDRESS: _____

UNIT PRICE BID: The undersigned, having carefully examined the Instructions to Bidders, New Hanover County REBID RFB # 22 –0548 – JUDICIAL BUILDING ELEVATORS 6 AND 7 MODERNIZATION, and draft contract, including the following addenda;

ADDENDUM # _____ DATED: _____

As well as the premises and conditions affecting the work, proposes to furnish all services, labor, materials and equipment called for to complete the project in accordance with the contract documents for the following unit price amounts.

Total Project Cost: _____

Signature

Title

State of Incorporation

Section 5 – Statement of Assurances and Compliance

NEW HANOVER COUNTY

REBID JUDICIAL BUILDING ELEVATORS 6 AND 7 MODERNIZATION

STATEMENT OF ASSURANCES AND COMPLIANCE

The undersigned, as bidder certifies that the General Conditions and Instructions to Bidders, the Draft Contract, the Scope of Work and the Price Sheet/Bid Form found in the bidding documents have been read and understood.

The bidder hereby provides assurance that the firm represented in this bid, as indicated below:

- 1) Will comply with all requirements, stipulations, terms, and conditions as stated in the bid document:
- 2) Currently complies with all applicable State and Federal Laws:
- 3) Is not guilty of collusion with the vendors possibly interested in this bid or in determining prices to be submitted: and
- 4) Such agent as indicated below is officially authorized to represent the firm in whose name this bid is submitted.

_____	_____
Name of Firm	Name of Firm Representative
_____	_____
	Title

Address of Firm	

Telephone Number	

Date	

State of Incorporation	

Section 6 – Minority & Women Business Enterprise (MWBE) Program

**Minority & Women Business Enterprise (MWBE) Program
FORM**

A. Authorized Representative

I HEREBY AFFIRM THAT:

I am [name] _____, [title] _____,
and the duly authorized representative of [Business Name] _____
and that I possess the legal authority to make this statement on behalf of myself and the
Business for which I am acting.

B. Affirmation Regarding MWBE Program Acknowledgement and Compliance

I FURTHER AFFIRM THAT:

I am aware of and intend to comply with the County’s MWBE Program. As such [check one]:

_____ The Business is certified as a woman- or minority-owned business by an accepted
agency. (Attach proof certification)

_____ The Business is a woman- or minority-owned business but has not been certified by an
accepted agency. (Attach document of ownership such as articles of incorporation, current
business license, K-1 of the most recent business tax return.)

_____ The Business is not a woman- or minority-owned business; however, the bidder
acknowledges the MWBE policy and if it should become necessary to subcontract some portion
of the work at a later date or obtain materials or services in conjunction with this
solicitation, the bidder will institute good faith efforts to comply with all requirements of the
MWBE program in providing equal opportunities to MWBEs.

Signature: _____

Date: _____

Part 1 GENERAL

**New Hanover County Judicial Building
316 Princess St
Wilmington NC, 28401**

ALL SPECIFICATIONS WITHIN THIS DOCUMENT REFERENCE THE SPECIFICATIONS FOR THE NEW HANOVER COUNTY JUDICIAL BUILDING ELEVATOR DOCUMENT. AMMENDMENTS AND EXCEPTIONS ARE LISTED WITHIN THIS DOCUMENT.

Part 1.01 SUMMARY

Section Includes: Two (2) electrically driven, oil-hydraulic elevator system complete installation located at New Hanover County Judicial Building Wilmington, N.C. 28401. Pre-engineered elevator products, systems and such are not acceptable and shall be rejected.

Section One is applicable in full hereto:

The installation work on this elevator shall include all manpower, tools, ladders, hoists, scaffolding, supervision, insurance, materials, parts, elevator equipment, cylinder hole drilling work, supplies, hardware, elevator electrical work and devices, lubricants, hydraulic fluid, welding, scheduling, cleaning, painting of elevator equipment and steel work and all other listed items associated directly with the elevator work and as required hereinafter. Additionally, refer to the Elevator Specifications, General Conditions and other specification sections, any Special Project Conditions, Instructions to Bidders, project manual and such that impact this project and/or any other instructions or requirements pertaining to complete site examination, bidding requirements, project schedule, submittals, working hours and overall elevator work related schedules and any other items necessary for project work compliance.

The Elevator Contractor shall serve as the Prime Contractor for this project. The Elevator contractor shall have all the applicable licenses and permits to perform elevator work and associated work in the State of North Carolina and any other applicable license and permits.

This project is a "time is of the essence" contract, to be coordinated by the Elevator Contractor. All sub-contractors shall be contracted through the Prime Contractor. Prime Contractor shall be responsible for ensuring that all sub-contractors are qualified to perform the contracted work and that sub-contractors comply with all local, state and any other applicable permits that are required for the subcontracted work.

1. Provide new: Oil-hydraulic pumping unit with special EV40 valve design or equal and all the required or associated assembly features specified hereinafter.
2. Provide new: All hydraulic pressure piping, shut-off valves, fittings, components, piping support stands, and the like as specified hereinafter.
3. Replace: Use the existing jack hole, jack, and cylinder.
4. Retain: Use existing platform and car frame assembly.
5. Provide new: Hydraulic fluid to completely fill the hydraulic system as specified hereinafter.
6. Provide new: Complete assembly of hoistway and car doors at each landing of the elevator as specified hereinafter.
7. Provide new: All required electrical wiring in the elevator machinery room and on the elevator car, including traveling cables and wiring throughout the elevator hoist way. All such wiring shall be new and fully enclosed in conduit or other enclosed raceways, except for new, flexible, electrical traveling cables. Machinery room wiring shall all be new and in new conduit with all new electrical boxes, fittings and such. Refer to specifications listed hereinafter.
8. Provide new: Car and hoistway door operator machinery with complete "closed loop" control system; door hangers and tracks; door interlocks and SmarTork™ or equal door closers and all related hardware as described hereinafter.
9. Provide new: Digitally operated, programmable, elevator controller system as described hereinafter.
10. Provide new: All available energy savings features, including the design of the elevator control system, inverter type elevator motor control and oil control valve system; automatic dimming system for car lighting and auto cut-off of cab exhaust blower; LED lighting in cab and signal fixtures and any other available features, all as described hereinafter.
11. Provide new: All safety devices, both electrical and mechanical, for the elevator equipment related to the door related controls and safety devices.

12. Provide new: Caution and low overhead clearance signs on top of cab and on the walls above the top landing and railing on top of cab, all as described hereinafter.
13. Retain: Steel pit safety ladder.
14. Provide new: All other devices or equipment involved in replacement of the existing equipment shall fully comply with the ASME A17.1-2019 Safety Code for Elevators as well as any other applicable codes which apply to this elevator renovation or replacement work. Refer to specifications listed hereinafter.
15. Provide new: Elevator cab complete with design features specified hereinafter.
16. Provide new: Car doors panel faced with stainless steel on cab interior side of panels as described hereinafter.
17. Provide new: Car operating panel, car position indicator, landing operating panels and landing signal fixtures, all as described hereinafter.
18. Provide: Final connections from the main power disconnect switches, elevator cab lighting power supply and fire alarm/elevator recall system connections and emergency telephone connection, all of which are to be extended to the machinery room for connection to the elevator electrical controller terminal connections. Comply with NEC 70 with such work requirements.
19. Provide: Suitable OSHA protection/barricade at any landing where work is being performed to prevent possible bodily injury.
20. Provide: All other requirements as stated or required hereinafter.
21. Provide: Complete warranty and elevator maintenance provisions, all in compliance with requirements described hereinafter.
22. Provide: Work on elevator shall continue, in uninterrupted manner, from the time the elevator work commences until the work has been fully completed, all as described hereinafter.

General Construction Work required to be in Elevator Contractor's work - Furnish and install the following:

1. Sufficient cooling of the elevator machinery room spaces to comply with the ASME A17.1 Elevator Safety Code for equipment cooling purposes. Make any additions, adjustments, alterations or provisions needed to

satisfy the cooling requirements. Air conditioning must function when elevator is on emergency generator power supply (if provided).

2. Installation of elevator main power related disconnect switch to be located in the elevator machinery room area. Electrical interlock device shall be included in the main elevator power disconnect to indicate to the elevator electrical controller that disconnect is opened manually. Disconnect shall be capable of being locked in the off position. Include dual element fuses in the main power supply disconnect of the size required by the elevator contractor. Disconnect shall be labeled with feed location. Include this circuit on emergency generator power supply (if provided).
3. Existing 480 Volts + or - 5% of normal, 3 Phase, 60 Cycle with a separate equipment grounding conductor. (Contractors shall field verify prior to submitting bids for work.)
4. Installation of a mini split air conditioning unit capable of maintaining the elevator machine room as required by the ASME A17.1 2019.
5. Installation of 120 volts, 15 amps, single phase power disconnect for car lighting, alarm bell and related circuitry. Disconnect shall be lockable in off position. Disconnect shall be located near the main power disconnect in the elevator machinery room area. Include this circuit on emergency generator power supply (if provided).
6. In the event there are any sprinklers in the elevator equipment areas, they shall be controlled by a shunt-trip device to shut off the power to the elevator machinery. The shunt-trip device shall be mounted in the elevator machinery room.
7. Provide at least two (2) GFCI rated, 120 volts, 15 amps, duplex type electrical outlets in the elevator machinery room area. Include these outlets on emergency generator power supply (if provided).
8. Pit sump pump and water separator assembly where elevators provided with Firefighters' Emergency Operation, a drain or sump pump shall be provided. The sump pump/drain shall be required to remove a minimum of 11.4m³ /h (3,000 gal/h) per single hoistway or multiple hoistway. Sump pump shall be in a sump pump recess covered by a steel plate or grill to prevent stepping into the hole.
9. Electrical outlets in the machinery room area shall be GFCI protected type. At least two (2) duplex outlets are required in that area. Must be on emergency generator power supply (if provided).
10. Provide single 120-volt electrical outlet in the pit area, non-GFCI protected, identified for sump pump use only.

11. Provide all required fire alarm and elevator recall circuits, conduits and such, including fire alarm system modules and such, connected to appropriately identified junction boxes in the machinery room area located near the elevator electrical controller panel. Coordinate with fire alarm installation contractor. The signals to be supplied to the to the elevator controller shall include at least the following:
 - A. Smoke detector operation for main floor
 - B. Smoke detector operation for alternate floor
 - C. Smoke detector operation for machinery space and/or in hoistway area
12. Install all elevator code compliant electrical lighting in the elevator machinery rooms using LED technology for reliability and lower energy usage. Mount the lighting to comply with the latest elevator code requirements of 19-foot candles, measured at the floor, throughout the area. Locate the light switch near the machinery room door strike jamb inside the elevator machinery room area. Must be on emergency generator power supply (if provided).
13. Provide pit lighting system in elevator pit area. Pit lighting shall be dual strip design, LED type, vapor proof, 48" long fixtures, 5000 lumens, clear lens, mounted horizontally below the elevator entrance threshold toe guard in the pit area. Light switch shall be located near the top of the pit access ladder.
14. Provide a dual 120-volt, 15 amp, GFCI type, UL rated PVC electrical receptacle in the elevator pit area equipped with a self-closing cover.
15. Machinery room door shall be self-closing to the fully locked position with suitable self-locking hardware requiring a key for entry. Also, appropriate signage shall be installed on the door indicating, "DANGER - ELEVATOR EQUIPMENT. NO UNAUTHORIZED ENTRY."
16. Patch any holes in hoistway walls.
17. Any other required elevator or building code requirements to meet the elevator, electrical and fire code as they pertain to the elevator renovation work.

