

#### **REQUEST FOR BIDS**

#### Goldston Library Addition

Release Date: Tuesday, September 3, 2024

Mandatory Pre-Bid Meeting: Tuesday, <u>September 10</u>, 2024, at 10:00 AM EST

**Deadline for all questions:** Tuesday, September 17, 2024, at 12 Noon EST

**Addendum Release:** Thursday, <u>September 19</u>, 2024, at 5:00 PM EST (*if needed*)

Bid Deadline: Tuesday, October 1, 2024, at 2:00 PM EST

Physical Address: Chatham County Finance

12 East St

Pittsboro, NC 27312

Mailing address: Chatham County Finance

PO Box 608

Pittsboro, NC 27312

**Questions and Contact: Michele Peluso** 

Chatham County Finance

purchasing@chathamcountync.gov

**County Project Manager: Brian Stevens** 

Chatham County Facilities and Construction Division

Brian.stevens@chathamcountync.gov

**Chatham County Bids** 

and Opportunity Page: <a href="https://www.chathamcountync.gov/government/bid-proposal-opportunities">https://www.chathamcountync.gov/government/bid-proposal-opportunities</a>



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- 8. M/WBE Requirements



#### **ADVERTISEMENT**

Request for Bids: Goldston Library Addition

Chatham County is soliciting to create additional space in the existing Goldston Library based on the scope and drawings provided within these documents. Pursuant to NC General Statute 87.1 a general contractor license is required. Bids will be received by Michele Peluso, Chatham County Finance Office until <a href="mailto:2:00 PM">2:00 PM</a>, EST, on Tuesday, October 1, 2024. Bids will be opened publicly and read aloud at 2:00 PM EST, at the Chatham County Performance Building 964 East Street, Pittsboro, NC 27312, second floor conference room.

Copies of the BID DOCUMENTS and addenda may be obtained in electronic format via the Chatham County webpage at <a href="https://www.chathamcountync.gov/government/bid-proposal-opportunities">https://www.chathamcountync.gov/government/bid-proposal-opportunities</a>.

Each BID must be submitted in a sealed envelope, addressed to Michele Peluso, Chatham County Finance Office at 12 East St., Pittsboro, NC 27312. Each sealed envelope containing a BID must be plainly marked on the outside as <u>BID for Goldston Library Addition</u> and the envelope should bear on the outside the BIDDER'S GC License number, BIDDER'S name, address, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at PO Box 608, Pittsboro, NC 27312.

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required. BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA.

A mandatory pre-bid meeting is scheduled for Tuesday, September 10, 2024, at 10:00 AM EST, on the site located at 9235 Pittsboro Goldston Road, Goldston, NC 27252. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

Questions regarding this RFB must be submitted in writing either via e-mail to Michele Peluso at <a href="mailto:purchasing@chathamcountync.gov">purchasing@chathamcountync.gov</a> or by fax to 919-542-4261. All questions requiring additional information will be responded to in an addendum. The deadline for questions is Tuesday, September 17, 2024, by 12:00 Noon. The last addendum for this project will be issued Thursday, September 19, 2024, by 5:00 PM.



#### INFORMATION FOR BIDDERS

Request for Bids: Goldston Library Addition

BIDS will be received by Chatham County (herein called the "OWNER") until **2:00 PM EST, Tuesday, October 1, 2024**, and then publicly opened and read aloud at the Chatham County Performance Building 964 East Street, Pittsboro, NC 27312, second floor conference room.

Contractors, who are both submitting a bid and attending the public bid open, may choose to present your sealed bid to the Finance Office representative at the bid open location, and prior to the 2:00 PM deadline.

The OWNER may waive any informalities or minor defects or reject any and all BIDS.

Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof.

Any BID received after the time and date specified shall not be considered.

No BIDDER may withdraw a BID within 60 days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA.

The BID DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve the contractor from fulfilling any of the conditions of the contract.

The NOTICE TO PROCEED shall be issued within Thirty (30) days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the Thirty (30) day period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request.

The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein. A conditional or qualified BID will not be accepted.

Award will be made to the lowest responsive, responsible BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout. Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the BID DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

#### Request for Bids: Goldston Library Addition BID FORM

BIDDE	R acknowledges receipt of th	e following	ADDENDUM:	
	R agrees to perform all the wo	ork describe	ed in the BID DOCUM	IENTS for the following
	n ramp cam.	BID SCI	HEDULE	
Item	Description	Unit		Total
1	Addition	LS	\$	
2	Unforeseen Conditions Allowance		\$2	20,000.00
3	Cost for Additional 3 Parking Spaces	LS	\$	
4	Other Fees		\$	
5	Project Total (excluding tax)		\$	
* Propo	osed estimated Sales Tax to b	e paid in th	e project = \$	
			<b>-</b>	
Respec	tfully submitted:			
Signatu	ure	F	Address	
Title			Date	
Contra numbe	ctor's GC License r			
SEAL - (	(if BID is by a corporation)			

#### ADDITIONAL CONTRACTING REQUIREMENTS

#### A. Insurance Requirements

Chatham County requires selected contractors and any subcontractors to obtain and maintain, at their own expense, all insurance required by state and federal law. If requested, the selected organization agrees to provide Chatham County with evidence of required policies, certificates and/or endorsements upon the award of the contract. At a minimum, contractors and subcontractors are required to have the following coverage related to any contract work for Chatham County:

- Worker's Compensation The contractor shall provide and maintain Worker's Compensation Insurance as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$500,000, covering all of Contractor's employees who are engaged in any work under the contract. If any work is sublet, the Contractor shall require the subcontractor to provide the same coverage for any of his employees engaged in any work under the contract. (Non-applicable-individual.)
- Commercial General Liability General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$100,000 bodily injury per person, \$500,000 bodily injury per occurrence and \$100,000 property damage. (Defense cost shall be in excess of the limit of liability.)
- **Automobile** Automobile Liability Insurance, to include liability coverage, covering all owned, hired, and non-owned vehicles used in performance of the contract. The minimum combined single limit shall be \$250,000.00 bodily injury and \$100,000 property damage.

The County shall be named as an additional insured on both the professional liability and comprehensive general liability coverage. Contractor shall furnish copies of all such policies and all renewals, terminations, and alterations to the County on a current basis.

#### B. E-Verify

Effective September 4, 2013, North Carolina local government units are prohibited from entering into certain contracts unless the contractor and the contractor's subcontractors, if any, comply with the requirements of N.C. Gen. Stats. §64-26(a). Prior to providing any services hereunder, Contractor and Contractor's subcontractors, if any, are subject to the provisions of N.C. Gen. Stats. §64-26(a). Contractor agrees to fully comply with such statute and require Contractor's subcontractors, if any, to fully comply with such statute.

#### C. Iran Divestment Act

Effective October 1, 2015, North Carolina local government units are prohibited from entering into certain contracts unless the contractor and the contractor's subcontractors, if any, comply with the requirements of §143C-6A-5. Contractor agrees to fully comply with such statute and require Contractors subcontractors, if any, to fully comply with such statute.

#### D. Divestment from Companies that Boycott Israel:

Contractor certifies that (a) it is not identified on the Israel Boycott List, or any other list created by the NC State Treasurer pursuant to NC G.S. 147-86.80 et al, and (b) it will not take any action causing it to appear on any such list during the term of the Contract Agreement.

#### **E.** Additional County Conditions:

- All proposing firms or individuals shall comply with all conditions, requirements, and specifications contained herein, with any departure constituting sufficient cause for rejection of the submittal. However, Chatham County reserves the right to change the conditions, requirements and specifications as it deems necessary.
- The bid form must be signed by a duly authorized official of the proposing organization or individual submitting the bid.
- No bids will be accepted from any person or organization that is in arrears for any obligation to Chatham County, or that otherwise may be deemed irresponsible or unresponsive by county staff or the Chatham County Board of Commissioners.
- Chatham County is not obligated to enter into any contract as a result of the RFB.
- Chatham County reserves the right to reject any and all bids or any part thereof and to select the most responsive firm that is deemed in the best interest of Chatham County.
- Chatham County may approve or disapprove the use of specific proposed subcontractors in any bid.
- Chatham County reserves the right to enter into an agreement with another proposing vendor in the event that the originally selected vendor fails to execute a contract with the County or defaults on their contract.
- Chatham County reserves the right to negotiate with any, none or all of the proposing company.
- All costs, including travel and expenses, incurred in the preparation of this proposal will be borne solely by the proposing company.
- The County will not return bid materials to those submitting proposals.
- No agreements with any selected vendor shall be binding until a contract is signed and executed by the Board of Commissioners or County Manager and authorized representatives of the vendor.
- Chatham County will follow all applicable local, state, and federal procurement requirements when expending federal funds and require all contractors to comply in full.
- Details of all terms and conditions for purchase orders and contracts can be found at <a href="https://www.chathamcountync.gov/government/departments-programs-a-h/finance/forms">https://www.chathamcountync.gov/government/departments-programs-a-h/finance/forms</a>.

#### BID BOND / PERFORMANCE AND PAYMENT BOND REQUIREMENTS

#### A. Bid Bond

Pursuant to G.S. 143-129(b) Each proposal shall be accompanied by a cash deposit, a cashier's check or a certified check on some bank or trust company insured by the Federal Deposit Insurance Corporation in an amount not less than five percent (5%) of the proposal; or in lieu thereof, a bidder may offer a bid bond executed by a corporate surety licensed under the laws of North Carolina to execute such bond; conditioned that the surety will upon demand forth with make payment to the oblige upon said bond if the bidder fails to execute the contract

in accordance with the bid bond, and upon failure to forthwith make payment, the surety shall pay to the oblige an amount equal to the amount of said bond. The deposit shall be retained if the successful bidder fails to execute the contract within ten days (10) after notice of award or fails to give satisfactory surety required herein. Bid Guaranties should be sealed in a separate envelope, marked as such, and attached to the envelope containing the bidder's proposal. Checks are to be made payable to the County of Chatham. Facsimile bid bonds will not be accepted.

A refund of any cash deposits, made by unsuccessful bidders, will be issued as soon as the bids have been awarded by the County.

#### **B. Performance and Payment Bond**

Having satisfied all conditions of the award set forth elsewhere in these documents, the successful bidder(s) shall furnish, within ten (10) days after award, the following:

- 1. A Performance Bond in the amount of one hundred percent (100%) of the Construction Contract amount, conditioned upon the faithful performance of the Contract in accordance with the plans, specifications and conditions of the Contract. Such bond shall be solely for the protection of the contracting body which awarded the Contract.
- 2. A Payment Bond in the amount of one hundred percent (100%) of the Construction Contract amount, conditioned upon the prompt payment for all labor or materials for which a Contractor or Subcontractor is liable. The Payment Bond shall be solely for the protection of the persons furnishing materials or performing labor for which a Contractor or Subcontractor is liable.

Such bond shall be in the same form as that indicated in the contract documents and shall bear the same date subsequent to that of the agreement. The current Power of Attorney for the person who signs for any surety shall be attached to such bond. This bond shall be signed by a guarantee or surety company licensed to do business in the State of North Carolina and the agent MUST be a North Carolina resident.

The failure of the successful bidder to supply the required bonds within ten (10) days after award, or within such extended period as the Owner may grant, shall constitute a default; and the Owner may either award the contract to the next lowest responsible bidder or re advertise for bids. If the successful bidder fails to provide satisfactory surety, the Owner shall retain the bid guarantee as outlined in these instructions.

Chatham County is an Equal Opportunity Employer and does not discriminate on the basis of sex, marital status, race, color, creed, national origin, age or disability.

#### PROJECT INFORMATION

Work to be included in this project will be as identified within the project documents with minimal invasion (or construction) associated with the existing space.

This project will be performed while the existing facility remains in operation which will require proper supervision and behavior by all parties associated with the project. Any interactions with staff or patrons that is found to be inappropriate could result in removal of individuals or contractors from the site/project.

Please note that as this is a government managed project, items/materials noted within the documents are to be used as a basis for design and alternative items/materials can be submitted for approval as long as they meet the equal to or better than standard against the basis of design. Submittals may be requested for substantial materials/equipment such as HVAC equipment, plumbing fixtures, cabinets and countertops, etc. Submittals will be required for sign-off for finishes such as paint, flooring, base, color choices, etc.

# INDEX OF DRAWINGS

#### **ARCHITECTURAL DRAWINGS**

- DRAWING INDEX, NOTES, CODE REFERENCES
- LIFE SAFETY PLAN (PROVIDED PRIOR TO PERMIT) FIRE EXITING PLAN (PROVIDED PRIOR TO PERMIT)
- **EXISTING SITE PLAN** PROPOSED SITE PLAN
- PROPOSED FLOOR PLAN EXISTING FLOOR PLAN
- PROPOSED ELEVATIONS
- PROPOSED ROOF PLAN
- EXISTING ROOF PLAN SECTIONS AND CABINETRY
- **EXISTING ELEVATIONS**

#### **ELECTRICAL DRAWINGS**

**ELECTRICAL NOTES, LEGENDS AND SCHEDULES** LIGHTING AND ELECTRICAL PLAN AND NOTES

## PLUMBING DRAWINGS

- PLUMBING NOTES AND FIXTURE SCHEDULE
- PLUMBING FLOOR PLAN AND RISER

PANEL SCHEDULES AND RISER DIAGRAM

#### **MECHANICAL - HVAC DRAWINGS**

- HVAC NOTES, SCHEDULE AND DIFFUSER SCHEDULE
- **DUCT LAYOUT, NOTES, AND DETAILS**

#### STRUCTURAL DRAWINGS

- FOUNDATION PLAN AND DETAILS
- FLOOR PLAN AND DETAILS **ROOF FRAMING PLAN AND DETAILS**
- **DESIGN CRITERIA AND STRUCTURAL NOTES**

# **ADDITION AND ALTERATIONS**

# Chatham County Public Libraries

# Goldston Public Library

9235 Pittsboro Goldston Road Goldston, North Carolina 27252

# **CLARK DAVID MORTON, Architect**

**ARCHITECTURE - PLANNING - CONSTRUCTION OBSERVATION** 

**133 Colonial Trail Court** 

Pittsboro, North Carolina 27312

**North Carolina License No. 8091** 

(305) 753- 1798 (c)

(919) 533-6979

cdmorton@bellsouth.net

#### **CODE - TABULATION**

#### **APPLICABLE CODES**

2018 NORTH CAROLINA BUILDING CODE, AS AMENDED **LATEST ADOPTED EDITION - NATIONAL ELECTRIC CODE** APPLICABLE CODES BY REFERENCE

#### **OCCUPANCY**

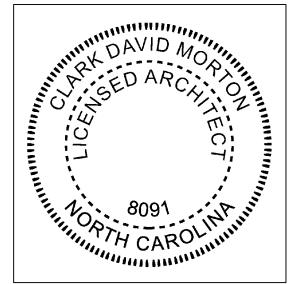
#### TYPE OF CONSTRUCTION

#### **GENERAL NOTES**

- 1. ALL WORK SHALL COMPLY WITH REQUIREMENTS OF 2018 NORTH CAROLINA BUILDING CODE.
- 2. THE CONTRACTOR SHALL REVIEW THE DRAWINGS IN THEIR ENTIRETY BEFORE STARTING WORK AND SHALL SUBMIT ANY QUESTIONS IMMEDIATELY IN WRITING TO THE BIDDING AGENCY.
- 4. SUBMIT A MINIMUM OF THREE (3) COPIES OF SHOP DRAWINGS FOR FLOOR AND ROOF SYSTEMS FOR REVIEW AND APPROVAL TO THE BIDDING AGENCY PRIOR TO FABRICATION.
- 5. THESE PLANS, AS DRAWN AND NOTED, COMPLY WITH THE BUILDING ENVELOPE ENERGY REQUIREMENTS OF THE NORTH CAROLINA ENERGY CODE FOR BUILDING CONSTRUCTION.
- 6. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE GOVERNING CODE IN ITS ENTIRETY. ALL WORK SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, CURRENT
- 7. TERMITE PROTECTION SHALL BE PROVIDED IN STRICT COMPLIANCE WITH NORTH CAROLINA BUILDING CODE REQUIREMENTS. PROVIDE CERTIFICATE AS DIRECTED BY BUILDING OFFICIAL.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATE BRACING OF STRUCTURAL OR NON-STRUCTURAL MEMBERS DURING CONSTRUCTION.
- 9. THE WINDOW AND DOOR SUPPLIER SHALL PROVIDE SHOP DRAWINGS TO THE BIDDING AGENCY FOR REVIEW AND APPROVAL.
- 10. ALL NEW EXTERIOR WINDOWS AND DOORS SHALL BE CAULKED AND WEATHER STRIPPED.
- 11. PROVIDE METAL THRESHOLD AT ALL EXTERIOR DOORS. 12. WINDOW UNITS SHALL DISPLAY LABELS SHOWING COMPLIANCE WITH THE NORTH CAROLINA
- ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION. 13. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMIT AND INSPECTION COSTS RELATED TO THE PROJECT. SAID COSTS SHALL BE INCLUDED IN THE BID.
- DURATION OF CONSTRUCTION. SITE SHALL BE LEFT IN A CLEAN CONDITION AT THE END OF EACH WORKDAY, WITH POLICING BEING DONE TO REMOVE ANY LOOSE DEBRI
- - THE CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH LIBRARY STAFF AS NEEDED

TO MAINTAIN A SAFE OPERATING ENVIRONMENT FOR THE DURATION OF THE PROJECT.