Part 1.02 SUBMITTALS

- A. ***Submittal Requirements:*** Elevator Contractor shall submit all required shop drawings and other required submittals within the time frame shown

in the project document requirements as otherwise directed. Submittals shall be based on full compliance with the elevator specifications without substitutions. Maximum time period for submittal of shop drawings and other submittal requirements shall be no more than forty-five (45) days from notice to proceed with the contract. All such documents shall be submitted in the same package and not in a piecemeal manner.

B. *Product Data:* Submit all product data, shop drawings and other documents, cuts, catalog materials and /or similar documents, which adequately depict design and information on all the following items in full compliance with the elevator specification requirements, in the quantity of copies required by the Owner or Consultant.

1. Roller type guide assemblies for elevator car frames.
2. Hydraulic pumping unit complete including pump, motor, reservoir, especially designed model EV40 Blain brand or approved equal oil-control valve assembly with all suitable dimensions and characteristics of the overall unit size.
3. Special Yaskawa brand or equal elevator electrical inverter motor drive assembly including dimensions of the overall unit.
4. Elevator cab LED lighting system; elevator cab emergency LED lighting system; cab lights dimming system/exhaust blower-off system, elevator cab exhaust blower, all in compliance with the requirements listed hereinafter.
5. Hoistway door panel and frame assemblies; car door and hoistway door tracks; door operator system complete; door hangers and rollers for hoistway and car doors; car door clutch assembly; car door restrictor device or car door interlock assembly, MOW model or equal, hoistway door interlocks and pick-up devices; SmarTork™ brand or equal, reel type hoistway door closer devices and miscellaneous hardware.
6. Gorman brand, or equal, hydraulic cylinder packing materials and seals, complete.
7. Hydraulic oil pressure line components furnished that are specified hereinafter, including listing all fittings, devices and piping sizes and thicknesses.
8. List of all painting products along with type and manufacturer to be used on the project.

9. List of trouble-shooting system components, tools, components and miscellaneous other such requirements associated with the new equipment being furnished on the elevator system.
10. List and description of all sealants and related products.
11. List of all items to be provided to the Owner at completion of work on the project.

C. *Shop Drawings:* Submit two (2) copies (or as required by the Owner or Consultant) of the required shop or layout drawings electronically if possible:

1. Complete layout drawings showing the general location of all elevator equipment in the machine room areas.
2. Provide general schedule and drawing showing all elevator and related power requirements and branch circuit protection in the elevator machinery room.
3. Show all hydraulic piping routing, fitting locations and other such components including all piping support stands, vibration isolation, shutoff valves and so forth.
4. Electrical layout of all miscellaneous electrical work provided in elevator machinery area.
5. Elevator hoistway door entrances including doors, frames, thresholds and related support items.
6. All elevator cab design and equipment features, car lighting systems, ceiling design and dimensional data for same.
7. All car operating devices, signal fixtures and such for the elevator.

D. *Finish Selection Information:* Submit stainless finishes for hoistway door finish materials for approval.

E. *Certificates:* Elevator installation permits, inspection reports and acceptance certificates for the elevator and related work shall be provided. Additionally, copies of all other permits for construction and electrical work shall be provided. Submit the required copies of all such documents to the consultant or as otherwise advised.

F. *Operation and Maintenance Documents, Equipment & Components:* At the completion of the project and prior to final payment for the work

specified hereinafter, the following documents, manuals, materials, service tools and related items shall be provided to the Owner for this elevator work:

1. Provide two (2) copies (or number as required by the Owner or Consultant. Provide Electronically if possible) of all new elevator equipment installation instructions; adjustment instructions; maintenance recommendations; parts lists; lists of recommended spare parts; trouble-shooting instructions for elevator electrical controller equipment; electronic type motor drive system adjustments, trouble-shooting instructions and parts listing; oil control valve adjustments instructions and trouble- shooting guide; roller guide adjustments and parts list; door hanger and hanger up-thrust adjustments; door closer adjustments; signal fixture cleaning instructions; stainless steel cleaning instructions; door operator machinery set-up and adjustments; hoistway door interlock adjustments and related information for all elevator mechanical and electrical components. All this information shall be provided in heavy duty, three ring binders labeled for the project involved.
2. Provide one (1) door operator electrical adjustment tool or device for use in re-adjusting the door equipment. Diagrams for the elevator controller system, hoistway wiring, cab wiring and signal fixture wiring. Include "pull sheets" for all field wiring listing wire numbers and connection points in all locations. Include these drawings in the manual described in item no.1 above.
3. Provide two (2) copies of all required information to allow the elevator control system components to be efficiently and effectively analyzed including all passwords, key words, adjustment parameters, test procedures, legends, reference codes and other important functions to activate the diagnostic portion of the elevator controller systems. Include this information in the manuals described in item no.1 above. Provide complete instructions for changing the microprocessor operating parameters where needed.
4. Provide one (1) set of all wiring diagrams and wiring pull sheets with laminated protection to aid in extending the useful life of the diagrams. Mount on rack in the elevator machinery room area for easy access by elevator maintenance technicians.
5. Provide the following archival items for use by Owner:
 - a. One (1) copy of all microprocessor programs in suitable USB format for use for reprogramming purposes which can be utilized in all aspects of programming of the elevator control

systems. The Elevator Contractor is obligated to replace any troublesome or defective computer programs which occur during the one (1) year warranty without additional charges to Owner.

- b. Provide one (1) spare set each of all special electronic tools or hand-held computers, SIM cards, computer chips, USB stored controller program thumb drives, special devices of any type, etc., which are necessary for adjustment or programming of the elevator controller systems. This includes all such control programs necessary for all elevator electrical systems provided under this contract, including elevator motor drive systems, elevator main controller and door operator systems. These programs shall be suitable to reinstall the programs in the event of control board replacement due to equipment failures, vandalism, lightning strikes and such other unforeseen event.

Part 1.03 QUALITY ASSURANCE

- A. ***Elevator Equipment Manufacturer Qualifications:*** An approved elevator manufacturer regularly engaged in manufacturing elevator equipment of the various types required for this project that has been manufacturing equipment of the quality and design required for this project for at least ten (10) years:
 1. The balance of the major parts or components of the elevator equipment shall be manufactured in North America or alternatively approved in Part 2 - Products.
 2. The manufacturer shall have a documented, on-going, quality assurance program.
 3. Only new components shall be acceptable. No rebuilt, reconditioned or used elevator equipment shall be brought onto the elevator worksite by the Elevator Contractor. The only previously used elevator components are those items clearly identified hereinafter.
 4. In the interest of high quality, comprehensive elevator system engineering integrity, the following items shall be completely engineered and/or manufactured by a single firm or by alternative suppliers listed hereinafter:

- a. Energy efficient elevator motor inverter drive system or as approved in Part 2 - Products.
- b. High quality elevator drive motor as approved in Part 2 - Products.
- c. Special oil control valve as approved in Part 2 - Products.
- d. Electronic door protection or as listed in Part 2 - Products.
- e. Elevator cab ceiling assembly and lighting components as approved in Part 2 - Products.
- f. Any other products listed - or as approved in Part 2 - Products.

B. *Elevator Contractor Qualifications:* The Elevator Contractor for this work shall be a firm financially connected with one of the previously listed major Elevator Equipment Manufacturers and shall be a firm which has developed a reputation for high quality workmanship and long-lasting equipment performance as demonstrated in previous elevator installations. The Elevator Contractor shall have no less than ten (10) years satisfactory experience installing and maintaining elevator equipment equal in design, character and performance and successfully building a highly regarded reputation maintaining similar equipment for other clients. The Elevator Contractor shall also have an extensive technical and design engineering department, as part of the firm, which assists in the determination of the correct elevator system products, complete systems and various elevator components to be incorporated in elevator systems modernization or renovation projects and to regularly provide requested assistance when maintenance contracts require advanced technical skills. Firms without such internal engineering capable personnel providing required support, as direct employees within the firm are not considered acceptable Elevator Contractors for this contract.

C. *Regulatory Requirements:* The following state, federal, local and customary requirements are to be complied with for any new work provided under this contract:

1. ASME A17.1-2019 Safety Code for Elevators and Escalators, including all addenda or corrections.
2. International Building Code, latest edition.
3. State of North Carolina, Department of Labor, Elevator Bureau.

4. ASME A17.5 Code for Elevator and Escalator Electrical Equipment, latest edition.
5. NFPA 70 & NFPA 72, latest editions published at time of this solicitation.
6. Americans with Disabilities -Accessibility Guidelines (ADAAG)
7. AWS Standards - American Welding Society, latest requirements.
8. NFPA 101 Life Safety Code, latest edition.
9. Any other State, Federal or Local Codes applicable to the elevator renovation work.

D. *Fire-rated Entrance Components:* The new elevator hoistway entrance doors and all door related equipment or hardware shall comply with the applicable requirements, standards and shall all have the applicable labels required for this work.

E. *Inspection and Testing:* Elevator Contractor shall arrange, obtain and pay for all required inspections as well as installation/replacement permits and associated fees covering the work involved under this contract, as listed below:

1. Secure all State of North Carolina Department of Labor Elevator and Amusement Device Bureau and locally required permits, including payment of all associated fees.
2. Required number of copies of all such documents shall be submitted to the Owner with the turn-over documents.

Part 1.04 DELIVERY, STORAGE, HANDLING, SCHEDULING AND SITE WORK

- A. Deliver all elevator components, materials and equipment in the elevator equipment manufacturer's protective packaging, crating and the like. All packaging and related refuse shall be properly disposed of at the sole expense of the Elevator Contractor.
- B. Store materials in a dry, protected area. Protect and handle the materials in accordance with the elevator equipment manufacturer's recommendations to prevent damage to the goods. Elevator Contractor shall arrange and pay for all required off-site storage facilities which he or she may need during the execution of this contract. The Owner shall not incur any additional costs for storage, demurrage, handling or other

materials related storage expenses. Protected storage at the building site will most likely not be available; consequently, the Elevator Contractor should anticipate the need for off-site storage related to the elevator materials. Any materials that become damaged due to having been stored at the site shall be replaced at the expense of the Elevator Contractor.

- C. Elevator work on this project shall commence on the renovation schedule at the time required by the proposal documents based on information provided by the Owner or Consultant and/or the Prime Contractor. All work shall be completed as soon as possible based on working one (1) shift per normal workday and working five (5) days per week, except on elevator industry holidays. Elevator Contractor shall be allowed to work four (4) ten-hour days per week, in lieu of five (5) days per week, providing this arrangement will not impact the performance and work requirements on the project and subject to the coordination requirements of the Prime Contractor. Working in concert with any other trades in the coordination and performance of this work is critically necessary. Coordination is required to expedite the work according to the critical schedule. Interruptions in the work schedule shall not be acceptable. Expeditious completion of the elevator work is essential and critical to the operation of the building.
- D. The Elevator Contractor shall be responsible for any damage, repairs and all other expenses associated with his or her employees, and employees of sub-contractors working under the Elevator Contractor, working on this site. Elevator Contractor shall be responsible for protect the building structure, all building systems, walls, roofs and such while working on this project.

Part 1.05 PROJECT CONDITIONS

- A. ***Prohibited Use:*** The elevator system shall not be used for construction purposes or public conveyance until the elevator installation has been completely finalized and approved by the Owner or Consultant.
- B. ***Elevator Equipment Design:*** The equipment for this elevator shall be classified as custom design products specifically designed for this project. Machine-Room-Less style and other such elevator products of similar type are not approved for this elevator installation work.
- C. ***Painting Work:*** Except as otherwise indicated in the elevator technical specifications or the painting specifications section, all the following painting shall be required of the Elevator Contractor:

1. Seal and paint the machinery room walls, ceiling, door and frame. Use semi-gloss near white wall and ceiling paint, high quality, low VOE acrylic latex paint.
2. Prime and paint any new elevator equipment located in the hoistway areas. Use highly effective rust inhibitive painting products. Repaint all new elevator equipment, even if it has a galvanized metal finish.
3. Clean and repaint the exterior of the new pumping unit assembly after installation.
4. Hydraulic piping, fittings, components, piping support stands and such shall be cleaned, primed and painted after installation.
5. Thoroughly clean and coat the machined surfaces of the elevator guide rails using two (2) coats of a high quality, drying type, machinist bluing material. Use a product equal to that provided by Precision Brand Products, Inc. (Product no. 50182, 930 ml bottle) available from supplier located at 2250 Curtis Street, Downers Grove, Illinois 60515, phone no. 630.969.7200. Apply this coating when the building is not occupied due to the airborne fumes from the product.
6. Clean and repaint the guide rail support brackets.
7. Clean and repaint the pit buffers, buffer supports and top of the hydraulic cylinder equipment using gloss type black enamel paint.
8. Clean and repaint the top of the elevator cab and structural members of the elevator car frame assembly to achieve a neat and easy to clean appearance.
9. Clean and paint the elevator machinery room floor and elevator pit floor area up to the lowest landing after the other elevator work has been completed. Use high quality, durable, gray colored, high gloss floor and deck enamel for this purpose.
10. Clean and repaint the hoistway door fascia materials, door headers, toe guards and dust cover using gloss type black enamel paint.
11. Primers and Paint products shall be highest quality type, manufactured by PPG, Sherwin-Williams, Krylon, Rust Oleum and Valspar or other approved firms.
12. The entire elevator installation work shall have a professional appearance in every respect, in terms of overall painting and

workmanship and must meet the requirements of the Owner and Elevator Consultant.

Part 1.06 WARRANTY AND NON-WARRANTY ITEMS

- A. *Warranty Certificates:*** Submit elevator manufacturer's and Elevator Contractor's printed or type written project warranty certificates agreeing to repair, restore or replace materials having defects in the elevator work and related systems or products. This includes any materials having defects in the elevator work and materials or work furnished under this contract having a defect of any kind, except for obvious abuse or misuse. The warranty period shall be for a period of at least twelve (12) months from the date of Final Completion of all elevator work included in this contract. The date of Final Completion shall be as determined by representatives of the Elevator Contractor, Owner and Elevator Consultant.
- B. *Non-Warranty Parts and Equipment:*** The only parts and equipment that the Elevator Contractor shall not be required to furnish, repair, replace or refurbish as part of his or her responsibility are those made necessary as a result of major acts of vandalism, fire, floods, windstorms, civil disturbances and other unpredictable major losses.

Part 1.07 MAINTENANCE SERVICES

- A. *Elevator Maintenance Services:*** Elevator Contractor must furnish complete elevator warranty, maintenance and call-back service on this elevator for a period of no less than twelve (12) months from the final completion date:
1. At least 1.25 hours per month, in the building, based on regular monthly elevator system examinations and adjustments of the elevator. Scheduled maintenance shall be at a minimum, 1.25 hours per month, not including travel time, call-backs, scheduled or unscheduled repairs, tests or non-related routine maintenance work. Call-backs shall not, under any circumstances, be considered as preventive maintenance work. Contractor is required to provide a monthly schedule to owner.
 2. Routine maintenance work shall be performed during regular time hours of regular working days, Monday through Friday 7am to 5pm.
 3. Emergency call-backs, minor repairs, adjustments, and other required unscheduled minor repair work shall be provided on a

twenty-four (24) hours per day basis, 365 days per year, including all holidays, at no additional cost to the Owner.

4. Elevator Contractor shall respond to regular time call-backs within two (2) hours, maximum. Response time to overtime call-backs shall be no more than three (3) hours, regardless of the time of day. Entrapments shall be responded to as rapidly as possible, regardless of the time of day. These time periods are all based on the arrival time at the building, measured from the time the trouble call is transmitted to the Elevator Contractor's call center. Elevator Contractor shall advise Owner's Representative when the technician arrives on the site in response to a call-back and when the technician departs the site after restoring the elevator in response to a call-back. This information shall be immediately communicated in the form of emails sent to the appropriate Owner's Representative.
5. All elevator work shall be performed by certified elevator technicians. Mechanic's helpers are not permitted to answer trouble calls and shall only provide work such as cleaning, painting, lamp replacements or related work under the direct supervision of a certified mechanic.
6. **Monthly Maintenance Visits to include at a minimum:** Vendor shall inspect each elevator at least monthly, not including service calls. The following outlines minimum monthly maintenance inspections:

Adjustments – adjust machinery and equipment as required. Vendor shall maintain the performance times as outlined in the specifications for each unit.

Cleaning – remove accumulated dirt, dust, and rubbish from machine rooms. Hoist way doors and frames are excluded. Cab tops and door equipment shall be cleaned no less than quarterly.

Lubrication – lubricate machinery and equipment with materials recommended by the manufacturer of the specific machinery and equipment.

Repairs – Vendor shall furnish and install or repair when necessary specific equipment listed in Extent of General Coverage for each type of elevator.

Reports – Vendor to leave completed service ticket upon completion of each visit. Vendor to also email a copy of service

ticket to Electrical Supervisor. Vendor to submit quarterly reports summarizing services performed.

7. All elevator maintenance, adjustments and repair work of any type shall be fully documented, including routine maintenance services. All records shall be provided and maintained as required in Section 8.6 of ASME A17.1-2019 and as required by Owner's Representative. Written documentation shall be provided in the machinery room. Records of all maintenance, repairs, parts replacements, call-backs and other related details shall be entered into an on-line computer system where the information is constantly and always available to the Owner's Representative. No other maintenance and repair work recording program is acceptable. All work time on the elevator shall be properly documented; otherwise, the Elevator Contractor is not in compliance with the contract requirements.
8. Elevator maintenance shall include all parts and equipment, necessary tools, instruments, cleaning supplies, coatings, paints, wiping cloths, fuses, cleaning compounds, lubricants and other necessary items and all of the necessary equipment, as needed, to adjust and test the elevator system and to keep the elevator equipment in "like-new" condition during the term of the warranty and maintenance requirements. No after-market rebuilt or used parts shall be brought onto the campus for installation on the elevator.
9. Elevator Contractor shall not permit excessive call-backs or operational problems to occur on the elevator. If call-backs or operational failures are not corrected within a reasonable time, in the sole opinion and at the discretion of the Owner, the Elevator Contractor agrees, in advance, to allow the Owner to retain the services of a reputable Elevator Contractor to repair the elevator equipment. The Elevator Contractor, who installs this elevator equipment, shall be the firm responsible for paying the charges submitted by the other Elevator Contractor to repair the elevator in accordance with the requirements of the Owner. The Owner shall be the sole judge of any required repair or reconditioning work requirements.
10. All maintenance work and response to call-backs shall be provided by Elevator Contractor's own employees and work shall not be sub-contracted to another firm.
11. At, or near the end of the specified twelve (12) months warranty, repair and maintenance period, the Elevator Contractor shall perform all the following work:

- a. Completely clean all the elevator equipment in the hoistway, machinery room area, pit area and car top area, including the interior of the elevator electrical controller panels.
- b. Make all adjustments necessary to fully comply with operational standards listed in these specifications and requirements of the elevator code. Elevator must operate smoothly, quietly, accurately and without any vibration.
- c. Verify that the door operation function is consistent with those requirements listed in these elevator specifications.
- d. Verify that the leveling accuracy is as specified hereinafter.
- e. Examine and verify that the elevator performance, floor to floor and in both directions, is functioning properly.
- f. Any work necessary to remove any squeaks, rattles or other undesirable conditions.
- g. Examine and tighten all elevator cab accessories or components.
- h. Examine and verify that the cab lighting fixtures, and the cab lighting dimming feature and exhaust blower automatic shut-down system all function properly. Make any corrections to the system operation as required by the specifications listed hereinafter. Shut-down features shall occur 5-10 minutes after last elevator operation.
- i. Examine and verify that the exhaust blower is not noisy, blower interior and exterior is clean and blower functions properly on all speeds.
- j. Verify and adjust, where needed, the elevator hoistway door interlocks, release mechanisms and door closer reels.
- k. Thoroughly clean all the elevator controller interior components and enclosures.
- l. Replace the car door guide shoes with new shoes of the type and brand specified hereinafter. Replace any of the other door guide shoes, as may be appropriate.

- m. Adjust the roller guide roller assemblies as may be required. Replace any worn or damaged roller wheels.
- n. Check and verify that the hydraulic cylinder packing is not leaking more than 20 ounces of hydraulic fluid per month, otherwise the packing and seals shall be replaced as part of this work.
- o. Examine and verify that there are no leaks in any of the hydraulic piping, fittings and valves; otherwise, the hydraulic system shall be repaired immediately at the cost of the Elevator Contractor.
- p. Examine and verify that the elevator cab emergency lighting system functions as required hereinafter.
- q. Examine and verify that the battery powered emergency elevator lowering system functions as required in these specifications.
- r. Elevator equipment appearance, operation, safety and performance shall be "like-new" when this work has been completed.
- s. Provide a detailed list of all work that was performed by the Elevator Contractor under these work requirements signed by an executive officer of the Elevator Contractor stating that such work has been performed as required and herein specified.
- t. Elevator Contractor shall notify the Owner's designated Representative at least ten (10) days prior to performing this work so that the Owner can verify that the required work is being performed as specified.
- u. Failure to comply with all of these requirements shall render the Elevator Contractor in contract default and subject to recourse by the Owner.

B. *Notice: Applicable Upon Expiration of Elevator Warranty Maintenance Period:* This elevator equipment is intended to be included in the campus wide elevator maintenance contract upon expiration of warranty and maintenance period. No separate elevator maintenance contracts will be considered by Owner.

Part 2 PRODUCTS

Part 2.01 MANUFACTURERS

A. *Manufacturer of Components or Systems:* All products manufactured shall have prior approval so long as they fully comply with all the requirements specified hereinafter. **NO SUBSTITUTIONS ARE PERMITTED. ALL EQUIPMENT FOR THIS PROJECT SHALL BE NON-PROPRIETARY.** Components which do not mirror the products listed, in terms of design, performance and operation or do not fully function in strict accordance with these technical specifications, shall not be accepted as meeting these technical specification requirements. The following additional elevator equipment manufacturing supplier firms are being listed as alternate manufacturers of some components, which are acceptable to the Owner and Elevator Consultant for this project. These alternate supplier firms shall also fully comply with all the elevator specification requirements and system designs for the respective products listed hereinafter:

1. Door operator and door systems - GAL Manufacturing Corporation model MOVFE - 2500, heavy duty linear type or entirely equal.
2. Elevator electronic controls - Elevator Controls Corporation Pixel Hydro Model Motion Control Engineering or entirely equal.
3. Motor drive system - Yaskawa, Special System Design or entirely equal.
4. Hydraulic pump assembly- Seim, Settima or Alweiller brand.
5. Hydraulic cylinder and plunger assembly - ECCO MEI brand or entirely equal.
6. Pumping unit drive motor - SB Motor, Elmo or Imperial brand.
7. Electronic door controls - Janus brand or entirely equal.
8. Hydraulic pumping unit assembly - Quality Elevator Products or entirely equal.
9. Roller guide assemblies - Delco brand, ELSCO or entirely equal.
10. Door closers - SmarTork™ Inc. or entirely equal.
11. Elevator cab - Gunderlin, Retro, Columbia or entirely equal.