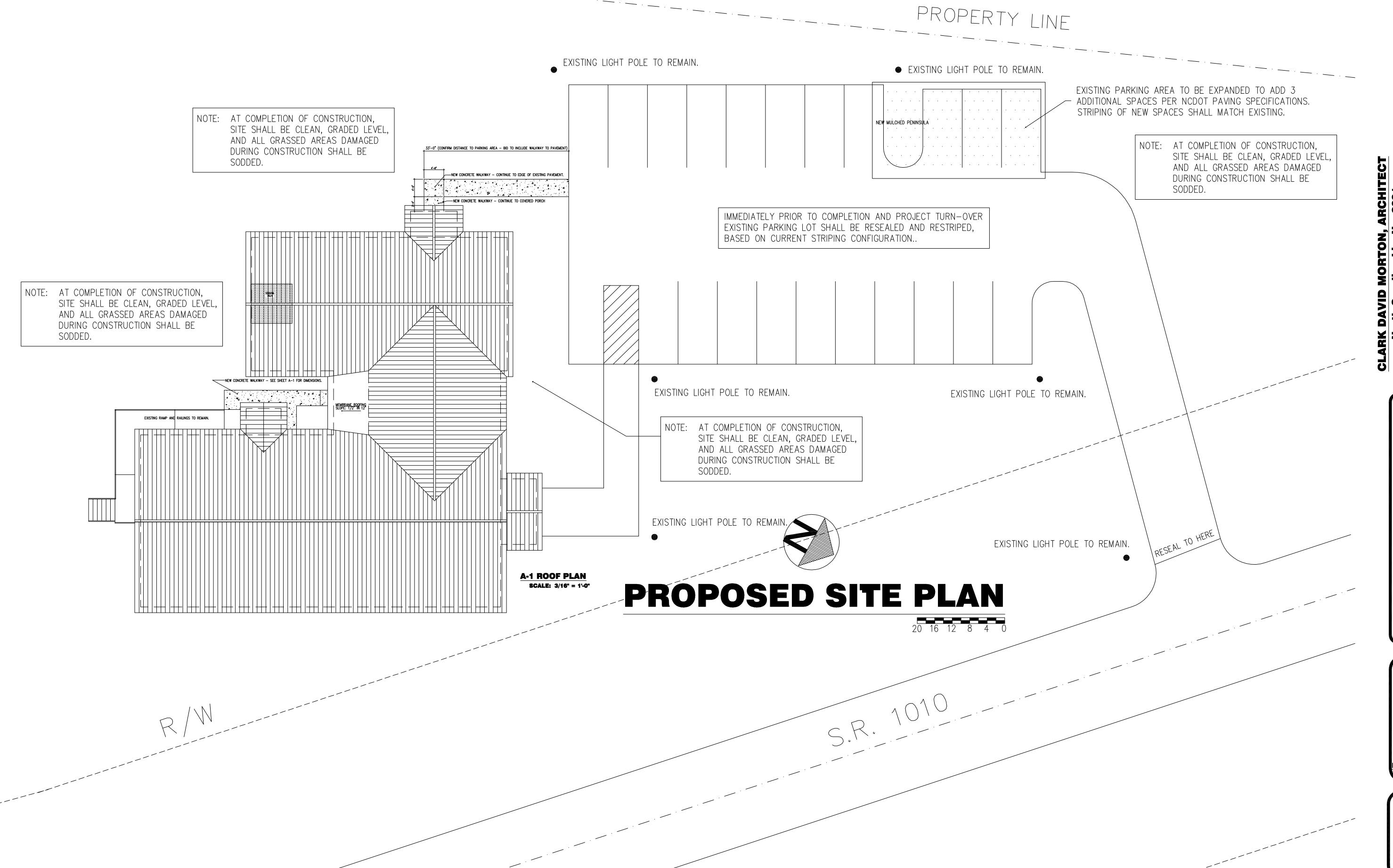
**Clark David Morton, Architect** No. Carolina Lic. #8091 4 April 2024



PROJECT 20-001 INITIAL ISSUE DATE

CS-1

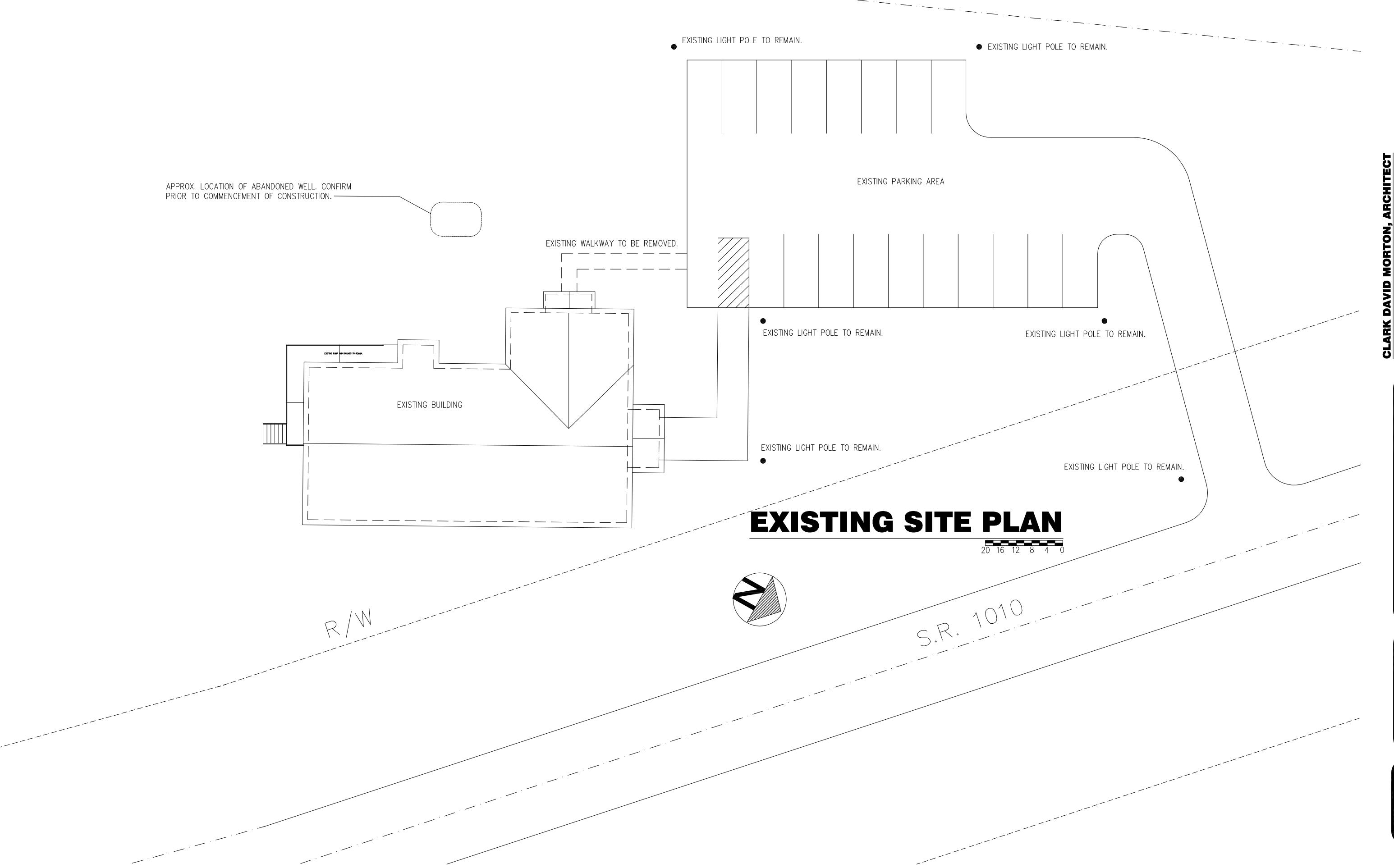




PROJECT 20-001
INITIAL ISSUE DATE
4 April 2024

SP-1

PROPERTY LINE



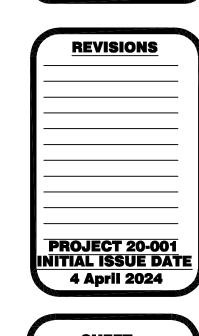
c. No. 8091

Bid Set

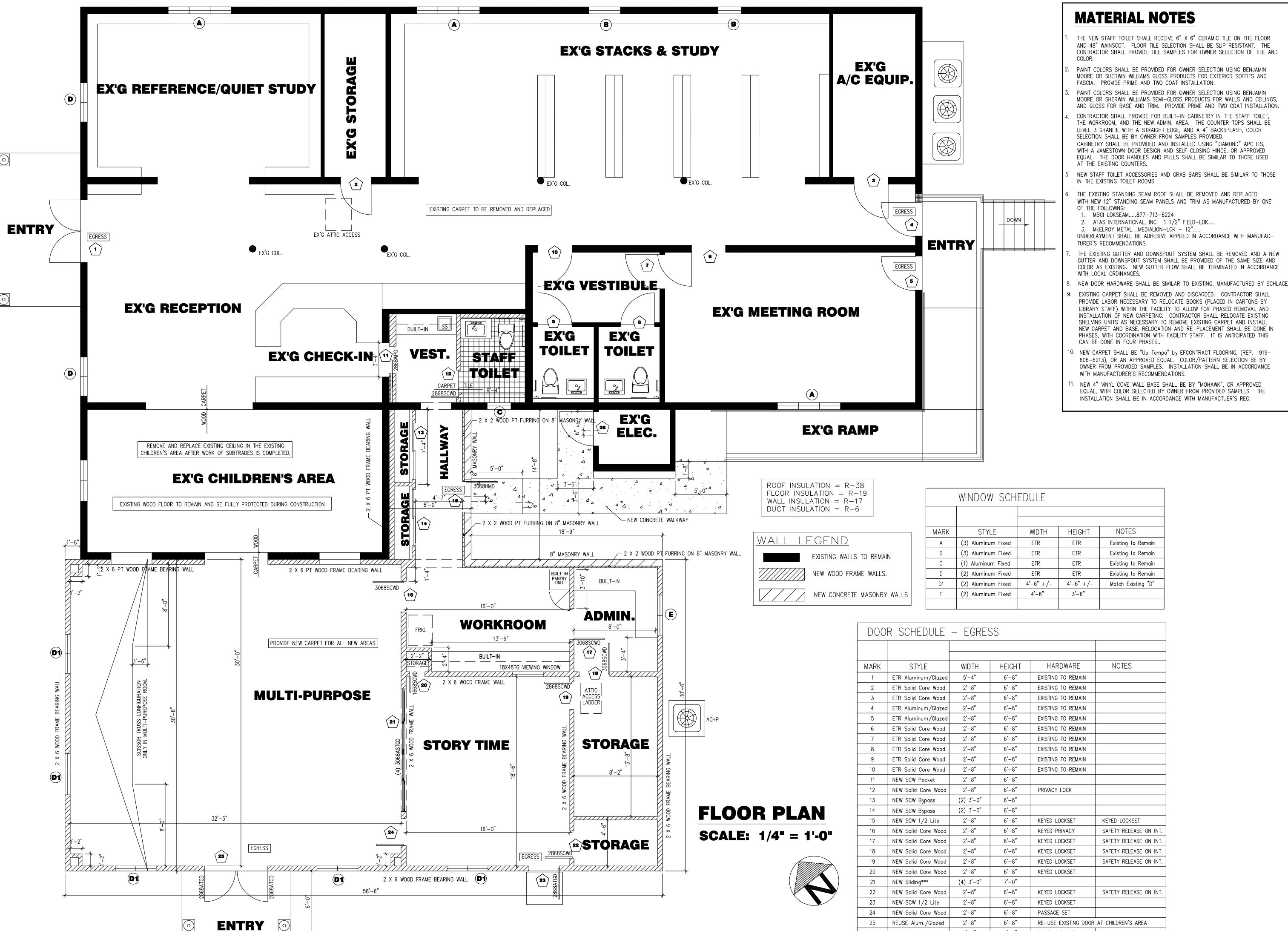
CLARK DAVID MORTON, ARCHITECT
Architecture - Planning - Construction Observation
133 Colonial Trail Court
Pittsboro, North Carolina 27312
305-753-1798 (c) 919-533-6979

Goldston Road

9235 Pittsboro Goldston Road
Goldston North Carolina 27252



SP-2



10'-8"



THE NEW STAFF TOILET SHALL RECEIVE 6" X 6" CERAMIC TILE ON THE FLOOR AND 48" WAINSCOT. FLOOR TILE SELECTION SHALL BE SLIP RESISTANT. THE CONTRACTOR SHALL PROVIDE TILE SAMPLES FOR OWNER SELECTION OF TILE AND

PAINT COLORS SHALL BE PROVIDED FOR OWNER SELECTION USING BENJAMIN MOORE OR SHERWIN WILLIAMS GLOSS PRODUCTS FOR EXTERIOR SOFFITS AND

PAINT COLORS SHALL BE PROVIDED FOR OWNER SELECTION USING BENJAMIN MOORE OR SHERWIN WILLIAMS SEMI-GLOSS PRODUCTS FOR WALLS AND CEILINGS, AND GLOSS FOR BASE AND TRIM. PROVIDE PRIME AND TWO COAT INSTALLATION.

THE WORKROOM, AND THE NEW ADMIN. AREA. THE COUNTER TOPS SHALL BE LEVEL 3 GRANITE WITH A STRAIGHT EDGE, AND A 4" BACKSPLASH, COLOR SELECTION SHALL BE BY OWNER FROM SAMPLES PROVIDED. CABINETRY SHALL BE PROVIDED AND INSTALLED USING "DIAMOND" APC ITS, WITH A JAMESTOWN DOOR DESIGN AND SELF CLOSING HINGE, OR APPROVED EQUAL. THE DOOR HANDLES AND PULLS SHALL BE SIMILAR TO THOSE USED

NEW STAFF TOILET ACCESSORIES AND GRAB BARS SHALL BE SIMILAR TO THOSE

THE EXISTING STANDING SEAM ROOF SHALL BE REMOVED AND REPLACED WITH NEW 12" STANDING SEAM PANELS AND TRIM AS MANUFACTURED BY ONE

2. ATAS INTERNATIONAL, INC. 1 1/2" FIELD-LOK....

3. McELROY METAL....MEDIALION-LOK - 12".....

UNDERLAYMENT SHALL BE ADHESIVE APPLIED IN ACCORDANCE WITH MANUFAC-

THE EXISTING GUTTER AND DOWNSPOUT SYSTEM SHALL BE REMOVED AND A NEW GUTTER AND DOWNSPOUT SYSTEM SHALL BE PROVIDED OF THE SAME SIZE AND COLOR AS EXISTING. NEW GUTTER FLOW SHALL BE TERMINATED IN ACCORDANCE

PROVIDE LABOR NECESSARY TO RELOCATE BOOKS (PLACED IN CARTONS BY LIBRARY STAFF) WITHIN THE FACILITY TO ALLOW FOR PHASED REMOVAL AND INSTALLATION OF NEW CARPETING. CONTRACTOR SHALL RELOCATE EXISTING SHELVING UNITS AS NECESSARY TO REMOVE EXISTING CARPET AND INSTALL NEW CARPET AND BASE. RELOCATION AND RE-PLACEMENT SHALL BE DONE IN PHASES, WITH COORDINATION WITH FACILITY STAFF. IT IS ANTICIPATED THIS

 NEW CARPET SHALL BE "Up Tempo" by EFCONTRACT FLOORING, (REP. 919— 606-6213), OR AN APPROVED EQUAL. COLOR/PATTERN SELECTION BE BY OWNER FROM PROVIDED SAMPLES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

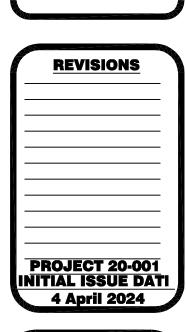
NEW 4" VINYL COVE WALL BASE SHALL BE BY "MOHAWK", OR APPROVED EQUAL, WITH COLOR SELECTED BY OWNER FROM PROVIDED SAMPLES. THE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTUER'S REC.

2'-8"

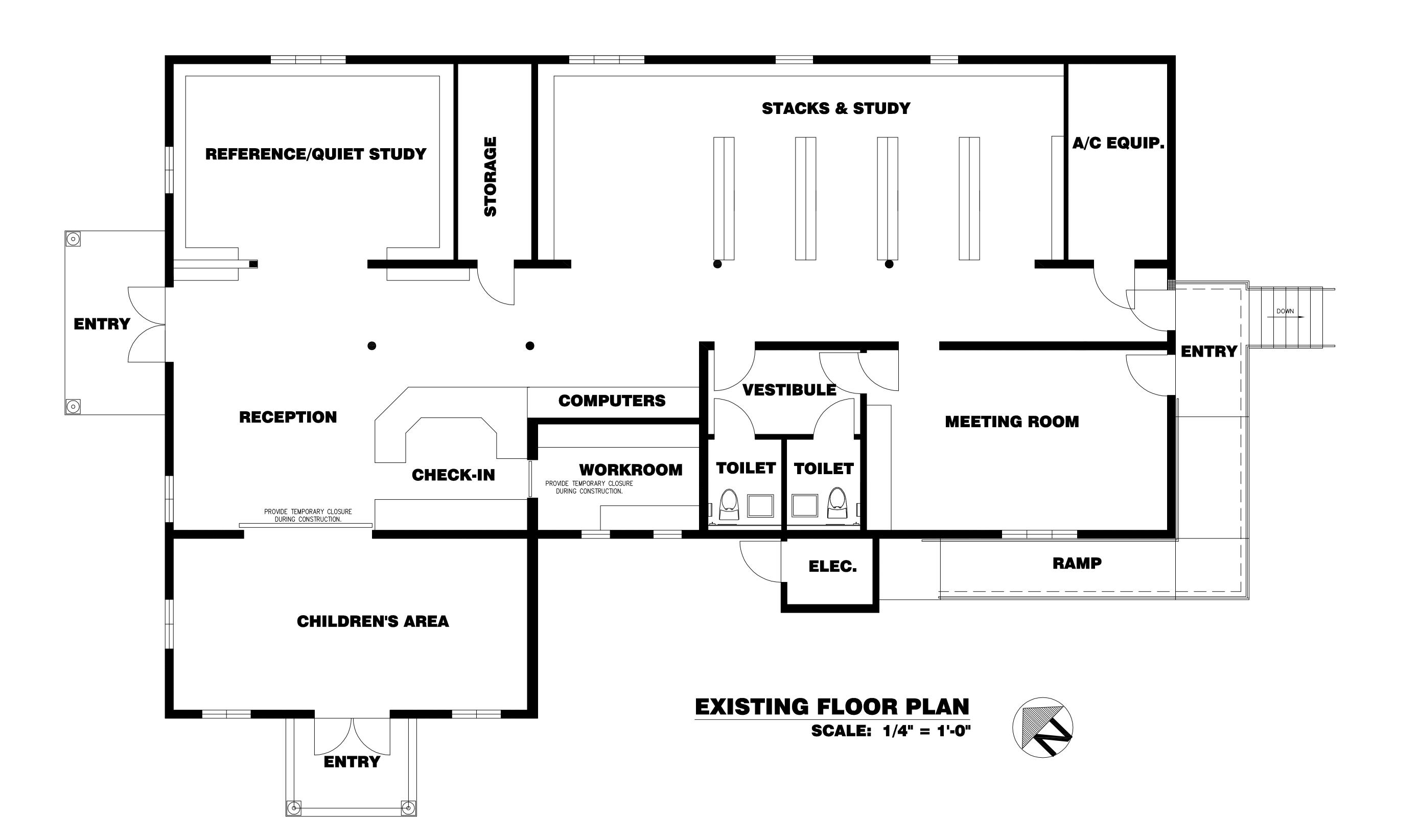
Metal door

6'-8"