12. Cab ceiling, LED ceiling and emergency lighting systems - ECI America, Retro or entirely equal.
13. Cab Door - Peelle, Gunderlin, Columbia or entirely equal.
14. Signal and Operating Fixtures - Innovation Industries or entirely equal.
15. Oil control valve assembly - Blain model EV40, Special Model only or entirely equal.
16. Regular hydraulic fluid.
17. Other firms equal to those listed in various locations in Part 2.

Part 2.02 MATERIALS, GENERAL

A. *Materials, Patterns and Finishes:* As selected by the Owner from the Elevator Contractor's standard patterns or finishes required by the specifications for this project as listed hereinafter.

B. *Steel:*

1. Shapes and bars: ASTM A-336.
2. Sheets: ASTM A-336, cold rolled, commercial quality, class 1, stretcher leveled quality.
3. Finish: Factory applied baked-on finish, zinc plated, dichromate plated or epoxy coated.

C. *Stainless Steel:*

1. Sheets, shapes and bars: ASTM A-276, type 304 or higher grade with No. 4 satin finish or textured design as specified hereinafter.
2. Tubing: NAAMM with No. 4 satin finish.

D. *Aluminum:*

1. Sheet and plate: ASTM B-209, alloy 6063-T52
2. Extrusions: ASTM B-211, alloy 6063-T52

- E. *Finish Flooring on Platform:*** Highest quality LVT flooring as selected by Owner.

Part 2.03 HOISTWAY AND MACHINE ROOM EQUIPMENT

- A. *Platform and Car Sling:*** Retain existing Platform and Car Sling
Additionally, provide the following:

1. Provide at least two layers of moisture resistant plywood for the platform flooring and sub-flooring. Design the elevator platform for class "A" loading.
2. Furnish an elevator code approved metal fire shield on the bottom of the car platform assembly.
3. Clean and repaint the equipment according to the Painting Requirements after installation.
4. Securely tighten all bolts and fasteners on the assembly.
5. Furnish and install high quality LVT finished flooring as selected by Owner.
5. Furnish and install a new stainless car door threshold secured with countersunk aluminum bolts or screws.
6. Furnish and install a galvanized steel apron or toe guard for the front of the platform which complies with the latest elevator code requirements. Paint the toe guard with black gloss paint and attach a 4" wide 3M striped safety tape near the top of the guard for added safety.
7. Arrange the car frame to accept specified roller guide assemblies at all four (4) locations to stabilize the elevator car.

- B. *Slide Guides:*** Replace inserts as needed on the existing slide guides

1. Slide guides shall be adjusted so that the slide guides can operated properly when the elevator is in motion.
2. Coat any unpainted or unprotected metal components, such as bolts, springs, stops, adjustments and the like with a highly effective surface coating which will resist rust and corrosion.

- C. Pit Buffers:** Retain existing buffers. Clean and paint existing equipment.
1. Thoroughly clean, prime and paint the pit buffers and buffer supports located in the pit area.
 2. Level the support beams, as may be necessary, and grout same to permit proper contact with the pit floor.
 3. Buffers shall contact strike plates on the bottom of the car frame channels on the bottom of the car.
- D. Pit Area Including Equipment, Walls and Floor:** All of the equipment and the pit structure shall be thoroughly cleaned to remove the dirt, debris, oil and oil residue from the area:
1. After cleaning the entire pit area, floor and walls, the area should be primed and painted to improve the appearance and ease in cleaning.
 2. Paint all the elevator equipment in the pit area according to the Painting Requirements shown elsewhere using approved painting products for this application.
- E. Hydraulic Cylinder Assembly, Cylinder Protection and Cylinder Hole:** Retain existing hydraulic jack and cylinder.
1. Elevator Contractor shall drill and case the new cylinder hole to the depth required for the overall cylinder depth. Cylinder hole shall be prepared to accept a schedule 40 PVC cylinder protective casing for the total depth of the hole, measured from the top of the pit floor slab to the required depth, plus required additional depth for a water-tight, sealed PVC bottom enclosure.
 2. The inside of cylinder hole protective casing shall be sealed around the top with at least 4" deep Room Temperature Vulcanizing engine oil resistant type silicone to seal off the area from intrusion of water, oil or any debris from entering the space between the outer cylinder casing and the interior of the cylinder protective casing. Install two (2) inspection tubes within the silicone seal as follows: one (1) for proving compressed air pressure and one (1) for syphoning liquids from the bottom of the cylinder protective casing. The pipe for use to apply air pressure should only be approximately 2'-0" in length. The siphon tube should run to the bottom of the PVC cylinder protection casing. Use backer materials between the two casing pipes to allow the 4" deep silicone seal to remain in place until it cures.

3. Drilling of the cylinder hole shall be on the basis of a firm price, in the elevator installation contract, with no extras for any water, sand, rock, hardpan or other obstacles that may be encountered during the drilling process.
4. The new cylinder shall be complete with cylinder casing, bearing assembly, polished plunger and welded brackets for mounting on the steel channels installed in the pit area.
5. The cylinder shall have a drip ring to collect any hydraulic fluid seepage and connection for a drain line. Drain line shall be extended to five-gallon size, closed metal or plastic container located in the pit area. Provide a method of preventing the fluid collection container from tipping over in case of water entry into the pit area.
6. The exposed section of the upper cylinder shall be thoroughly cleaned, wire brushed, primed and painted with a rust inhibitive, black enamel paint after installation. Lower portion of the cylinder shall be painted with a rust inhibitive paint prior to installation into the protective casing.
7. Properly align the top of the polished plunger to the bottom of the bolster channel on the bottom of the elevator car frame to permit proper function and noiseless operation.
8. **Hole-less type hydraulic cylinders shall not be acceptable for this application.**

F. *Hydraulic Oil Fill and Pressure Piping System:* Furnish and install all new materials between the new hydraulic pumping unit system and the in-ground cylinder, including the following work and features:

1. Furnish and install new piping which shall be of the proper thickness and size for this application.
2. Furnish and install screw type pipe fittings using threaded type steel fittings. Do not install any Victaulic or equal type fittings, except where the piping attaches to the pumping unit assembly only.
3. On all screw type pipe joints, utilize Expando TM brand or equal joint compound to assure leak-proof joints.
4. In the elevator machinery room area, install a hydraulic pressure type silencer unit with replaceable oil resistant type rubber inserts

equal in design to ThyssenKrupp Elevator model # 9817529 silencer product.

5. In the elevator machinery room area, install two (2) oil resistant rubber isolated hydraulic pressure type sound and vibration couplings, equal in design to ThyssenKrupp Elevator couplings model # 9814929 sound and vibration reducing product, using Buna N rubber seals. Couplings without Buna N rubber seals will not be approved.
6. Furnish an ASME A17.1 approved hydraulic pressure shut-off line valve in the machinery room area near the hydraulic pumping unit.
7. Furnish an ASME A17.1 approved pressure shut-off line valve in the pit area, near the hydraulic cylinder unit, for use only when servicing and repairing the hydraulic cylinder assembly.
8. Furnish an ASME A17.1 approved combination pipe rupture and over-speed safety valve in the pit area near hydraulic cylinder. Adjust the operation of the safety valve within code requirements and proper functionality; add lead seal to the valve after the unit has been fully adjusted and tested in the presence of the elevator inspector.
9. Install all needed steel pipe support stands and isolate the piping from the building and piping support stands by using rubber, 1/2" thickness, standard grade neoprene, 60 durometer materials in all such locations. All supports or contact points with the building surfaces or structures shall be rubber insulated so that the piping is not exposed to or touching any concrete or masonry materials, or any steel connected to the building. No piping shall be installed in a "binding" condition which could cause failure in the future.
10. Where the pressure piping penetrates the machinery room/ hoistway wall, seal around the piping with standard grade, 60 durometer gray neoprene rubber, at least 1/2" thickness, to prevent the piping from contacting the wall and transmitting vibration to the building. Piping shall not contact any surfaces or supports without being insulated with such rubber vibration absorbing materials at least 1/2" in thickness. Additionally, use suitable, flexible type, flame- and fire-retardant sealant materials around the piping to meet the fire code.
11. Clean and paint all piping, piping components and fittings using approved paint products, including corrosion resistant paint, after

installation. All such piping shall be painted with high gloss type black paint for ease of cleaning.

12. Hydraulic system shall be filled with high quality, US sourced, regular type hydraulic fluid to the capacity required for this application. The fluid system capacity shall be at least 25 gallons more than is required to safely move the elevator to the top landing.

G. *Hydraulic Power Unit Assembly: Furnish and install a completely new pumping unit assembly, equipped with the following features:*

1. Provide a high-quality submersible pump motor designed for heavy duty elevator service of at least 80 starts per hour, compatible with a new variable frequency inverter type motor control/drive system. The elevator drive motor shall be 20 horsepower. Motor shall have long service life, highest quality bearings and electrical insulation available for this type of submersible motor. Drive motor shall be either SB Motori, Elmo or Imperial Electric brand.
2. High quality, elevator duty submersible, direct drive, precision screw type pump assembly manufactured by Allweiler. Settima or Seim brand.
3. Heavy gauge sheet steel type, fabricated, welded and leakproof reservoir assembly to contain the hydraulic fluid, pump and motor assembly and the special oil control valve. Provide a method of measuring the fluid level without necessity of removing the reservoir cover. Effective reserve capacity of the reservoir shall be at least 25 gallons more than is required to safely move the elevator from the lowest landing to the top landing. Install the additional gallons of oil in the reservoir before testing the final installation work.
4. Oil control valve assembly shall be a Maxton brand valve or equivalent capable of operating the elevator.
5. Reservoir tank cover shall be safely and easily removable, when required, for maintenance, repairs or examination. Provide two (2) handles on the cover for ease of removing and handling the cover.
6. Mount the pump, motor and control valve on suitable rubber isolated frame assembly to isolate the assembly from the reservoir assembly. This mounting arrangement is to reduce noise and vibration from being conducted to the reservoir and ultimately to the building structure.

7. Pumping unit shall operate relatively quietly and without objectionable noises or vibration.
8. Use effective, high durometer type, 1" thickness, reinforced rubber mounting pads on each corner of the reservoir to isolate the reservoir from the machinery room floor. Mounting pads shall accommodate the weight of the entire machine and weight of the hydraulic fluid without becoming overly compressed.
9. Include all suitable piping and fittings for the oil control valve as well as the piping required inside the reservoir assembly.
10. Install a warning label on the pumping unit reservoir cover indicating the brand and type of AW-32 hydraulic fluid that has been installed in the system.
11. The entire exterior of the hydraulic pumping unit shall be cleaned and repainted prior to placing the unit into the final location at the building site. Use high gloss black machinery enamel for ease in cleaning.