EXISTING TO REMAIN



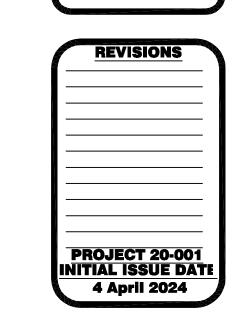
<u>SHEET</u>



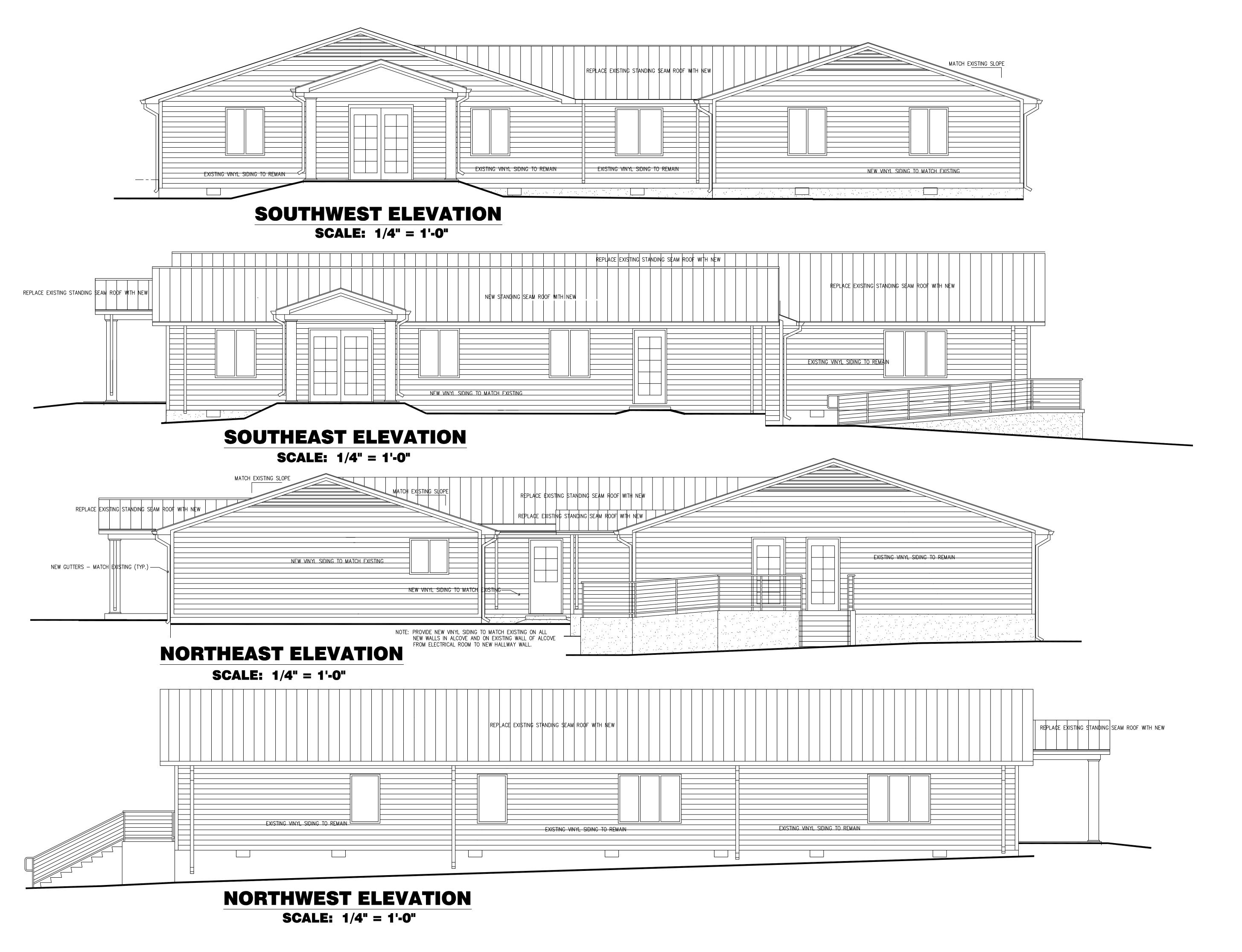
Bid Set

LARK DAVID MORTON, ARCHITECT
chitecture. Planning . Construction Observation

Goldston Public Librar 9235 Pittsboro Goldston Road







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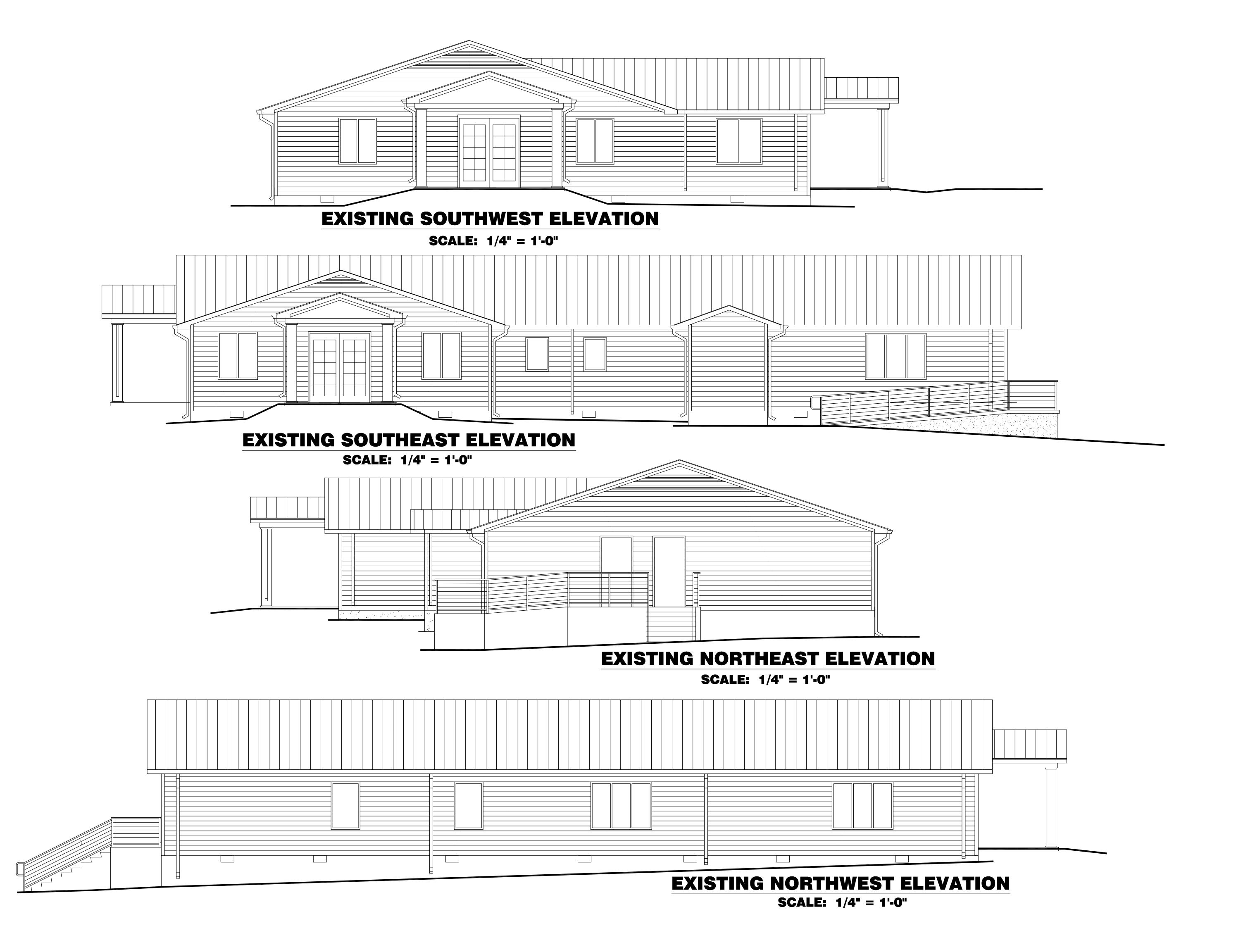
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CLARK DAVID MORTON, ARCHITECT
Architecture - Planning - Construction Observation
133 Colonial Trail Court
Pittsboro, North Carolina 27312

Goldston Rolling Libra
9235 Pittsboro Goldston Roa



A-3

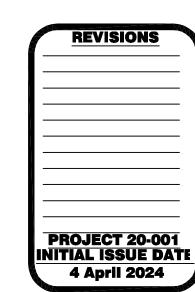


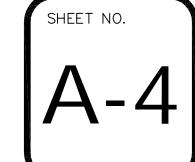


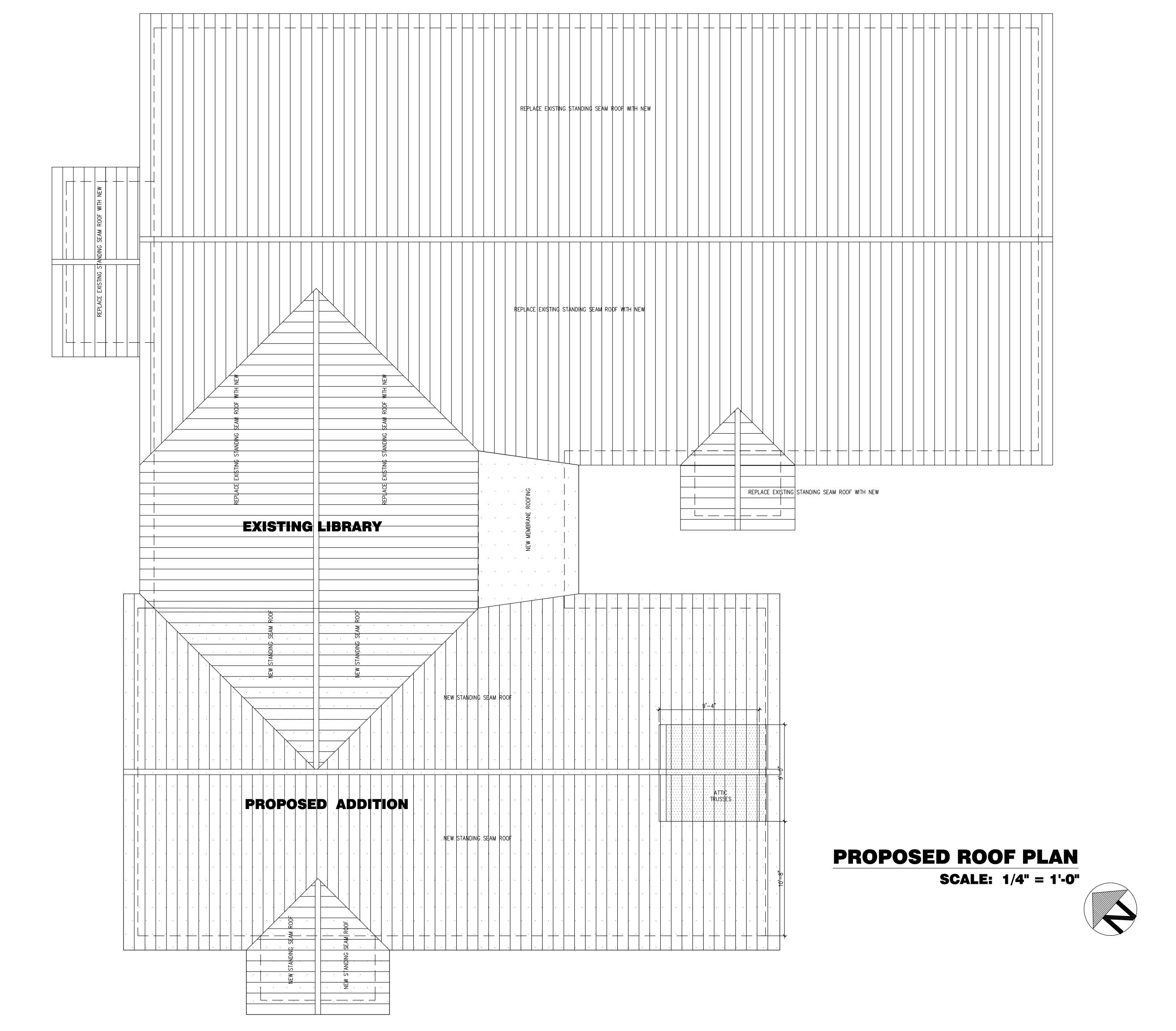
Bid Set

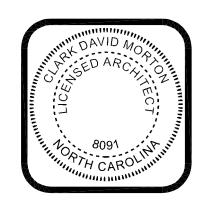
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Pittsboro, North Carolina 27312

Goldston Public Libra
9235 Pittsboro Goldston Road





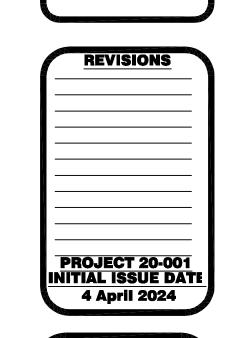




Bid Set

Architecture - Planning - Construction Observation 133 Colonial Trail Court Pittsboro, North Carolina 27312 305-753-1798 (c) 919-533-6979 cdmorton@bellsouth.net

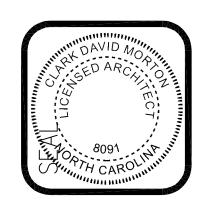
Goldston, North Caroline 2725





**EXISTING ROOF PLAN** 

**SCALE:** 1/4" = 1'-0"



id Set

CLARK DAVID MORTON, ARCHITECT
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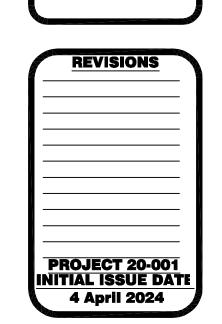
ADDITION & ALTERATION

to

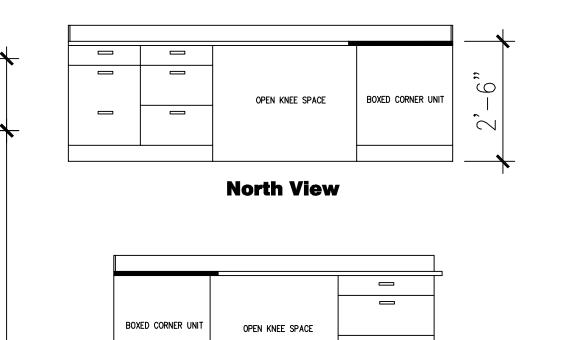
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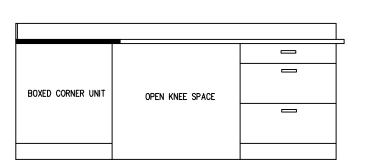
soldston Public Library

9235 Pittsboro Goldston Road







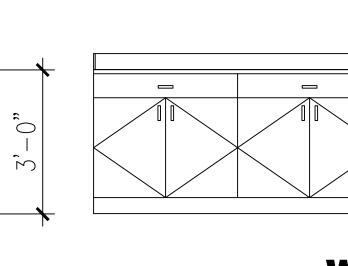


**East View Administration Scale:** 1/2" = 1'-0"

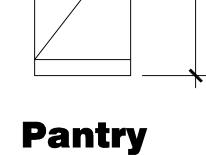
**Vestibule** Scale: 1/2" = 1'-0"

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**Staff Toilet** Scale: 1/2" = 1'-0"

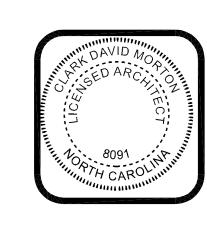


Workroom Scale: 1/2" = 1'-0"



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Scale: 1/2" = 1'-0"



ADDITION



#### GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES.
- 2. ALL MATERIAL, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITER'S LABORATORIES, INC., AND THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.
- ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR. DRAWINGS ARE DIAGRAMMATIC ONLY AND INDICATE ONLY THE GENERAL ARRANGEMENT. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
- 4. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.
- 5. ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL POWER CONNECTIONS TO HVAC, PLUMBING AND OTHER EQUIPMENT AS REQUIRED.
- 6. A COMPLETE GROUNDING SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE
- 7. ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 8. CONDUCTORS #8 AND SMALLER SHALL BE COPPER RATED AT NOT LESS THAN 600 VOLTS. CONDUCTORS #6 AND LARGER MAY BE ALUMINUM RATED AT NOT LESS THAN 600 VOLTS. MINIMUM SIZE SHALL BE #14 AWG WITHIN RESIDENTIAL UNITS AND #12 ELSEWHERE. ALL WIRE #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID, UNLESS OTHERWISE NOTED. BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE THHN OR THWN AS REQUIRED.
- 9. ALL WIRING SHALL BE INSTALLED IN GALVANIZED RIGID CONDUIT, INTERMEDIATE METAL CONDUIT, OR EMT. EXCEPT AS ALLOWED BELOW. EMT SHALL NOT BE USED IN OR UNDER CONCRETE SLABS, OR IN MASONRY WALLS. USE SCHEDULE 40 PVC OUTDOORS WHERE NOT SUBJECT TO PHYSICAL DAMAGE OR BELOW FLOOR SLAB. MINIMUM CONDUIT SIZE TO BE 1/2". TYPE NM, MC AND AC CABLE MAY BE USED WHERE PERMISSIBLE BY NEC. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTIONS TO VIBRATING EQUIPMENT AND LUMINAIRES, BUT SHALL NOT EXCEED 6' IN LENGTH.
- 10. PROVIDE A PULLWIRE IN ALL EMPTY CONDUITS.
- II. PROVIDE A TYPED DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL PANELBOARDS AND DISCONNECT SWITCHES, WHITE LETTERS ON BLACK BACKGROUND.
- 12. FUSES 0 600 AMPS SHALL BE UL CLASS "RK-I" LOW PEAK DUAL ELEMENT TIME DELAY WITH 200,000 AMPERE INTERRUPTING RATING AS MANUFACTURED BY BUSSMANN, UNLESS NOTED OTHERWISE.
- 13. ALL TERMINALS/LUGS SHALL BE 60/75° RATED. ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED.
- 14. VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
- 15. E.C. TO VERIFY DEVICE PLATE COLOR AND MATERIAL WITH ARCHITECT PRIOR TO PURCHASE.
- 16. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.).
- 17. PENETRATIONS OF REQUIRED SMOKE PARTITIONS SHALL BE SEALED USING METHODS APPROVED UNDER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO ENSURE THAT THIS SMOKE STOPPING IS ACCOMPLISHED.
- 18. WHERE PENETRATIONS ARE MADE THROUGH A REQUIRED FIRE-RESISTIVE WALL, FLOOR, OR PARTITION FOR THE PURPOSE OF RUNNING RACEWAY CARRYING ELECTRICAL, TELEPHONE, TELEVISION, OR LOCAL COMMUNICATION AND/OR SIGNALING CIRCUITS, THE OPENING AROUND THE RACEWAY SHALL BE FIRE STOPPED PER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS FIRE STOPPING IS ACCOMPLISHED. USE APPROVED U.L. OR EQUIVALENT ASSEMBLIES.
- 19. IN REQUIRED FIRE RATED WALLS AND PARTITIONS, OPENINGS FOR INSTALLATION OF BOXES THAT ARE GREATER THAN 16 SQUARE INCHES SHALL BE PROTECTED AS REQUIRED BY U.L. COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO INSURE THAT THE INTEGRITY OF THE U.L. RATING IS MAINTAINED.
- 20. WHERE A HOME RUN IS SHOWN THE CIRCUIT SHALL BE INSTALLED IN A DEDICATED CONDUIT, DO NOT COMBINE WITH OTHER CIRCUITS. WHERE A CIRCUIT HOMERUN IS NOT SHOWN, THE CONTRACTOR SHALL COMBINE CIRCUITS AS FOLLOWS: A MAXIMUM OF THREE 20A BRANCH CIRCUITS MAY BE COMBINED IN A COMMON HOMERUN WITH SEPARATE NEUTRALS FOR A MAXIMUM TOTAL OF SIX CURRENT CARRYING CONDUCTORS. ALL BRANCH CIRCUITS LARGER THAN 20A SHALL BE SEPARATELY HOMERUN TO THE PANEL.
- 21. COORDINATE WITH THE CABLE TV AND TELEPHONE UTILITIES FOR SERVICE ENTRANCE AND CABLING REQUIREMENTS PRIOR TO ANY PURCHASING. INSTALLATION MUST COMPLY WITH THEIR RESPECTIVE REGULATIONS AND REQUIREMENTS.
- 22. RECEPTACLES IN COMMERCIAL AREAS SHALL BE SPECIFICATION GRADE EQUAL TO HUBBELL 5200/5300 SERIES; GROUND FAULT RECEPTACLES SHALL BE EQUAL TO HUBBELL GF-5362. ALL I5A/20A I20V RECEPTACLES IN PRIMARY/ KINDERGARDEN AREAS SHALL BE TAMPER PROOF, EQUAL TO COOPER TR SERIES; GROUND FAULT RECEPTACLES SHALL BE EQUAL TO COOPER VGF SERIES. LIGHTING SWITCHES SHALL BE SPECIFICATION GRADE EQUAL TO HUBBELL 1200 SERIES. ENSURE DEVICES ARE INSTALLED IN COMPLIANCE WITH ANSI AII7.1 FOR ADA REQUIREMENTS.
- 23. ALL EXTERIOR FIXTURES AND DEVICES SHALL BE RATED FOR OPERATION AT 0° F AND SHALL BE DAMP OR WET LABELED AS REQUIRED.
- 24. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. IN ACCORDANCE WITH LOCAL SEISMIC CODE REQUIREMENTS. PROVIDE SEISMIC RESTRAINTS, ACCESSORIES AND INSTALLATION DETAIL AS REQUIRED.
- 25. ALL QUESTIONS MUST BE SUBMITTED IN RFI FORMAT TO THE ARCHITECT AND MUST BE ADDRESSED BY THE APPROPRIATE DESIGNER OF RECORD PRIOR TO BECOMING A PROPOSED CHANGE ORDER.
- 26. OUTLETS SHALL BE STAGGERED BETWEEN STUDS TO REDUCE SOUND TRANSMISSION.

			L	LIGHTING	G FIX	TUR	E SCHE	DUL	.E	
MARK	MANUF.	CATALOG NUMBER	LA NO.	MP DATA  TYPE	VOLTS	BAL NO.	LAST DATA TYPE	INPUT WATTS	MOUNTING	DESCRIPTION
А	HE WILLIAMS	BP-24-LS-8-CS-DIM-UNV BP24SMK-W	- -	LED 3500K	UNV	- -	-	39	SURFACE	MULTI-PURPOSE, STORY TIME - 2'x4' SURFACE MOUNTED LED BACKLIT FLAT PANEL; COORDINATE MOUNTING WITH ARCHITECT.
В	HE WILLIAMS	BP-I4-LS-8-CS-DIM-UNV BPI4SMK-W	-	LED 3500K	UNV	1	-	30	SURFACE	STORAGE, ADMIN - I'x4' SURFACE MOUNTED LED BACKLIT FLAT PANEL; COORDINATE MOUNTING WITH ARCHITECT.
С	HE WILLIAMS	6DR-TL-L20/830-DIM-UNV- OW-OF-CS-N-FI	-	LED	UNV	-	-	19	RECESSED	STORAGE, VESTIBULE - RECESSED LED; CONFIRM REFLECTOR & TRIM WITH ARCHITECT.
٧	VONN	PROCYON VMWII200	1	LED 3000K	120	1	-	24	WALL (HEIGHT BY ARCH)	BATHROOM - LED BATHROOM WALL LAMP WITH WHITE FINISH.
E	SCOTT ARCHITECTURAL	S9410-L16-EML (90-MIN EMERGENCY PACK)	1	LED 3500K	120/277	ı	-	16	WALL (HEIGHT BY ARCH)	EXTERIOR BUILDING - EXTERIOR LED WALL SCONCE; HEIGHT BY ARCHITECT.
F	BROAN	HD80L (COORDINATE PURCHASE AND INSTALLATION WITH M.C.)	-	LED	120	-	-	43	RECESSED	BATHROOM - FAN/LIGHT COMBINATION UNIT WITH 80CFM FAN AND WHITE ACRYLIC DIFFUSER.
FLx	1	-	1	LED	-	1	-	-	SURFACE	EXTERIOR - LED FLOOD LAMP.
G	SIGNIFY	FSS-4-40L-830-277-DIM	1	LED	120	1	-	30	SURFACE	ATTIC - 48" LED STRIP LIGHT W/ ACRYLIC LENS; PROVIDE WIRE GAURD.
	SIGNIFY CHLORIDE	CLR2W	-	LED	UNV	1	NA	4	SURFACE	SURFACE LED EMERGENCY LIGHT. MOUNT AT 96" AFF TO BOTTOM. MAX 56' SPACING. PROVIDE WITH 90 MINUTE BATTERY BACKUP.
EMX	SIGNIFY CHLORIDE	PLACEMBZ-BAC	8	3W LED	120/277	1	-	24	WALL	SURFACE MOUNTED EXTERIOR EMERGENCY LIGHT, MOUNT AT 8'-6" AFF. CONNECT TO UNSWITCHED LEG OF EXTERIOR LIGHTING CIRCUIT.
<b>⊗</b> EX	SIGNIFY CHLORIDE	CN-6-GC-A-I	-	LED	UNV	-	NA	4	SURFACE	EDGE-LIT EXIT SIGN WITH GREEN LETTERS, CLEAR PANEL AND BRUSHED ALUMINUM HOUSING. PROVIDE TWO-FACED OPTION WHERE NOTED ON PLAN.

- CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF FIXTURE DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY FIXTURES. INFORMATION ON ALTERNATE FIXTURES PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT FIXTURE (OR THE ALTERNATE PACKAGE AS A WHOLE).
- EXIT AND EMERGENCY LIGHTING FIXTURES SHALL BE CIRCUITED TO AN UNSWITCHED LEG OF THE LOCAL LIGHTING CIRCUIT, UNLESS NOTED OTHERWISE. WHERE FIXTURE IS LOCATED RECESSED IN A RATED FLOOR/CEILING ASSEMBLY PROVIDE WITH TENMAT 1-HOUR OR 2-HOUR FIRE RATED LIGHT COVER TO MATCH ASSEMBLY
- COLOR TEMPERATURES OF LED LAMPS SHALL BE CONFIRMED WITH THE ARCHITECT.
- CONFIRM MANUFACTURER, TYPE AND FINISH OF ALL LIGHTING FIXTURES AND ACCESSORIES WITH ARCHITECT AND OWNER PRIOR TO PURCHASE AND INSTALLATION.

## LIGHTING SYSTEMS

**ENERGY CONSERVATION CODE SECTION 405** 

(SEE BELOW)

#### LIGHTING POWER DENSITY CALCULATION COMPLIANCE

INTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE 405.4.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.

INTERIOR WATTAGE SPECIFIED VS. ALLOWED

THIS PROJECT IS CLASSIFIED AS -

\_\_\_\_X VS. X\_\_\_\_ EXTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE 405.6.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.

TRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED NONTRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED NA VS. NA ENERGY CONSERVATION CODE, SECTION C405 AND ANY LOCAL AMENDMENTS THEREOF.

DESIGNER STATEMENT:

PAUL SCOTT, PE

ELECTRICAL ENGINEER

SECTION 406 COMPLIANCE -  $\square$  N/A

 $\square$  406.1.1  $\square$  406.1.2  $\square$  406.1.3  $\square$  406.1.4  $\square$  406.1.5  $\square$  406.1.6

## **ELECTRICAL DEMOLITION NOTES**

- DRAWINGS ARE BASED ON EXISTING PLANS AND NON-DESTRUCTIVE FIELD INVESTIGATIONS. THE CONTRACTOR SHALL VISIT THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS. THE CONTRACTOR SHALL EXAMINE RELATED DRAWINGS TO AVOID CONFLICTS.
- 2. PROVIDE ELECTRICAL DEMOLITION WORK AS NECESSARY TO INSTALL NEW WORK. ELECTRICAL CONTRACTOR SHALL REPOUTE AND RECONNECT ANY CIRCUITS THAT WILL REMAIN IN USE BUT INTERFERES WITH NEW CONSTRUCTION.
- MATERIAL BEING REMOVED UNDER DEMOLITION (AND NOT TO BEING RELOCATED) SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED COMPLETELY FROM THE SITE, UNLESS OTHERWISE NOTED.
- 4. EXISTING CONDUITS THAT WILL NOT BE REUSED SHALL BE REMOVED IN CEILING PLENUMS AND WALLS. OTHERS MAY BE ABANDONED BELOW FLOOR SLABS. CONTRACTOR SHALL REMOVE ALL WIRING FROM ABANDONED CONDUITS. CUT-OFF ABANDONED CONDUITS BELOW FLOOR AND GROUT FLUSH WITH NON-CONTRACTING GROUT.
- 5. ABANDONED DEVICES SHALL BE REMOVED WITH THE JUNCTION BOX. WALLS SHALL BE PATCHED TO MATCH ADJACENT SURFACES.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING

COMPLIES WITH THE LIGHTING SYSTEMS REQUIREMENTS OF THE INTERNATIONAL

- 6. CONTRACTOR SHALL EXERCISE CARE IN REMOVING DEMOLITION ITEMS AND SHALL REPAIR OR REPLACE AT HIS COST ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND EQUIPMENT TO REMAIN.
- 7. SCHEDULE WORK IN EXISTING BUILDING AT TIME CONVENIENT TO OWNER.
- 8. DEVICES TO BE REMOVED AND NOT REINSTALLED SHALL HAVE JUNCTION BOXES, CONDUCTORS, CONDUIT AND ALL ASSOCIATED APPURTENANCES REMOVED BACK TO LAST ACTIVE DEVICE OR PANELBOARD.

## ELECTRICAL ABBREVIATIONS

18"	DIMENSION INDICATES HEIGHT ABOVE FINISHED FLOOR AT WHICH CENTER OF DEVICE IS TO BE MOUNTED.
AFF	ABOVE FINISHED FLOOR.
AFG	ABOVE FINISHED GRADE.
E.C.	ELECTRICAL CONTRACTOR.
FPN	FUSE PER EQUIPMENT NAMEPLATE REQUIREMENTS.
G.C.	GENERAL CONTRACTOR.
M.C.	MECHANICAL CONTRACTOR.
P.C.	PLUMBING CONTRACTOR.

INDICATES DEVICE TO HAVE WEATHERPROOF COVER.

UNLESS OTHERWISE NOTED.

NIGHT LIGHT, LIGHT NOT SWITCHED.

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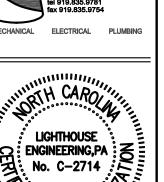
#### SYSTEM COMMISSIONING NOTES (NCECC C408)

COMMISSIONING REQUIREMENTS ARE NOT REQUIRED FOR THIS BUILDING, PER EXEMPTION UNDER NCECC C408.1, WHICH ALLOWS COMMISSIONING EXEMPTIONS FOR BUILDINGS LESS THAN OR EQUAL TO 10,000 SQUARE FEET OF CONDITIONED SPACE. THIS BUILDING CONTAINS 6,000 (INCLUDING 1,800 NEW / RENOVATED) SQUARE FEET OF CONDITIONED SPACE.

ELECTRICAL SYMBOL LEGEND CIRCUIT CONDUCTORS CONCEALED IN FLOOR, WALL OR CEILING. ARROWHEAD INDICATES HOMERUN TO PANEL NOTED. INDICATES HOT LEG OF CIRCUIT TO BE CARRIED OVER TO NEXT DEVICE. SEE PLANS FOR CONTROL SCHEME. **(** JUNCTION BOX CEILING MOUNTED. JUNCTION BOX FLOOR MOUNTED Ю JUNCTION BOX WALL MOUNTED AT HEIGHT INDICATED ON DRAWINGS. SINGLE POLE SWITCH, 20A, 120/277 VOLT, 46" A.F.F. TO CENTER. "3" INDICATES 3-WAY SWITCH. "4" INDICATES 4-WAY SWITCH. "D" INDICATES DIMMER SWITCH OF TYPE TO SUIT LOAD. "H" INDICATES HINGE MOUNTED PUSH OFF SWITCH. "K" INDICATES KEY OPERATED SWITCH "M" INDICATES 120V, 20A MOTOR RATED TOGGLE SWITCH. SS INDICATES FLUORESCENT FIXTURES DUAL SWITCHED, INBOARD/OUTBOARD SWITCHED SEPARATELY.  $\Theta$ SINGLE RECEPTACLE, 20 AMP, 120 VOLT, 18" A.F.F. TO CENTER. DUPLEX RECEPTACLE, 15 AMP, 120 VOLT, 18" A.F.F. TO CENTER. **=** "GFI" INDICATES GROUND FAULT CIRCUIT INTERRUPTER TYPE. "WP" INDICATES WEATHERPROOF. "EWC" INDICATES MOUNT GFI RECEPTACLE BESIDE ENCLOSURE OF ELECTRIC WATER COOLER. QUADRUPLEX RECEPTACLE, AS ABOVE, 18" A.F.F. DUPLEX RECEPTACLE, AS ABOVE, SPLIT WIRED, TOP HALF SWITCHED, 18" A.F.F. DUPLEX RECEPTACLE, AS ABOVE, MOUNTED 6" ABOVE COUNTER TOP OR 4" ABOVE BACKSPLASH, AS APPROPRIATE, OR AT HEIGHT INDICATED. DUPLEX RECEPTACLE, AS ABOVE, MOUNTED 6" ABOVE COUNTER TOP OR 4" ABOVE BACKSPLASH, AS APPROPRIATE, OR AT HEIGHT INDICATED, WITH GFI PROTECTION. RECESSED FLUSH FLOOR DUPLEX RECEPTACLE WITH BRASS COVERPLATE. COORDINATE EXACT FINISH WITH ARCHITECT AND OWNER. 240V RECEPTACLE, SEE PLANS FOR NEMA CONFIGURATION. TELEPHONE OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. PROVIDE 3/4 CONDUIT TO ACCESSIBLE CEILING. ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE. DATA OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT 4 DEVICE, UNLESS OTHERWISE NOTED. PROVIDE I" CONDUIT TO ACCESSIBLE CEILING. TELEPHONE/DATA OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. PROVIDE I" CONDUIT TO ACCESSIBLE CEILING. HEAVY DUTY FUSIBLE/NON-FUSIBLE DISCONNECT SWITCH, NUMBERS INDICATE FRAME SIZE, NUMBER OF POLES AND FUSING. PROVIDE NEMA I ENCLOSURE INSIDE. PROVIDE NEMA 3 ENCLOSURE FOR ALL SWITCHES LOCATED OUTSIDE. "FPN" INDICATES FUSE PER EQUIPMENT NAMEPLATE "NF" INDICATES NON-FUSED. "MS" INDICATES MOTOR STARTER OF TYPE TO SUIT LOAD. ELECTRICAL PANEL, SURFACE OR RECESS MOUNTED, SEE SCHEDULE FOR DETAILS. FAN, PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. PROVIDE DISCONNECTING MEANS AS REQUIRED. WATER HEATER, PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. PROVIDE DISCONNECTING MEANS AS REQUIRED. ELECTRIC UTILITY METER LOCATION. 120V MULTI-STATION SMOKE ALARM WITH EMERGENCY POWER SOURCE BACK-UP,

CONNECT TO 120V CIRCUIT AS INDICATED, EQUAL TO BRK 7020BSL.





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REVISIONS

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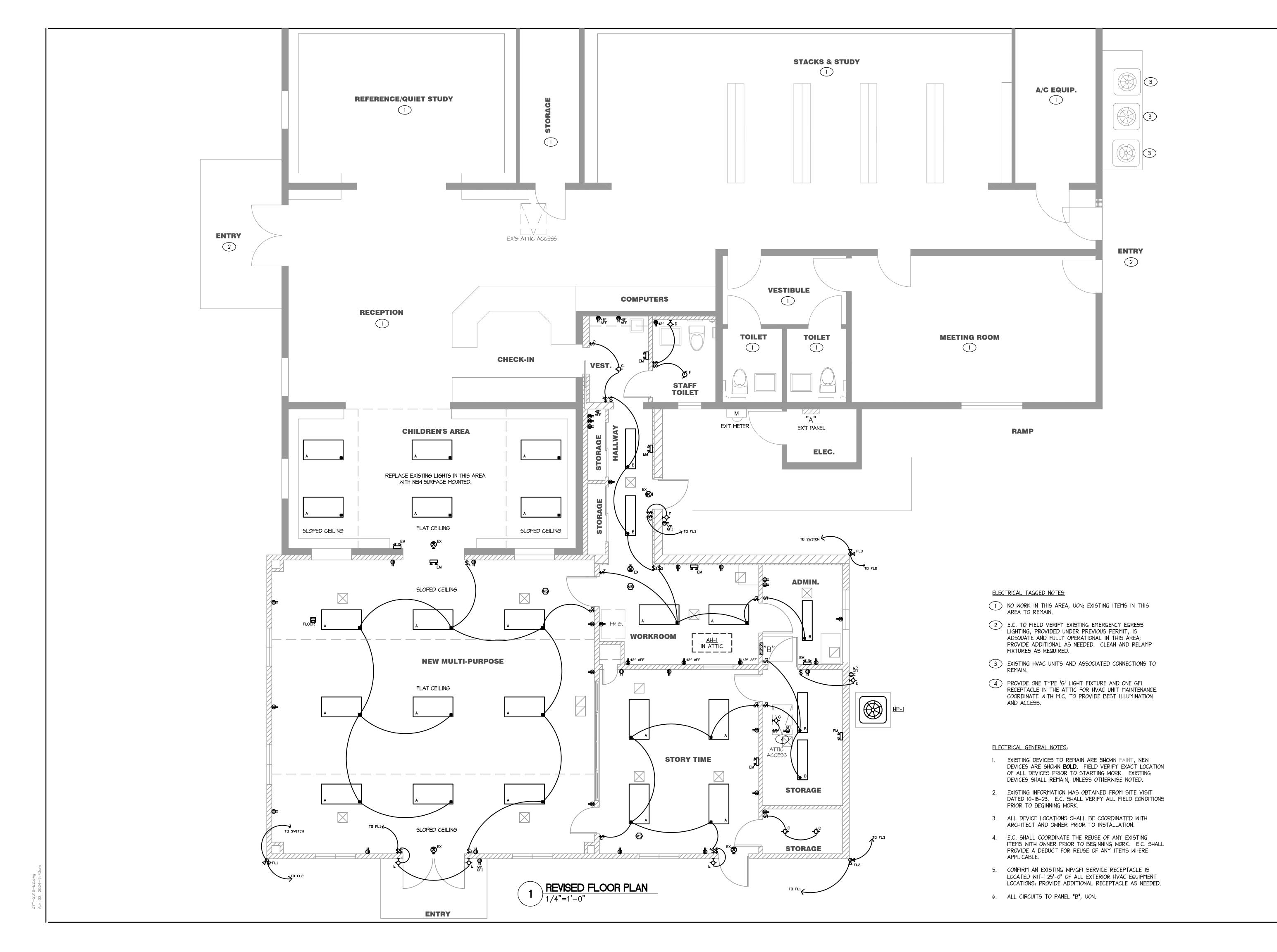
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SHEET TITLE ELECTRICAL LEGEND AND SCHEDULES

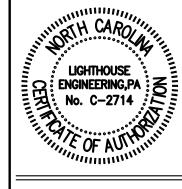
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ELECTRICAL LEGEND AND SCHEDULES ELECTRICAL PLANS ELECTRICAL RISER DIAGRAM







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D ADDITION AND ALTERATION

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ton, North Carolina 27252

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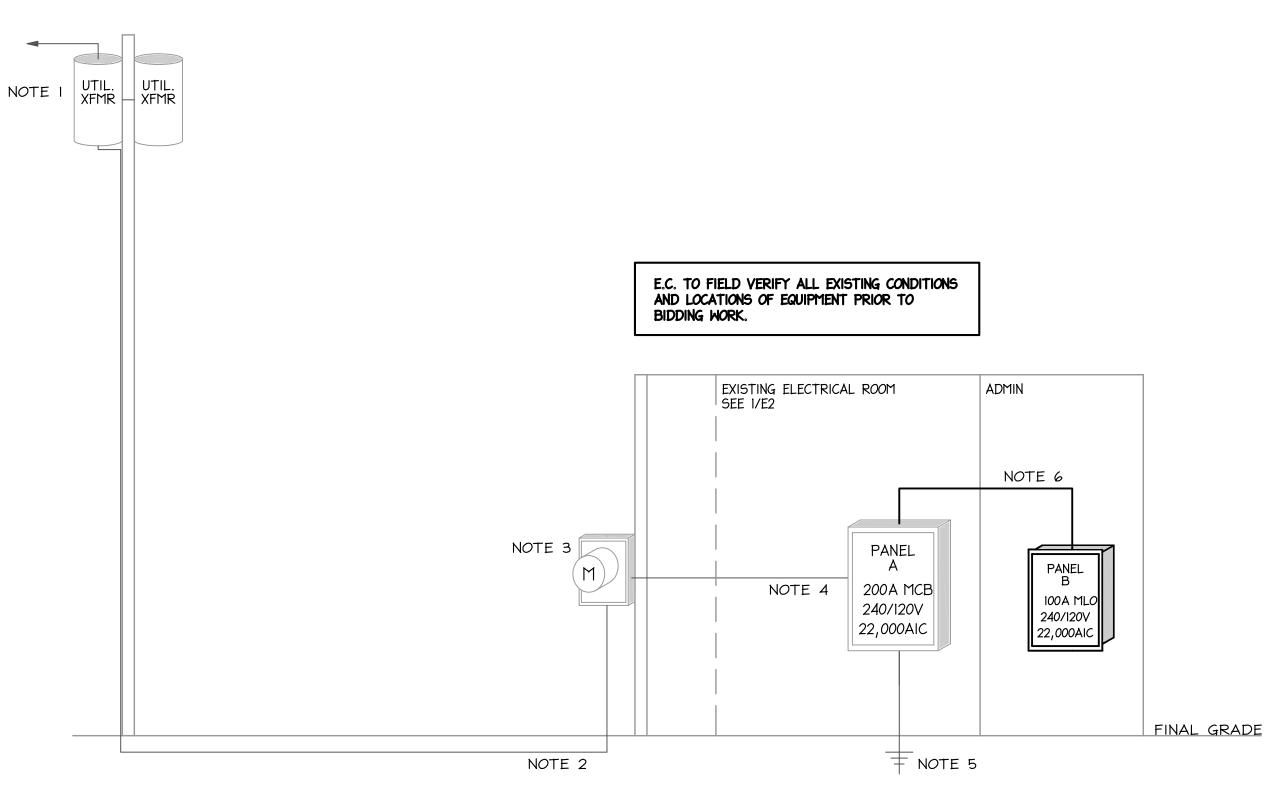
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#### EXISTING POWER RISER DIAGRAM NOTES:

ITEMS SHOWN FAINT ARE EXISTING. EXISTING INFORMATION WAS OBTAINED FROM SITE VISIT DATED 09-29-20. E.C. SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BEGINNING WORK.

- I. EXISTING POLE MOUNTED UTILITY TRANSFORMER(S). E.C. TO NOTIFY UTILITY OF ADDITIONAL LOAD TO BE ADDED BY THIS PROJECT AND CONFIRM THE EXISTING TRANSFORMER IS SIZED
- 2. EXISTING SERVICE LATERAL CONDUCTORS TO METER.
- EXISTING METER BASE.
- 4. EXISTING 200A FEEDER.
- 5. EXISTING GND. TO GROUNDING ELECTRODE SYSTEM.
- 6. 4#2 CU., #8 CU. GND IN 1㎏ CONDUIT.



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PROPOSED ADDITION AND ALTERATION

DS OF THE GOLDSTON LIBR

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Goldston, North Carolina 27252

REVISIONS

DATE 03-19-2024 DRAWN BY JRS PROJECT NO.