H. *Elevator Electrical Controller: The Elevator Contractor shall furnish and install a new digitally controlled system as specified hereinafter:*

1. The new controller shall be state of the art equipment designed to operate with real time performance and meet all the requirements of a system.
2. Digital controller shall be wall mounted in machinery room near the hydraulic pumping unit. Controller shall be designed with hinged cover or door. Lift off type cover or door is not acceptable.
3. Controller shall have black painted finish on exterior. Galvanized finish is not acceptable.
4. Automatic 4-stop collective operation is required.
5. Firemen's recall operation, phase 1 and phase 2 design.
6. Elevator shall return to main floor if the oil supply becomes too low to reach the top landing or if the elevator fails to reach the top landing within a specific period.
7. Provide for operation of an electronic digital type of position indicator mounted in the car operating panel and at the main floor.

8. Provide electrical operation for car direction lantern assembly in car entrance jamb.
9. Digital position indicator at main floor and in car operating panel.
10. Design controller to accept wiring from a door operator management control system.
11. Battery powered automatic lowering system for use during a power failure. Elevator shall automatically lower to lowest floor and open the doors in the event of a power failure. Doors shall close after the passengers have departed.
12. Automatic shutdown of car lighting and exhaust blower after 5-10 minutes of car idle time.
13. Controller shall log a fault code if the car emergency lighting is not fully operable.
14. Supply a copy of all controller settings, adjustments, programs and such on a removable thumb drive to be provided to the Owner at project closeout.
15. Controller shall have complete, on-board, diagnostics system for all operations, features, testing and trouble log codes. Also, provide a suitable connection for a lap- top computer to be connected by elevator maintenance technician using an Ethernet cord. Provide USB port for installing programs using thumb drive device.
16. Call-registration lights in car and landing stations.
17. Floor passing chime as required by elevator code.
18. Independent service with toggle switch in car panel maintenance cabinet.
19. Hoistway access controls at top and bottom landings.
20. Car top inspection operation.
21. Elevator control system without the use of LON or CAN devices or boards located in the hoistway area. Any control boards must be in machinery room. All field wiring in hoistway must be discrete type.
22. Design the controller for emergency power operation when normal power supply fails. Interface the emergency power operation with

the automatic battery lowering system to prevent both systems from functioning at the same time. If Emergency Power is provided.

23. Door closing interference warning signal device. Do not provide standard nudging operation. Nudging shall only operate while on firemen's operation.
24. Design controller to function with VVVF Electronic Drive in lieu of typical electronic starter system.
25. Fully comply with all ASME A17.1-2019 Elevator Safety Code requirements.
26. Complete adjustment, diagnostic and operation program information shall be provided to Owner for back-up purposes.

I. Variable Voltage, Variable Frequency Inverter Drive System for Elevator Motor: The elevator drive motor shall be of high-quality motor design with highest quality motor shaft bearings. Drive motor is to operate in the up direction only. The drive motor shall be driven by a special variable voltage variable frequency inverter drive open loop type system. This system accelerates the motor and hydraulic pump from start to full speed without need for by-pass of oil and decelerates the motor and hydraulic pump down to full stop position without any by-pass of oil. Drive motor rating shall be 20 horsepower.

Elevator motor inverter assembly, using a Yaskawa brand or equal drive, shall be designed for long life operation and shall be easily programmable to satisfactorily function for this application. All suitable safety features shall be included in the system. The entire system shall function as intended and permit any needed adjustments to operational parameters by qualified technicians. This drive system is designed to save 50% or more usage of electrical energy in a one floor run of approximately 12 feet in the up direction (compared to conventional hydraulic elevator system design). The savings may be more or less dependent on the load on the elevator car and the travel distance at the time of operation. This system, intended to provide considerable savings on electrical power cost, also dramatically reduces the accumulation of heat in the system oil supply. Motor drive control assembly is available from Hydrastar-USA. Contact Mr. Robert Coda, Phone No. 973.276.8490 for information on this elevator drive system.

J. Automatic Self-Leveling and Re-Leveling System: Furnish and install new landing and car positioning control related switches, cams and such as required for full functionality of the new elevator controller system and fully comply with ASME A17.1-2019 Elevator Safety Code.

K. Door Operator Machinery & Controls: All new door operator machinery and equipment shall be installed including the following devices and designs:

1. Heavy duty, gearless door operator machine, linear motion type. Heavy duty linear motion type is required for long term, reliable and dependable service.
2. Heavy duty door operator drive motor, at least 1/2 horsepower. Smaller drive motors are not acceptable.
3. Precise encoder on the operator drive shaft or on motor shaft.
4. Complete "closed loop" system design.
5. Door velocity regulation system.
6. Door position recognition.
7. Door motor current monitoring and regulation.
8. Door closing pressure regulation system. Preset the door closing pressure at 17 pounds maximum.
9. Door operator shall operate quietly when opening and closing the doors.
10. Provide immediate door reversal operation in the event the preset 17 lbs. of resistance or pressure is reached during door closing operation. This adjustment shall be completely adjustable in the field.
11. Include elevator code required door restrictor device or an approved car door interlock assembly to prevent car door from opening more than 4" when the car is outside the landing zone. All such materials shall be plated to be corrosion resistant using zinc dichromate finish.
12. Include high quality car door clutch assembly to automatically unlock the hoistway doors as the car stops at the selected landings.
13. Car door position switches and limit switches shall be designed to be suitable for this application.
14. Door obstruction warning device. If doors are obstructed during the closing operation for more than 15 seconds (adjustable timer), an

audible voice warning signal shall sound indicate the doorway is being blocked.

15. Door opening time shall be set at 1.8 seconds measured from the time the doors start to open until they are fully open.
16. Door closing time shall be set at 2.4 seconds measured from the time the doors start to close until they are fully closed.
17. Set the initial door stand open time at 5.5 seconds from the time the doors fully open at each floor.
18. Elevator car shall be equipped with new car door track, door hangers and rollers with up-thrust rollers, door clutch assembly, door restrictor assembly or car door interlock and miscellaneous hardware devices.
19. Car door switch shall be dirt and moisture resistant equal to GAL type MOW design.
20. Door operator related equipment not entirely meeting all these requirements is not acceptable.

L. Car Door Safety Screen Device: Furnish and install a complete door safety assembly on the car door. The new electronic door safety device shall be equal to Pana-forty brand product assembly with transom mounted 3-D feature completely manufactured by Janus Elevator Products, Inc. All electrical connections shall be mounted on the car top, out of reach of unauthorized persons. Safety screen without all these features is not acceptable. Comply with ASME A17.1-2019 Safety Code for Elevators. Also, provide an audible announcement that the "elevator doors are closing, please clear the doorway." Equipment shall be dust, dirt and moisture resistant for added reliability.

M. Car Top Inspection Station and Alarm Bell: The Elevator Contractor shall furnish and install a car top inspection station on the top of the elevator cab to function as needed during maintenance, inspections and repairs of the elevator equipment. Inspection station shall be reachable from the landing without the need to step onto the top of the elevator cab to reach the inspection station. Provide a suitable LED light on the top of the cab operated by a switch located in the car top operating station. Additionally, provide an emergency alarm bell system on the car top powered by a built-in charger and replaceable, rechargeable battery. The battery shall function for at least 4 hours in the event of normal power failure.

Part 2.04 HOISTWAY ENTRANCE DOORS & HARDWARE, COMPLETE

- A. *Hoistway Door Panels:*** Furnish and install new, side sliding type door panels, including the following features and designs:
1. Door panels shall be sandwich type construction, fabricated with no.14-gauge no. 304 stainless panels on front and powder coated 14-gauge steel panels on rear of door. The landing side of the doors shall be no. 4 satin finish stainless. The door panels shall be suitably reinforced for door release mechanisms and door hangers. Furnish and install stainless tubular keyways at each level to allow use of emergency keys. Doors without tubular keyway inserts are not approved.
 2. Dual interlocks shall be furnished on each set of door panels.
 3. Doors shall have matching stainless removable/replaceable sight guards constructed of no. 14 gauge stainless materials of same finish as door panel finish selection.
 4. Factory paint the backs, bottoms, tops and rear edges of doors using powder coating system for long duration protection.
 5. All door panels shall have suitable elevator code required 1.5 hour fire test labels.
 6. Each of the door panels shall have two (2) SEES brand Enforcer•M or equal grade door guides plus fire protection brackets on bottom of each panel.
 7. Furnish and install dual SmartTork™ brand door closers on each door panel at both floors.
 8. Install or paint the floor numbers on the rear of the doors in 4" high numbers or letters.
- B. *Hoistway Door Frames, Thresholds and Door Headers:*** Elevator Contractor shall furnish and install new door frames and hoistway door track support headers at each of the landings of the elevator. Retain existing door frames and headers.
1. New door track support headers shall be furnished and installed. Repaint the headers prior to installing the door track assemblies.
 2. Provide suitable header support channels or angles located inside the hoistway.

3. Furnish and install new extruded aluminum thresholds at each landing.
4. Furnish and install galvanized steel hoistway threshold angles at each opening attached with heavy duty concrete anchors.
5. Furnish and install no. 14 gauge thickness, no. 4 satin finished stainless steel door frames with 2" square profile. Secure or brace the frames before they are back filled around the perimeter.
6. Furnish and install suitable stainless marking plates with Braille markings on both sides of hoistway door at all locations. Background shall be black and raised characters shall be bright stainless. Secure plates with drive rivets or pins.

C. *Fascia, Toe Guards and Dust Covers:* The Elevator Contractor shall perform the following work on this equipment:

1. Furnish and install new fascia, dust covers and toe guards in the hoistway area. Paint shall be gloss black enamel.
2. Securely fasten the materials in place, where needed, to avoid rattling and easy removal.

D. *Door Clutches, Interlocks and Interlock Release Mechanisms:* The Elevator Contractor shall furnish and install all dual interlocks and interlock release mechanisms at all floors. Additionally, the interlocks at each floor shall be GAL Model "MOW" or equal, designed to exclude dirt, debris and moisture. Interlocks which do not include all the features of this interlock model will be rejected during the approval process. Interlocks shall be fully enclosed type.

1. Standard materials are acceptable
2. The conduit entering the interlock box shall be sealed with silicone sealant around the circuit wires to prevent any moisture or debris from entering the cavity where the electrical contacts are located, thus greatly improving the service life and reliability of these components.

E. *Door Hangers, Door Tracks, Door Hardware, Door Closers and Related Items:* The Elevator Contractor shall furnish and install completely new door equipment at each landing of the elevator and on the elevator car assembly.

1. Door tracks shall be designed and finished to retard rust or corrosion including zinc dichromate plating at the factory. Tracks shall be securely bolted to the support headers and adjusted to provide proper clearances and quiet operation.
2. Door hangers shall be adjustable type equipped with adjustable roller type up thrusts to control distance between the up thrusts and bottom of track assembly. Adjust the clearance of up thrusts to .015" in all locations. Hangers shall be properly aligned to prevent the door rollers from squeaking on the hanger tracks. All hanger equipment shall be plated with zinc dichromate at the factory to be resistant to rust or corrosion.
3. Hanger rollers on each hanger assembly shall have rubber or polyurethane tires suitably machined to provide smooth, quiet door operation. Bearings in rollers shall be sealed to retain grease. Rollers shall be designed for long life service.
4. Tracks shall be smooth shapes for quiet operation.
5. Furnish all hardware, fasteners and other necessary components as may be necessary.
6. Furnish new SmartTork™ reel type door closer devices for all hoistway doors. This includes two (2) such closers at each floor level. Adjust the closers with sufficient tension to fully close the doors from any location in the door opening.

2.05 ELEVATOR OPERATING DEVICES AND SIGNALS

- A. Elevator Car Operating Panel:** Furnish and install a completely new car operating panel in this elevator system.
1. The car operating station shall be constructed as described and contain the following items or devices:
 - a. Hinged cover plate approximately 78" high by 11" wide, 1/8" thickness. Secure the cover in place with security system type countersunk screws around the perimeter.
 - b. Floor selection buttons mounted in a vertical line, in addition to alarm bell and door control buttons. All floor buttons shall be equal to MAD elevator BP Classic stainless-steel design with bright blue center jewels and Julius flush mounted

incorporating floor markings and Braille indications for each floor served. Include key switch operation for top floor selection in lieu of button. Alarm bell button shall have a center jewel with a red illumination when depressed. Allow additional space between the floor selection buttons and the door control buttons/alarm bell button for improved visual appearance.

- c. In the upper part of the panel provide the elevator serial number, building elevator number and the lifting capacity of the elevator, all of which are to be engraved and filled with epoxy in the stainless-steel panel.
- d. Engrave and fill, no smoking and international symbol for same, below the capacity engraving sign.
- e. Below the elevator serial number, building elevator number and elevator lifting capacity engraving, provide a 4.3" LCD type car position indicator. Color of indications shall be white on a bright blue background.
- f. Below the car position indicator, provide a flush compartment for the firemen's control operation. The compartment shall have a tight fitting, locked door that has the operating instructions on the back of the door.
- g. Below the firemen's control compartment, provide firemen's jewel.
- g. Below the elevator floor selection and door control buttons, locate the elevator intercom device on the rear of the panel with activation button and instructions for operation on the front of panel. Also, provide a punched grillwork in the panel for the speaker and microphone assembly on the rear of the panel located above the floor selection buttons.
- h. Below the emergency intercom location, provide a locked elevator service cabinet with flush mounted door. Door shall be appropriately sized to display the State of North Carolina elevator certificate of operation behind a scratch-proof Lexan cover. Certificate shall be installed from the rear of the door when it has been opened using an appropriate key for entry. Inside the service cabinet include the following:
 - i. On-off type toggle light switch.

- ii. Double pole type toggle switch to check the operation of the emergency car lighting system.
- iii. Cab exhaust blower, on-low-medium-high, rotary switch.
- iv. Key switch for activating the hoistway access operation.
- v. Key switch to activate the car top inspection operation.
- vi. Key switch to remove the elevator from service.
- vii. Spare key switch for future use.
- viii. All typical key switches shall use barrel type keys.
- ix. Provide Firemen's phone jacks in car panels only if required by local Fire Marshal. Verify prior to fabrication.

B. *Landing Control Stations:* Furnish and install new call stations at each landing. The stations shall contain the following:

- 1. Flush mounted face plates, approximately 8" wide and at least 11-gauge thickness, type 304, with no. 4 satin finish, stainless steel with four (4) countersunk corrections center system type screws to secure the plates.
- 2. Use call buttons to match those in elevator car with Julius type direction indicators using up and down direction indications to the left of each button for improved clarification. Include Braille indications as well. Vandal resistant buttons shall have bright blue colored call registration lights to match cab operating buttons.
- 3. All lamps shall be long life design LED type.
- 4. Furnish emergency warning signage, engraved and filled type in upper portion of each station face plate.
- 5. Include key switches in top and bottom terminal stations for operation of hoistway access switch controls.

6. Include Phase I elevator recall switch, jewel and instructions in main floor station where the fire department would enter the building.
7. Include emergency communication system failure jewel and chime, along with such signal deactivation switch, in main landing station. Main landing station is located on the floor where the Firemen would enter the building.
8. Perform all cutting and patching to install the landing control signal fixtures flush with wall face. Surface mounting is not acceptable. Block-outs in the wall during construction are acceptable for fixture installation.
9. Provide firemen's phone jacks in cover plates, only if required by the local Fire Marshall.

C. *Landing Signal Fixture:* Furnish and install the following wall mounted landing signal devices as listed:

1. Elevator shall have 4.3 "LCD type car position indicator, flush mounted over the main floor hoistway entrance door to illuminate bright blue and have white characters.
2. Cover plate shall be 11 gauge stainless, with no. 4 satin finish held in place with at least two (2) corrections center type countersunk fasteners.
3. All cutting and patching shall be by Elevator Contractor. Work shall be neatly accomplished. Block-outs during wall construction are advisable.

Part 2.06 ELEVATOR CAB ENCLOSURE AND INTERIOR FINISHES

A. *Elevator Cab and Interior Design:* Elevator Contractor shall furnish and install a new elevator cab assembly as described herein:

1. Cab walls on three (3) sides shall be constructed of the heaviest gauge, SWL design product with suitable reinforcements on the exterior of the cab panels.
2. Cab front returns on each side of the cab opening shall be constructed of no. 14 gauge, no. 4 satin finished stainless steel materials.

3. The cab lighting system and ceiling system shall be as follows:
 - a. Furnish and install a ceiling panel constructed of wood core materials with laminate plastic laminated on top and bottom of the ceiling panel assembly.
 - b. Furnish and install white laminate plastic on the underside of the ceiling and unfinished laminate on the top of the panel for added rigidity and resistance to warping.
 - c. Support the ceiling panel with heavy duty supports attached to the cab top. Around the perimeter of the ceiling, hidden from view, furnish and supply diamond wire protection to prevent persons from pulling down on the ceiling or placing objects on top of the ceiling panel.
 - d. Provide an access panel in the suspended ceiling to align with the exit opening in the top of the cab assembly.
 - e. Furnish and install nine (9) lighting fixtures, ECI brand (or equal) Cablite •M VR model 2.25, vandal resistant, elevator grade, down lighting fixtures designed and manufactured by Electronic Controls - America or equal. The lighting control box and wiring shall be part of the same lighting system package.
Provide a dimmer system that will allow adjustment in the cab illumination level, if desired. Lighting system shall be designed for approximately 75,000 hours of use. Contact Walter Barnes of ECI-America @ 800.633.9788 or equal supplier for the suspended ceiling and the specified lighting system equipment.
 - f. Include battery powered emergency lighting system as part of the normal lighting which will operate at least five (5) of the down lights for at least four (4) hours when the emergency lighting system is in operation. This system should be provided as part of the cab lighting system.
 - g. Provide an automatic "lights-out and fan-off" system after the elevator is idle for 5-10 minutes. The "Lite Wizard" control system shall receive a signal from the elevator electrical controller that it is safe to turn off the lighting system. The Lite-Wizard control system is available from ECI-America as an option of the lighting system or other approved supplier.

- h. Cab emergency lighting system shall send a signal to the elevator controller when it is no longer functional, and a fault shall be recorded on the elevator monitoring system. Contact the lighting system supplier for details on this requirement.
- 4. Design one front return panel for the installation of the car operating panel to accept the car operating panel of the size shown in paragraph 2.05, A.
- 5. Furnish a cab exhaust blower equal to CED part no. 06-01058, AA model or equal, designed with three speed motor and squirrel cage design blower.
- 6. Add a 2" x 3/8" flat bar, solid stainless, handrail on three (3) walls. Ends of rail shall be returned toward the walls. Attachment brackets shall be stainless designed to support at least 500 pounds. Additionally, furnish similarly designed stainless bumper rails located 6" on center, above the floor, to act as bumper protection on all three (3) walls. Provide matching stainless-steel supports for the bumper rail assembly.
- 7. Provide 12-gauge thickness, grade 304, no. 4 finished, 5.5" high stainless-steel base attached to the walls using high quality, industrial grade, contact cement around three sides of the cab. Form the base to allow for cab ventilation means. Relieve the top edge of the base to remove the sharpness on the top of the base materials. Install the base after the new flooring materials have been installed.
- 8. Provide new LVT flooring materials as selected by the Owner. Install the stainless-steel threshold at the proper height for the finished floor thickness.
- 9. Furnish and install stainless steel protection pad hooks in all suitable locations including front return along with new vinyl coated protection pads by Palmer Pads or approved equal. Apply thread locker on screws to prevent removal without tools.
- 10. Thoroughly clean the complete cab after completing the work assembly.

Part 2.07 PIT STOP SWITCH

- A. ***Pit Switch:*** Elevator Contractor shall furnish and install a water-resistant elevator stop switch in the elevator pit area suitably located to meet the ASME A17.1 2019 code.

Part 2.08 EMERGENCY COMMUNICATION SYSTEM

- A. ***Emergency Communication:*** An emergency communication system shall be furnished and installed per the ASME A17.1 2019.

Part 2.09 ELECTRICAL WIRING AND ELECTRICAL WORK REQUIREMENTS

- A. ***Electrical Work and Requirements:*** The Elevator Contractor shall furnish and install all required electrical wiring conductors, electrical cabling, traveling cables, wiring conductors, conduit, fittings, etc., which are considered necessary for this elevator installation work as follows:
1. Furnish and install UL rated conduit or other suitably flexible conduit rated for use on the elevator car top and otherwise. No flexible conduit shall exceed four feet in length.
 2. Furnish and install hoistway mounted traveling cables for all suitable electrical circuits including elevator controls; audio circuits; video circuits; intercom circuits; emergency communication circuits; elevator signal circuits; security control circuits; camera circuits and such as required by the Owner. Include at least 50% spares in traveling cords and CAT 6 or equal for the video camera located in the car.
 3. Furnish and neatly install wiring and conduits to all elevator control circuits for controls, signals and such throughout the elevator system.
 4. Furnish and neatly install conduits and wiring on the elevator car top and to the signal devices on the elevator cab.
 5. Meet all system renovation and Electrical Code requirements in connection with these work requirements.
 6. No printed circuit boards shall be installed in the hoistway as part of a LON or CAN control system. Such boards shall be installed in the elevator machinery room area. The door operator control board can be installed on the cab top as part of the door operator system, but

it shall be mounted inside a gasketed cover, water-proof fiberglass or steel control box on the cab top.

- B. *Grounding Requirements:*** All mechanical and electrical equipment shall be completely mechanically grounded with a positive grounding system. Adequate ground wires are the necessary means of grounding.
- C. *Electrical Surge Protection:*** The Elevator Contractor shall furnish and install electrical power surge protection on the following circuits or connections to the elevator electrical controller assembly:
1. Main elevator power supply.
 2. Power supply for the elevator car lighting system.
 3. Emergency telephone device.
 4. Fire alarm/elevator recall system.
 5. Any other electrical circuits that connect to the elevator controller.
- D. *Neat Installation Workmanship:*** The electrical wiring work in all locations shall be neat in appearance, tied and left in professional condition. Spare wires must be bundled, tied and marked accordingly. Excess wiring shall be removed.

Part 3 EXECUTION

Part 3.01 EXAMINATION

Initial Examination Prior to Commencing Work: Before any fabrication of equipment or commencing work on the elevator, examine the drawings related to the complete hoistway, machinery room, site logistics, door dimensions, pit layout and hydraulic cylinder, pit area and so forth; verify all critical dimensions, examine supporting structure, examine related systems and other aspects of the site and conditions under which this elevator work is to be performed.