SHEET TITLE ELECTRICAL RISER DIAGRAM

#### PLUMBING GENERAL NOTES

- I. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT IN STRICT ACCORDANCE WITH THE "YEAR" "STATE" PLUMBING CODE AND ALL STATE AND LOCAL CODES, STANDARDS, AND PER MANUFACTURER'S DIRECTIONS.
- 2. ALL PLUMBING FIXTURES AND PLUMBING SYSTEM EQUIPMENT SHALL BE PROVIDED COMPLETE WITH ALL ACCESSORIES, HANGERS, VALVES, STOPS, TAILPIECES, TRAPS, FAUCETS, STRAINERS, ETC. SEE FIXTURE SCHEDULE.
- 3. FURNISH AND INSTALL COMPLETE SYSTEMS OF SOIL, WASTE, VENT, HOT AND COLD WATER PIPING FROM ALL PLUMBING FIXTURES, AND/OR OTHER EQUIPMENT.
- CLEANOUT PLUGS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS. PROVIDE CLEANOUTS AT THE BASE OF ALL WASTE STACKS, AT EVERY FOUR 45 DEGREE TURNS, AND AT EVERY 100 FEET. CLEANOUTS SHALL BE PLACED IN READILY ACCESSIBLE LOCATIONS.
- 5. ALL SOIL, WASTE, AND VENT LINES SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION.
- 6. COPPER PIPING SHALL BE PROTECTED AGAINST CONTACT WITH MASONRY OR DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON IRON TRAPEZE HANGERS WITH OTHER PIPING, SATISFACTORY AND PERMANENT ELECTROLYTIC ISOLATION MATERIAL SHALL PROTECT THE COPPER AGAINST CONTACT WITH OTHER METALS.
- WHERE COPPER PIPING IS SLEEVED THROUGH MASONRY, SLEEVES SHALL BE COPPER OR RED BRASS. WHERE COPPER MUST BE CONCEALED IN A MASONRY PARTITION OR AGAINST MASONRY, CONTACT SHALL BE PREVENTED BY COATING THE COPPER HEAVILY WITH ASPHALTIC ENAMEL AND PROVIDING 15# ASPHALT SATURATED FELT BETWEEN THE PIPE AND MASONRY.
- 8. THE PLUMBING CONTRACTOR SHALL COORDINATE CLOSELY WITH THE MECHANICAL AND THE ELECTRICAL CONTRACTORS TO AVOID CONFLICT WITH OTHER TRADES.
- 9. CEILING AREA HAS LIMITED SPACE. CONTRACTOR MUST COORDINATE WITH OTHER TRADES FOR ALL STRUCTURES, PIPING, CONDUIT, DUCTWORK, LIGHTING, ETC. TO PROPERLY BE INSTALLED.
- 10. ALL PIPE INSULATION SHALL RUN CONTINUOUSLY THROUGH FLOORS, WALLS, AND PARTITIONS.
- II. PROVIDE BALL VALVES IN ALL BRANCH LINES OF THE HOT AND COLD WATER DISTRIBUTION SYSTEM ON 3/11 AND LARGER CW \$ HW AND AS SHOWN ON PLANS, RISERS, AND SCHEMATIC DETAILS. PROVIDE SHUT OFF VALVES ON THE FIXTURE SUPPLY TO EACH PLUMBING FIXTURE, APPLIANCE, OR MECHANICAL EQUIPMENT.
- 12. VACUUM BREAKERS SHALL BE PROVIDED FOR ALL FIXTURES TO WHICH HOSES MAY BE ATTACHED. VACUUM BREAKERS SHALL BE PERMANENTLY ATTACHED.
- 13. WASTE AND VENT PIPING SHALL BE AS FOLLOWS: BELOW SLAB: PVC PIPE, PVC SOCKET FITTINGS, AND SOLVENT-CEMENTED
- ABOVE SLAB: PVC PIPE, PVC SOCKET FITTINGS, AND SOLVENT-CEMENTED FITTINGS.
- INSULATION IS REQUIRED ON ALL WATER SUPPLY PIPING ABOVE FINISHED FLOOR. INSULATION TO HAVE A MINIMUM R FACTOR OF 6.5 OR PER LOCAL JURISDICTION.
- ALL PLUMBING VENT LOCATIONS TO BE VERIFIED WITH ARCHITECT BEFORE INSTALLATION.
- 16. ALL PLUMBING LINES REQUIRED TO BE JETTED PRIOR TO TURNOVER.

14. DOMESTIC WATER PIPING ABOVE SLAB SHALL BE TYPE 'L' COPPER.

- 17. PIPING SHOULD BE COORDINATED WITH ALL STRUCTURAL FOOTINGS AND FOUNDATIONS. PIPE SHOULD BE OFFSET TO AVOID CONTACT WITH FOOTINGS AND FOUNDATION WALLS. IF PIPING MUST RUN UNDERNEATH A FOOTING OR THROUGH A FOUNDATION WALL, THE PIPE MUST BE INSTALLED WITH A RELIEVING ARCH OR IN A PIPE SLEEVE.
- 18. INVERT ELEVATIONS SHALL BE ESTABLISHED AND VERIFIED BEFORE WASTE PIPING IS INSTALLED SO THAT PROPER SLOPES WILL BE MAINTAINED.
- 19. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- 20. PROVIDE ACCESS DOORS FOR ALL VALVES AND DEVICES REQUIRING ACCESS WHEN LOCATED IN WALLS OR ABOVE INACCESSIBLE CEILING CONSTRUCTION. ACCESS DOORS TO BE RATED WHERE INSTALLED IN RATED ASSEMBLIES.

PLUM	BING LEGEND
	DOMESTIC COLD LIATED DIDING
	DOMESTIC COLD WATER PIPING
	DOMESTIC COLD WATER PIPING (UNDRSLAB)
	DOMESTIC HOT WATER PIPING
	VENT PIPING
	WASTE (SANITARY SEWER)
	BALL VALVE
	CHECK VALVE
<del></del> 0	PIPE UP
<del></del> ə	PIPE DOWN
•	CONNECT TO EXISTING

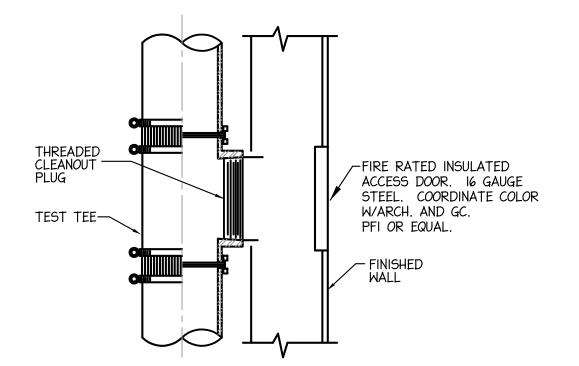
AAV	AIR ADMITTANCE VALV
ADV.	ADOVE

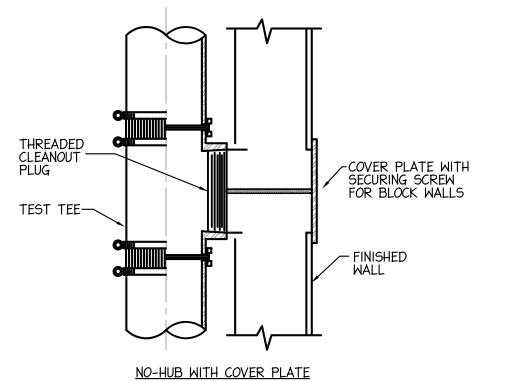
- AFF ABOVE FINISHED FLOOR
- BALANCING VALVE
- COLD WATER CW DN DOWN
- E.C. ELECTRICAL SUB-CONTRACTOR
- FCO FLOOR CLEAN OUT
- FD FLOOR DRAIN FR FROM
- FS FLOOR SINK
- G.C. GENERAL CONTRACTOR
- HB HOSE BIBB HD HUB DRAIN
- HOT WATER M.C. MECHANICAL SUB-CONTRACTOR
- P.C. PLUMBING SUB-CONTRACTOR
- SD STORM DRAINAGE

V	VENT
M	WASTE

					PLUMBIN	G FIXTUF	RE SPECIFI	CATIONS	S AND	CONN	ECTIC	ON SO	CHEDULI						
								FAUCET/VALV	Έ		DRA	NN.	SUPPLIES		PIPE S	SIZES			
MARK	FIXTURE	TYPE	MANUFACTURER	MODEL NO.	MATERIAL	STYLE	MANUFACT. MODEL NO.	SPOUT	HANDLES	CENTERS	TYPE	SIZE	AND STOPS	WASTE	VENT	CM	HM	MOUNTING	REMARKS
P-I	WATER CLOSET	FLUSH TANK	AMERICAN STANDARD	22ICA.104	VITREOUS CHINA	STANDARD ELONGATED	-	-	-	-	-	-	McGUIRE 185	3"	2"	ا <sub>گ</sub> ا"	_	FL00R	PROVIDE WITH OPEN FRONT SEAT WITH NO LID. 1.28 GPF, WATERSENSE
P-2	LAVATORY	SINGLE COMP <sup>I</sup> T	AMERICAN STANDARD	0476.028	VITREOUS CHINA	ADA OVAL	CFG 477IIL	CENTERSET	SINGLE LEVER	4"	POP-UP	1½"	McGUIRE 175	2 <sup>  </sup>	1½"	<i>\f</i> <sub>2</sub> "	<i>y</i> ,"	COUNTER TOP	MOUNT AT ADA HEIGHT
P-3	KITCHEN SINK	SINGLE COMP <sup>I</sup> T	DAYTON	DI252I4	STAINLESS STEEL	6½" DEEP 4-HOLE	CFG 47513B	8" SWING	SINGLE LEVER	8"	CRUMB CUP	1½"	McGUIRE 165	1½"	1½"	<i>l</i> y."	<i>h</i> ,"	COUNTER TOP	PROVIDE WITH ELKAY LK-35
MCO	WALL CLEAN-OUT	ROUND COVER	J.R. SMITH	4472	CAST IRON	S.S. COVER	-	-	-	-	-	-	-	-	-	-	-	WALL	

1. CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF FIXTURE DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY FIXTURES. INFORMATION ON ALTERNATE FIXTURES PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT FIXTURE (OR THE ALTERNATE PACKAGE AS A WHOLE).







**Drawing Sheet List** PLUMBING PLANS



LIGHTHOUSE © ENGINEERING,PA ₹ 为: No. C-2714 :

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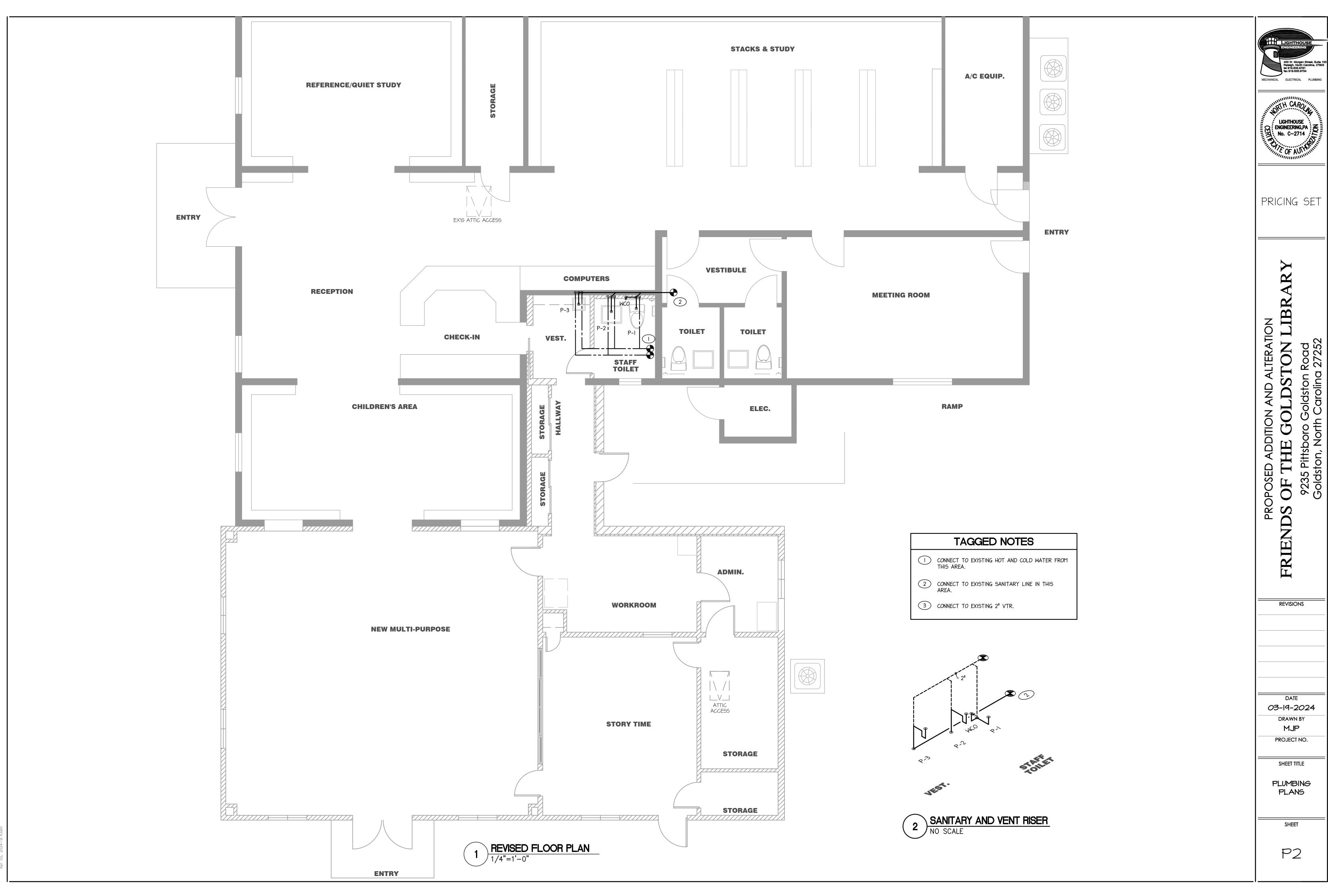
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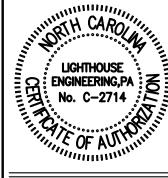
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REVISIONS

DATE 03-19-2024 DRAWN BY PLM PROJECT NO.

SHEET TITLE PLUMBING LEGEND AND SCHEDULE





PRICING SET

REVISIONS

DATE 03-19-2024 DRAWN BY PLM

SHEET TITLE PLUMBING

PLANS

#### HVAC GENERAL NOTES

- I. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT IN STRICT ACCORDANCE WITH THE 2018 NORTH CAROLINA MECHANICAL CODE, ALL STATE AND LOCAL CODES AND STANDARDS, AND PER MANUFACTURER'S DIRECTIONS.
- 2. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS, LICENSE, INSPECTIONS, APPROVALS, AND FEES.
- 3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES BEFORE INSTALLATION OF ANY MATERIALS OR EQUIPMENT.
- 4. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT.
- 5. DO NOT SCALE DRAWINGS FOR MEASUREMENTS.
- 6. ALL DUCT DIMENSIONS SHOWN ARE INTERIOR DUCT DIMENSIONS.
- 7. ALL PENETRATIONS THROUGH EXTERIOR WALLS & ROOF SHALL BE FLASHED & COUNTERFLASHED IN A WATERPROOF MANNER (COLOR TO MATCH EXTERIOR).
- 8. SEAL ALL PENETRATIONS OF RATED WALLS WITH FIRE DAMPER OR SEALANT MATERIAL APPROVED BY LOCAL CODE. TO BE INSTALLED PER MFG.
- 9. ALL SUSPENDED MATERIALS AND EQUIPMENT SHALL BE INDIVIDUALLY SUPPORTED FROM THE BUILDING STRUCTURE. DO NOT SUSPEND ITEMS FROM THE CEILING OR ITS SUPPORT SYSTEM.
- 10. INSTALL ALL CONTROL DEVICES, INCLUDING THERMOSTATS AND SWITCHES, 4'-0" ABOVE FINISHED FLOOR FROM TOP OF DEVICE. PROVIDE THE REQUIRED DEVICE(S) FOR ALL SYSTEMS WHETHER LOCATED ON THE PLANS OR NOT.
- II. LOCATE CEILING DIFFUSERS IN ACCORDANCE WITH ARCHITECTURAL REFLECTED CEILING PLANS (IF PROVIDED).
- 12. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND MECHANICAL UNITS FOR MAINTENANCE AND FILTER REMOVAL.
- 13. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED W/ WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
- 14. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTS SHALL BE INSULATED AS FOLLOWS:

CONDITIONED SPACES R-6 MINIMUM NON-CONDITIONED SPACES R-8 MINIMUM

CONCEALED SHEET METAL DUCT MAY BE EXTERNALLY INSULATED WITH MINERAL FIBER BOARD OR BLANKET OR MAY BE INTERNALLY INSULATED WITH DUCT LINER. THE FIRST 15' FROM THE AIR HANDLER SHALL BE INTERNALLY

15. CERTIFIED TEST AND BALANCE CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNER'S REPRESENTATIVE WITH COMPLETE BALANCE REPORT. IF BALANCING DAMPERS ARE NOT PROVIDED IN RETURN DUCTWORK, CONTRACTOR SHALL BALANCE SUPPLY SIDE TO AIR QUANTITIES INDICATED ON PLANS AND SHALL BALANCE OUTSIDE AIR AND RETURN AIR FLOWS AT THE AIR HANDLER TO AIR QUANTITIES INDICATED IN THE SCHEDULE. PROVIDE NEW AIR FILTERS FOR EACH UNIT.

HANGER -

FAN

EXHAUST FAN DETAIL - NON-RATED CEILING

EXHAUST GRILLE -

COLOR TO MATCH CEILING

- 16. AS REQUIRED BY LOCAL CODES, MECHANICAL CONTRACTOR SHALL PROVIDE U.L. LISTED FIRE DAMPERS WHERE REQUIRED FOR FIRE PROTECTION REQUIREMENTS OF THE HVAC SYSTEM & THE UL ASSEMBLY.
- 17. PROVIDE I YEAR WARRANTY ON ALL EQUIPMENT AND 5 YEAR WARRANTY ON
- 18. ALL INTAKE OPENINGS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ALL EXHAUST LOCATIONS.
- 19. CONDENSATE DRAIN PIPING AND FITTINGS SHALL BE SCHEDULE 40 PVC. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED. PIPING SHALL BE INSULATED WHERE ROUTED THROUGH ATTIC SPACES.
- 20. A COMPLETE SYSTEM OF SEISMIC RESTRAINTS SHALL BE DESIGNED BY MASON INDUSTRIES & SEALED BY THEIR REGISTERED ENGINEER & INSTALLED BY THIS CONTRACTOR, AS REQ'D BY APPLICABLE CODES FOR THE LOCALE OF THIS PROJECT.
- 21. ALL MAIN DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS. RUNOUTS FROM MAIN/BRANCH DUCTS MAY BE FLEXIBLE DUCT CONFORMING TO THE REQUIREMENTS OF UL 181 FOR CLASS I FLEXIBLE AIR DUCTS.
- 22. THE MECHANICAL CONTRACTOR SHALL PROVIDE REFRIGERANT AND LOW VOLTAGE CONTROL LINES FROM THE CONDENSER(S) TO THE AIR HANDLING UNIT(S). COORDINATE ROUTING AND INSTALLATION WITH THE GENERAL CONTRACTOR. SIZE REFRIGERANT LINES PER MANUFACTURER'S
- 23. ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH VOLTAGE ELECTRICAL WIRING, CONDUIT, DISCONNECT SWITCHES, FUSES, ETC. TO SPLIT SYSTEM UNIT(S). ALL FINAL ELECTRICAL CONNECTIONS ARE BY ELECTRICAL CONTRACTOR.

REQUIREMENTS.

- 24. OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 11/2" FIBERGLASS DUCT WRAP WITH VAPOR BARRIER.
- 25. REFRIGERANT PIPING, NOT SHOWN ON PLANS, SHALL BE SIZED & INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTALLATION INSTRUCTIONS AND LOCAL CODES.
- 26. MECHANICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL PENETRATIONS FOR RELIEF HOODS, OUTSIDE AIR HOODS, LOUVERS, AND WALL CAPS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
- 27. MECHANICAL CONTRACTOR SHALL PAINT ALL RELIEF HOODS, INTAKE HOODS, LOUVERS, AND VENT CAPS. CONFIRM COLOR WITH ARCHITECT \$ OWNER PRIOR TO INSTALLATION.
- 28. PENETRATIONS OF RATED WALLS, PARTITIONS AND FLOORS OF NON-COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH NONCOMBUSTIBLE MATERIALS. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH MATERIALS EQUIVALENT TO TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814.
- 29. ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR MECHANICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.