- A. *Installation Work:*** The Elevator Contractor and his or her work, when commenced, constitutes the acceptance of existing conditions and responsibility for satisfactory performance when the project is completed.

Part 3.02 INSTALLATION WORK

- A. *Elevator Components:*** Install new elevator components in a completely satisfactory elevator system.
1. Work to be performed by completely competent, fully trained elevator installation personnel in accordance with the requirements of ASME A17.1-2019, ASME A17.5, 2019 Most current edition of the National Electrical Code NFPA 70, elevator equipment manufacturer's installation instructions, approved shop drawings/submittals and other project details or requirements.
 2. Fully comply with any other requirements such as the State of North Carolina and other regulatory agencies.
- B. *Work Performance:*** Only skilled workmen under the direct supervision and control of the Elevator Contractor's experienced foremen and superintendent shall work on this project.
- C. *Scheduling Activity:*** In addition to providing the elevator equipment at the proper time, the Elevator Contractor shall supply any required materials in time for installation by any other trades working on the site, the materials to be connected or otherwise incorporated into the project. Adhere to all scheduling requirements established by the Elevator Contractor, Owner and Consultant.
- D. *Mounting of Critical Components:*** Elevator Contractor shall mount all moving elevator components on suitable vibration absorbing mounts designed to effectively prevent the transmission of vibration to the structure as well as eliminate undesirable sources of structure borne noise from the entire elevator system.

Part 3.03 FIELD QUALITY CONTROL REQUIREMENTS

- A. *Acceptance Testing:*** Upon completion of the elevator installation work and before use of the elevator equipment, Elevator Contractor shall perform tests on the elevator equipment to demonstrate that the equipment will sustain and lift the loads for which the elevator was initially designed. Test weights are required to perform these tests and must be used to demonstrate the performance of the elevator system in the presence of representatives of the Owner, Elevator Consultant and State of North Carolina Department of Labor elevator inspector.
- B. *Prior Notification:*** Elevator Contractor shall notify the Owner's Representative, Elevator Consultant and Licensed Elevator Inspector at

least ten (10) calendar days in advance of the date and time for complete testing of the elevator system which is to be performed on this elevator. All equipment must be tested at time of inspection.

Part 3.04 ADJUSTING WORK

- A. *Equipment Adjusting:*** Elevator Contractor shall make all necessary and required adjustments in the operation of the elevator equipment to assure that the elevator system performs smoothly, quietly, reliably and accurately. This work shall be performed in advance of all tests and evaluations. Provide complete documentation of all loads, safety devices and other testing in the presence of the State of North Carolina Department of Labor elevator inspector.

Part 3.05 ELEVATOR AND SURROUNDING AREA CLEANING

- A. *Cleaning Work:*** Prior to the Final Acceptance, remove all protective materials from the finished surfaces including the plastic sheeting. All the elevator equipment must be cleaned prior to final acceptance including the materials in the machinery room area, elevator controller interiors, cab interior, car top area, pit equipment and pit area and areas in front of each elevator hoistway opening. The elevator cab, signal fixtures, car flooring materials, entrance thresholds and hoistway entrance frames shall be cleaned and polished.
- B. *Removal of Surplus Materials and Tools:*** Upon completion of the elevator work, the Elevator Contractor shall remove all surplus materials, tools, unused equipment and the like from the site. Thoroughly clean up all oil spills, residue and other untidy conditions.

Part 3.06 DEMONSTRATION & TRAINING OF OWNER'S PERSONNEL

- A. *Instructions and Training:*** Elevator Contractor shall make a special effort to properly demonstrate and carefully train the employees of Owner in the proper operation, proper use and special operations associated with this elevator. Additionally, explain the daily maintenance of this elevator all as explained as follows:
1. Proper cleaning of the elevator cab interior, hoistway entrances and signal fixtures daily.
 2. Vacuuming of the cab and hoistway thresholds on a daily basis.

3. Precautions regarding the surfaces or finishes to avoid damage and reliability problems with the equipment.
4. Special operations included as well as use of all keyed switches or controls.
5. Discuss the emergency telephone use, connections and recorded message to the person(s) answering the emergency phone. Answering machines are not acceptable.

B. *Time Allowance for Training Work:* Elevator Contractor shall provide Owner's representatives with at least two (2) hours of on-site training for the items listed in "A" above. Training must be provided by qualified personnel and documentation of training must be created by Elevator Contractor which must be transmitted to Owner's representative. Include names of all personnel attending the training sessions along with the instructor's name.

Part 3.07 TURNOVER OF DOCUMENTS, TOOLS AND OTHER SUCH REQUIREMENTS

A. *Turnover Requirements:* As detailed herein, the Elevator Contractor shall turn over to the Owner copies of the required documents, tools, archival materials, instructions, parts lists, drawings, certifications, permits and other related items at time of Final Acceptance. Final payment will not be made until these items are provided and reviewed by Owner's representative and Elevator Consultant for acceptability.

B. *Keys:* Elevator Contractor shall provide at least eight (8) complete sets of keys for the elevator except as follows:

1. Elevator hoistway door emergency release keys - provide three (3).
2. Provide metal or plastic type identification tags on all typical keys.

Part 3.08 COMPLETION DATE

A. *Agreed Upon Completion Date:* The Elevator Contractor agrees that the actual completion date shall be the date agreed upon by the Owner's representative, Elevator Consultant and Elevator Contractor and shall be the date that the Warranty and Elevator Service shall commence.

B. *Installation Completion:* The installation of this elevator equipment shall not be considered as complete until all work is considered to be first-class

in every respect and until the Owner's representative and Elevator Consultant have been given an opportunity to evaluate the workmanship and elevator operation. Further, all adjustments, load tests, performance tests, cleaning work, painting work, operational evaluations, punch lists and the like must be completed prior to establishment of a completion date.

Part 3.09 ELEVATOR SCHEDULE

A. *Outline of Elevator Details:* One (1) electric oil-hydraulic elevator as briefly described herein:

1. Elevator Car Platform - 7'-0" by 5'-6", overall.
2. Driving Machine Location - Refer to building drawings for remote location. The machine room is on the 5th floor of the Judicial Building.
3. Travel Distance - Elevator Contractor shall verify travel distance on building drawings.
4. Elevator Design - Passenger type, class A loading rating on platform.
5. Elevator Speed - Approximately 95-100 feet per minute up; 125 feet per minute down with no load on the elevator.
6. Elevator Capacity - 3,000 pounds.
7. Control System - Microprocessor type, programmable type elevator electrical controller system.
8. Motor Control - Inverter type electronic motor drive system, as described herein.
9. Hydraulic Oil Control Valve - New EV40 design, or equal, for this application.
10. Hydraulic Cylinder and Plunger - In-ground type cylinder assembly.
11. Floors Served - Two (2)
12. Openings Served- Two (2), both on same side of elevator.

13. Door Type - 3'-6" wide by 7' -0" wide, center-opening, horizontal slide type. Elevator Contractor must verify size at all locations.
14. Power Supply - 460 volts, 3 phase, 60 cycles. Verify on electrical drawings.
15. Elevator Cab Design - As specified herein.
16. Warranty Period - Twelve months after completion of work.
17. Maintenance Period -Twelve month, after completion of work.
18. End of Warranty Period Work- Refer to paragraph 1.07, 8 and 10 for additional requirements.

NORTH CAROLINA

AGREEMENT

NEW HANOVER COUNTY

THIS CONTRACT made and entered into this _____ day of _____ 2022 by and between **NEW HANOVER COUNTY**, a political subdivision of the State of North Carolina, hereinafter referred to as "County"; and _____, hereinafter referred to as "Contractor."

WITNESSETH:

That the Contractor, for the consideration hereinafter fully set out, hereby agrees with the County as follows:

1. Scope of Services. Contractor shall provide labor and materials for elevator modernization at the New Hanover County Judicial Building located at 316 Princess Street, as more fully described on Exhibit A, attached hereto and incorporated herein by reference.

2. Time of Performance. The term of this Agreement shall begin from Notice to Proceed and all work shall be completed within sixty days (60) days of receipt of approved drawings and equipment.

3. Payment. County hereby agrees to pay for the cost of this Contract not to exceed a sum of _____ (\$_____) Dollars. Payment is contingent upon a final County inspection and acceptance of work.

4. Extra Work. County and Contractor shall negotiate and agree upon the value of any extra work or services prior to the issuance of a County Change Order or Renewal/Amendment (CRA) form covering said extra work or services. Such Change Order or CRA shall set forth the corresponding adjustment, if any, to the Contract Price and Contract Time.

5. Indemnity. Contractor shall indemnify and hold County, its officers, officials, agents, and employees, harmless against any and all claims, demands, causes of action, or other liability, including attorney fees, on account of Contract or personal injuries or death or on account of property damages arising out of or relating to the work or services to be performed by Contractor hereunder, resulting from the negligence of or the willful act or omission of Contractor, its agents, employees and subcontractors.

6. Insurance. Before commencing any work or services, Contractor shall procure insurance in Contractor's name and maintain all insurance policies for the duration of the Contract of the types and in the amounts listed in this Contract. The insurance shall provide coverage against claims for injuries to persons or damages to property which may arise from operations or in connection with the performance of the work hereunder by Contractor, its agents, representatives, employees, or subcontractors, whether such operations by itself or anyone directly or indirectly employed by it.

7. Minimum Scope and Limits of Insurance

7.1 Commercial General Liability

7.1.1 Contractor shall maintain Commercial General Liability (CGL) and if necessary, Commercial Umbrella Liability insurance with a total limit of not less than \$5,000,000 each occurrence for bodily injury and property damage. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location or the general aggregate shall be twice the required limit.

7.1.2 CGL insurance shall be written on Insurance Services Office (ISO) "occurrence" form CG 00 01 covering CGL or its equivalent and shall cover the liability arising from premises, operations, independent Contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured Contract, including the tort liability of another assumed in a business contract.

7.1.3 County, its officers, officials, agents, and employees are to be covered as additional insureds under the CGL by endorsement CG 20 26 or an endorsement providing equivalent coverage as respects to liability arising out of activities performed by or on behalf of Contractor; products and completed operations of Contractor; premises owned, leased or used by Contractor; and under the commercial umbrella, if any. The coverage shall contain no special limitations on the scope of protection afforded to County, its officers, officials, agents, and employees

7.1.4 Contractor's CGL insurance shall be primary as respects County, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by County, its officers, officials, agents, and employees shall be excess of and not contribute with Contractor's insurance.

7.2 Worker's Compensation and Employer's Liability

7.2.1 Contractor shall maintain Work or Worker's Compensation as required by the General Statutes of the State of North Carolina and Employer's Liability Insurance.

7.2.2 The Employer's Liability, and if necessary, Commercial Umbrella Liability insurance shall not be less than \$5,000,000 each accident for bodily injury by accident, \$5,000,000 each employee for bodily injury by disease, and \$5,000,000 policy limit.

7.2.3 The insurer shall agree to waive all rights of subrogation against County, its officers, officials, agents, and employees for losses arising from work or services performed by Contractor for County.

7.3 Business Auto Liability

7.3.1 Contractor shall maintain Business or Personal Auto Liability and, if necessary, Commercial Umbrella Liability insurance with a limit of not less than \$5,000,000 each accident.