								SPLI	T SYS	TEM H	EAT P	JMP L	INIT SO	CHEDU	JLE							
						AIR HAN	DLING UNIT	DATA								-	HEAT PUMP	)				
				FAN	DATA		coo	LING	HEAT	AUX.	ELE	CTRICAL D	ATA		GI	ENERAL DAT	`A		ELE	CTRICAL D	ATA	
UNIT TAG	AREA SERVED	MANUF. MODEL	FAN CFM	ESP (" OF WG)	MOTOR (HP)	OA (CFM)	TOTAL (MBH)	SENS. (MBH)	TOTAL (MBH)	HEAT (KW@240)	VOLTAGE (V/PH)	MCA (A)	MOCP (A)	UNIT TAG	MANUF. MODEL	TONNAGE	SEER 2	HSPF 2	VOLTAGE (V/PH)	MCA (A)	MOCP (A)	NOTES
AH-I	-	CARRIER EVACNBOOG	2000	0.50"	3/4	-	57.0	42.7	33.0	15	208/10	76.3	80	HP-I	CARRIER	5.0	14.3	7.5	208/I¢	33.2	50	1-12

- 1. COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210/240 AT 95°F AMBIENT OUTDOOR AIR TEMP., 80°F DRY BULB, 67°F WET BULB ENTERING AIR TEMP., AND AIR QUANTITY LISTED BY MFG. UNITS ABOVE 5 TONS ARE RATED IN ACCORDANCE WITH ARI STANDARD 340.
- 2. REFRIG. PIPING TO BE SIZED PER TOTAL INSTALL. EQUIV. LENGTH. LONG-LINE APP.TO BE PROVIDED WHENEVER MFG. RECOMM. LENGTHS ARE EXCEEDED, INCL. LIQ. LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAX T.E.L. IS PER MFG.
- 3. PROVIDE SINGLE POINT ELECTRICAL CONNECTION FOR AIR HANDLING UNIT. 4. PROVIDE 3 SETS OF NEW FILTERS FOR EACH UNIT. PROVIDE ONE AT INSTALLATION, ONE PRIOR TO AIR
- BALANCE AND ONE AT TURNOVER TO OWNER.
- 5. SYSTEMS SHALL HAVE A MINIMUM 14.3 SEER2 AND 7.5 HSPF2 RATING. 6. PROVIDE MANUFACTURER'S 7-DAY PROGRAMMABLE THERMOSTAT W/ HUMIDITY CONTROLS AND MANUAL OVERRIDE.
- 7. PROVIDE BI-FLOW TXV FOR HEAT PUMP OPERATION.

- 8. AHU TO USE HORIZONTAL APPLICATION.
- 9. RUN CONDENSATE TO EXTERIOR DOWN TO GRADE, AWAY FROM FOOT TRAFFIC, TOWARDS STORM RUN-OFF. IF NOT POSSIBLE FOR A GRAVITY RUN, PROVIDE CONDENSATE PUMP.
- 10. OUTDOOR THERMOSTAT TO LOCK-OUT ELECTRIC HEAT WHEN TEMPERATURE IS 40°F OR HIGHER. PROVIDE UNIT WITH EMERGENCY HEAT OVERRIDE OPTION.
- II. LOW AMBIENT KIT DOWN TO O'F.
- 12. CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF UNIT DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY UNITS. INFORMATION ON ALTERNATE UNITS PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT UNIT (OR THE ALTERNATE PACKAGE AS A WHOLE).

						FAN SC	HEDULE				
UNIT NO.	SERVICE	AREA SERVED	CFM	S.P.	RPM	TYPE <b>\$</b> ARRANGEMENT	MIN. MOTOR HP \$ VOLTAGE	MANUFACTURER # MODEL NO.	DRIVE	CONTROL SCHEME	REMARKS
EF-I	EXHAUST	STAFF RR	80	0.10"	MFG	FAN/LIGHT	43 WATTS/0.4 A 120/1¢	BROAN MODEL HD80L	DIRECT	А	1-4

#### NOTES:

NOTES:

- 3. COLOR BY ARCHITECT SCREEN
- 2. BACKDRAFT DAMPER 4. INTEGRAL DISCONNECT SWITCH

CONTROL OPTIONS:

A. CONTROL W/ ROOM LIGHTS

	DIFFUSER SCHEDULE													
SYMBOL	CFM	NECK SIZE	MODULE SIZE	FRAME TYPE	PATTERN	DAMPER	MATERIAL	SERVICE	FINISH	MANUFACTURER \$ MODEL NO.	NOTES			
X	AS NOTED	AS NOTED	12x12	SURFACE	4-WAY	YES	STEEL	SUPPLY	NOTE 2	TITUS TDC	-			
X	AS NOTED	AS NOTED	12x12	SURFACE	PERFORATED	NO	STEEL	RETURN	NOTE 2	TITUS PAR	-			

- I. DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS: DIFFUSER OR
  - DIFFUSER TYPE AS NOTED ABOVE AIR QUANTITY
- 2. FINISH TO MATCH / BE ABLE MATCH CEILING OR WALL OR DOOR. 3. FACTORY INSULATION BACKING ON GRILLES EXPOSED TO NON-CONDITIONED AREAS.
  - ALTERNATELY, FIELD SUPPLY AND INSTALL.

MECI	HANICAL LEGEND
18x14	RECTANGULAR DUCT
<del>- 60</del> <del>-</del>	ROUND METAL DUCT
<del>† 60</del> <del>†</del>	FLEXIBLE ROUND DUCT
N. S.	ELBOW WITH TURNING VANES
_	VOLUME DAMPER
⊅	SUPPLY TAP WITH VOLUME DAMPER
	SUPPLY TAP
$\boxtimes$	SUPPLY DIFFUSER/GRILLE OR RISER
	RETURN REGISTER/GRILLE OR RISER
	EXHAUST REGISTER/GRILLE OR RISER
_	SIDEWALL DIFFUSER/GRILLE
	CEILING EXHAUST FAN
₩-	I" DOOR UNDER CUT

	GR	AVITY	<b>VENTILATO</b>	R SCHE	DULE	
UNIT DESIG.	AREA SERVED	FUNCTION	MANUFACTURER \$ MODEL #	MOUNTING	PRESSURE DROP	NOTES
GV-I	OUTSIDE AIR	INTAKE	GREENHECK GRSI-8	ROOF	0.06"	1-4

- I. PROVIDE FACTORY MANUFACTURED ROOF CURB. 3. INSTALL W/ BACKDRAFT DAMPER.
- 2. COLOR TO MATCH ROOF.
- 4. INSTALL W/ INSECT SCREEN.

CONDENSING

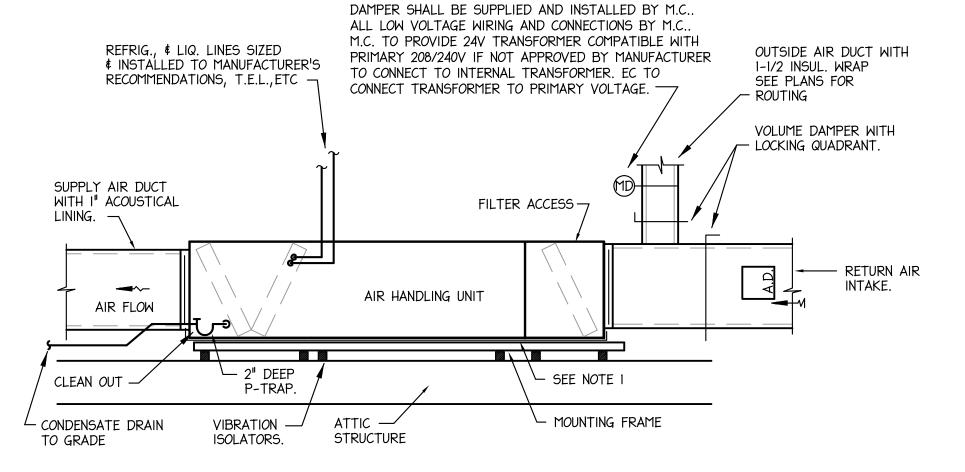
UNIT

-CONCRETE

PAD







1. 1岁 DEEP AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH. INTERLOCK FLOAT SWITCH WITH AIR HANDLER. INSTALL FLOAT SWITCH IN ONE CORNER OF PAN AND TILT PAN TO THAT CORNER.





OTH CAROLAGIA LIGHTHOUSE ENGINEERING, PA 为。No. C-2714 🕺

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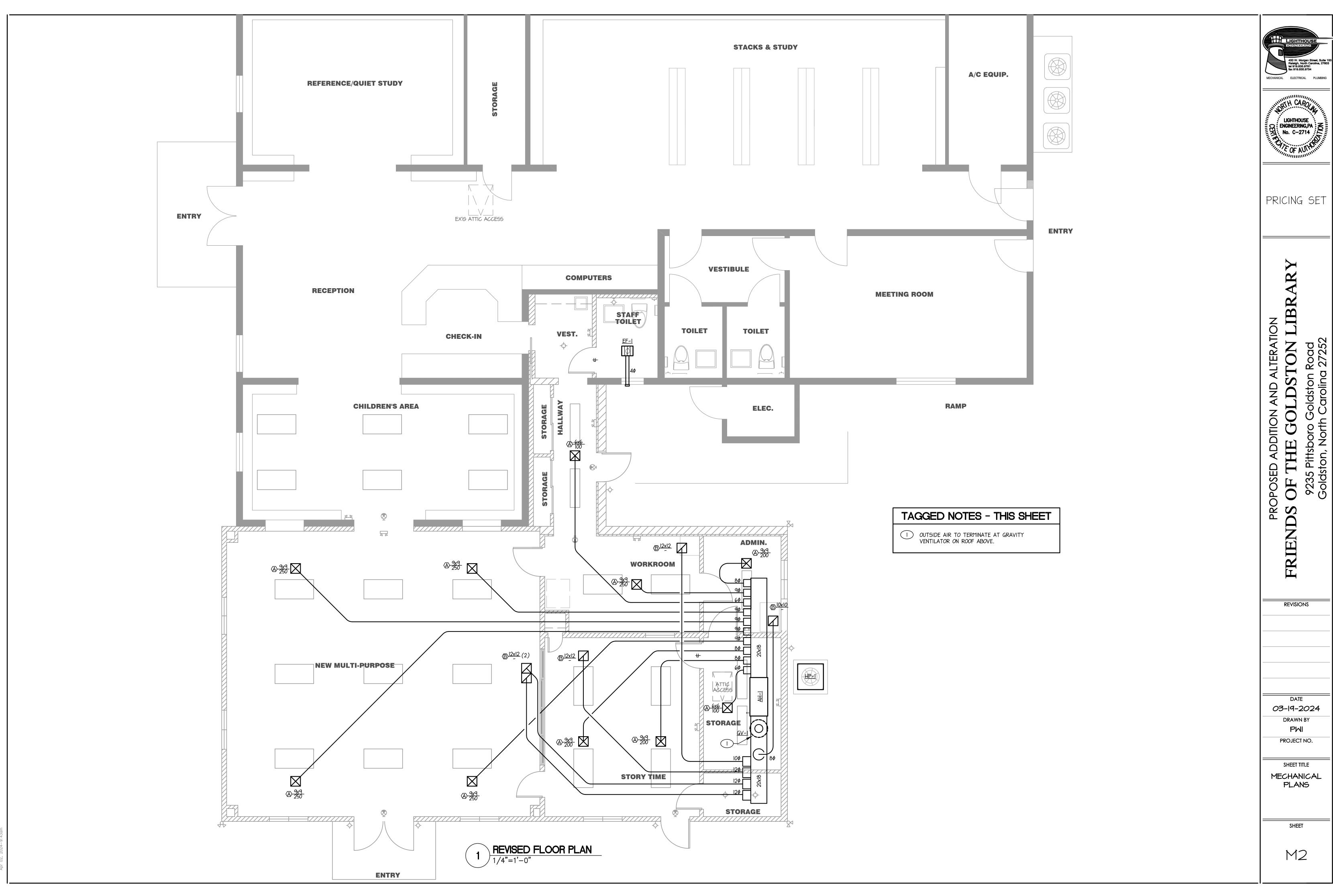
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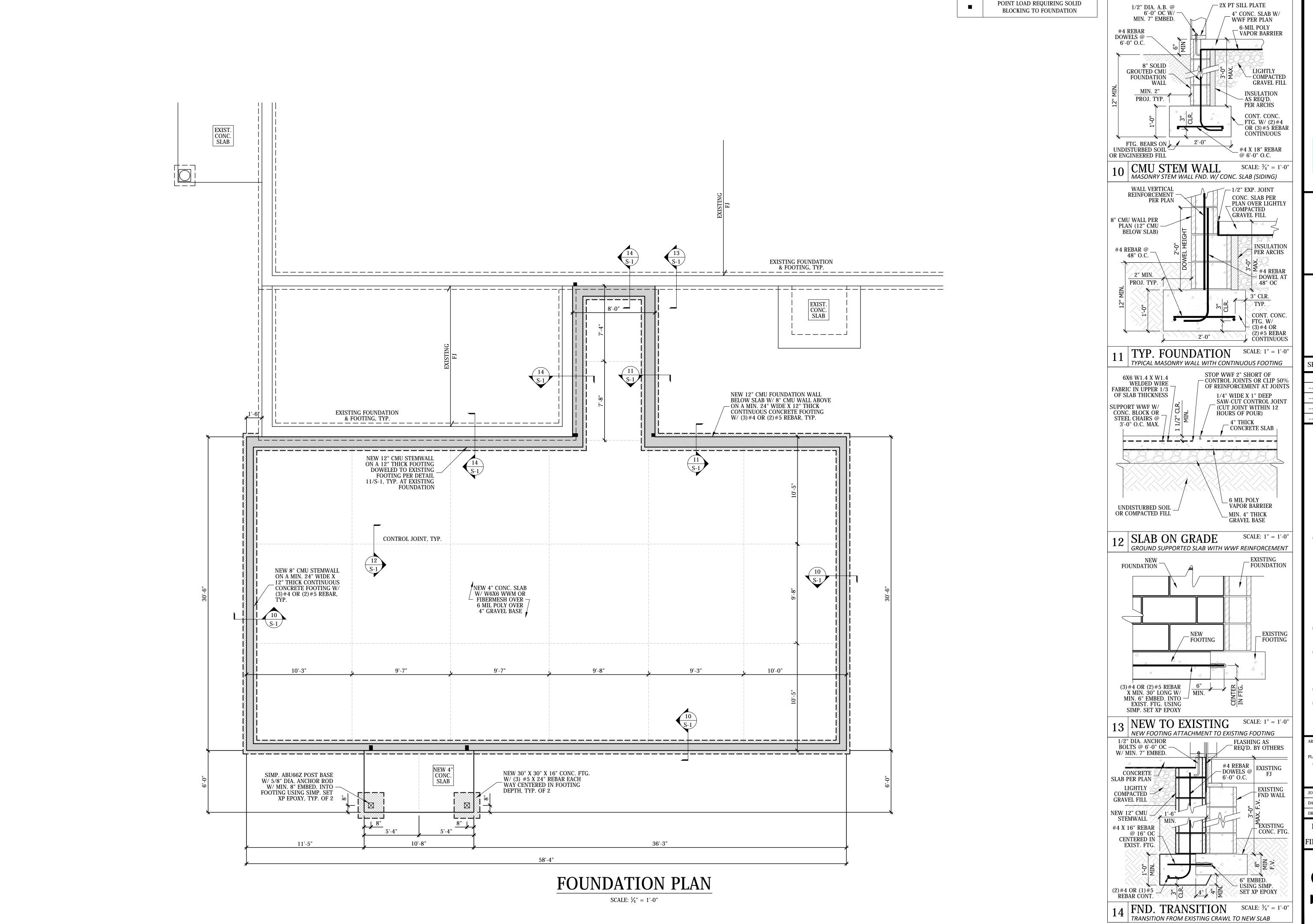
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DATE 03-19-2024 DRAWN BY PMI PROJECT NO.

SHEET TITLE **MECHANICAL** LEGEND AND SCHEDULES







BID SET SEAL DATE: 00/00/0000 REVISIONS RD RD BLIC LIBF GOLDSTON I NC 27252

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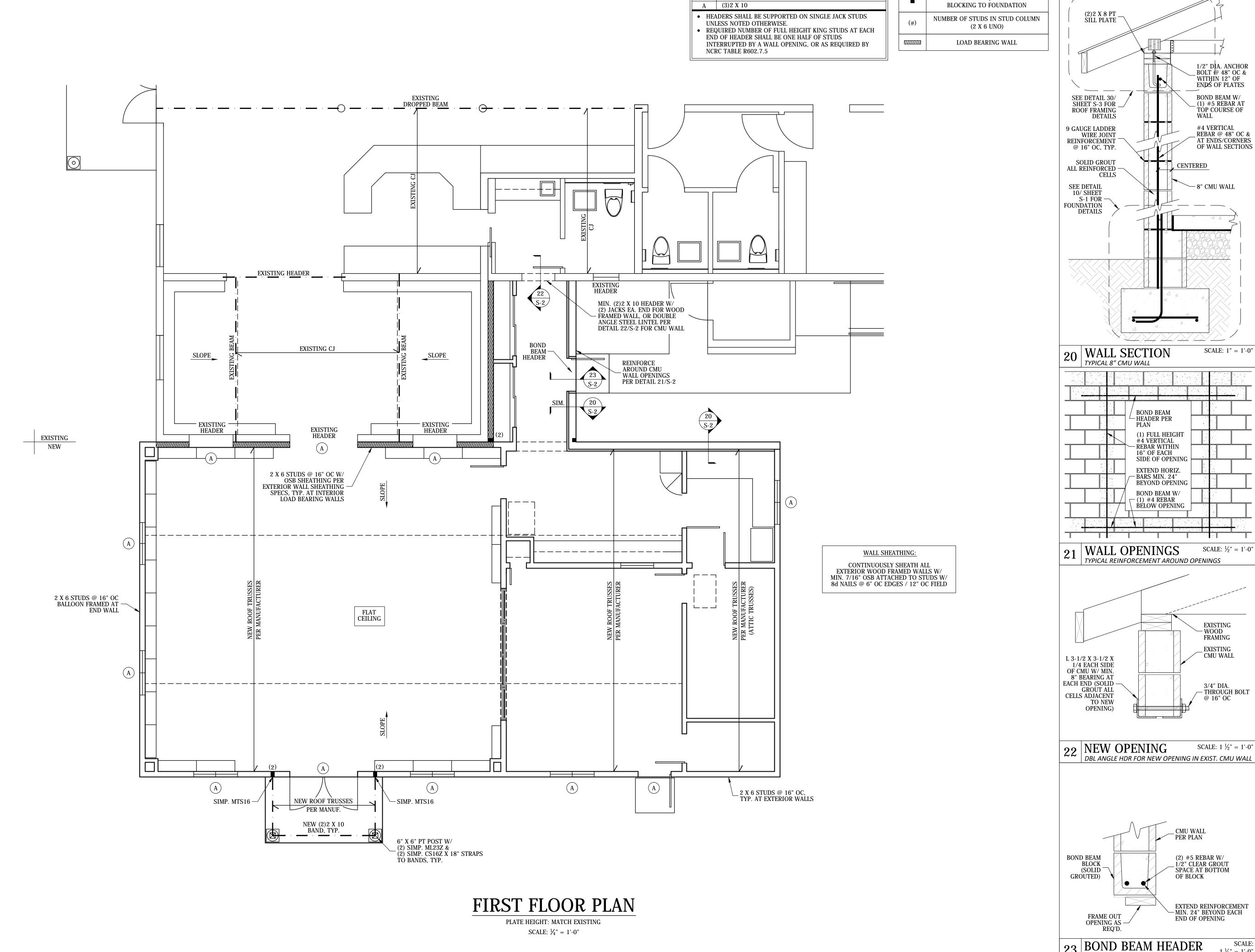
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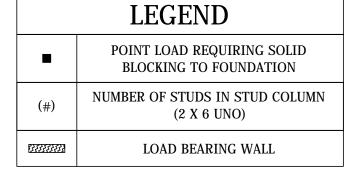
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FOUNDATION PLAN FIRST FLOOR FRAMING

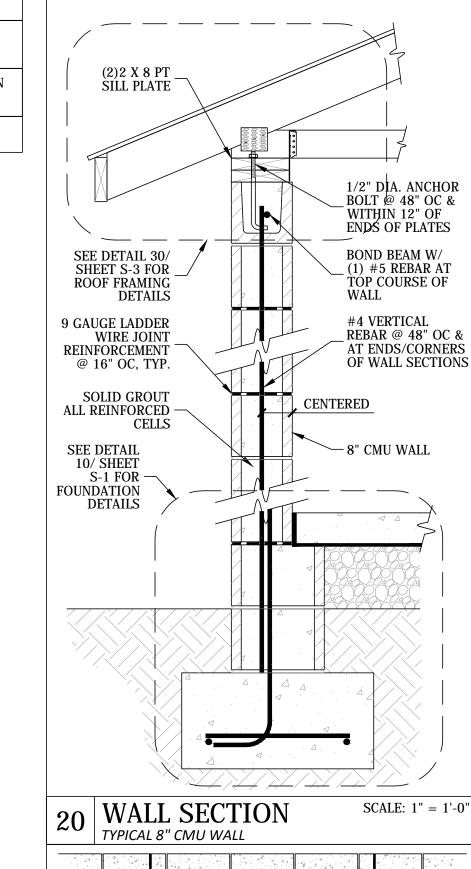
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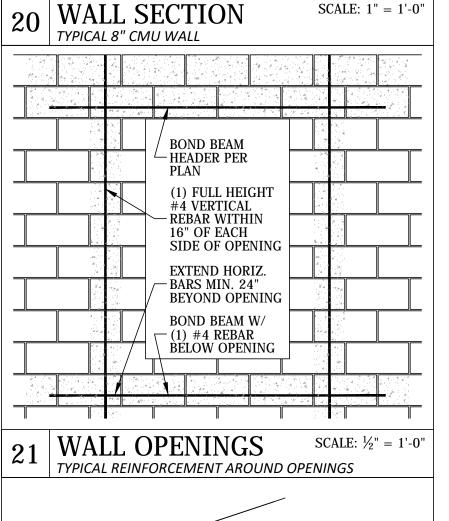


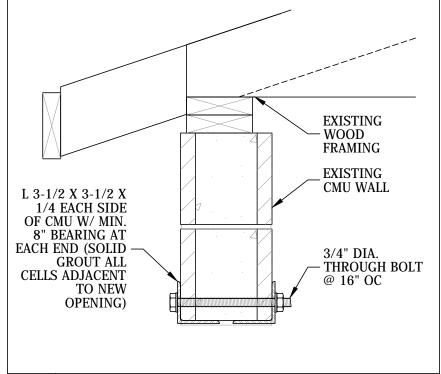


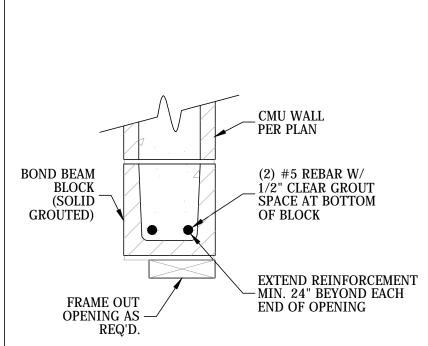
HEADER SCHEDULE

TAG HEADER









23 BOND BEAM HEADER
BOND BEAM HEADER OVER WALL OPENING SCALE:

**BID SET** 

SEAL DATE: 00/00/0000 REVISIONS --/--/-----/--/-----/--/-----/--/---

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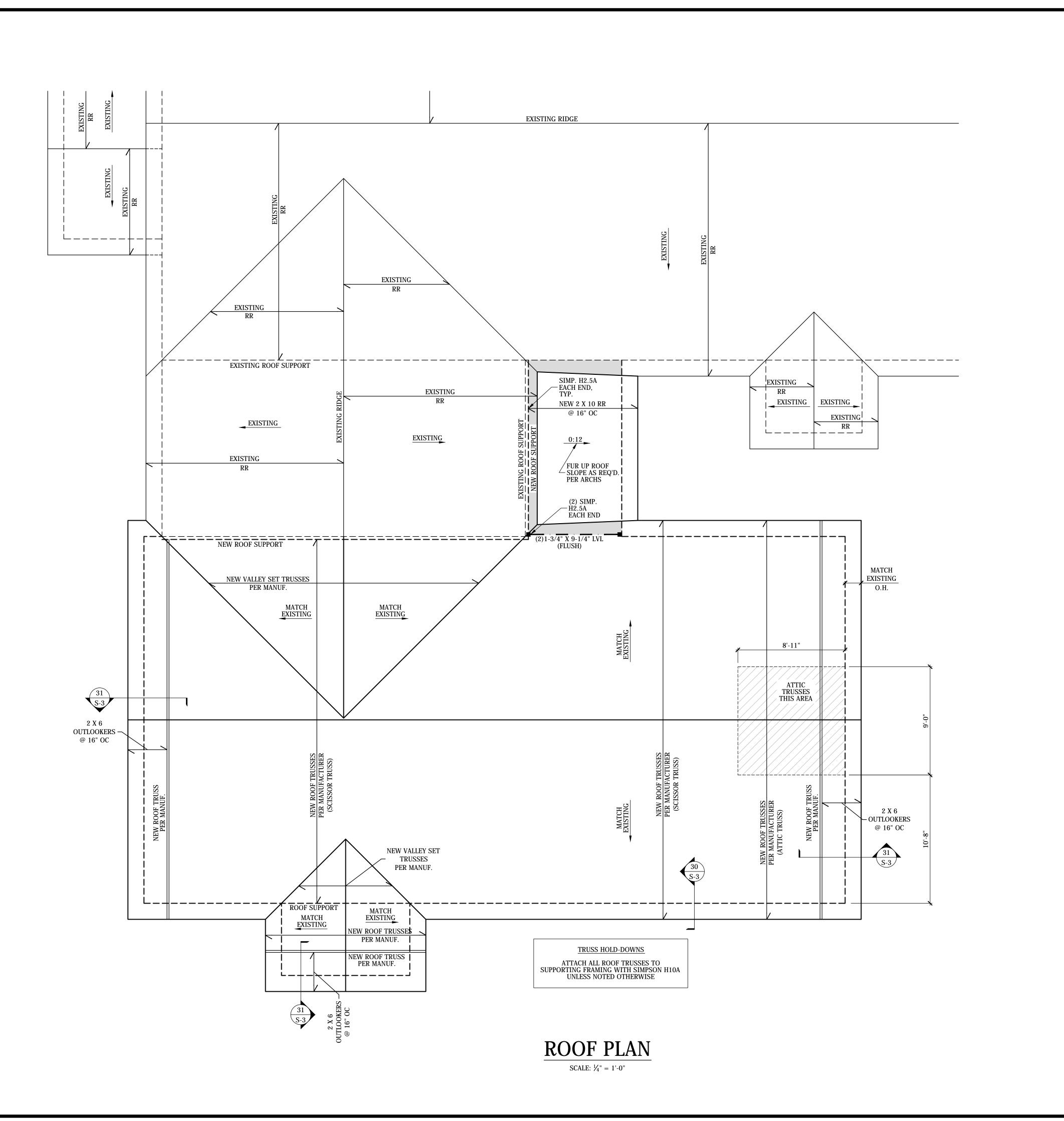
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FIRST FLOOR WALLS 2ND FLOOR FRAMING

2 OF: 4



#### **LEGEND**

POINT LOAD REQUIRING SOLID BLOCKING TO FOUNDATION

OVERFRAMED ROOF WITH RAFTERS BEARING ON A 2X FLAT PLATE ON LOW RAFTERS

PERMANENT TRUSS BRACING — PER NOTES

\_ DOUBLE 2 X 6 TOP PLATE

\_ WALL STUDS PER PLAN

30 TRUSS HOLDDOWN SCALE: 3/4" = 1'-0"
TYPICAL TRUSS HOLDDOWN TO DOUBLE TOP PLATE

MIN. L/2

\_ROOF TRUSS PER MANUFACTURER

\_\_ROOF TRUSS PER MANUFACTURER

MAX. L/2

\_\_SIMP. H2.5A

SCALE:  $\frac{3}{4}$ " = 1'-0"

(2'-0" MAX.)

ROOF SHEATHING – PER PLAN

UPLIFT CONNECTOR -PER PLAN

WALL SHEATHING — PER PLAN

(3)10d \_ TOE NAILS \_

OUTLOOKERS – @ 16" OC

DROP GABLE TRUSS FOR 2 X 6 — OUTLOOKERS

31 RAKE OVERHANG OUTLOOKER FRAMING



BID SET

SEAL DATE: 00/00/0000 REVISIONS --/--/-----/--/-----/--/---

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OLDSTON PUBLIC LIBRA 9235 PITTSBORO GOLDSTON RD GOLDSTON, NC 27252

GOLDSTON

ARCHITECT: C. DAVID MORTON PLAN NAME: GOLDSTON LIBRARY

23119 04/01/2024 DRAWN BY: PSE

ROOF FRAMING PLAN

\_3\_OF:\_\_4\_

# DESIGN LOADS: VERTICAL LOADS: ROOF CEILING **FLOOR** SNOW LOADS: WIND LOADS: (3-SEC GUST), V: RISK CATEGORY: - ROOFS: - WALLS: SEISMIC LOADS: RISK CATEGORY: - SITE CLASS: **GENERAL NOTES:** CONSTRUCTION. - ROOF: L/180 - FLOORS: L/360 - WALLS: L/120 FOUNDATIONS: CAPACITY OF 2000 PSF. INVESTIGATION AND REPORT. DIVERT WATER AWAY FROM THE FOUNDATION AS

LIVE LOAD DEAD LOAD 20 PSF 10 PSF 10 PSF 20 PSF 150 PSF 50 PSF - GROUND SNOW LOAD, Pg: 15 PSF - FLAT ROOF SNOW LOAD, Pf: 9.5 PSF - SNOW EXPOSURE FACTOR, Cs: 0.793- SNOW IMPORTANCE FACTOR, Is: - THERMAL FACTOR, Cf: - DRIFT SURCHARGE LOAD(S), Pd: 15 PSF - WIDTH OF SNOW DRIFT(S), w: 8 FT. - ULTIMATE DESIGN WIND SPEED 115 MPH WIND EXPOSURE CATEGORY INTERNAL PRESSURE COEFFICIENT, GCpi: +/-0.55DESIGN WIND PRESSURE FOR COMPONENTS & CLADDING: ZONE 1: 17.2 PSF / -31.3 PSF ZONE 2: 17.2 PSF / -47.4 PSF ZONE 3: 17.2 PSF / -67.5 PSF ZONE 4: 31.2 PSF / -33.3 PSF ZONE 5: 31.2 PSF / -39.3 PSF - DESIGN WIND BASE SHEARS: Vx = 5.9 KIPSVy = 11.3 KIPS- ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE SEISMIC IMPORTANCE FACTOR, Ie: 1.0 0.1840.087 0.196 SEISMIC DESIGN CATEGORY: - BASIC SEISMIC-FORCE RESISTING SYSTEM: LIGHT-FRAME (WOOD) WALLS WITH WSP RATED FOR SHEAR RESPONSE MODIFICATION FACTOR, R: SEISMIC RESPONSE COEFFICIENT, CS: 0.03DESIGN SEISMIC BASE SHEAR: 2.8 KIPS

- ALL CONSTRUCTION SHALL CONFORM TO THE 2018 NORTH CAROLINA STATE BUILDING CODE.
- THE ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE STRUCTURAL ENGINEER OF RECORD FOR THE PROJECT. NO OTHER PARTY SHALL MODIFY THESE DRAWINGS WITHOUT WRITTEN PERMISSION FROM
- THE STRUCTURAL ENGINEER OF RECORD. ONLY SEALED DRAWINGS WITH THE LATEST REVISION DATE ARE APPLICABLE FOR CONSTRUCTION. DRAWINGS HAVE BEEN ISSUED EXCLUSIVELY FOR ONE
- TIME USE AND SHALL NOT BE REPRODUCED OR REUSED WITHOUT WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER OF RECORD. THE ENGINEER ASSUMES NO LIABILITY FOR CONSTRUCTION METHODS OR QUALITY, DEVIATIONS OR
- OMISSIONS FROM PLANS, OR FAILURE TO MEET THE REQUIREMENTS OF THE REFERENCED CODE OR THE ISSUED STRUCTURAL PLANS. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY STRUCTURAL DISCREPANCIES THAT ARE IDENTIFIED.
- THE ENGINEERS SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS SHOWN AND COORDINATION OF ALL PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEMS PRIOR TO START OF
- DO NOT SCALE DRAWINGS OR DETAILS. CONTACT ENGINEER OR ARCHITECT FOR ANY REQUIRED DIMENSIONS THAT ARE NOT LABELED ON THE PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING AND SUPPORTS REQUIRED TO MAINTAIN STABILITY OF THE STRUCTURE DURING CONSTRUCTION. CONSTRUCTION LOADS RESULTING FROM MATERIALS OR EQUIPMENT SHALL NOT EXCEED THE DESIGN LIVE LOADS.
- MINIMUM DESIGN LIVE LOAD DEFLECTIONS:
- MORE RESTRICTIVE DEFLECTION LIMITS SHALL BE USED WHERE REQUIRED BY APPLICABLE REFERENCED STANDARDS OR AT ENGINEERS DISCRETION.
- ALL FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL WITH A MINIMUM BEARING
- FOUNDATIONS AND FILL SOILS SHALL MEET ALL REQUIREMENTS OF GEOTECHNICAL ENGINEERS
- FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D698.
- EXCAVATIONS FOR FOOTINGS SHALL BE CLEAR OF ANY LOOSE DEBRIS AND SHALL BE PROTECTED FROM EXCESS MOISTURE BUILDUP PRIOR TO POURING FOOTING. EXISTING FOUNDATIONS SHALL NOT BE EXCAVATED
- WITHOUT FIRST PROTECTING THE FOUNDATION AGAINST DETRIMENTAL LATERAL OR VERTICAL MOVEMENT. GRADE SHALL BE ADEQUATELY SLOPED AWAY FROM BUILDINGS OR A DRAINAGE SYSTEM SHALL BE USED TO
- REQUIRED BY THE APPLICABLE CODE. DO NOT BACKFILL WALLS SUPPORTING UNBALANCED FILL UNTIL ALL SUPPORTING SLABS HAVE BEEN POURED AND CURED, SUPPORTING SOILS ARE IN PLACE, AND ALL REQUIRED LATERAL RESTRAINTS HAVE BEEN INSTALLED.

#### CONCRETE:

- ALL CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".
- ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH (fc) OF 3000 PSI UNLESS NOTED OTHERWISE ON PLANS. CONCRETE SHALL BE EVALUATED AND TESTED IN
- ACCORDANCE WITH SECTION 5.6 OF ACI 318. NOTIFY STRUCTURAL ENGINEER OF RECORD IF TESTING INDICATES A COMPRESSIVE STRENGTH LOWER THAN PLAN SPECIFICATIONS.
- 4. ALL REINFORCING BARS SHALL BE GRADE 60 DEFORMED CARBON STEEL CONFORMING TO THE SPECIFICATIONS OF
- WELDED WIRE REINFORCEMENT SHALL CONFORM TO THE SPECIFICATIONS OF ASTM A1064
- 3. ALL REINFORCEMENT BARS NO. 11 OR SMALLER SHALL BE SPLICED WITH CONTACT LAP SPLICES OF AT LEAST 48db OR 24 INCHES, WHICHEVER IS GREATER, UNLESS
- NOTED OTHERWISE. REINFORCEMENT TERMINATING IN A HOOK SHALL HAVE A STANDARD HOOK CONSISTING OF ONE OF THE FOLLOWING: 180 DEGREE BEND PLUS A 4d<sub>b</sub> EXTENSION, BUT NOT
- LESS THAN 2-1/2 INCHES. 90 DEGREE BEND PLUS A 12d, EXTENSION. MINIMUM BEND DIAMETERS (INSIDE DIAMETER) OF
- REINFORCEMENT ARE AS FOLLOWS: - NO. 3 THROUGH NO. 8: 6d<sub>b</sub> (4d<sub>b</sub> FOR STIRRUPS OR TIES)
- NO. 9 THROUGH NO. 11: 8d<sub>b</sub>
- NO. 14 AND NO. 18: 10d<sub>b</sub> REINFORCEMENT FOR NON-PRESTRESSED CAST IN PLACE CONCRETE SHALL BE PLACED WITH THE FOLLOWING MINIMUM CLEAR CONCRETE COVER:
- CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH: CONCRETE EXPOSED TO EARTH OR WEATHER: - NO. 6 THROUGH NO. 18 BARS: - NO. 5 BAR, W31 OR D31 WIRE,
- AND SMALLER: 1-1/2" CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: - SLABS, WALLS, JOISTS:
- NO. 14 & NO. 18 BARS: - NO. 11 BAR & SMALLER: - BEAMS. COLUMNS: - PRIMARY REINFORCEMENT,
- 1-1/2" TIES, STIRRUPS, SPIRALS: - SHELLS, FOLDED PLATE MEMBERS: - NO. 6 BAR & LARGER: 3/4" - NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER: 1/2"
- 10. CONCRETE MATERIAL SPECIFICATIONS: - CEMENTITIOUS MATERIALS SHALL CONFORM TO ONE OF THE SPECIFICATIONS LISTED IN ACI 318 TABLE 26.4.1.1.1(a) AGGREGATE SHALL CONFORM TO THE FOLLOWING
  - SPECIFICATIONS: - NORMAL WEIGHT CONCRETE: ASTM C33 - LIGHTWEIGHT CONCRETE ASTM C330
  - NOMINAL MAXIMUM AGGREGATE SIZE SHALL NOT EXCEED:
  - 1/5 OF THE NARROWEST DIMENSION BETWEEN FORMS - 1/3 OF THE DEPTH OF SLABS
  - 3/4 OF THE MINIMUM CLEAR SPACING BETWEEN REINFORCING BARS OR WIRES
  - WATER USED TO MIX CONCRETE SHALL CONFORM TO ASTM C1602 - STEEL FIBER REINFORCED CONCRETE SHALL CONFORM
- I. BASEPLATES SHALL BE FULLY GROUTED WITH NON-SHRINK GROUT WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI AND SHALL CONFORM TO ASTM C1107 2. SLABS ON GRADE SHALL BE MINIMUM 4" THICK WITH 6x6 W1.4 x W1.4 WWF OR FIBER REINFORCED CONCRETE OVER
- A 6-MIL POLY MOISTURE BARRIER OVER A 4" GRAVEL BASE. 3. WELDED WIRE FABRIC SLAB REINFORCEMENT SHALL BE LOCATED IN THE UPPER HALF OF A SLAB WITH MINIMUM 1-1/2" CLEAR DISTANCE TO THE SLAB EDGE. CONCRETE BLOCKS OR STEEL CHAIR SUPPORTS SHALL BE PLACED NO
- MORE THAN 3'-0" ON CENTER 4. WWF SHALL BE SPLICED WITH MINIMUM 8" LAP SPLICES 15. CONTROL JOINTS IN SLABS ON GRADE SHALL BE PLACED AS FOLLOWS UNLESS NOTED OTHERWISE:
- MAX. 12'-0" SPACING (OR 36x SLAB DEPTH) IN UNREINFORCED OR FIBER REINFORCED SLABS - MAX. PANEL LENGTH-TO-WIDTH RATIO OF 1.5:1 JOINTS SHALL BE TOOLED DURING CONCRETE POUR OR SAW CUT WITHIN 4-12 HOURS AFTER POURING, ONCE CONCRETE HAS CURED SUFFICIENTLY TO RESIST TEARING OR RAVELING
- JOINT WIDTH SHALL BE 1/4" AND JOINT DEPTH SHALL BE MINIMUM 1/4 OF TOTAL SLAB DEPTH - MINIMUM OF 50% OF REINFORCEMENT SHALL BE CUT AT CONTROL JOINTS.