7.3.2 Such insurance shall cover liability arising out of any auto, including owned, hired, and non-owned autos.

7.3.3 Business Auto coverage shall be written on ISO form CA 00 01, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide Contractual liability coverage equivalent to that provided in ISO form CA 00 01.

7.3.4 Contractor's Business Auto Liability insurance shall be primary as respects County, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by County, its officers, officials, agents, and employees shall be excess of and not contribute with Contractor's insurance.

7.4 Professional Liability Insurance

7.4.1 Contractor shall maintain in force for the duration of this Contract Contractor liability or errors and omissions liability insurance appropriate to Contractor's profession. Coverage as required in this paragraph shall apply to liability for a Contractor error, act, or omission arising out of the scope of Contractor's services as

defined in this Contract. Coverage shall be written subject to limits of not less than \$5,000,000 per loss.

7.4.2 If coverage in this Contract is on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this Contract, and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of two (2) years beginning from the time that work or services under the Contract is complete.

7.5 Deductibles and Self-Insured Retentions

7.5.1 Any deductibles or self-insured retentions must be declared to and approved by County. At the option of County, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects County, its officers, officials, agents, and employees; or Contractor shall procure a bond guaranteeing payment of deductibles or self-insured retentions.

7.5.2 Contractor shall be solely responsible for the payment of all deductibles to which such policies are subject, whether or not County is an insured under the policy.

7.6 Miscellaneous Insurance Provisions

7.6.1 The policies are to contain, or be endorsed to contain, the following provisions:

7.6.2 Any failure to comply with reporting provisions of the policies listed in this Contract shall not affect coverage provided to County its officers, officials, agents, and employees.

7.6.3 Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be canceled by either party except after thirty (30) days prior written notice has been given to County, 230 Government Center Drive #125, Wilmington, NC 28403.

7.6.4 If Contractor's liability policies do not contain the standard ISO separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

7.7 Acceptability of Insurers

7.7.1 Insurance is to be placed with insurers licensed to do

business in the State of North Carolina with an A.M. Best's rating of no less than A VII unless County has granted specific approval.

7.7 Evidence of Insurance

7.7.1 Contractor shall furnish County with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements prior to commencing the work or services, and thereafter upon renewal or replacement of each certified coverage until all operations under this Contract are deemed complete.

7.7.2 Evidence of additional insured status shall be noted on the certificate of insurance as per requirements in this Contract.

7.7.3 With respect to insurance maintained after final payment in compliance with requirements, an additional certificate(s) evidencing such coverage shall be provided to County with final application for payment and thereafter upon renewal or replacement of such insurance until the expiration of the period for which such insurance must be maintained.

7.8 Sub-Contractors. Contractor may utilize Walter Holmes Electric Inc. as subcontractor for this work. Subcontractor shall refer to Section 7 for insurance requirements Contractor shall include all sub-contractors as insureds under its policies or shall furnish separate certificates for each sub-contractor. All coverage for sub-contractors shall be subject to all of the requirements stated herein. CGL coverage shall include independent contractors' coverage, and Contractor shall be responsible for assuring that all sub-contractors are properly insured.

7.9 Conditions

7.9.1 The insurance required for this Contract must be on forms acceptable to County.

7.9.2 Where circumstances warrant, County may, at its discretion subject to acceptance by the Risk Management and Finance Department accept letters of credit or custodial accounts in lieu of specific insurance requirements.

7.9.3 Contractor shall provide that the insurance contributing to satisfaction of insurance requirements in this Contract shall not be canceled, terminated, or modified by Contractor without prior written approval of County.

7.9.4 Contractor shall promptly notify the New Hanover Facilities Management and the Risk Management Office at (910) 798-7497 of any accidents arising in the course of operations under the Contract causing bodily injury or property damage.

7.9.5 County reserves the right to obtain complete, certified copies of all required insurance policies, at any time.

7.9.6 Failure of County to demand a certificate of insurance or other evidence of full compliance with these insurance requirements or failure of County to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

7.9.7 By requiring insurance herein, County does not represent that coverage and limits will necessarily be adequate to protect Contractor and such coverage and limits shall not be deemed as a limitation of Contractor's liability under the indemnities granted to County in this Contract.

7.9.8 If Contractor fails to maintain the insurance as set forth herein, County shall have the right, but not the obligation, to purchase said insurance at Contractor's expense.

7.9.9 Contractor or its agent may apply to County for approval of higher deductibles based on financial capacity and quality of the carrier affording coverage.

7.9.10 County shall have the right, but not the obligation of prohibiting Contractor or any sub-contractor from entering the project site or withhold payment until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by County.

7.10 Standard of Care. Contractor shall exercise reasonable care and skill as might be expected from similarly situated Contractors performing work or services of the kind required under this Contract at the time and the place where the services are rendered. The staff of and subcontracted Contractors engaged by Contractor shall possess the experience, knowledge and character necessary to qualify them to perform the particular duties to which they are assigned.

8. Independent Contractor. The parties mutually agree that the Contractor is an independent contractor and not an agent of the County, and as such, the Contractor shall not be entitled to any County employment benefits, such as, but not limited to, vacation, sick leave, insurance, workmen's compensation, or pension and retirement benefits.

9. Default and Termination. If Contractor fails to prosecute the work or services with such diligence as will insure its completion within the Contract time, or if Contractor breaches any of the terms or conditions contained in this Contract and fails to cure said breach within two (2) days of County's mailing of Notice of Default, or otherwise fails to perform the work or services hereunder to the County's reasonable satisfaction, County may terminate this Contract forthwith. Upon termination, County may, without prejudice to an action for damages or any other remedy, take the prosecution of the work or services out of the hands of Contractor. County may enter into another Contract for the completion of the Contract, or use such other methods as may be required for the completion of the Contract. County may deduct all costs of completing the Contract from any monies due or which may become due to Contractor. In the event this Contract is terminated prior to completion of the services by the Contractor, the Contractor shall be paid for work or services performed to the date of termination. In no event will the amount due Contractor in the event of termination exceed that amount set forth in this Contract. Nothing contained herein shall prevent the County from pursuing any other remedy, which it may have against Contractor, including claims for damages.

10. Termination for Convenience. County may terminate this Contract for convenience at any time and without cause. Upon receipt of notice, Contractor shall immediately discontinue providing the work or service and, if applicable, placing any orders for any materials, facilities, and supplies in connection with the performance of the work or services of this Contract.

11. Non-appropriation. All funds for payment by County under this Contract are subject to the availability of any annual appropriation for this purpose by the Board of Commissioners. In the event of non-appropriation of funds by the Board of Commissioners for the services provided under the Contract, County will terminate the Contract, without termination charge or liability, on the last day of the then-current fiscal

year or when the appropriation made for then-current year for the services/items covered by this Contract is spent, whichever occurs first. If at any time funds are not appropriated for the continuance of this Contract, cancellation shall be accepted by the Professional on ten (10) business days' prior written notice, but failure to give such notice shall be of no effect and County shall not be obligated under this Contract beyond the date of termination.

12. Non-waiver of Rights. The parties mutually agree that either party's failure to insist upon the strict performance of any provision of this Contract or to exercise any right based upon a breach thereof, or the acceptance of any performance during such breach, shall not constitute a waiver of any rights under this Contract.

13. Conflict of Interest. No paid employee of the County shall have a personal or financial interest, direct or indirect, as a contracting party or otherwise, in the performance of this Contract.

14. Subcontracts. The Contractor shall utilize no subcontractors for carrying out the services to be performed under this Contract without the written approval of the County.

15. Entire Contract. This Contract constitutes the entire understanding of the parties.

16. Binding Effect. This Contract shall be binding upon the parties hereto, and their heirs, successors, executors, administrators and assigns.

17. Further Actions. The parties will make and execute all further instruments and documents required to carry out the purposes and intent of this Contract.

18. Severability. If any provision of this Contract is held unenforceable, then such provision will be modified to reflect the parties' intention. All remaining provisions of this Contract shall remain in full force and effect.

19. Inclusive Terms. Use of the masculine herein shall include the feminine and neuter, and the singular shall include the plural.

20. Governing Law. All of the terms and conditions contained herein shall be interpreted in accordance with the laws of the State of North Carolina.

21. Accounting Procedures for Refund of County Sales & Use Tax.

Pursuant to G.S. 105-164.14(c), the County is entitled to a refund of sales and/or use taxes paid by contractors on purchases of building materials, supplies, fixtures and equipment that become a part of or are annexed to any building or structure that is owned or leased by the County and is being erected, altered or repaired for use by the County.

Contractors shall provide a "certified statement" containing the specific required information. The certified statement must include all of the following information:

- a. the date the property was purchased;
- b. the type of property purchased;
- c. the cost of property purchased and the amount of sales and use taxes paid thereon;
- d. the project for which the property was used;
- e. if the property was purchased in this State, the county to which it was delivered; and
- f. if the property was not purchased in this State, the county in which the property was used.

If the contractor makes several purchases from the same vendor, the certified statement must indicate each invoice number, the inclusive dates of the invoices, the total amount each invoice, and the state and local sales and use taxes paid on the purchase. The statement must also include the cost of any tangible personal property withdrawn from the contractor's warehouse stock and the amount of state and local sales or use tax paid by the contractor. If subcontractors are used, similar certified statements by its subcontractors must be obtained by the general contractor and furnished to the County. Local sales or use taxes included in the contractor's statements must be shown separately from the State sales or use taxes. The contractor's statements must not contain sales or use taxes paid on purchases of tangible personal property purchased by the contractor for use in performing the contract which does not annex to, affix to or in some manner become a part of the building or structure that is owned or leased by the County and is being erected, altered or repaired for use by the County.

Examples of property on which sales or use tax has been paid by the contractor and which shall not be included in the contractor's statement are scaffolding, forms for

concrete, fuel for the operation of machinery and equipment, tools, equipment, equipment repair parts and equipment rentals.

A certified statement must be provided with each pay request. If there was no sales or use tax paid during the period, the contractor shall provide a "Zero" sales and use tax statement. .

22. Notices. All notices required hereunder to be sent to either party shall be sent to the following designated addresses, or to such other address or addresses as may hereafter be designated by either party by mailing of written notice of such change of address, by Certified Mail, Return Receipt Requested:

To County:

New Hanover County Facilities Management
Attn: Scott Gordon
200 Division Drive
Wilmington, NC 28401

To Contractor:

23. Assignability. The parties hereto agree that this Contract is not transferable and shall not be assigned by either party without the written consent of the other party to this Contract.

24. Contract Under Seal. The parties hereto expressly agree to create a Contract under seal.

IN WITNESS WHEREOF, the parties have hereunto affixed their hands and seals, the day and year first above written and by authority duly given.

CONTRACTOR

President (Seal)

ATTEST:

Secretary

STATE OF _____

_____ COUNTY

I, _____, a Notary Public of the State and County aforesaid, certify that _____ came before me this day and acknowledged that (s)he is Secretary of _____ an _____, and that by County duly given and as the act of the corporation, the foregoing instrument was signed in its name by its President and sealed with its corporate seal.

WITNESS my hand and official seal, this ____ day of _____, 2022.

Notary Public

My commission expires: _____

***[REST OF PAGE INTENTIONALLY BLANK.
NEW HANOVER COUNTY DIGITAL SIGNATURE PAGE FOLLOWS EXHIBIT A]***