## WOOD FRAMING:

- ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI, Fv = 135 PSI, E = 1,400,000 PSI). TREATED LUMBER SHALL BESYP #2 (MIN. Fb = 750 PSI, Fv = 175 PSI, E = 1,400,000 PSI).
- LAMINATED VENEER LUMBER (LVL) SHALL MEET THE MINIMUM SPECIFICATIONS: Fb = 2,600 PSI, Fv = 285 PSI, E = 2,000,000 PSI. MULTIPLE LVL PLIES SHALL BE CONNECTED TOGETHER PER MANUFACTURER SPECIFICATIONS UNLESS NOTED OTHERWISE.
- ALL WOOD SUBJECT TO WEATHERING OR DECAY SHALL BE PRESSURE-PRESERVATIVE-TREATED IN ACCORDANCE WITH THE LATEST EDITION OF AWPA U1 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. CONTACT ENGINEER
- FOR ANY PROJECT SPECIFIC SPECIFICATIONS. WOOD FRAMING SHALL BE NAILED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE FASTENING SCHEDULE UNLESS NOTED OTHERWISE ON THE PLANS. ALL SHEATHING SHALL BE APA RATED SHEATHING WITH AN
- EXPOSURE 1 BOND CLASSIFICATION. SHEATHING PANELS SHALL HAVE AN ADEQUATE SPAN RATING FOR THE JOIST SPACING AND USE INDICATED ON THE PLANS AND SHALL BE INSTALLED WITH THE STRENGTH AXIS EXTENDING OVER MINIMUM (2) SPANS. ALL PANELS SHALL BE
- FASTENED WITH 8d NAILS @ 6" OC EDGES & 12" OC FIELD UNLESS NOTED OTHERWISE ON PLAN. MINIMUM SHEATHING THICKNESSES ARE AS FOLLOWS: • ROOF/WALLS: 7/16" THICK
- SUBFLOOR: 23/32" THICK INTERIOR WALLS AND CEILINGS SHALL BE SHEATHED WITH MIN. 1/2" THICK GYPSUM BOARD W/ 5d NAILS @ 7" OC AT ALL SUPPORTS UNLESS NOTED OTHERWISE.

#### MASONRY:

- . ALL MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 530 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1 "SPECIFICATION FOR MASONRY STRUCTURES". 2. LOAD BEARING MASONRY ASSEMBLIES SHALL DEVELOP A
- MIN. 28-DAY COMPRESSIVE STRENGTH (fm) OF 1500 PSI UNLESS NOTED OTHERWISE ON PLANS. B. MASONRY UNITS SHALL BE LAID IN A RUNNING BOND WITH 3/8" THICK MORTAR JOINTS WITH FULL COVERAGE OF FACE SHELLS AT HEAD AND BED JOINTS. WEBS SHALL BE FULLY MORTARED IN ALL COURSES OF PIERS, COLUMNS, AND
- PILASTERS, AND AT ALL GROUTED CELLS. BED JOINTS AT THE STARTING COURSE SHALL BE MIN. 1/4" AND MAX. 3/4" THICK. 4. CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT UNITS CONFORMING TO THE SPECIFICATIONS OF ASTM C90
- WITH A MINIMUM AVERAGE NET AREA COMPRESSIVE STRENGTH OF 1900 PSI. 6. CLAY BRICK USED IN STRUCTURAL APPLICATIONS SHALL
- CONFORM TO ASTM C216 OR ASTM C62 GRADE SW WITH A MINIMUM AVERAGE COMPRESSIVE STRENGTH OF 3000 PSI. . MORTAR SHALL BE TYPE S CONFORMING TO THE
- SPECIFICATIONS OF ASTM C270. 7. AT LEAST 50 PERCENT OF UNITS SHALL INTERLOCK AT WALL
- INTERSECTIONS UNLESS NOTED OTHERWISE. 8. GROUT SHALL CONFORM TO THE SPECIFICATIONS OF ASTM C476 WITH A SLUMP OF 8 TO 11 INCHES. GROUT COMPRESSIVE STRENGTH SHALL EXCEED SPECIFIED COMPRESSIVE STRENGTH OF MASONRY AND SHALL HAVE A
- MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI. O. GROUT TYPE, MIN CLEAR SPACE REQUIREMENTS, AND MAX. POUR HEIGHTS SHALL BE DETERMINED IN ACCORDANCE WITH TABLE 7 OF ACI 530.1. MAX. POUR HEIGHT SHALL NOT EXCEED 12'-8". MAXIMUM POUR HEIGHT SHALL BE LIMITED TO 5'-4" WHEN MASONRY HAS CURED FOR LESS THAN FOUR

HOURS OR WHEN GROUT SLUMP IS LESS THAN 10 INCHES.

- 10. PLACE GROUT WITHIN 1-1/2 HOURS OF INTRODUCING WATER INTO THE MIXTURE AND PRIOR TO INITIAL SET. CONSOLIDATE GROUT POURS UP TO 12" HEIGHTS BY MECHANICAL VIBRATION OR PUDDLING. CONSOLIDATE GROUT POURS EXCEEDING 12" HEIGHT BY MECHANICAL
- VIBRATION ONLY AND RECONSOLIDATE AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURED. 1. ALL REINFORCING BARS SHALL BE GRADE 60 DEFORMED CARBON STEEL CONFORMING TO THE SPECIFICATIONS OF

ASTM A615.

3/4"

- 12. REINFORCEMENT SHALL HAVE A MINIMUM THICKNESS OF GROUT BETWEEN THE REINFORCEMENT AND THE MASONRY UNITS OF NOT LESS THAN 1/4" FOR FINE GROUT AND 1/2" FOR COARSE GROUT.
- 13. PLACE REINFORCEMENT AND TIES IN GROUT SPACES PRIOR TO GROUTING. SUPPORT REINFORCEMENT TO PREVENT DISPLACEMENT BEYOND THE ALLOWABLE TOLERANCES IN ARTICLE 3.4 B.11 OF ACI 530.1 4. REINFORCEMENT SHALL BE PLACED WITH THE FOLLOWING
- MINIMUM MASONRY COVER: MASONRY EXPOSED TO EARTH OR WEATHER: - NO. 6 THROUGH NO. 11 BARS:
- 1-1/2" - NO. 5 BAR OR SMALLER: MASONRY NOT EXPOSED TO EARTH OR WEATHER: 1-1/2" JOINT REINFORCEMENT LONGITUDINAL WIRES:
- EXPOSED TO EARTH OR WEATHER: 5/8" - NOT EXPOSED TO EARTH OR WEATHER: 1/2" 15. REINFORCEMENT TERMINATING IN A HOOK SHALL HAVE A STANDARD HOOK CONSISTING OF ONE OF THE FOLLOWING: 180 DEGREE BEND PLUS A 4d<sub>b</sub> EXTENSION, BUT NOT
- LESS THAN 2-1/2 INCHES. 90 DEGREE BEND PLUS A 12d, EXTENSION. 16. MINIMUM BEND DIAMETERS (INSIDE DIAMETER) OF
- REINFORCEMENT ARE AS FOLLOWS: - NO. 3 THROUGH NO. 8: 6d<sub>b</sub> - NO. 9 THROUGH NO. 11: 80 17. REINFORCING BARS MAY BE SPLICED USING LAP SPLICES WITH A MINIMUM SPLICE LENGTH OF 48d b
- 18. WALLS SHALL HAVE A MINIMUM VERTICAL REINFORCEMENT OF (1) #4 REBAR IN THE FOLLOWING LOCATIONS: - WITHIN 16" OF EACH SIDE OF OPENINGS WITHIN 8" OF EACH SIDE OF MOVEMENT JOINTS WITHIN 8" OF THE ENDS OF WALLS
- MAXIMUM SPACING OF 10'-0" O.C. 19. CONTROL JOINTS SHALL BE PROVIDED IN ABOVE GROUND CMU WALLS AT A MAX. SPACING OF 1.5X THE WALL HEIGHT OR 25 FEET. LOCATE CONTROL JOINTS AS FOLLOWS:
- AT CHANGES IN WALL HEIGHT OR THICKNESS - AT MOVEMENT JOINTS IN FOUNDATIONS AND FLOORS - WITHIN HALF OF THE CONTROL JOINT SPACING OF CORNERS AND WALL INTERSECTIONS NEAR ONE OR BOTH SIDES OF WALL OPENINGS PER
- NCMA TEK 10-2C. 20. JOINT REINFORCEMENT SHALL BE HOT-DIP GALVANIZED LADDER TYPE OR TRUSS TYPE CONFORMING TO THE
- SPECIFICATIONS OF ASTM A951. 21.HORIZONTAL JOINT REINFORCEMENT SHALL CONSIST OF AT LEAST TWO WIRES OF W1.7 (9 GAUGE) SPACED MAX. 16" O.C. VERTICALLY WITH MIN. 6" LAP SPLICES. 22. MULTIPLE WYTHE WALLS SHALL BE BONDED WITH (1) W1.7

GALVANIZED. VENEER TIES SHALL BE MINIMUM 9 GAUGE

WIRE OR 22 GAUGE CORRUGATED SHEET METAL. ONE TIE

25" VERTICALLY.

SHALL BE PROVIDED FOR EACH 2.67 SQUARE FEET OF WALL

AREA, WITH MAXIMUM SPACINGS OF 32" HORIZONTALLY AND

WIRE PER 2.67 SQUARE FEET OF WALL WITH SOLID FILLED COLLAR JOINTS. MAX. SPACING BETWEEN TIES IS 36" HORIZONTALLY AND 25" VERTICALLY. 23. VENEER WALL TIES SHALL BE STAINLESS STEEL OR HOT-DIP

#### **ABBREVIATIONS**

MATL. MATERIAL

A.B. ANCHOR BOLT

A.D.	ANCHUR BULI	MAIL.	WIAIEKIAL
ABV.	ABOVE	MAX.	MAXIMUM
ADDL.	ADDITIONAL	MIN.	MINIMUM
BLDR.	BUILDER	MISC.	MISCELLANEOUS
B/T	BETWEEN	M.O.	MASONRY OPENING
BTM.	BOTTOM	MONO.	MONOLITHIC
CANT.	CANTILEVER	NO.	NUMBER
CJ	CEILING JOIST	N.T.S.	NOT TO SCALE
CLG.	CEILING	OC	ON CENTER
CLR.	CLEAR	O.D.	OUTSIDE DIAMETER
CMI	CONCRETE MASONRY	O.H.	OVERHANG
CMU	UNIT	OPP.	OPPOSING
COL.	COLUMN	OPT.	OPTION(AL)
CONC.	CONCRETE	OCD	ORIENTED STRAND
CONT.	CONTINUOUS	OSB	BOARD
DIA.	DIAMETER	PDS	PULL DOWN STAIRS
DIM.	DIMENSION	PL.	PLATE
DIST.	DISTANCE	PRELIM.	PRELIMINARY
DJ	DOUBLE JOIST	PROJ.	PROJECTION
DN.	DOWN	DCI	POUNDS PER
DR	DOUBLE RAFTER	PSI	SQUARE INCH
DTL.	DETAIL	DOD	POUNDS PER
EA.	EACH	PSF	SQUARE FOOT
E/E	EACH END	PT	PRESSURE TREATED
EQ.	EQUAL	QTY.	QUANTITY
EXST.	EXISTING	RAD	RADIUS
FJ		REINF.	REINFORCE(-ING)
FND.	FOUNDATION	REQD.	REQUIRED
FLR.	FLOOR	RET.	RETAINING
FRMG.	FRAMING	REV.	REVISION OR REVERS
FT.	FEET/FOOT	R.O.	ROUGH OPENING
FTG.	FOOTING	RR	ROOF RAFTER
F.V.	FIELD VERIFY	RS	ROOF SUPPORT
GA.	GAUGE	SCHED.	SCHEDULE
GALV.	GALVANIZED	SEC.	SECTION
GYP.	GYPSUM	SIM.	SIMILAR
	HOT DIPPED	GI DD	SHORT LEG BACK
HDG	GALVANIZED	SLBB	TO BACK
HDR.	HEADER	SPEC.	SPECIFICATION(S)
HORIZ.	HORIZONTAL	SPF	SPRUCE PINE FIR
HT.	HEIGHT	SQ.	SQUARE
I.D.	INSIDE DIAMETER	STD.	STANDARD
IN.	INCH	STL.	STEEL
INT.	INTERIOR	STRUCT.	STRUCTURAL
JST.	JOIST		SOUTHERN YELLOW
LB.	POUND	SYP	PINE
	LOAD BEARING	TH.	THICK(NESS)
LBWA	WALL ABOVE	TR	TRIPLE RAFTER
	LONG LEG BACK	TYP.	TYPICAL
LLBB	TO BACK		UNLESS NOTED
LLH	LONG LEG HORIZONTAL	UNO.	OTHERWISE
LLV	LONG LEG VERTICAL	VERT.	VERTICAL
	I AMINATED VENEED	VIIII.	WITH

#### WOOD TRUSSES:

MAS. MASONRY

LUMBER

MFR. MANUFACTURER

LVL

LAMINATED VENEER

- ALL DESIGN. MANUFACTURING. AND CONSTRUCTION OF WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ANSI/TPI 1 - "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
- WOOD TRUSSES SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER.

W/O WITHOUT

WWF WELDED WIRE FABRIC

WT. WEIGHT

- 3. CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION UNTIL THE FINAL SEALED TRUSS DRAWINGS AND TRUSS
- PLACEMENT DIAGRAMS HAVE BEEN REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. TRUSSES WITH A CLEAR SPAN GREATER THAN 60 FEET SHALL HAVE THE TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL MEMBER RESTRAINT AND DIAGONAL BRACING DESIGNED
- BY A LICENSED PROFESSIONAL ENGINEER. IN THE ABSENCE OF SPECIFIC PLAN REQUIREMENTS, TRUSSES SHALL BE ANCHORED TO THE BUILDING USING A MECHANICAL CONNECTION WITH A LOAD RATING THAT EXCEEDS THE DESIGN UPLIFT LOAD INDICATED ON THE
- TRUSS DRAWINGS. IN THE ABSENCE OF SPECIFIC PLAN REQUIREMENTS, PERMANENT RESTRAINT/BRACING OF CHORDS AND WEB MEMBERS SHALL BE PROVIDED IN ACCORDANCE WITH
- BCSI-B3 SUMMARY SHEET. CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, PROGRAMS, AND SAFETY IN CONNECTION WITH THE RECEIPT. STORAGE. HANDLING. INSTALLATION.
- RESTRAINING, AND BRACING OF THE TRUSSES. TRUSSES SHALL BE INSPECTED AFTER ERECTION AND INSTALLATION FOR ANY DAMAGE THAT CAN IMPAIR THE STRUCTURAL INTEGRITY OF THE TRUSS. NOTIFY THE TRUSS MANUFACTURER AND THE ENGINEER OF RECORD OF ANY DAMAGE OBSERVED IN ORDER TO DETERMINE REQUIRED REPAIRS.

BID SET

SEAL DATE: 00/00/0000 REVISIONS --/--/------/--/------/--/------/--/---

LIBI STON 7252 LD **M** 5 BORO

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C. DAVID MORTON PLAN NAME: GOLDSTON LIBRARY

23119 04/01/2024 PSE DRAWN BY: NOTES &

**DETAILS** 

4 OF: 4

#### **Identification of HUB Certified/ Minority Business Participation**

hereby certify that on this project, we will astruction subcontractors, vendors, suppl	(Name of Bidder) use the following HUB ( iers or providers of profe	Certified/ minority ssional services.	business a
m Name, Address and Phone #	Work Type	*Minority Category	**HUB Certified (Y/N)
<del>-</del> -			
*Minority categories: Black, African America	on (B) Hieronia (H) Asian	/	 vices Indian (

The total value of minority business contracting will be (\$)\_\_\_\_\_.

<sup>\*\*</sup> HUB Certification with the state HUB Office required to be counted toward state participation goals.

	unty of
Δfi	(Name of Bidder)
711	I have made a good faith effort to comply under the following areas checked:
	dders must earn at least 50 points from the good faith efforts listed for their bid to be nsidered responsive. (1 NC Administrative Code 30 I.0101)
	1 – (10 pts) Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
	2 (10 pts) Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
	3 – (15 pts) Broken down or combined elements of work into economically feasible units to facilitate minority participation.
	<b>4 – (10 pts)</b> Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
	5 – (10 pts) Attended prebid meetings scheduled by the public owner.
	6 - (20  pts) Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
	7 – (15 pts) Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
	<b>8</b> – <b>(25 pts)</b> Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
	<b>9 – (20 pts)</b> Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
	10 - (20 pts) Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date:	_Name of Authorized Officer:
	Signature:
	Title:
SEAL	State of, County of  Subscribed and sworn to before me thisday of  Notary Public  My commission expires

Attach to Bid Attach to Bid

## State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce.

with <u>own</u> workloide.
County of
ffidavit of
(Name of Bidder) hereby certify that it is our intent to perform 100% of the work required for the
contract
(Name of Project)
n making this certification, the Bidder states that the Bidder does not customarily subcontract elements f this type project, and normally performs and has the capability to perform and will perform <u>all</u> <u>lements of the work</u> on this project with his/her own current work forces; and
he Bidder agrees to provide any additional information or documentation requested by the owner in upport of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority uppliers where possible.
he undersigned hereby certifies that he or she has read this certification and is authorized to bind the idder to the commitments herein contained.
Pate:Name of Authorized Officer:
Signature:
SEAL Title:
tate of . County of
tate of, County of ubscribed and sworn to before me thisday of20
otary Public
ly commission expires

Do not submit with bid Do not submit with bid Do not submit with bid

State of North Carolina - Performed by HUB Certified County of				Work to be
(Note this form is to be submitted o	nly by the ap <sub>l</sub>	parent lowe	st responsible, re	sponsive bidder.)
If the portion of the work to be executed 128.2(g) and 128.4(a),(b),(e) is equal to bidder must complete this affidavit. This affidavit shall be provided by the after notification of being low bidder.	to or greater th	<u>an 10%</u> of th	ne bidders total cor	ntract price, then the
Affidavit of	Name of Bidder)		l do here	by certify that on the
Desired ID#	ct Name) /	Amount of Bi	id \$	
I will expend a minimum of9 enterprises. Minority businesses will or providers of professional services below. Attach ad	be employed Such work	as construct will be subdecquired	tion subcontractors	s, vendors, suppliers ollowing firms listed
Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value
·				
*Minority categories: Black, African Americ Female (F) So ** HUB Certification with the state HUB Pursuant to GS143-128.2(d), the under work listed in this schedule conditionathis commitment may constitute a breat	ocially and Écor Office required ersigned will en al upon execu	nomically Disa d to be count nter into a fo tion of a cor	dvantaged (D) red toward state par rmal agreement wi	rticipation goals.
The undersigned hereby certifies that authorized to bind the bidder to the co	he or she has	read the terr	ms of this commitm	ent and is
Date:Name of Authorize	d Officer:			
	Signature:			· · · · · · · · · · · · · · · · · · ·
SEAL	Title:			
State of		County of	day of20	
Subscribed and s  Notary Public				)
My commission e			<del></del>	

#### **State of North Carolina**

#### **AFFIDAVIT D – Good Faith Efforts**

County of					
(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)					
If the goal of 15% participation by be provide the following documentation				, the Bidder shall	
Affidavit of			I do here	by certify that on the	
	(Name of Bidd	er)			
	roject Name)				
Project ID#		Amount o	of Bid \$		
I will expend a minimum of	ority business professional se	es will be er ervices. Suc	nployed as constructio	n subcontractors,	
Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value	

<u>Examples</u> of documentation that <u>may</u> be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- A. Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- B. Copies of quotes or responses received from each firm responding to the solicitation.
- C. A telephone log of follow-up calls to each firm sent a solicitation.
- D. For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- E. Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- F. Copy of pre-bid roster
- G. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- H. Letter detailing reasons for rejection of minority business due to lack of qualification.
- I. Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

<sup>\*</sup>Minority categories: Black, African American (B), Hispanic (H), Asian American (A) American Indian (I), Female (F) Socially and Economically Disadvantaged (D)

<sup>\*\*</sup> HUB Certification with the state HUB Office required to be counted toward state participation goals.

Do not submit with the bid Do not submit with th

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date <u>:</u>	Name of Authorized Officer:_		
	Signature:_		
SEAL	State of	_, County of	
SEAL	Subscribed and sworn to before Notary Public		20
	My commission expires		

#### **APPENDIX E**

#### MBE DOCUMENTATION FOR CONTRACT PAYMENTS

Prime Contractor/Architect	::			
Address & Phone:				
Project Name:				
Pay Application #:				
The following is a list of parentioned period.	ayments made to	Minority Business l	Enterprises on this pr	oject for the above-
MBE FIRM NAME	* INDICATE TYPE OF MBE	AMOUNT PAID THIS MONTH	TOTAL PAYMENTS TO DATE	TOTAL AMOUNT COMMITTED
*Minority categories: American Indian (I), F	emale (F), Soc	cial and Economi	cally Disadvanta	ge (D)
Date:	Approved/Ce	ertified By:	N	ame
			Т	itle
			Sig	nature

SUBMIT WITH EACH PAY REQUEST & FINAL PAYMENT